

AUTOIMMUNE SECRETS

hosted by JONATHAN OTTO

EPISODE TRANSCRIPTS



AUTOIMMUNE SECRETS

DISCOVER THE TRUE CAUSES OF AUTOIMMUNE DISEASE &
HOW YOU CAN PREVENT AND REVERSE THESE
HORRIFYING SYMPTOMS

SILVER SERIES

Hosted by JONATHAN OTTO



As an investigative journalist and film director Jonathan has produced several popular films covering innovative & effective approaches to cancer, autoimmune disease, neurodegenerative disease, and heart disease. His work has been featured in international TV broadcast, print media, national news, and radio broadcast. He received the awards, Young Citizen of the Year and International Volunteer of the Year by the Australian government for international humanitarian contributions, which he continues to support. He and his wife, Lori, reside in San Diego, California.



Disk 1: Episode 1: Autoimmune Disease Revealed

Episode 2: When Your Body Attacks: How to Win the War on Lupus, Arthritis & Thyroid Disease

Disk 2: Episode 3: Missing Puzzle Pieces: Can Your Mind Be Restored? The Truth About Alzheimer's & Dementia

Episode 4: Learning to Thrive Instead of Just Survive: The Truth About Lyme and the Effect of Toxins & Parasites

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Bonus Episode 8: Neurodegenerative (Alzheimer's/ Dementia)

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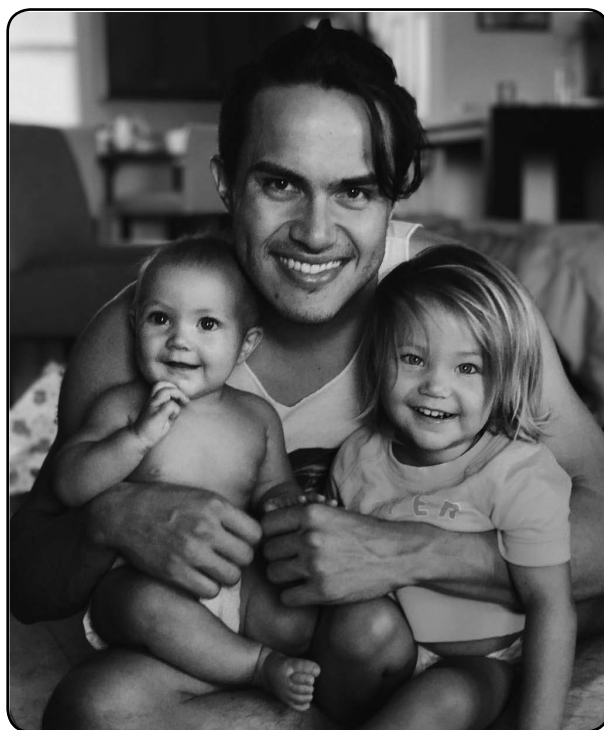
Questions and Answers 2 - Featuring Dr. Philip Oubre & Dr. David Jockers

Questions and Answers 3 - Featuring Dr. Daniel Nuzum





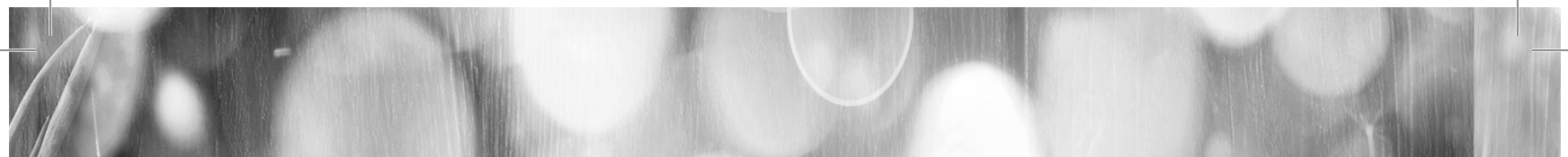
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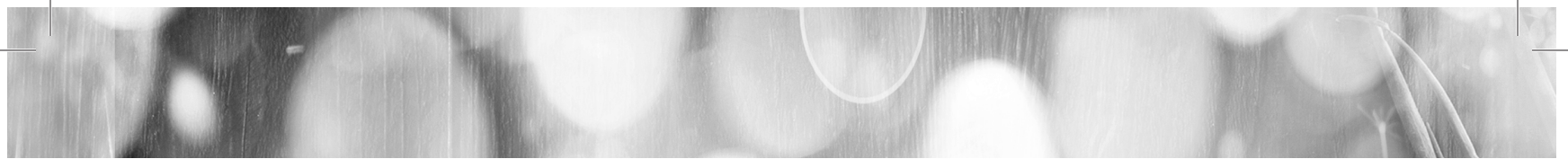


with JONATHAN OTTO and Experts & Guests
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Episode 1:

AUTOIMMUNE DISEASE REVEALED

Jonathan Otto

[00:00:30] Have you or a friend or a family member suffered from an autoimmune disorder? If so, you've probably been led to believe that this is a lifelong condition, and it's impossible to turn around. You've likely been told that you'll have to take the medications for the rest of your life with no relief in sight. The fearful reality also exists that once you've developed one autoimmune condition, you're far more likely to develop another one or even multiple conditions. Why is this? Is it possible to reverse this deteriorating process? Is it possible that your body has the mechanisms within itself to reverse disease and heal?

[00:01:00] In this eye-opening series we'll be exploring these concepts. You'll have the opportunity to hear multiple testimonies from autoimmune patients who have reversed their autoimmune conditions and are living happy, healthy lives. Today, we will begin by exploring what autoimmune conditions really are and what causes them to occur. You've likely been told that there's no way to know what causes these conditions and, while there may be various factors, we will see that really it comes down to some very core processes in our body that we need to understand. Understanding how our bodies work and how disease develops can have a profound, positive effect on the rest of our lives.

[00:01:30] Okay, I'm here with Dr. Davidson. We're going to discuss some really interesting factors when it comes to autoimmune disease, what its true causes are, what its true solutions are. If pharmaceutical drugs are not the solution, then what is?

Dr. Jay Davidson

Dr. Davidson:

[00:02:00] Yeah, well, I mean I just think about my wife's journey, when she was seven years old, and she started having symptoms and getting sick, and the doctors didn't know what was going on. They gave her some medication that caused brain encephalitis, and then she went into a coma for six weeks. They ended up finding out that she had Lyme disease. Then, as soon as they found out she had Lyme disease, and this is almost 30 years ago now, but when she found out she had Lyme disease, they gave her antibiotics, IV PICC line antibiotics for about a year, and then oral antibiotics for another year.

[00:02:30] I just look at, if that was the answer for her in that case, because oftentimes chronic Lyme will be in the autoimmune category, as well. If that was the answer for her, she wouldn't have had a need for heart surgery. She wouldn't have had a need for sinus scraping. She wouldn't have had to remove herself from entering the Junior Olympics for swimming, because of her health issues. All these different things triggered from that.

[00:03:00] I always just see that being a Band-Aid, trying to cover up symptoms. Research has actually shown, Jonathan, that vaccines can trigger autoimmunity and actually will, like different autoimmune conditions. When you look at the pharmaceutical industry, it's often looked at of just the prescription pill side, but the vaccine or

vaccination side is almost a bigger moneymaker for them. It's really scary, what's happening with the laws, where there's actually not the choice to choose whether you want to or not. It's always up to everybody's own opinion in that category, but, when you actually look at the pharmaceutical industry, I mean, it's this huge umbrella. It is multi-trillion dollar business and Fortune 50 companies. They're up there, so there's always profit. There's always motives, really, behind that.

[00:04:00] When you're looking at solutions, you always want to look at the cause. In order to identify, okay, what do I need to do to get my body well? You have to identify, what actually triggered it in the first place? The big four things that I see from a practitioner side of things: Lyme disease and coinfections, which is in the pathogen category. You've got mold - mold is a very major issue. Household - if there's ever been water damage in your house; if you ever feel better when you're outside of your house; sick building syndrome. A lot of the work environments actually have mold to them.

[00:04:30] We've got Lyme and coinfections being a big trigger, mold being a big trigger, heavy metal toxicity. You could say toxins, in general, but there's such a big, modern day epidemic of heavy metal toxicity that's happening right now. Also, we know mercury directly provokes autoimmunity in people, demyelinate the sheath, which is basically like MS, multiple sclerosis. Then the fourth thing I would throw into that category is parasites. In that, there's controversial treatments in the holistic world for parasites and for gut issues, which we can get into, but it's really these four things that, if you have any of these going on, they're going to negatively affect the digestive tract. They're negatively going to affect the thyroid, the adrenals. They're going to negatively impact the things that are, what I consider, downstream.

[00:05:00] Oftentimes, even in the functional medicine world, we'll go through an adrenal protocol or we'll go through a thyroid protocol to try to help support that organ. The question always to ask is what is the source of that? If we can identify what that is and then remove it, now, all of a sudden, everything that's downstream can start getting better.

[00:05:30] From an autoimmune standpoint, Dr. Alessio Fasano, 2009, actually wrote an article in the Townsend Letter on this. He basically said that when you're looking at autoimmunity, you can consider it a three-legged stool. If you imagine a stool with three legs on it, if you take any leg out of a three-legged stool, what happens to the stool? It tips over. What he's saying is you imagine autoimmune on top. As soon as you pull a leg out, that stool tips. Now, you've triggered autoimmunity.

[00:06:30] When you look at the three legs, he says one of them is environmental triggers, or really what we'd consider the stressor category. Another one is genes or genetics, which I would also say the genetic expression in that. Then the third leg, by itself, is actually leaky gut. From a science standpoint, for any researcher listening to this right now, if you're a researcher, you get a little like, well, is leaky gut even a real thing? Well, when you actually go into PubMed and type in leaky gut, you're going to find all kinds of stuff. Now, 5-10 years ago, not so much. It did exist, but it used the name intestinal permeability.

Intestinal permeability just means that, essentially, the junctions in your gut are opened bigger than they should be, letting things in that shouldn't be. When you let things in, like big, undenatured proteins or any type of food, any type of pathogen, let it in, now the body's going to start attacking it. That's usually where autoimmunity starts getting triggered.

[00:07:00] The gut, for sure, super important, leaky gut, but it's usually a downstream issue. Mold, parasites, heavy metal toxicity, Lyme and its coinfections are usually upstream of what causes downstream issues, like gut issues. We can't forget about the mental, mind, emotional stressors, but that's another piece to the puzzle, too.

Jonathan:

[00:07:30] Dr. Jay, so you're talking about four key areas for somebody to assess. Now, whether somebody has rheumatoid arthritis, whether somebody has lupus, whether somebody has Hashimoto's thyroiditis, you're saying that regardless of which of the 80-plus autoimmune diseases you have, these are the four steps you need to assess in every one of those cases, and, if you can understand this, if you can correct this, then you can expect great results. Is that true?

Dr. Davidson:

[00:08:00] Yes, yeah. If you can identify what the underlying source or sources to your health issues, our bodies were made to heal. If you can remove the source, you can absolutely get well. The body was designed to heal. As long as we can figure out what's interfering with the ability for the body to function and remove that, the body can absolutely get well, for sure.

[00:08:30] What is an autoimmune condition? You hear about lupus. You hear about rheumatoid arthritis, RA. You hear about MS, multiple sclerosis. A lot of gut issues, like ulcerative colitis, Crohn's, fall into this autoimmune category, but when you actually start looking through science, more and more conditions and diseases are actually getting thrown into this, so now we have well over 200 different conditions that are now being classified as autoimmune in nature, things like autism, things like type 2 diabetes. Always been known for type 1 diabetes to be autoimmune, but now they're classifying type 2 as in that category. Cancer... I mean, these are huge diseases and huge conditions that are now being thrown into the autoimmune pot.

[00:09:30] When you actually look at autoimmune, it's almost scary to think where it's moving toward, you know? Yeah, I mean, when I look at what's a strength of the classic treatment for autoimmune conditions, I don't see anything on that list. From a practitioner standpoint, clinically, it is what is natural, what is more of actually going to the source. That's really the key, because when you boil it down, autoimmune means that there's an imbalance in the immune system. It's often referred to that it's your body attacking itself, which is correct, and it all involves the immune system.

[00:10:00] Of course, when you look at autoimmune, there's immune in the word, right? Autoimmune, immune system... The one primary goal for the immune system, and this is all that it does, is it kills stuff. It kills pathogens. It kills bacteria. It kills viruses. It kills parasites, and that's its job. Right now, we're dealing with an onslaught of chemical toxicity, which is starting to trigger autoimmunity that our bodies were never meant and it gets us into a bad place, but backing up and looking at the immune system, we've essentially got two arms of the immune system. We've got the TH1 and we've got the TH2. Within each arm of the immune system, there's a bunch of different chemokines and cytokines and things. But essentially, you can boil it down to we have two basic arms of the immune system and technically, there's more to it. But this is a really basic understanding, so we've got TH1 and TH2. When you have an infection, like let's say you get a flu virus, you catch it from somebody. The TH1 immune system's gonna fire. It is the fast-acting. Think of these as they're both military, right? We've got the Navy and we've got the Army, so they're both military. But they work a little differently, so we've got TH1 that comes in. It tags things and then TH2 is that immune system that then comes in later, more longer-term. So when we have autoimmunity, essentially what's happening is we get stuck.

[00:12:00] We get dominant TH2 or we get stuck and we get dominant TH1, so the immune system is firing one way or it's firing the other way. This is really more of the scientific approach and the understanding of autoimmunity and so much of what's happening in our society with TH1 and TH2 becoming imbalanced is this toxicity epidemic. So let's say that you get exposed to mercury toxins. Those mercury toxins attack to your thyroid, which then can trigger something called Hashimoto's, which is an autoimmune thyroid condition. It was the first autoimmune condition ever classified as autoimmune in nature. It was the early 1900s and so mercury on

the thyroid, now the immune system says, "Wait a minute. That's not right. I'm gonna go after it." Well, can our immune system kill mercury? No, it can't. Mercury cannot be killed because it's an element of the periodic table. It's not actually living like a virus, bacteria or parasite. So what happens is then the immune system when it's going after mercury, it's actually damaging tissue around it.

[00:13:00] When it's damaging tissue around it, now it's actually decreasing the function of the thyroid and now all of a sudden, you start having hypothyroid. You need to take Synthroid or you need to take some type of thyroid to give the body some boosting. The goal isn't that you need that to help with the body. Inevitably, that's just treating the symptom. So we have to identify, "Okay, why is the body actually attacking the thyroid cells? Why is it attacking it? How do we shut that off?" Basically what happens is this TH1, TH2 just becomes tipped one way or it becomes tipped the other way. Autoimmune in nature, we're looking at big diseases like cancer, so cancer essentially is when it becomes TH2-dominant. When you're looking at lupus, rheumatoid arthritis, MS, even chronic Lyme disease, that's typically more TH1-dominant. So we get stuck and that's really autoimmune. Just think of it like a teeter-totter, a balance when it gets pushed one way versus the other too far. That's when autoimmune gets triggered.

[00:14:30] So if we can do things that actually help to balance this out and there are some tests that can help detect TH1, TH2 balance. There's also, you can always look at using energetic testing, like muscle testing or different electrodermal screening to try to detect it. But then there's also this whole category to say, "Okay, let's say we're autoimmune and we have TH1-dominance, we have TH2 decreased or we're the opposite. What can we do?" There's things that they call immune modulators that actually help balance this out, no matter what direction you are, things like vitamin D3. I mean, how many times do you hear about vitamin D3? It's technically a hormone. We know scientifically it affects out of the 25,000 genes we have human, it affects about 3,000 of those genes epigenetically, positive expression. So vitamin D3, super important for the body, but that immune modulates, so no matter what side you're tipped on, vitamin D will help with that. Colostrum actually helps modulate the immune system TH1, TH2.

[00:15:00] Vitamin A, vitamin E, glutathione actually, superoxide dismutase, so there's actually many beneficial things that can help to help balance autoimmunity of it. Now these things I don't think are the end-all solution. I think there's more steps and we have to really peel the layers back to really find out the causes. But they can also help kind of calm down those autoimmune reactions, autoimmune storms that people get into.

Jonathan:

[00:15:30] Essentially these autoimmune disorders are all manifestations of your immune system malfunctioning and appearing as various symptoms at different times. The names given to these diseases are simply classifications for the symptoms themselves, rather than a true diagnosis of what causes the disease and how to treat it. Thus, at times, depending on the medical professional who is doing the diagnosing, one person may be diagnosed with different conditions, depending on the current symptoms they are manifesting.

[00:16:30] Dr. Davidson, when it comes to the industry, the healthcare industry, pharmaceutical, drugs, pharmaceutical companies, now is this problem with autoimmune disease the fact that from what you're saying, a lot of the drugs are not working. A lot of the drugs are not effective. A lot of the drugs are causing problems and we can talk more about that later. But what's the problem here? Is it simply because there's a lack of information or are they just not up to date with what might be working for certain people that we're coming in contact with that are getting remarkable results or is there something else at stake here?

Dr. Davidson:

[00:17:30] It's a great question. Really, the answer is, follow the money. Money is power and right now, you're asking about corruption. There's so many different levels of corruption, unfortunately, that are happening. I mean,

you can go back to the early 1900s, I believe, when Rockefeller basically donated a ton of money to medical schools. But in agreement, they wanted to influence the curriculum. That's really when everything started shifting from what we know that's naturally made, that's effective to help people, to now, it's synthetic, pharmaceutical, petroleum-based type chemicals and ingredients and things, which by law, are the only things that they can say cure anything. But in reality, it's probably the only thing that actually won't ever cure anything. So when you look at corruption, it goes deep. It goes to who's learning the information from the pharmaceutical industry, which is pretty much the modern doctor right now. The whole system is set up for that.

[00:18:30] I mean, when I look at corruption, Jonathan, I mean when I look at it, one of the areas that really, I mean, I get emotional and I get upset is what's happening with kids nowadays from the birth process, like pregnant moms. So pregnant mom gets a RhoGAM shot, which has the highest amount of mercury of any vaccine before a baby's born. The child in the womb isn't getting to determine, "Hey, I'm ready to come out." It's a doctor or somebody else setting that date for them. "So, okay, yeah, your pregnancy will fall on this date because we don't want you to go too long. God forbid, we'll let the baby decide when it's ready to come out, so we're gonna puncture the amniotic sac. Oh wait, things aren't picking up, so we're gonna give the mom Pitocin," which then puts the baby into fetal stress, which they know that does that.

[00:19:30] That's why they do a fetal monitor and then that leads to more intervention, such as drugs and then possibly even C-section. It's that medical intervention that then starts racking up bills and then the hospital system can actually make a lot of money that way. I mean, the rabbit hole goes deep, so even if somebody does a natural birth, for instance, oftentimes, they'll put mom on her back. This doesn't happen all the time, but this is the standard. The goal is that you or your loved ones don't become the standard, right? We step out of this horribly put together medical standard box and actually look at how are our bodies designed. But they'll put Mom on her back, trying to push in labor, which is one of the hardest positions, actually to push a child out, reverse gravity, up over the tailbone to get a child out. Let's say the child comes out. There's usually five, six foreign people that are catching the baby, clipping the umbilical cord right away before the baby's taken its last nutrients and oxygen and blood from the umbilical cord.

[00:20:00] You always want to wait until that stops, then you can clamp it then cut it, but it really should be Dad catching. It should be baby going right on the chest of Mom because baby's got all this sensory on the head, on the body and what do we do in the medical world? Some foreign person catches the baby to bond with the baby that he'll never see again. Immediately wraps it up, cleans it up, puts a hat on and then puts it off to the side or if he does give it to Mom, then the baby's sitting on Mom, but the baby's got all the sensory covered up, and then all of a sudden then a lack of bonding actually happens between Mom and the baby, and it's all these traumas that I believe actually increase the risk of a child developing a type of condition like autism, developing autoimmunity. I mean, research shows that if Mom gets a bladder or a urinary infection while pregnant, the increased risk of autoimmunity for that child increases like 40%. Autism actually increases. If Mom has celiac disease, which is an autoimmune, basically disease of the gut reacting to gluten, the child is highly more likely to have autoimmune conditions like autism, so all these different traumas play such a big role. I believe that that right there, I mean, you're asking about conspiracy and you had conspiracies really... What was your definition?

Jonathan:

[00:21:00] Secret organized crime.

Dr. Davidson:

[00:21:30] Yeah, secret organized crime. I believe that they reverse engineered the birth process and said, "Okay, how can I cause the most harm to a child and Mom, and let's do that, and then now we're gonna have patients for life that

we can enter in the system that we're gonna give drugs to that are never, ever gonna treat the underlying cause, but we'll just try to manage symptoms, but keep them in the system," because they make money when you're sick, and our bodies were designed to be well, but we just have to figure out what's gonna support that process.

Rachel & Celia Karnuth

Rachel Karnuth:

[00:22:00] Hi. I'm Rachel Karnuth, and my daughter, when she was nine years old, was diagnosed with an autoimmune disorder called juvenile dermatomyositis, which was skin rashes on her face, on her legs, she had arthritis in her hands and arthritis in her knees, and we were able to find a holistic doctor to help us and get us on this road to recovery.

Celia Karnuth: In my hands, I had arthritis, and I could feel it. At school, I stopped doing monkey bars because my hands hurt. I can only close my hands this much when I close them all the way. I have skin rashes. They're on my eyelids and my cheeks, and a little on my neck and on my back.

Jonathan: Wow.

Rachel:

[00:23:00] And you had arthritis in your knees that was diagnosed that you didn't know about, in your hips. At one point, when we didn't realize what it was, what was going on with her, she was sick, we were living overseas, and she had this terrible stomach pain and was so weak after being sick that she couldn't even jump up one flight of stairs, one little step, and now we laugh because she can jump like three, so she had a lot of muscle weakness too, associated with her autoimmune disorder that she eventually got diagnosed with.

Dr. Peter Osborne:

[00:23:30] So, Celia was one of my patients. She had been... A little girl. She was diagnosed with a disease called juvenile dermatomyositis, which is basically a skin and a muscle inflammation, so it manifests with rashes. It manifests with a lot of pain, and this little girl was a gymnast, and she couldn't get on the bar. It hurt too bad, so one of the things we did with her is, of course, autoimmune disease you've gotta look for four triggers, the four big common denominator triggers, so for her she was gluten-sensitive, and it was very obvious, but we tested her genetically to confirm it.

[00:24:00] She was also allergic to things like tapioca and squash and mango, foods, real foods, whole foods. Right? So, go figure, you don't change those things, the problems don't go away, so you've gotta get the diet cleaned up even more than just going gluten-free, going beyond that. Right? And then she had several deficiencies, several nutritional deficiencies that we had to get corrected as well, and so within about four months, it didn't take very long. I mean, we went from first meeting her to getting her diet identified where she needed to be to her following that, and then just within about four months, she's able to get back up on the bar. She's able to do gymnastics again. The skin rash is going away, and it's almost gone at four months. At five months, the skin rash is gone.

Jonathan: How does that make you feel that it's gone?

Rachel:

[00:25:00] Amazing. Amazing. I mean, it was the hardest journey ever, but God brought us through it and led on certain paths, and one of those was Dr. Osborne, and it's amazing to look back and know that she's completely healed through all her hard work, and it's a lot of cooking and shopping involved, but she's done it. I mean, she's

had to change her diet and she's had to take supplements and learn how to do all that, and it was a slow process, but looking back now, we're just... My husband and I are just like, wow, because it's been a little over a year since we saw Dr. Osborne, and she's amazing.

Dr. Peter Osborne

Dr. Osborne:

[00:25:30] So, the autoimmune industry is a massive industry, and even by standard medical definition, it's about a hundred-billion-dollar industry just for medical treatment, but when you actually look at what are the major diseases in our country that are happening - diabetes, cancer, brain cognition dementia, heart disease - so many of these diseases are actually autoimmune in nature, so we could almost make more of a blanket statement and say that autoimmune is such a massive piece to this disease epidemic that's happening in our country, so a hundred billion I think is very conservative, but when you look actually through the research, they're tagging more and more conditions. They're tagging them as being autoimmune in nature.

[00:26:30] So, your comment, Jonathan, that whether it's intentional or unintentional, it's like you're too good of a person. It is intentional, and you can see this in so many different aspects of the mainstream medical world. I mean, they are literally systematically trying to abolish homeopathy. They're literally trying to remove that as a treatment, and this has happened - acupuncture, chiropractic. I mean, there's been agendas in the medical world to systematically try to remove anything that competes with the pharmaceutical agenda into the pharmaceutical treatment realm, because anything that's natural that doesn't fit into that, they don't profit, so they want to remove it.

[00:27:00] It's a scary time right now knowing that with their agenda it's just gonna keep going, and it really does need to be... A revolution needs to happen. I mean, people need to stand up and say, "For crying out loud, we need to make a change." The direction we're moving in, when you look at autism, and it was one in 10,000 kids in 1980, maybe 1970, and then in 2013 the CDC said one in 50 kids are autistic right now, or on the autistic spectrum, and then you have researchers prominent from MIT, Dr. Stephanie Seneff, saying in 2032, right now, the way the trends are going, it's gonna be one in two kids are gonna be autistic. I mean, at what point do we have to stand up and say, "Enough of this, and we need to figure out what can we do to support the body naturally"?

[00:28:00] Unfortunately, right now there are doctors, natural doctors and people, advocates in the autism world, in the cancer world, that are looking for alternative treatments, and they're coming up mysteriously dead. We're looking at maybe 80, 90, even 100 doctors or researchers in this natural alternative world, realm, looking for answers outside the pharmaceutical have come up dead in the last couple of years. I mean, how scary is that? I mean, I go to bed and I am on alert because this is a time and place where we need to make a change, and if we continue down the path, it is scary of what's gonna continue to happen with our health and our family and our children.

Jonathan:

[00:28:30] The medical community has developed into a system of finding a way to spend the least amount of time with a patient while deriving the most amount of money from the encounter. Unfortunately, our medical system is a business, and like any business, it needs to make money. Every time a medication is changed or a procedure ordered, the doctor or medical institution receive financial bonuses, especially if this can be done in less than 15 minutes spent with a patient. Do you see the problem with this system? Are the patient's needs truly being understood and explored? Does the doctor have true incentive to find out what is the true cause of a

patient's illness, to sit down with the patient and go through the blood work, explore possible areas of concern, to talk about the ways to prevent disease? Does the doctor benefit if the patient develops more diseases?

Dr. Osborne:

[00:30:00] A few facts about autoimmunity is that 50% of healthcare costs (this is from a commercial-based insurance plan) are attributed to five percent of the patients. That's a scary fact. That means that half of your insurance premiums that you all are all paying right now are paying for five percent of the people, not yourself. Why is that? Because the drugs are ridiculously expensive that we are using to treat these diseases. So, what are some autoimmune diseases? Hashimoto's, lupus, psoriasis, Crohn's, rheumatoid, multiple sclerosis, diabetes type 1, there's a ton of them out there, and generally, if you have a weird medical condition that nobody can explain, it's probably an autoimmune condition. So, what are some other autoimmune disorders that we consider autoimmune? We consider asthma, eczema, nasal allergies, any kind of allergic component is on the autoimmune spectrum. It's not really autoimmunity, but it goes away with some of the same things we do with autoimmune, so we kind of lump it in there. And then is autoimmunity inherited? Oftentimes, people will say, "Well, my mom had Hashimoto's, so that's why I have Hashimoto's." Hashimoto's, or autoimmunity in general, you could be predisposed to, but just because your parents have it doesn't mean that you're going to have it. It is reversible. We've seen it. We've got patients to prove it. You all have probably seen or heard of people that have reversed it. If you have a propensity towards autoimmunity, you can protect yourself from it by taking some of the same measures before you develop it.

[00:30:30] If you take home anything from this lecture, it's actually this tree, because all of us are a tree and we have our roots, which is our gut. Our gut takes all our nutrients and rain and sunlight and all that and makes it all into energy. There's no other energy source besides what you put in your mouth. Our root system is our gut, and everything that you see above is our systems, our symptoms, systems, however you want to look at it.

[00:31:00] Let's call one of those branches autoimmunity. Say you start developing symptoms. One of those branches is autoimmunity, and then we want to get a little more specific and say that specific branch is Hashimoto's, because the symptoms that go along with that are brain fog, fatigue, joint pain, and you have some Hashimoto's antibodies. Well, that's important, but we don't want to stare at the fruit too long because that's not the root of the problem, right? If you've got a dead branch of a tree, are you going to go looking at the leaves and say, "Well clearly, the leaves are defective because they're dead"? No, you're going to go look at the branch, then you're going to look further down, you look at the roots, wonder why isn't it growing.

[00:32:00] That's one branch, but what about the other branch up there? 30% of people who have one autoimmune condition develop a second and even multiple others. While you may have an autoimmune condition that may not be that severe, you might develop a second one that is more severe. I say that and I don't want to scare people, but if you have Hashimoto's disease, your risk of developing a second autoimmune condition, which might be diabetes type one or multiple sclerosis, those are really potentially life-changing. Yes, Hashimoto's and brain fog stinks, but not being able to see from multiple sclerosis is a lot worse, right? The things I'm hinting at with those other apples are paralysis, blindness, numbness. Those are signs of multiple sclerosis. If you look at the conventional medical model, they're going to give you a drug for every symptom out there and try to fix those problems. We don't want to focus there at all. We want to focus down at the roots.

[00:32:30] The two biggest things that you want to take away from this lecture is if you want to reverse autoimmunity or protect yourself from autoimmunity, then you need to make sure these two broad categories are great. Your gut is your number one life support. If your gut is not healthy, if you don't have the right balance of bacteria, yeast, digestive properties, then you're predisposed to really anything, but especially autoimmunity.

Dr. Jay Davidson

Jonathan: There's a powerful tool set that's valuable to all people. Whatever condition I have as I'm watching this series, every single piece of information is going to be valuable to me. What would you like to say in regard to that?

Dr. Davidson:

[00:33:00] It's a great point when we're looking at a label. I feel like from a clinical side, when I'm working with a client, it's easy to get caught into, "I want a certain diagnosis." I'm just looking like, "What do I have? Oh, I've got MS, or I've been diagnosed with lupus or I've been diagnosed with rheumatoid arthritis," and then it's like all of a sudden it stops from there. All I wanted was a name.

[00:33:30] I would say, "Let's remove that label," because inevitably, it's still not telling us what's the source of it. Why did it show up? Why did MS or RA or lupus show up when you're 35 years old and you didn't have it when you were younger? It's obviously not genes. Something got triggered, something's the source of it, so let's just try to put the label to the side and boil down and try to figure out, "Okay, what are the underlying issues in my body and how can I remedy them?"

[00:34:00] When you're looking at autoimmunity, Sjogren's, Tourette's syndrome, lupus, RA, multiple sclerosis, fibromyalgia, chronic fatigue, any of these diagnoses from a clinical standpoint, I always want to rule Lyme disease out. Now, am I saying that if you're diagnosed with any of the ones I just mentioned you have Lyme disease? No, but so oftentimes, Lyme disease is known as the great mimicker.

[00:34:30] If we just say, "Oh, I've got RA," and we stop trying to figure out, "What triggered that? Why do I even have it?" If that is a correct diagnosis, then we stop looking at the source, where it could be a bacteria like Lyme disease that actually triggers this or mercury toxicity. You get a filling drilled out, the mercury exposure sets the body over, and all of a sudden you've developed MS and you're not sure how that happened. We don't want to just settle for a label. We always want to look at the source. We want to find the source and correct that.

Dr. Daniel Nuzum

[00:35:00] Autoimmune disorders are one of the most misunderstood conditions in medicine, in my opinion. Most of medicine is operating off of an old paradigm, an old thought process, operating under the assumption that the immune system in an autoimmune disorder is actually an overactive immune system. An immune system is overaggressive and overactive and over-vigilant, if you will.

[00:35:30] The truth of the matter is that's not the case. The truth of the matter is that a person dealing with an autoimmune disorder has a dysfunctional immune system. They have an immune system that has lost its ability to differentiate between who's good and who's bad. Because of that, the immune system may be attacking different tissues in their body, different types of hormones or different aspects of different organs or so on and so forth.

[00:36:30] The thing is, the immune system is not overactive. The immune system is misguided and has lost its ability to tell what's me and what's not me. I'll give you an example. There was a heavyweight boxer some years ago. There's a chicken company with the same names. This particular boxer was ferocious. They would unleash this fellow in the ring, he'd come across the ring swinging, and he didn't quit swinging until the other boxer was done. He was an amazing, amazing, amazing boxer.

[00:37:00] I want to use this analogy. We have a boxer that is the heavyweight champion of the world. We have another boxer that's his opponent. Let's say the heavyweight champion has a cold. He doesn't feel well. He goes

to the ring, and he has a round with this other fellow that's also a professional boxer. This other professional boxer just has his way with him for the first round. The first round, the champion gets beat up a little bit.

[00:37:30] Well, let's say we go into round two, and not only is the champion beat up a little bit, but we blindfold him. He comes into round two blindfolded, so he can't see his opponent. He knows there is an opponent there, but we also put both corner men, all the judges and all these other people, we just let everybody into the ring.

[00:38:00] Now the ring's full of people, and we have the heavyweight champion of the world, world's best boxer, against the contender, who's the next best boxer in the world. They both know each other's there. Heavyweight champion goes out in the ring, but he's blindfolded. He's blindfolded. He can't see. He can't tell who's his opponent and who's not.

[00:38:30] How do we determine who he's going to knock out first? Is he going to knock out his opponent, or is he going to knock out one of the judges, the referee? What we don't know is who he's going to knock out at all. He may knock out everyone. He might not knock out anyone.

[00:39:00] I'm giving you this picture because this is what's happening in autoimmune disorder. Your immune system is the world's heavyweight champion. If your immune system gets beat up a little bit, it doesn't have the right nutrition, it's been exposed to toxicity, different toxins and things in the environment, and it's had to deal with different stresses, the immune system gets beat up a little bit, right?

[00:39:30] If it loses its ability to differentiate, it gets blindfolded. Now we have the world's heavyweight champion going about trying to take out an opponent, but he's blindfolded and he can't see. He can't differentiate. That is what's going on in an autoimmune disorder.

[00:40:00] What we need to understand is how does that come about? How does that happen? How does the immune system become dysfunctional and lose its ability to differentiate between who is my body and who isn't my body? Who's my friend and who's my foe? This is what happens in autoimmune disorders. The immune system can't tell.

In autoimmune disorders, the immune system can't tell. It can't tell who's good, who's bad. It knows that there's something out there that it needs to go after, but it can't tell who's the good guys and who's the bad guys, so it goes after everything.

Jonathan Otto

[00:40:30] Autoimmune conditions include a host of symptoms, such as joint swelling and pain. Therefore, rheumatoid arthritis and similar joint conditions also fall into the autoimmune category. When these are ignored, they can advance and turn into more serious autoimmune disorders. It's important that we're able to catch these conditions at their start if possible so that the healing process will likely be more rapid. The longer the conditions are left to linger, the longer they may take to reverse.

Steve Curran

[00:41:00] [00:41:30] As hard as I work out, you would expect normal aches and pains and things. I'm 54 years old, so probably more aches and pains than a 20-year-old guy after working out, but I started having recurring hip problems. It just hurt a lot. I was going to a practitioner for deep tissue and myofascial release and all that, and they could help me a little bit, but he was concerned because it would come back so quickly, so they did an X-ray. The X-ray results came back, and it just wasn't all that conclusive. He was like, "You know, this is not something you need a hip

replacement for at this point, at least not from the X-ray report, but something you need to probably just manage the pain through foam rolling and massage and doing different things.”

[00:42:00] I happened to be at Dripping Springs Pharmacy, and I was inquiring about some supplements or something, and I mentioned something about joints. I can’t remember. One of the ladies at the pharmacy, “So, you know there’s a functional medicine doctor right in that office right there. He’s here a couple days a week.” I’m like, “Function?” I had never heard of functional medicine, and I’m a functional fitness guy, so I thought that the terminology peaked my interest. She gave me a little card of his. On it, it talked about stem cell therapy for joints without surgery and about supplementation and all that and holistic way.

[00:42:30] [00:43:00] I called and made an appointment. I went in and talked to Dr. Oubre, and the engineer side of me ... I like data and I like information, so I would ask questions and he would just fill me with data, and it was just like, “All right. I got to go look this up.” Come to find out, he said, “Yeah. We can do stem cell therapy.” He looked at my X-ray report and decided that it didn’t look like anything that required major invasive hip replacement or anything, but he said, “Before we talk about stem cell, I wanna make sure you’re healthy.” He said, “You look healthy. You’re a fitness trainer and all this stuff.” He ran a very, very extensive blood test that came back pretty negative. In fact, he emailed it to me late at night, and then he said, “I don’t usually do this, but,” he goes, “this is kind of ugly in terms of you’re a fitness trainer.” He goes, “I don’t know what you eat. I don’t know what your diet is like, but,” he goes, “we gotta talk because you’re pre-diabetic. You’re on a brink of a full autoimmune blowout.”

[00:43:30] [00:44:00] There was a lot of other ... Lipid profile was off the charts. No B12. I had no Omega-3 fatty acids. He’s like, “All right.” We went and we reviewed the report. I have to admit that at some point, I know about nutrition from my training, but I was more of a do as I say and not as I do kind of trainer, unfortunately, at that time. I thought, “Hey, I work out three, four days a week. I look good, so, therefore, I must be okay.” What he showed me on the blood results was that I was really not okay.

[00:44:30] From November through June, I was hardcore Paleo, no dairy, no bread products whatsoever, no legumes, very strict Paleo, but the blood numbers showed, and that was the coolest thing I think about eating healthy like that is I know that when I first started researching all this, and Dr. Barry Sears came up with the Zone diet. I don’t know if you’ve ever heard of the Zone, but, basically, it’s an anti-inflammatory diet, lots of Omega-3, fish oil. You take that, and you stay away from all processed sugars to keep your insulin levels in a medium zone area. By doing that, you reduce inflammation in your arterial walls. Therefore, you can actually reverse atherosclerosis and some of these conditions where your heart’s pumping through clogged veins and all that. You can actually fix all that by just eating right.

[00:45:00] [00:45:30] Through discussions with Dr. Oubre and the information that he’s given me and the books that I’ve read now, you can also reverse autoimmune conditions strictly from the way you eat. In fact, one of the books that I read said that 65% of autoimmune conditions is diet, not genetics. You can be completely predisposed, genetically, to an autoimmune condition, and it doesn’t mean that your genes have to express that condition if you eat right. That, to me, was like ... That was my light bulb, bright light moment is that I was really literally eating myself to death or to a very miserable environment of autoimmune stuff.

Dr. Philip Oubre

[00:46:00] This is Steve’s actual blood levels. When he first came to see me, he actually came to see me for hip pain. Actually, he referred someone else to me before he came to see me for stem cell therapy. He came to see me for a hip pain that he thought he was going to get stem cell therapy for, that we were going to help him regenerate his hip. I said, “Wait, Steve. Let’s do some labs before we do that.” He didn’t know that he had rheumatoid arthritis. We diagnosed Steve with rheumatoid arthritis, and he’s been having this hip pain and migratory joint pain for years. After

I think this is about six months ... I didn't write it down. About six months, and his rheumatoid factor dropped by four, from 22 down to 18. That may not seem like a really big drop, but if he drops by four one more time, he's normal. He is technically normal, and he has reversed rheumatoid arthritis.

[00:46:30] This is a debilitating arthritic condition. I don't know how many of you people know or have seen anyone with rheumatoid arthritis. It is disturbing what they look like in their 70s and 80s. Their hands are just riddled with arthritis. Their fingers point the wrong way. It's horrible. To think that this can be changed by removing gluten and dairy and sealing leaky gut instead of Humira is incredible, and Steve did it.

[00:47:00] [00:47:30] He also had lupus. He was on the lupus spectrum. If anyone knows what this test is, it's called an ANA test with a reflex. The ANA test is a way to throw out a broad net and catch as many fish as you can in the autoimmunity sea, and then when you drag that net up, you see if you caught any fish. If you catch any fish, you're listed as positive. Done. You caught a fish, an autoimmune problem. Then they try to identify as many of those fish as they can, and so they run 10 or 12 of the individual tests and say, "Well, we didn't identify any fish, but he's got some sort of fish in there that we don't know what it is." Steve was not that way. He flagged positive for three different fish in his autoimmune soup, and then six months later, completely negative.

This is what I was talking about with the shorter you have an autoimmune condition, the easier it is to reverse. Steve's lupus was likely a lot younger, and his rheumatoid factor, his rheumatoid arthritis has likely been going on for years to decades and that's why it's going to be a little more stubborn.

[00:47:51] Yes, Kristy?

Kristy: I have to add that this patient was extremely dedicated to the changes he was making.

Dr. Oubre: Yes.

Kristy:

[00:48:00] [00:48:30] Almost unrealistically so, as looking at it as somebody who's also deals with lupus spectrum. I couldn't imagine ... I saw his devotion to those changes, and that's why he saw those results so fast. Not everybody's going to be able to make those changes like he did. He was just completely ... His mindset. He's a crossfit trainer, and so the time and efforts that he spent in it was extraordinary. It was above, and so it can happen, but just know that he really strived to make those changes, and it was absolute dedication on his end.

Steve Curran

Jonathan: Dedication and commitment are really a plus when fighting autoimmune disorders with functional medicine. You can't just do it halfway and expect to see results. The more committed you are, the more determined your efforts, the more positive your mindset, the better your body will respond to the protocols.

Steve:

[00:49:00] [00:49:30] The sad reality though is as a fitness professional, as I told people about this, I've come to realize that there's a very small segment of society that will take the words and go, "I wanna do what you did, Steve, and I'm gonna eat right for the next month." Thirty days is really all it takes to reverse a lot of these conditions. They just won't do it because there's pills they can take, like prednisone or other anti inflammatory drugs that will help you get rid of the symptoms, but you haven't actually solved any of the underlying problems, but that's-

Jonathan: What proportion of people have you found that will say, "Yes," and those who say, "No"?

Steve:

[00:50:00] Out of the people that I've spoken to, probably 70% won't do it, and only about 30% will actually take a proactive approach to eating right because the issue is you can't just eat right a little. You got to go all in or nothing. It's not about removing gluten most of the time. If that ends up being the thing that ruined your small intestine is the gluten problem, then you can't just eat a little gluten because the problem is still there. After Dr. Oubre explained to me and like I've read, if your immune system starts to fire off on gluten because it recognizes gluten for some reason as an invading body, it has a long memory. And so, you can't just get off gluten for a couple of weeks and go, "Oh, I'm good." Even if your gut starts to heal, your gluten sensitivity, your antibodies are there. Your body remembers that, and so you got to go all in.

Dr. Eric Zielinski

[00:51:00] When you look at one of the root causes of autoimmune disease, which is inflammation, essentially, anything, anything that causes inflammatory response in the body can trigger an autoimmune disease. This list is yay long. Top of the list, toxic thoughts, toxic foods, toxic pharmaceuticals. Virtually every pharmaceutical you're going to take is going to have an inflammatory response on the body. It is absolutely mind boggling to realize that the products that we put on our skin and our hair, that we brush our teeth with, all this stuff is laden with chemicals and to whatever level, whether minor or extreme, it will cause an inflammatory response.

Dr. Daniel Nuzum

[00:51:30] [00:52:00] So we have leaky gut. We have fatty liver. These are two particular organic issues that lead to autoimmune disorders. They do this one, leaky gut, undigested food floating into the bloodstream, causing an irritation and an inflammatory immune response, which eventually leaves the body in an inflamed state, number one, but leaves the immune system exhausted.

[00:52:30] If we're eating three times a day and the immune system has an inflammatory response every time we eat, it wears out the immune system. The immune system gets to where it's exhausted. It gets tired of having this level five alarm three times a day. That exhausts the immune system. As the immune system gets exhausted, it starts to dysfunction. It has a faulty function, then. That's where autoimmune disorders start to happen.

[00:53:00] [00:53:30] The other thing is a liver that is not filtering properly, whether due to toxicity or nutritional deficiency or both at the same time. The liver is not filtering properly. All these toxins that we're exposed to everyday, which there's 80,000 known toxins that we are exposed to on a daily basis, just in our homes. It's a massive number.

[00:54:00] If the liver is not filtering all these toxins out properly, it starts to store them. When the storage bin is full, guess where they go? They don't get stored in the liver. They permeate and get shoved out into the rest of the body. That's another source of irritation, which causes an inflammatory response from the immune system, which further exhausts the immune system.

I hope I'm painting a picture here that you can understand, that if you are suffering from an autoimmune disorder, it's not because you have an overactive immune system. It's because you have an exhausted immune system. An exhausted immune system loses the ability to differentiate.

[00:54:30] [00:55:00] It's kind of like the blindfolded boxer. Remember we talked about the heavyweight champion? He goes out there. Well, if he goes out there blindfolded, he's super powerful. He can go out and knock out anybody, but if he's blindfolded, he can't tell who he's going to knock out. It may be the person that he's

supposed to knock out. It may be the referee. If he's blindfolded, how is he supposed to tell? How is he supposed to differentiate?

[00:55:30] An exhausted immune system is in that same position. It's blindfolded and it can't differentiate between what's a pathogen or a toxin and what's my liver or my shoulder or my thyroid or my brain. That's what happens with an exhausted immune system. To take a step back, this is my explanation to explain what's actually happening physiologically in an autoimmune disorder.

Dr. Stephanie Daniel

Jonathan: They're lucky because they know that they had it, whereas all these women that don't know they have it-

Dr. Daniel: Or denied that that's the reason for their symptoms

Jonathan:

[00:56:00] Yes, and these poor women particularly, obviously being around 10 to one women to men, and these poor women that get so often told that it's in their head.

Dr. Daniel: They're depressed. Actually, so that was another piece of the story I didn't tell. When I first got my results, my primary care person was out because she had broke her ankle, and I had seen the results the day before because I was in for a routine annual and I just happened to see them in the computer kiosk. I saw the antibodies and I knew what that meant. My TSH was elevated.

[00:56:30] I went in for my results and there was a physician who was substituting for my primary care person. I think I said something like, "Oh, I saw that my TSH is elevated and I have antibodies and that makes sense," because I had been experiencing any number of symptoms, including the cold intolerance too, and other stuff.

[00:57:00] He said, "How do you know you're not just depressed?" I wanted to throw the chair at him because it was such a cliché. I just said, "Because I wasn't depressed two weeks ago or three weeks ago and I have nothing to be depressed about," and I just got up and left and waited for my primary care to say, "Yes, this is what it is. Here you go, here's a prescription," and then I started the discovery process after that.

Jonathan: Wow. Good for you.

Dr. Daniel:

[00:57:30] That's what happens, right? Any number of patients, and especially women, are said, "It's in your head. It's not that. You're just lazy, or you need to sleep more," or the classic, "You're a tired mom because you've got small kids." I see these patients too, and I'm like, "No, it's not all in your head and it doesn't have to be this hard." They're struggling through their life and their day because they have a hormonal imbalance that's making everything harder.

Jonathan:

[00:58:00] Yes. You're a doctor of osteopathy, so you understand the modern medical system, as well as more innovative, natural-based approaches, holistic medicine. What do you see as being the major flaws within the modern medical system? How is it affecting people's lives for the negative?

Dr. Daniel:

[00:58:30] I refer to conventional medicine often as cookbook medicine, because it's almost like there's a recipe for every diagnosis. There's a set of symptoms, these sets of symptoms that if they check mark the boxes for this diagnosis equal this diagnosis, and then there's the standard of care treatment, end of story.

[00:59:00] For a couple of things, like acute infection and trauma, western conventional medicine is super helpful and we need it for those things. When it comes to chronic disease, the problem with symptoms, diagnosis, treatment is that very little of the time is there ever a question of, "Well, why? Why are these symptoms being created?"

[00:59:30] Okay, we can label it. The label just allows for ease of conversation, but it's very reductionistic. It doesn't give people any insight or options or avenues for making themselves well, which I think is almost like a birthright. Our bodies are self-healing. It doesn't honor that. It doesn't allow for that truth to be available to people.

Jonathon Otto

[01:00:00] Did you know that if you're symptom-free, you may still be in the process of developing an autoimmune condition? By having the proper test done, you can determine if you're at risk for developing an autoimmune disorder and you can take the steps that you need toward prevention. If it is possible to prevent yourself from developing difficult health challenges down the road, would you want to take the best steps possible to be in your optimum health?

Dr. Jay Davidson

[01:00:30] [01:01:00] Well, really the truth is that it most likely is happening to you right now. It's a scary statement to say, right? Because to some degree it's a little more fear based, right? Like, oh my gosh. Autoimmune in nature is slow developing. Often times symptoms don't show up right away, symptoms are years later. When you start looking back it's like gosh, when did this actually happen? This was probably 10-20 years ago in development and when I look at our culture right now, I see a massive epidemic of digestive gut issues. One of the primary gateways to trigger autoimmune is having gut issues. If you have any type of digestive symptom, you want to say okay, this is opening me up to possibly even triggering autoimmune in my body. Fixing the gut, making sure the gut is healthy is really a critical thing, but it's quite daunting, actually, when you think about how many people probably do have autoimmune right now.

[01:01:30] Yeah, I mean, when I look at what's the strength of the classic treatment for autoimmune conditions I don't see anything on that list. I'm pretty much, from a practitioner's standpoint, clinically it's what is natural, what is more of actually going to the source, and that's really the key. When you boil it down, autoimmune means that there is an imbalance in the immune system. It's often referred to that it's your body attacking itself, which is correct and it all involves the immune system. Of course when you look at autoimmune, there's immune in the word, right? Autoimmune. Immune system, the one primary goal for the immune system, and this is all that it does, is it kills stuff. It kills pathogens, it kills bacteria, it kills viruses, it kills parasites and that's its job.

[01:02:00] Right now, we're dealing with an onslaught of chemical toxicity which is starting to trigger autoimmunity that our bodies were never meant for and it gets us into a bad place. Fixing the gut, making sure the gut is healthy is really a critical thing. It's quite daunting, actually, when you think about how many people probably do have autoimmune right now.

Dr. Stephanie Daniel

[01:02:30] [01:03:00] [01:03:30] So, I see a lot of immune dysregulation. Autoimmune disease is historically thought to be incurable. Most people come in with a particular diagnosis, so we can talk about Crohn's or Ulcerative Colitis or neuromuscular diseases like MS. They are on a trajectory where they have to maybe take multiple medications to try to manage the progression and/or the symptoms and yet even with that, often times, they either become symptomatic again or you know, they break through the symptom control and they come looking for a new answer. It's not uncommon. It ranges from dietary and lifestyle changes being 100% turnaround, no medications needed, completely asymptomatic for indefinitely to there needing to be more disease reversal work, like putting together the stepping stones that led to this signaling to go awry and reverse engineering that so that people can get back to a place where their bodies become self healing and they're able to find a place back to optimal health.

[01:04:00] [01:04:30] [01:05:00] I definitely see that with pretty much every autoimmune disease across the board. Antibody evidence goes away completely. Even from an objective data point it's gone. Subjectively, they are not needing medications. You know, a lot of people actually lose weight in the process, too, even when they're not trying because of the reasons that they're holding on to things to begin with. All of their systems start working better, so the hormonal system is actually one that is a later downstream impact point from some of these more root cause issues. Like whether it's immune dysregulation or these inflammatory processes. They get their balance hormonal signaling back, their mood changes because a lot of autoimmune disease come with suppressed mood. I would say like over 90%, maybe even more than that, have complete reversal of their disease process and their symptoms and are asymptomatic, not on medications and it's remarkable and yet, even though it happens over and over again it's still this thing that's surprising every time. They actually have to do a lot of work to get there. At the same time, we have a road map that ...

[01:05:30] [01:06:00] I think the main message is that if you keep your buffer resilient and your ability to navigate the influences and the ups and downs and the exposures of life. If you choose wisely and you keep that buffer in place you don't actually ever have to get sick. You don't even really have to engage this concept of aging or you know, age related diseases. It doesn't mean you can't have fun, but there should be that as highlight points of your life rather than the thing that runs your whole life. If you're able to make as many choices as you can that keeps that resiliency intact, you're good and you can actually enjoy things along the way without succumbing to some sort of disease process or level of unwellness. That's not, we're not born with that. You know, we're not born to break down and to get sick.

Jonathan Otto

[01:06:30] Perhaps you've been in a situation where you've had symptoms that you can't explain. That even the doctors can't seem to explain. Perhaps you've had to have multiple tests done only to find out that they're inconclusive. Don't give up hope. A functional medicine doctor may have the tools that you need to finally be able to understand your puzzling health problems. To help you come up with an ideal plan to heal your body and prevent further conditions from developing.

Dr. Jay Davidson

[01:07:00] [01:07:30] To be honest I don't know if I want to continue because of the resistance. There's that point, and I feel like probably even a listener right now with whatever health struggle autoimmune you're dealing with, you or a family member, where you get to a point where you're like is it even worth it to keep going? It always come back to what's your why? Like, what drives you? I will tell you that I have a five and a half year old daughter that was a blessing and it really forced us to do things and help my wife that we wouldn't have if she didn't come

along. I look at, you know, where we're going to be in 20, 30, 40 years and if I have the opportunity to change it I'm going to because I want a better future for my daughter. It's that mentality that's going to allow us to change the culture in the health world, but it's also going to allow you to move forward and get well health wise. There's always dips. We always think it's like this, you know, Jonathan, we think it's like this linear climb, right? Like, oh, I've figured out what I have, now I'm going to start removing the sources and fixing and really working on my body.

[01:08:00] [01:08:30] I'm going to start going like this, it's like this. Like there's days where you just don't feel well and it is what it is but you've got to keep your eye on the bigger picture because that's the direction you're going in. Don't focus so much on how you're feeling today if it's not good. Think about the big picture. Obviously we want to live in the moment, but it's really that that I hope I can give some hope to a listener to know you know what? There is hope. Even if we're up against a wall, you know what? I'm going to fight even harder because that's just my nature. There's a time where I'm like is it worth it? Then I'm like but what else would I do? I'm put on this earth for this to help with.

Jonathan Otto

[01:09:00] This first episode has really been about helping you learn what's going on inside your body when you have an autoimmune disorder. We have explored ways that you can prevent autoimmune disease and have seen that it's possible to turn it around. Don't give up hope on your health. Stay with us in coming episodes to find out in more detail how various autoimmune disorders can be reversed. You'll have this incredible opportunity to hear amazing transformation stories from those who have overcome Dementia, Lyme Disease, Adrenal Fatigue and Thyroid disease. You won't want to miss out on this life saving health information.

Dr. Jay Davidson

[01:09:30] [01:10:00] This is so important. I mean, you're listening right now and you know the value you're getting from it. I mean, adding these things to your library, I always look at it as, you know, I want to help other people so I'm going to add it to my library and when there's a need I'm going to tell people like hey, you need to watch this. This information, though you don't get it from a textbook. You don't get it from a conventional doctor visit. I just don't know how else you would get this information without participating and really having it. The value to me, like, I don't care what number you put on it it is worth it because this is things that when you learn them can shift what you do and what your family does and put you on a completely different path. Right now, the number one reason for bankruptcy in our country is for medical expenses. That person that gets the bankruptcy for medical expenses, guess what, they say it's not going to be who? Oh, it's not going to be me, but statistics show that unless we do something different than what the classic pathway is for us as an American or if you're overseas watching this, you know, we're going to fall into that same trap.

[01:10:30] [01:11:00] If we can take care of our health, functional optimally, it puts us on a different path then it's like there's abundance. You know, there's abundance. Yeah, so take action today because we always think about I'll do it tomorrow, but tomorrow is always ahead and it's just like act today. Take action now and when you look back in a year you're going to be like wow, I'm so glad I did that. It might seem like a big step now but just keep moving forward one step at a time and this is just something that can really help you a lot.

Episode 2:

WHEN YOUR BODY ATTACKS: HOW TO WIN THE WAR ON LUPUS, ARTHRITIS & THYROID DISEASE

Jonathan Otto

[00:00:30] Welcome to Autoimmune Secrets. I'm your host Jonathan Otto. In our first episode, we went through an overview of autoimmune disorders in general. Today, we'd like to look into more specific issues such as lupus, arthritis and thyroid conditions. Often many of these conditions appear simultaneously, one contributes to the other. If we get down to the root cause and understand the true source of these symptoms, then we can really begin to tackle the problem and find hope through recovery.

Dr. Jay Davidson

[00:01:00] The thyroid is gaining a lot of attention. There's doctors out there like Dr. Barnes who says that 90%, this is huge, of men and women in America have subclinical hypothyroid. Meaning, they're actually exhibiting some symptoms but they don't know that there's actually lower functioning thyroid. I mean, 90%. Then of that, 90% majority of those are women. 80 to 90% are mostly women. 80 or 90% of those are autoimmune.

[00:01:30] When you start extrapolating that, a ton of people have thyroid issues. Most of them are women and a lot of it is autoimmune. The stat seem pretty high but I think the foundation really allows us to look at and say, "Thyroid is a big deal right now in our society. Thyroid is a big issue in our country, really across the globe." Thyroid is big for, basically, your metabolism, your energy level, hair, skin. There's so many things that actually plays a role with.

[00:02:00] Often times a thyroid will show people that can't lose weight hormonally related. Thyroid can be affected with that. Then you have this other classification of the chronically ill and they're underweight. They're worried. I can't fast or I can't do anything because I don't want to lose more weight. You have this spectrum. Thyroid fits really into that niche.

[00:02:30] How do you know if you have a thyroid disease or a thyroid condition? You can simply go and get some blood work done. You can get tested for it. Now there are signs and symptoms. The face is really a great place to look at signs and symptoms. If you're missing the outer third of your eyebrows, thyroid type symptom, that's a nice one to look at. But when you go in, you can have some blood work done. The standard blood work that they run is TSH, which is thyroid-stimulating hormone which when I look at that, I'm like, "Wait a minute. The TSH isn't even produced by the thyroid." Some doctors will only use TSH as a marker for thyroid, but it's actually not even produced by the thyroid. It's very interesting.

[00:03:00] [00:03:30] TSH is basically produced by the pituitary in the brain to then signal to the thyroid, hey, do something. Go do some work. Go produce hormones, T4, T3. Your thyroid produces T4 and then it'll produce a small amount of T3. Majority, though, of the T4 will get converted to T3 in the liver. When we're looking at thyroid, it's not just about the thyroid. So often I see clinically that the liver is actually a fundamental issue of why people have thyroid problems, that they can't convert T4 to T3. Fixing the liver is a big thing and we can get into more of that. But when you're running blood work, you want to look at TSH. You want to look at T4 and T3. There's two different types. There's free, F-R-E-E, and then also total so free T3, free T4, total T4, total T3. Then you're looking again, TSH, you want to look at reverse T3. That goes high. Typically in chronic infection, our body is chronically stressed out so reverse T3.

[00:04:00] [00:04:30] The other two things you want to look at are antibodies like TG, TPO antibodies. If the antibodies are high, then that usually signals autoimmunity. I think about with my wife when she was pregnant with my daughter, starting to have some heart palpitations. This was either the second or third. Beginning of the third trimester started having some issues. We're like, "Oh, my gosh. What are we going to do? There's a baby inside you." Went and got tested, came up Hashimoto's. Antibodies for thyroid were elevated. Oh, great. Now we have an autoimmune condition going on. Then she actually had an ultrasound done in her thyroid that showed nodules as well. There's multiple things that you can do to look at it, but I think if you just want a complete thyroid panel, that's a good foundation to detect does somebody, Jonathan, actually have thyroid disease or a condition or not?

Mette Dyhrberg

Mette:

[00:05:00] In my case, I got my first autoimmune condition when I was 14. Spent the first half of my 20s chasing a condition, being told it was all in my head and my second half of my 20s collecting disease labels. I had six autoimmune conditions by 30. I was heavily medicated. After 10 years of being sick, my doctor's team told me that they had great news and then proceeded to tell me that I wasn't going to die in the immediate future.

[00:05:30] I was a CEO for a company at the time and I thought to myself, "If I went to my board of advisors and told them we're not going to go bankrupt in the immediate future, I don't think I have a job." I said, "What are we going to do about my process?" I was told that that was not what they were doing and they were happy with my numbers. I'm an economist by training and a little autistic with numbers. To me that just didn't cut it. I was seeing these numbers for the last years in my head and I was like, "Wow." Of course I didn't think I was going to be able to change anything, but I was so disempowered as a patient that I went home and I turned to the one thing that I'd always been able to rely on which was numbers. It was pre-apps and it was pre-Quantified Self and all these things. I started charting everything that I did.

[00:06:00] [00:06:30] At night, I would put it into an Excel spreadsheets. I build an algorithm. Basically from looking at correlations between what I did and my symptoms, I proved in five months that I wasn't a cardiac patient. Then proceeded to think, "Well, if I could get rid of my first label, I can probably get rid of everything." It took me 16 months in total but I basically tinkered my way or hypothesis tested my way out of all my conditions. Got off Humira. Got off the different drugs and basically was able to normalize my blood work. Here we are six years later. I've not taken any drugs and I'm perfectly fine and happy and probably healthier in my 40s than I was in my 20s.

Jonathan: That's amazing.

Mette: Thank you.

[00:07:00] Well, it was funny. Every time I'd go into a meeting, my COO says, "Mention that grandmother." It's a woman that was so sick when we started seeing her that her husband took the first two appointments. I don't know if you've ever gone over someone else's bowel movement with a partition but it was pretty weird. At the same time, he was so informed that I thought, "Wow, he's really been helping her out at a very intimate level because otherwise he wouldn't know all the stuff that he knows."

[00:07:30] Then 10 weeks later when I called her for a follow up, she was winded when she picked up the phone and she said, "Can I call you back in five minutes?" I double-checked the list like three or four times because I was like, "That cannot be the same woman." By the time she called me back, I said, "How are you feeling?" She goes, "Oh, great. I was taking care of my grandsons." I thought to myself, "Wow, it's amazing that you can see these turnarounds in people's lives." In her case, it was very, very basic. I think that's what we're seeing over and over is it's very basic interventions.

Jonathan: Tell me what she was experiencing. She was so sick, she was not able to come to the appointment, right?

Mette: Yeah.

Jonathan: What was she experiencing?

Mette: In her case-

Jonathan: What was her disease?

Mette:

[00:08:00] She has lupus. We're focusing a lot on lupus. She had occurred four strokes. She had gone through a lot of different pre-diabetes, whatever. By the time I see people, they always have at least four different diagnoses. I think in her particular case and what we see quite a lot when people have a lot of medications, they stop eating as much. They don't hydrate or, if they hydrate, they do it with sugary liquids. There's just a lot of bad lifestyle behavior that went into producing these symptoms.

[00:08:30][00:09:00] When she started working with us, her goal was to cook a meal for her family once a week. I said to her, "No, no. This is blue sky. You can tell me anything that you want to get out of this program." She said, "Well, it's been so long since I've been able to do that. That, for me, that would actually be a huge accomplishment." Six weeks later, no, actually not six, 10 weeks later, she was babysitting her grandsons. Of course she was exhausted. Who wouldn't be? But, at the same time, she was able to do it. This woman will never get back to the workforce, but it also doesn't matter because she's going to be able to be there for her family and for her grandsons which is going to make a huge change in their world.

Jonathan Otto

[00:09:30] Learning is all a part of the autoimmune journey. Educating yourself on autoimmune disease in general as well as your specific condition helps you to become a more savvy, informed patient who can best advocate for yourself during a healthcare appointment. Since we aren't ignoring conventional medicine or your doctor's advice, this is incredibly important as it helps you to be proactive and guide the medical side of treating your autoimmune disease.

Dr. Peter Osborne

Dr. Osborne:

[00:10:00] Right. When we look at the genesis, where does rheumatoid arthritis come from? There's this concept, Jonathan, called molecular mimicry. Molecular mimicry means when the gut is leaking ... Think of your gut. It's a quarantine zone. The gut is a tube and it's supposed to keep bad things out and let good things in. What happens with molecular mimicry is that the gut has sprung holes. There's microscopic pinholes in your gut, so all the garbage from the food, all the waste is leaking in. Sometimes what happens is proteins from bacteria and proteins from yeast also leak in. Some of these proteins look like human tissue. In some cases, some of the bacteria especially. Certain bacteria like *Klebsiella* and *Pseudomonas*, these are species of bacteria that produce proteins that look like our joints. These bacterial proteins can leak into the bloodstream through that leaky gut being caused by the Methotrexate, right? The immune system starts to attack them because it looks at them and says these are foreign. Over time what it says is hey, these look like our joints. Let's attack the joints, too because they look the same. That's molecular mimicry.

[00:11:00] The molecules that are leaking through the leaky gut mimic the joints and they perpetuate the autoimmune response. Until you stop that gut from leaking, you know, and whatever is causing it. Whether it's a medication that you're on or whether it's, you know, that you're eating the wrong food or plastics. Plastics can cause a leaky gut. Eating or drinking out of plastics can cause a leaky gut. Doesn't matter what it is that you're doing, you've got to stop that process to stop the molecular mimicry to calm down the immune system long enough so that the joints can begin the process of healing and repairing so you can get that patient back to stable and normal. That's what we had to do with Ann, but her story is an amazing turnaround from not functional to completely functional and being able to be a mom and being able to do crossfit and being able to do the things that she really wanted to do.

[00:11:30] [00:12:00] We've been seeing various results with the Ketogenic diet. People are noticing, for instance, we've got a rheumatoid arthritis patient and she was noticing that she was kind of stuck on Methotrexate and she didn't want to be stuck on Methotrexate and she had actually quit it on her own before she had even come to see us. She was looking to get healthier and finally, for once and for all, reverse the rheumatoid arthritis and get her symptoms under control without toxic medicine like Methotrexate. She kicked into Ketogenesis fairly quickly. I won't say that she experienced full resolution of symptoms, but she noticed a dramatic improvement in her inflammatory levels and how much her arthritis was hurting and how much it was waking her up in the middle of the night.

[00:12:30] [00:13:00] Adrenal dysfunction is another common thing that's probably my number one thing that I'm talking to every patient about, especially in America. Americans are typically burning the candle at both ends. Our cortisol levels are high and cortisol is the exact opposite of Ketogenesis. When Cortisol levels are high, it's actually forcing the liver to make more sugar and it causes the brain to even crave more sugar, which makes sense because in a high cortisol state, that's your high stress stage. If you're running from a lion now is not the time to eat steak and fat, now is the time to find a sugar source so you can quickly get energy. When we kick people into Ketogenesis with adrenal dysfunction, all of the sudden the body stops being inflamed, cortisol levels come down and really it's kind of a whole body reset. If you're not familiar with adrenal dysfunction, most people that struggle with adrenal dysfunction have fatigue, especially the afternoon fatigue, really restless sleep, salt cravings, sugar cravings. When they kick into Ketogenesis, many of those symptoms get better almost immediately. Now, it takes months for the true adrenal dysfunction to reset, but as long as you can get symptom improvement in people at least quickly, then they're likely to believe all the other things that they need to institute.

[00:13:30] But nutritional deficiencies can cause or trigger autoimmune disease or make existing autoimmune disease worse. It's something that absolutely needs to be evaluated. Glyphosate, before it was a pesticide, was used as a chelating agent to strip metal. It strips metals from the human body just as well as it strips metals from plants and weeds and kills them.

Jonathan: It's taking the good metals from the body, is that right?

Dr. Osborne:

[00:14:00] Yeah, yeah, especially one of the metals it can rob the body of is Selenium. Now, selenium half its function is in the thyroid. Look at how many thyroid disease, thyroid prescriptions are written in the United States alone. I mean, it's one of the top medications in the world. Selenium is necessary to convert thyroid hormones. T4, which is inactive thyroid hormone, to be able to convert it to the active form of thyroid hormone, which is T3, requires an enzyme that is selenium driven. If you're exposing somebody to a chelating agent that's stripping their body away of selenium, they can actually become hypothyroid. Selenium deficiency can trigger autoimmune thyroid disease.

Jonathan:

[00:14:30] [00:15:00] Unfortunately, one of the solutions the medical community has developed for dealing with thyroid issues is to remove the thyroid. This extreme practice causes the patient to have to be on constant hormone replacement therapy for live with synthetic drugs that can cause other health issues. Is this really even a solution or is it just bypassing the issue of taking the time to look at the body and figure out what is really going wrong? Functional medicine doctors and many holistic professionals have been able to see many patients with thyroid conditions be able to reverse their abnormalities and live healthy lives with little to no medication. If it's possible to overcome these conditions then why are we using surgery and pharmaceuticals to try to either cut out the problem or patch it up with a bandaid?

Dr. Osborne:

[00:15:30] It really comes down to if you've had your thyroid removed, completely removed, then there's not that organ really to produce the thyroid hormones needed and then, yeah, you get basically stuck being a lifetime customer. Synthroid, Levothyroxine, then people usually will switch to Armour. What's interesting about Armour from a pharmaceutical manufacturing side of it, it's often times made with gluten which gluten has the molecular mimicry to actually negatively affect the thyroid. When you're looking at what do you have to take if you're having to be on something, obviously you want to find a thyroid expert and somebody that can help really monitor your thyroid levels and give you the right stuff. Compound pharmacy, you know, compounding things so that you know what all the ingredients are, are important.

Jonathan:

[00:16:00] Many autoimmune patients are aware that allergies are often associated with their condition. However, do they really understand why? Let's get to the root cause of what causes allergies to develop and if it's possible to prevent or even reverse our allergic reactions.

Dr. Osborne:

[00:16:30] Top solutions, really, when you're looking at the thyroid is figuring out okay, why is the immune ... Like in a Hashimoto case, when the immune system is actually attacking the tissue of the thyroid, why is that happening? There's three big causes that I've seen; toxicity, pathogens such as Lyme Disease and other co-infections, then I'd also throw parasites into the mix, as well, too. I mean, you could put parasites in the pathogen category, but really toxicity and pathogens as a whole are big sources of why people have thyroid issues. Then, you don't want to discount diet that certain foods that you're consuming, potentially synthetic damaging foods, are actually negatively affecting the thyroid or the body actually attacking it. Like gluten, the whole molecular mimicry, basically.

Sharon Porter

Jonathan:

[00:17:00] Tell me about that when it comes to biomimicry, can you please explain what that is? Why that's important to understand what it can do inside the body.

Sharon Porter:

[00:17:30] [00:18:00] Yes, so when I'm working with a nutrition client who has Hashimoto's, so this is autoimmune attack against the thyroid gland, right? Hashimoto's. It is critical that this person become absolutely diligent about avoiding gluten. We think about gluten as being an autoimmune trigger for celiac disease where the lining of the

gut is attacked by the immune system. It's really fascinating with Hashimoto's where the structure of the gluten molecule is almost identical to the structure of the thyroid gland tissues. If we have been over consuming gluten, and the immune system has decided that is a threat and every time gluten is consumed the immune system mounts an attack to wipe out that gluten molecule. Now the immune system is going on the search, looking for every molecule of gluten in the body and scanning and all of the sudden it finds this huge concentration of what it thinks is gluten molecules. The thyroid gland, right? The immune system starts attacking the thyroid gland.

[00:18:30] [00:19:00] In order to get the Hashimoto's attack to calm down and to minimize the damage we've got to avoid gluten. The thing that's astounding is the most recent research is showing that a single gluten exposure can have an immune response that can last up to six months long. People think, oh I'm going to be gluten free and protect myself but maybe once a week I'll have pizza, right? You know, some people's immune system's are healthier and still have a fairly normal function and that may not be devastating to that person, but someone with autoimmunity, especially either celiac, obviously, but Hashimoto's, it really has to become an all or nothing thing if we're going to stop the destruction of the thyroid gland.

[00:19:30] [00:20:00] The other thing that's fascinating is the biomimicry effect of Type 1 diabetes. There's different theories out there. Type 1 versus Type 2. Type 1 being where the beta cells inside the pancreas are destroyed. These are the beta cells that normally would produce insulin. When they're completely destroyed then the body cannot produce insulin, so Type 1, right? The theories are that the beta cells in the pancreas are destroyed either by a virus or by an autoimmune attack. There's some research now that's showing that that autoimmune attack could be linked to commercial dairy. The type of cows, the Holstein cow, is the type that's usually used in commercial dairies, produces a casing that is of a variety that can stimulate that autoimmune attack. That protein structure resembles the molecular structure of the beta cells of the pancreas that produce insulin.

[00:21:00] This comes back, full circle, to the raw milk and somebody having goats in their backyard or being a member of a raw milk share, where at a small scale the cows that are usually used are either Jersey or Guernseys, and they produce a different type of casing that is more compatible with human biology. Dairy is not tolerated well by some people, and other people they seem to have the capacity to tolerate dairy better than others. And so I strongly recommend, if somebody's going to choose to have dairy in their diet, that it really needs to be from a small scale dairy where they can verify the type of cow and the type of casing that's in there so they don't put their pancreas at risk.

Jonathan:

[00:21:30] Great, that's awesome. Now, anything else, in regard to autoimmunity or thyroid disease in particular. It sounds like you've got quite a bit of awareness on Hashimoto's. Is there anything else you would like the viewer to understand when it comes to looking at natural ways to both prevent and put Hashimoto's into remission or reverse the disease?

Sharon:

[00:22:00] Other than a complete diligence in avoiding gluten, I would say the best way to manage and minimize an immune attack on the thyroid gland is to manage your overall immune health. Right? That would be the same as any other type of autoimmune condition, so minimizing the stressors to your gut, packaged processed foods, sugar, alcohol, stress. Right?

[00:22:30] When we are under stress, our adrenal glands are pumping out excess cortisol, if they still can, and that cortisol weakens the immunity, the SIgA, in the lining of the gut. There's a very well known connection between stress and weakening the lining of the gut.

Jonathan Otto

[00:23:00] It's important to note that no hormone works in isolation from other hormones. They all function within a complex, subtle web of interconnectedness. Many hormones have an effect on the immune system, disease, and each other. There's little doubt that hormone imbalance can exacerbate or even induce relapses of dormant autoimmune disease. Women are afflicted with autoimmune disease at a much higher rate than men, which is a good clue that female hormone balance is involved in some way.

Dr. Jay Davidson

[00:23:30] When somebody has autoimmunity, we know from a scientific standpoint that if you have an autoimmune condition, you're going through perimenopause or menopause, or for the guy, it'd be andropause, which isn't often talked about, but menopause or perimenopause, that if you have an autoimmune condition, it's going to be a rougher road, a rougher journey through that. Really, always looking at the body as a whole and how can you heal yourself is an important thing. But hormones, in general, is big for just a feel good. So if you're deficient of estrogen, deficient of progesterone, you're converting things in the wrong manner. I mean, you can just feel like crud. You can just not feel well.

[00:24:00] [00:24:30] And so hormones, reproductive organs, they're all connected. If somebody's even having trouble getting pregnant, you want to look at ovaries, you want to look at uterus, you want to look at the hormone levels in the body. Hormones would be estrogen, and you want to also look at the estrogen metabolites. I generally like a dried urine test or even a 24-hour urine test because that test is nice. I feel like it's more comprehensive than just the standard blood work because, really, when you're looking at risk factors, hormonal-wise, if you're looking at uterine cancer, breast cancer risk, it's always the estrogen metabolite, the 4OH, what they call the 4OH estrogen metabolite, that then puts you at risk.

[00:25:00] When you run a standard blood work for hormones, you can't actually look at the metabolites in the blood, so I like the 24-hour urine hormone, or also, Precision Analytical has a test called the DUTCH, and you can actually do it at home. It stands for dried urine test comprehensive hormones and what it will do is it will look basically at the whole chart of hormones. We can look at progesterone. We can look at DHEA. We can look at testosterone. We can look at estrogen metabolites and how it's breaking down methylation. We can look at how testosterone's breaking down. It's really within that pathway, you can have a better assessment of what's actually going on with the hormones. Assessing the hormones can help, whether you're dealing with hormonal type symptoms, menopause, perimenopause, infertility issues. Usually lower progesterone just makes it a little bit tougher for somebody to get pregnant.

Dr. Phillip Day

[00:25:30] One of the patients that came to see me was actually a girlfriend of a patient that's seen me for a long time. He started dating this girl, and she was having some markers come up with her GYN exam, and the boyfriend was worried and like, "Hey, we need to do something else. We need to help you." The GYN wasn't willing to help her, or not unwilling to help her, but wasn't able to help her.

[00:26:00] She sits down in my office, and one of the first things she tells me is, "I love sugar, and I eat way too much of it, and there's not really anything you're going to be able to do about it." She had some pre diabetic markers and inflammatory markers and some mood issues that she didn't really attribute to her sugar cravings, but as Snickers likes to make popular the "hangriness," the being hungry and being grumpy is a very real thing.

[00:26:30] It's a hormonal imbalance, whether it be insulin or estrogen or whatnot. Those hormones are constantly feeding into each other. High insulin states always lead to high estrogen states in females. High estrogen states are

very irritating to the brain. They're kind of inflammatory to the brain, and people are more likely to get migraines. They're more likely to have mood irritation, anxiety, heavy periods or PMS.

[00:27:00] That's how she came to me, with many of those symptoms and one of the first things we put in place was a ketogenic diet. I sent her to work with my nutritionist to help her get into a ketogenic diet and she was absolutely amazed. I didn't see her until, I think, three or four weeks later. I was prepared to have the conversation of like, "Okay, how much did we cut down on carbs? Where can we go, because we've got further to go, now that you've cut back a little bit."

[00:27:30] Basically, she came in at the three or four week mark and said, "I don't have any more sugar cravings. I've lost weight. I came off of birth control, and my mood is more stable. I didn't have a massive period. Everything's working better." She's still seeing us, and it's been probably six months. She's not ketogenic any longer, because she met a lot of her goals and she's more on a balanced diet, but one of the most powerful things to her was that she didn't have the sugar cravings that she initially came to me on, that she thought she was just born with. She thought she was going to have those sugar cravings the rest of her life and not really be able to tackle them. Both her and her boyfriend were pleasantly surprised that she was able to reset her metabolism and have a healthier life.

Dr. Jay Davidson

In order for you to know whether you have hormone issues or not, you really just need to run a test. I like the DUTCH hormone. It's pretty inexpensive. You can do it at home. Then, it's going to monitor your hormones, and it's going to look at progesterone. It's going to look at DHEA. It's going to look at testosterone.

[00:28:00] When we're looking at the pathway, understand that pregnenolone kind of sits at top. So there's a hormone called pregnenolone and then above that actually is cholesterol so where we always say cholesterol is the bad guy, cholesterol is the precursor to hormones.

[00:28:30] If you want to increase your risk of cancer and you want to increase your risk of having low hormones, lower your cholesterol as much as you can. And that's sarcasm to not do that, right? So, pregnenolone is at the top. Pregnenolone is a very smart hormone. It'll either pick to go into progesterone or it'll go into DHEA so it kind of has that potential to pick and choose. So there's people that will take pregnenolone just to kick the whole pathway in gear. There's people that'll just take progesterone as well. There's people that'll just take DHEA, testosterone, there's kind of a whole slew to it. But essentially we've got pregnenolone at top, that will split into progesterone.

[00:29:00] [00:29:30] [00:30:00] And then the other pathway is a big pathway. So we've got DHEA, pregnenolone will go to DHEA. That will go then to testosterone and if your testosterone is low you can have very low sex drive, very common in chronic illness. That's one of the first things that disappears is that sex drive when the body's not doing well, hormones immediately shift gears. So you've got pregnenolone, DHEA, testosterone, and then that ... testosterone will actually break down into what they call the alpha-beta and you want to make sure that pathway is breaking down properly. For instance, a guy's not at risk of prostate cancer or something, but testosterone will then turn into, basically get converted into estrogen. And this is the kind of the danger of testosterone taking, when you take testosterone you're basically taking something that's going to turn into estrogen too, so you have to be very careful on the hormone side. I think clinically, I'm fine with people doing natural things hormonally as long as they've taken a look at their tests. There's a massive issue with fertility. I mean when you actually look at research, men's sperm counts are at an all time low. And when you take a step back and you think about, okay, having a child, getting pregnant, male and female obviously it takes to get pregnant, and actually look at from how the body was designed, you have to be healthy enough to bear a child. When somebody starts having a "chronic

illness,” one of the first things that disappears is your sex drive, because if the body’s not well, the body doesn’t want to reproduce. The body is trying to survive in the moment.

But look at what’s happening right now in our culture, Jonathan. Glyphosate is everywhere. Where we think, oh, I’m buying organic. I’m not exposed to it, glyphosate’s in the rain water. We share one atmosphere on this earth that, when somebody sprays in one area, we share it all over the place. Glyphosate’s a huge one for affecting toxicity, in general, will bring down sperm levels.

[00:31:00] [00:31:30] But what does everybody carry around in their hand or in their pocket all day so they can stay connected to the world? Cellphones. And where do guys or dudes put their phone? Right in their pocket, front pocket or back pocket, like right next to their gilets, right next to their prostate. These are these reproductive sex organs that need to make sperm, which is usually a 90 day lifecycle. If somebody’s not healthy, for them to get pregnant, it’s tougher because the body is saying we got to deal with you first before we’re all of a sudden going to have a child. Clinically, I see fertility way down. People being able to be fertile and have children, which of course then the industry, the fertility industry or infertility industry I guess you would call it, of trying to artificially inseminate and things like that, that industry is booming right now.

Dr. Stephanie Daniel

Dr. Daniel: A lot of fertility cases are pretty remarkable.

[00:32:00]

Jonathan: Is infertility at an all time high in this frame?

Dr. Daniel: I think so. I think statistically it appears to be at an all time high, and 50% of it is labeled unexplained. And what I have discovered just in my practice is that the unexplained aspect of it is very similar to all the other conditions that present in my practice.

[00:32:30]

Jonathan: Are you seeing people get pregnant when they do the right protocol?

Dr. Daniel:

[00:33:00] [00:33:30] Yeah, I didn’t even finish that. What happens is we fill in the gaps. We fill in nutritional gaps. We actually help their bodies get rid of excess toxins which end up going on to the unborn child if they remain. We fix or help support pathways that are genetically determined that are inefficient with simple micronutrient repletion, like giving people certain micronutrients that help biochemical pathways that are hindered operate more effectively. And then I look at subtle hormone imbalances that are not things that are picked up in the fertility world because they’re a lot more subtle, but they’re collectively enough to create that message that says no, no, no. Not right now. The whole system’s skewed to a direction that is not optimally functional.

[00:34:00] If you restore all these pieces, you give new information, the body’s able to reorganize itself in a way that’s optimal and healthy, it does what it was evolutionarily designed to do, which was to reproduce. That’s part of our biological imperative. We’re born to be able to do that. It’s only all this other impact that has gotten in the way, that if you can address it and correct it, allows for that process to happen again normally.

Jonathan: And you’ve seen it?

Dr. Daniel: Over and over and over again.

Jonathan: Can you tell me what kinds of cases-

Dr. Daniel:

[00:34:30] [00:35:00] One that most comes to mind just because she delivered a few months ago was a woman in her early 40s. She worked for a good couple of years and her case was really interesting, too, because there were not so obvious signs, even in this other paradigm, but when we dug underneath it, there's lab evidence of immune dysregulation that hadn't yet become symptomatic. But on a biological level, which I separate from the cognitive level, there was enough imbalance that her body was choosing, was knowing that it needed to negotiate and navigate that process, even before she manifested symptoms.

[00:35:30] And she had gone through various fertility treatments and been unsuccessful, and had no real diagnosis as to why, was in that unexplained group. And we peeled back the layers bit by bit. She worked really hard in terms of ... I guess even sort of trusting the process, because the thing that sort of threw things off initially was that she didn't have very many symptoms that we would typically see of this objective data. But when we addressed it and corrected it, she conceived naturally, all on her own, and her at age 41, and went on to have a really healthy pregnancy and a really sweet little baby boy.

Jonathan: No problems?

Dr. Daniel: No problems. Those stories happen over and over again.

Dr. Jay Davidson

[00:36:00] [00:36:30] If somebody's having fertility issues, if they're having autoimmune struggles, you still need to deal with the upstream sources to get the body well, and when the body heals, it heals. Everything heals. It doesn't pick and choose, oh, I'm just going to heal the shoulder now and everything else will wait. It's like no, when the body heals, it heals. And when the body is healthy, it's ready to give birth or to procreate, to have offspring. And that's really the goal is let's get the body overall healthy. Instead of okay, you're not fertile. You've been trying for eight years to try to get pregnant. Now you're going to a clinic. It's like well in that time, has anything been done overall to actually help your health? To actually improve your overall health. That's the shift, I believe, we need to make is not using a treatment to try to get pregnant, but to look at overall body health, and if we improve the health, I think fertility issues will diminish, and obviously people will be more fertile.

Dr. Stephanie Daniel

Stephanie:

[00:37:00] Most of the people I see come to me after they've failed traditional treatment. They failed the convention. They're not conceiving through all the other fertility methods that they've been trying, that they've been spending thousands of dollars on. And it's because we're smart. Our bodies are smart.

Jonathan: This is moving for you, isn't it?

Stephanie: Yeah. I think so.

Jonathan: Why? Why is it moving for you?

Stephanie:

[00:37:30] [00:38:00] A couple reasons. One is that as opposed to trying to force something into being that is going against an intelligent biological process, right? If we look at things like IUI or IVF, you're trying to trick the body into overcoming a really elegant message that it's putting out and trying to force something that's just not reasonable, as opposed to actually providing the building blocks and removing the barriers that allow it to unfold and find this beautiful state of balance and being that allows for these natural processes to occur normally. At the end of it, you get a new life. You get a baby. There's nothing better than that.

Jonathan: And you've seen that happen with more people than that woman?

Stephanie:

[00:38:30] Almost universally, every single person I've worked with, if they are committed to the process, they all get pregnant and have healthy pregnancies and have healthy babies.

Jonathan: Wow!

Stephanie: Over and over and over and over again.

Jonathan: Really.

Stephanie: Mm-hmm. Yeah. I would say statistically, 80 plus percent.

Jonathan: That's a large number.

Stephanie: Yeah.

Jonathan: And that 20%?

Stephanie: They gave up.

Jonathan: I was going to ask that.

Stephanie: Yeah, they gave up.

Jonathan: Did they give up?

Stephanie:

[00:39:00] [00:39:30] They didn't commit to the process. They maybe dipped their toe in or maybe they went a little bit further than that, but sometimes course correcting takes ... it's peeling back the onion. It's peeling back the layers. If the initial layer wasn't enough, there is more work to do. Sometimes the initial layer is plenty, and the body is able to self-correct just by addressing that piece. But sometimes the impact is deeper than that and you have to go deeper than that and look at some of these other more nuanced impact points and undue them.

Jonathan: It's awesome.

Stephanie: Yeah.

Jonathan: It's awesome. And then, considering then the other 20%, if they all had fully applied themselves and not given up, then-

Stephanie:

[00:40:00] There's nothing biologically to indicate that they wouldn't be successful. We still had evidence of, even objective evidence of imbalance where a conventional doctor might look at it and say they don't see anything, but I'm looking at fine tuning and optimizing and allowing this orchestration of really complex processes to work together.

[00:40:30] The first message that people get is, "Oh, you're this age and you've been trying this long." There's an equation for that, and that equation says, "You have to go do this right away. You have to do this intervention right away or you'll never have a baby," and then that intervention fails at least four times out of five, or eight times out of 10. The statistics are less than that. Every round of IVF has about a 16% success rate. They're told, "Well, you just have to keep doing it."

[00:41:00] Their initial message is, "This equation says that it can't happen unless you do this. There's fear and there's disempowerment and then there's all of that impact. We know even data-wise the number of women who have early pregnancy loss, their cortisol levels compared to women who maintain pregnancy, 30% of women who maintain pregnancy have excess cortisol levels, and 90% of women who have early pregnancy loss have excess cortisol levels.

[00:41:30] That's stress, right? You're saying, "This can't happen unless you do this," and they feel broken. They feel like there's something seriously wrong, and only this technology can make it happen. That's not always so much the case. How many rounds is that? Five or six to get to 100%. That's a lot.

Jonathan: Stress is inevitable when hope is lost.

Stephanie:

[00:42:00] I think so. I think one of the major points of success that I have is that instilling that hope and giving them the insight that they can get better is partly what makes them successful. The protocols are helpful, but it's the idea that they're able to that actually allows them to succeed, to resolve their health.

Dr. Jay Davidson

Jonathan:

[00:42:30] What's a few things that somebody could do that was wanting to fall pregnant? What's a couple of things that they could assess as being triggers that are causing infertility, and a couple things that they could start doing that would help their body to be a great nurturer of new life?

Dr. Davidson:

[00:43:00] I would go back to what are the sources, what are the underlying sources of your health issues and address those and deal with them. Toxicity is a big epidemic. Pathogens like Lyme and coinfections and parasites are big epidemics. Remove the toxin, clear out the bad pathogen, body has a healthy environment. Now, on the other side of it-

Jonathan: What about EMFs?

Dr. Davidson: Oh, EMFs are a huge category. EMF, or really the technical term we'd say is EMR, electromagnetic radiation, is more of the scientific research category. EMF is still a popular buzzword, but cell phones around you, WiFi on, Bluetooth.

[00:43:30] Literally, in my house about a year and a half ago, I had an EMF guy come in and analyze it, and in my office alone, I had the WiFi router, which had two different WiFi signals, like 2.4 and five gigahertz or something. He looked at it because I'm in a little 1,200 square foot place. You've been there. Pretty small house. He's like, "This is an industrial router for this tiny house." I'm like, "Yes, but it's fast, because I like technology."

[00:44:00] I had this router about six feet from my head. I had a Sonos WiFi speaker right next to that. In the closet, I had a printer that was WiFi. I had my laptop, which was connected to WiFi, even though I was right next to the router. I then had that on stand so it's ergonomic so I'm not hunched over, but then I had a wireless keyboard and mouse, which was Bluetooth, so I had Bluetooth on, WiFi on.

[00:44:30] He came in with the meters in my office. He has three different settings. He turned it all the way down, and he's like, "Dr. J, it still says off the chart. I can't even get a number, it's so high in here." I started thinking, "Is that why I get tired by four or five o'clock at the end of the day?" This electromagnetic radiation that's just constantly stressing me out.

[00:45:00] Sure enough, it's a hard switch when you say, "Get rid of WiFi, get rid of Bluetooth, get rid of the wireless things," because wireless is so convenient. There's not wires everywhere. When we did that in our house, we made a decision, after he came in with meters, I'm like, "Okay, we've got to do it," immediately, my daughter started sleeping through the night. Our house was peaceful. It immediately changed the environment. It was at that point I'm like, "You know what? EMFs, EMR, electromagnetic radiation is a big issue." It's a big stressor for somebody trying to get pregnant, too. At minimum, shut your WiFi router off at night. You can go get one of those Christmas light timers or a fish tank light timer where it turns it on every morning at eight AM or shuts it off every night at 10 PM.

[00:45:30] I think that's a first starting spot for you listening. Just go get a timer, shut it off at night, minimum, but the long-term picture is let's get rid of the wireless technology because anything transmits wirelessly is creating electromagnetic radiation, which then is just another stressor. It's another thing to fill our buckets up to more likely to tip and cause autoimmune issues, to cause all kinds of different things in our body.

[00:46:00] [00:46:30] It's really cool. If you actually google EMF or even EMR and Kirlian photography, you can actually see what WiFi looks like from a photograph. It's actually pretty scary when you actually see it. When you can't see EMFs or EMR, you're like, "Oh, it's not a big deal. I got my phone in my pocket. Whatever, Dr. J, I'm moving on." It's these stressors that tip the bucket. If you're somebody who's struggling right now, you have to remove those stressors to get well. Remove them, and I promise you, you will heal faster from that.

Maria Whalen

Maria: His look on his face was different. There was something different about it. He said, "I want you to sit down." I was like, "Doc, look, don't feel bad. You can tell me whatever you want. Honestly, I don't mind." He goes, "No, this one might hurt a little bit more." I was like, "What?" He put his hand on my arm and I knew it was something different. He said, "I just want you to know with some of the results, you'll probably never be able to have children."

[00:47:00] For me, that was like life stopped. I had absolutely no reason to live at that point. I remember leaving there and I was in a fog, and everything felt like it was moving in slow motion. I went home, and I turned around and I went and checked myself into a hotel. I had paid six days in advance so that I was clear I was leaving this planet and I was going to do what I needed to do and I didn't want anybody to find me, because I didn't want to get back in the hospital.

[00:47:30] I went in, checked in, and I went to go do what I was going to do to take my life. For some reason, I had this desire to say goodbye to the world. I got on my knees. I started saying goodbye to my family. I had this vision,

this cloud, and I could see my family talking about it. I saw my dad telling my sister, who's my friend, and I saw my sister just start weeping, and I started weeping. I saw my sister tell my nieces.

[00:48:00] Just watching what they had to go through, I was in absolutely agony and tears. I was just weeping, and that stress actually sent me into a coma. The very thing I thought was going to take my life ended up saving my life. I woke up the next morning, and I always joke that the first thing I said was, "I hope heaven doesn't look like a hotel room, because where am I and what happened?" When I realized I was here, I had this overwhelming sense like the Incredible Hulk that just filled my body of, "This is not how my body's meant to be. There has to be answer, and I'm not stopping until I find it." At that moment is when I declared that I'm going to help other people once I conquer this, and I was going to conquer it. That warrior theme came over me.

[00:48:30] What took me seven years to figure out, I ended up healing myself. I have a beautiful 10 year old little girl now. That was my proverbial finger to the, "Don't tell me I can't have a kid," kind of thing. Really, when I learned how the body actually heals anything and everything, I realized that people need a system.

Jonathan Otto

[00:49:00] What a benefit it's been to learn more about how our hormones are affected by our diet and how hormone imbalances are the root cause of many autoimmune disorders, especially thyroid malfunction. We hope that you can take some of the things that you've learned from this episode and start making changes today in our own life that can benefit your health.

Episode 3:

MISSING PUZZLE PIECES: CAN YOUR MIND BE RESTORED? THE TRUTH ABOUT ALZHEIMER'S & DEMENTIA

Jonathan Otto

[00:00:30] Welcome to Autoimmune Secrets. I'm your host, Jonathan Otto. In episode two, we examined some of the most common autoimmune diseases. In this episode, we're going to look at a group of diseases that have a dramatic impact on our society because of their high incidence, mortality, and severe debilitating character. Neurodegenerative diseases have now surpassed both cardiovascular disease and cancer in incidence rates, but they haven't always been known as autoimmune diseases. They do show all the features, and the symptoms are just as debilitating.

Dr. Ben Johnson

I actually have three medical degrees, which is way too many. An MD, a DO, and an NMD. That's been quite a journey for a boy that couldn't sit in his seat in school, that's way too much education, but ...

[00:01:00] Longevity, extension of life, and of course, we don't need an alive body if we don't have an alive mind, a healthy, alive mind, so a critical part of life extension is a healthy, vital, vivacious mind that's fully aware and fully active, so yes, Alzheimer's is part of that treatment.

[00:01:30] I also treat cancer patients, and interestingly enough, they are very similar paths, because longevity and getting us there, there's probably a 90% similarity between life extension and prevention of Alzheimer's and cancer treatment. It's just a matter of details in the difference.

[00:02:00] The truth is, we don't know all of the details about Alzheimer's. We thought it was tau formation, and we thought it was beta amyloid, and now the question is, which came first, the chicken or the egg? Is the beta amyloid deposition the result of the disease process, and the tau, or is it the primary incident? It may be simply a reflection of the inflammatory process, so the truth is we don't know cause and effect yet. We know that beta amyloid shows up, but we know that there are people with healthy minds that have a lot of beta amyloid and tau on autopsy.

[00:03:00] What we've got to do is keep all the neuron connections, because each nerve fiber has a lot of different connections, and cross connections, synapses, and when we lose those synapses, that's when we start to lose memory. There's a lot of things involved in that process, from heavy metals to toxins to inflammation, so there's a lot involved in Alzheimer's. It's not a simple answer. It's a multifactorial disease.

[00:03:30] Atrophy of the brain is part of that process, and why is it atrophying? Is it simply a result of a die off of cells in aging, or is it a part of high glucose levels, because another name for Alzheimer's is diabetes type three, so we have to strongly consider the role that sugar plays in our high sugar diet.

[00:04:00] Let me define sugar for you. Sugar is breads, sugar is pasta, sugar is noodles, sugar is grains, oats, wheat, all of the grains. That includes corn, which of course includes corn chips. That includes potatoes and other starches, which of course includes potato chips. So if it's white, or was white, essentially, don't put it in your mouth. Unless it's cauliflower, probably the healthy white thing that we can put in our mouth. Maybe a little jicama, but essentially, we need to avoid grains and starches like the plague.

There are some primary things. Diet, which we'll cover extensively in a minute. Exercise and the nutritionals, which you can separate from your diet if you want. And then there are supplements, and active, aggressive medical treatment.

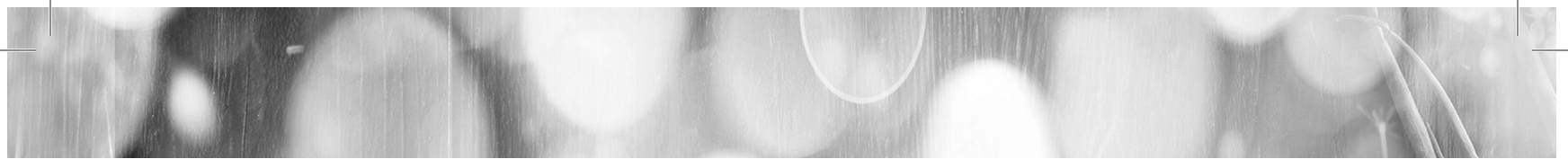
[00:05:00] Let's be very clear, though. If you go on the Internet, Alzheimer's not being preventable or irreversible is simply not the truth. Alzheimer's is absolutely preventable. Alzheimer's is reversible up to stage five. There's seven stages of Alzheimer's. Even stage six, we can hold the line, and prevent progression. Stage five, we can roll Alzheimer's back and regain some of that memory. Alzheimer's is absolutely preventable and is, to a significant degree, reversible.

[00:05:30] Diet is your number one thing. Diet is critical, so we briefly mentioned that another name for Alzheimer's is diabetes type three. So avoiding sugar and sugar spikes is important. Sugar spikes cause Alzheimer's. Sugar spikes cause diabetes. Sugar spikes cause cancer. Not singularly, but one of the factors. And so what is a sugar spike? A sugar spike is when we eat a certain substance, and it spikes the blood sugar more than 20 points.

[00:06:00] This is critical in my treatment of Alzheimer's patients and cancer patients and in preventing aging. I will actually tell my patients, "Go to the local pharmacy and get a blood sugar meter. Check your blood sugar. Eat the bowl of whatever you're going to eat, quinoa or corn or potatoes or fruit. Set your timer for 20 minutes and check your blood sugar again. If your blood sugar went up over 20 points, you can't eat that. That's causing a sugar spike."

[00:06:30] Sugar spikes cause damage everywhere, from the brain to the pancreas, to our little bitty blood vessels, capillaries, nerves; feeding cancer cells. Sugar spikes are one of the unhealthiest things that we can do in life.

[00:07:30] Another critical element in diet is when not to eat, because we not only want to be eating the right things, but fasting is a lost art in America. All through the centuries, since the creation, we have fasted. It's been



a major spiritual practice, but it is also an extremely healthy practice. Fasting allows immune senescence to happen, and that's hard to grasp, but when I stubbed my toe on the boardwalk when I was five years old and got a little bacteria in there, my immune system mounted a response against those bacteria, and ever since then, I've had immune cells sitting around, waiting on that bacteria to show up again. Here's a bacteria, and here's the immune system, and it comes in and it discovers that antigen, and then the rest of its life, it's going around looking for that one thing.

[00:08:30] If we don't ever incur that one thing again, then our immune system is just inactive. I want to use an athletic metaphor. They're on the sidelines. They're in the dugout. They're on the bench. They're out of the game. They're not out there playing. They're not active. Fasting allows natural immune senescence in a healthy way, because it allows your body to purge itself of some of those old cells. Probably upwards of 90% of our immune system is sitting on the sideline, waiting for that one thing to show back up that we were exposed to when we were one year old or five years old or 10 years old, and if it's never going to show up again, then it's just that part of the immune system not functioning. It allows the purging of some of those old cells, and then your immune system creates new vibrant stem cells that haven't identified anything, and now they're looking for that new cancer cell or that new fungus or virus, and they can react to it.

[00:09:30] Fasting is a health practice. It's not just a spiritual practice, which I encourage that too, but it's an amazing health practice. So, what does that look like? On a daily basis, we should be fasting for 16 to 18 hours without food. On a monthly basis, a three-day fast, water only. You say, "Oh, I can't do that." Yes, you can. Yes, you can. Anyone can do it, including diabetics. You have to set your mind to it and be firmly intentional. It should be a water-only fast, preferably 72 hours, but no less than 48 hours. Again, lots of fluid, because you're purging, and you want to have a good wash-out. Fasting is very important for keeping a healthy mind and healthy body.

[00:10:00] We talked about elimination of starches and grain similar to the Mediterranean diet. We've always wondered how the French, the Italians, and Greeks could drink like fish and smoke like fiends and have less cardiac disease than we could. Well, they're eating a healthy diet. They're eating fresh greens and lots of olive oil. It includes eating fish and not so many red meats. They're eating a lot of healthy things such as peas and nuts. They're eating healthy foods. So, look up a Mediterranean diet, and that's really where we should be focused as far as diet. The fresher the food, the better, so you want fresh food, you want organic for sure, you don't want any artificial chemicals or fertilizers or pesticides, and absolutely no GMOs. GMOs are pesticides that have been incorporated into the food to kill animals. Preferably insects, but you're an animal in that sense, on a physiological basis.

[00:11:00] So you're taking these toxins that are made to kill animals into your body, and they're damaging you. Avoid GMOs like the plague. So, eat a Mediterranean diet and organic; no GMOs. If you can't afford organic, at least bring your food home and wash it off in the sink in hydrogen peroxide to decontaminated the pesticides and chemical residue.

[00:12:00] Hydration is critical. People don't comprehend that first of all. You're washing out toxins nicely and hydration is necessary for DNA to happen. All day long our cells are making DNA. Well, DNA looks like a rubber band wad inside of a cell, and inside of the nucleus, and inside of the mitochondria, and it literally has to unfold and string out for it to be copied to create new structure, to create whatever the body is creating. The cell is creating from that DNA. And then after it gets translated, it wads back up. Well, if things are dehydrated and it's compressed in there, it can't untangle itself. Liquid is the medium in which everything happens in the body, so it has to be able to untangle.

[00:12:30] And then after, the body's a small factory, cells are small factories, so after they manufacture their stuff, there's waste products. And we don't have a little blood vessel coming from every cell, so the cell throws the trash right outside the door, which is not a good situation. But that's carried off by the lymph fluid. People don't

understand what lymph fluid is. It's waste from cellular debris. And that gets carried back into the blood system and recirculates. So, we need lots of fluid for inside of the cell and outside of the cell, to dispose of waste products. So hydration is critical.

[00:13:00] And you want to hydrate with healthy water. So that is absolutely not tap water, and that's not water in plastic bottles, which, if you do the research, is mostly tap water. And now it's sat in plastic for weeks or months with all the chemicals in plastic. So, healthy water is fresh water that's cleansed with activated charcoal and other substances, preferably right in your own home, and stored in glass. I use a glass bottle if I'm going outside, or away traveling, to put my fresh water in. Slightly alkaline, mineralized.

[00:13:30] It's critical, if you're going to have reverse osmosis water, you have to have remineralization on there, because the life of the water is mineral. That's how everything works inside our body, is minerals. Electrolytes and nerves can't work without minerals. We can't even make adrenaline or cortisol or mineralocorticoids, any of those, without minerals. So minerals is a critical element. So, we've got to have all of those things.

[00:14:30] Healthy fats, again I briefly mentioned EPA and DHA and fish. Avocados are a great source of healthy oil. I personally drink three to four ounces of extra virgin olive oil a day, in the afternoon when I start getting a little brain fog. I will take extra virgin coconut oil, because it is brain food, you can feed your brain directly. Your brain can burn those medium chain triglycerides. Healthy fats are critical. We've been told to stay away from fat, and that is deadly. Fats are not only essential for life, they are primary fuel sources, and there couldn't be anything healthier than healthy fats. However, we can't use the things that we cooked our fried chicken in for 100 years.

[00:15:30] We have to have healthy, vital, fresh oils to cook in, to eat, on our salads. So, not artificial oils. We must avoid trans fats at all costs, because it's part of the structure. Our body's building new cells every day, and so whatever we have on board, it's building new cellular structure. And if all it has is broken material, it builds the cells out of that broken material. But then the cells leak. They aren't healthy, so those trans fats are the wrong structure. They don't fit together well. It's like having a tile roof and some of the tiles turned upside down, some of them sideways. It's not doing the job.

[00:16:00] And so, we've got to have healthy fats to build a structure out of and that's natural, olive oil, avocados, coconut oil, almond oil, all those healthy oils that we should be eating fresh, raw, from nature. And just again, to mention about carbs. We talked about carbs, what they were, what sugar was, and again we've been on a carbohydrate craze in America because of ill advice from the medical establishment and the agricultural department encouraging us to eat those things. Because that's what pushes forward from industry in America.

[00:17:00] So the diet looks like: vegetables is number one. Number two is vegetables. And number three is vegetables. And then we can talk about nuts and low glycemic fruits. Just go online and look at low glycemic index fruits. So many fruits today are bred for sugar content, because that's what we crave in America. We crave sugar, and that's what our taste buds have been raised on. So, look at a glycemic index of fruit, and you can eat the low glycemic index fruits but avoid the high glycemic index fruits. Avoid sweets. Avoid corn sugar. Avoid sugars of all sorts. That's what the low-carb diet looks like in a nutshell, no pun intended.

[00:17:30] Exercise is another one of those critical elements, for the brain, for the body. There has never been a study done on exercise that showed it any detriment, and any study that I've ever read showed an improvement in whatever it was, from Alzheimer's to heart disease to atherosclerosis to diabetes. There is nothing that exercise doesn't help. So what does exercise look like? It looks like 30 minutes a day preferably, absolutely not less than 30 minutes three times a week, of relatively intense exercise.

[00:18:30] For instance, there was a recent study that came out that men that had prostate cancer had 60% less progression if they had vigorous exercise for 30 minutes or more for three times a week. So, vigor is part of that

equation, so getting your heart rate up to 150 if you're under 50, 140 if you're over 60, 130 if you're over 70. So that heart rate goal goes down as we age a little bit. But getting your heartbeat up nicely, sustained for a significant period of time, at least 30 minutes, at a bare minimum of three times a week is critical.

[00:19:30] And I mentioned lymph a few minutes ago. People don't understand what lymph is. We have a vascular system, we have arteries and veins, and that's one continuous system, and then we have lymphatic vessels. Well okay, what is that? Lymphatic vessels are actually open-ended, an open-ended vascular system, so it just kind of ends out there in the tissues, the muscles, the glands. And then it forms into vessels. It has no muscles in the wall, so lymph doesn't move unless you move. And remember what lymph is? Lymph is waste material. If you've ever been in a city with a garbage strike, it only takes about three days for everybody to cave in, because it really becomes a health hazard very rapidly. And so, our cells are throwing the garbage right outside the cells, it's being carried off by the lymph. You do not want that garbage right around the cells, it's toxic stuff. Nice medical term, stuff.

[00:20:00] And so, that lymph only gets carried away with adequate amounts of hydration and movement, because it's the muscles, it's the organs. When you move, it squeezes the lymph. Now the lymph vessels do have valves to prevent it from back-flowing into the tissues, but you gotta squeeze it up to the next valve. So, motion is critical. Exercise is critical to health in every realm, from the brain, to the heart, to the organs, to the muscles, and so exercise, absolutely cornerstone.

Dr. Michael Merzenich

Dr. Merzenich:

[00:21:00] I'm writing a book about this. The book is titled Alzheimer's Is Not a Disease, which it isn't. It isn't a disease, and it's the end stage, nothing unexpected about it, nothing unpredicted about it, of a decades-long progression, negative change, regression that ultimately results in a catastrophe, and as soon as they called it a disease 112 years ago, it put everybody off on thinking that when you have it you treat it as opposed to how you should think about it, and that's to stop the decades-long progression. That's really how you should be dealing with it. You should be stopping it from ever happening in life, but we don't think about it that way in the mainstream of medicine.

Jonathan: You believe that Alzheimer's can be prevented?

Dr. Merzenich:

[00:21:30] Oh, absolutely, no question, or you could say delayed for probably indefinitely in most people, but I also think that when you do that, the changes that you drive in the brain will lead to substantial increases of longevity.

Dr. Mihai Dimancescu

[00:22:00] Now, as a neurosurgeon, I have the privilege of being able to actually see into people's brains, and in the early days of neurosurgery when we had to operate on a brain, we used to make a large window in the skull so we could see a large part of the brain. The advantage to seeing the brain, you realized, when you see portions of the brain with the naked eye and see yourself actually taking parts of that brain out and then seeing the patient recover, you suddenly recognized that other parts of the brain are capable of taking over some of the functions that have been lost by the hemorrhage or by the surgical intervention, and that is all due to the brain's plasticity. So, as a neurosurgeon, I've always had a great receptivity to this concept of plasticity.

[00:23:00] One of the most remarkable things that affected a lot of my career later on was during my training years. As a young surgeon, a resident, we used to do rounds on the patients in the hospital, and the professor would stop in

front of a bed and ask the group questions about the patient, talk to us about the patient, what was wrong with the patient, how would you treat this patient, and we'd do this from bed to bed, except one bed. He'd always bypass it and he would say, "Well, this woman's in a coma. We don't need to stop here," and that bothered me.

[00:23:30] She was a young woman. She must've been in her mid 30s. So, after rounds and everybody dispersed, I'd come back to her bed and I'd sit by the bed and just watch her for a while, and I'd do this every day for about 20 minutes to half an hour, and one day I started talking to her. I got no response. I tried this again, and then one day she opened her eyes and she looked at me, and it looked as though she's kind of aware that I was there, and this went on for several days, and then eventually I'd ask her a question. She'd start answering, yes, no, and within a few weeks she began talking.

[00:24:00] [00:24:30] This, by now, about three months had gone by, so I said to her, "You know, do you remember anything from the last weeks, days, months, that you've been here?" She said, "Yes. I remember that damn professor saying I will never wake up, and I was determined to prove that he was wrong." Boy, that stuck with me. That's one of the things that led me into becoming a specialist on coma and coma arousal techniques. That was a very, very, very powerful moment. It's been very successful over the last 40-plus years. I think I've brought thousands of people out of coma, some of them doing very well, some of them only getting partially better but living at home, having a different quality of life than if they had been sent to a nursing home.

[00:25:00] [00:25:30] The techniques involve several modalities, several modalities of approach. These have to be considered as total individuals, not just a brain, and even though we're treating the brain, we want the brain to recover, we have to treat the entire body. So, to arouse somebody from a coma involves, number one, making sure they have appropriate nutrition, and we're back to nutrition again. Number two, ensuring that they get sufficient movement, even if it's passive movement. Passive movement means having a therapist come in or a relative come in and exercise their limbs so they don't tighten up on them, and then very importantly, program of what I call multisensory stimulation using the different senses in the body to stimulate all the different senses in a very systematic fashion, one after another, and repeating that over and over again, multiple times a day, doing this until you start getting responses, and then when you start getting responses, depending on the response, you change that modality of stimulation.

[00:26:00] Just to give you an example, an individual who's lying in bed in a coma who's not opening or moving their eyes, you might hold an eye open and shine a very bright light into it repeatedly, just a very brief flash, until you get a reaction. The way one normally sees a reaction to bright light is that the pupil, which is the dark part of the eye, constricts, just like when we're out in bright light. The black of the eye becomes very small. It becomes a pinpoint. When you get that reaction, then you can start shifting to less bright lights, then presenting them with black and white images, and progress the sensory stimulation depending on how they're progressing, same with the hearing, same with the sense of taste, same with the tactile senses. It's a progressive program that's tailored to the level of response.

Dr. Dale Bredesen

[00:26:30] It's been over the last five years that we have seen patient after patient after patient who had devastation in their lives or devastation in their families, and who has done very well, and it's just hearing those stories again and again, which has been so exciting. We had one guy who said that he has allowed himself to think about the future and to talk about the future with his grandchildren once again. He had actually stopped because he wouldn't talk to them about the future because he knew that he would not be part of it, and now he's allowed himself to do that.

[00:27:00] [00:27:30] We had another woman who said that her husband is an excellent guitarist, and he had lost that ability, and that he now got the nuance in his guitar playing back again. Another woman who actually had lost her ability to play the piano, and that came back. A woman who had lost her ability to speak a foreign language, which she had been very good at when she was young, she actually learned to speak both Chinese and Russian, and these started to come back as she improved. So, these stories are just heartwarming and very exciting to hear, and of course from the other parts of the family. One girl said that her mother had become part of the family once again, so these are really exciting to hear.

[00:28:00] It means that the science that we've all been working on for so many years really can change the world. It really means that the things that we're looking at in the test tubes and the various DNA base pairs that we've talked about and the molecular genetics that we've all studied for years, the whole molecular biology revolution is leading us to real answers that impact human lives all over the world. That's very exciting.

Barbara Hansen

Barbara Hansen: Well, originally I was diagnosed with some major damage to the white matter in my brain, and I can go into the details about that in just a bit. I also had a serious cardiac condition. My whole body hurt. I was obese, I was forgetful, and I was emotionally out of control.

Jonathan:

[00:28:30] Wow. And so, tell me more about this condition with your brain. How serious was that?

Barbara:

[00:29:00] That was serious enough that I couldn't remember a telephone number from looking at it on a piece of paper to being able to dial it on the phone. Today, I'm able to, and if this were not being recorded, I could recite to you the 16 digits on my debit card, and I never set out to memorize those. I now not only have my vocabulary back, but I can memorize numbers, and I know where I'm going, and I know when I get into a room what I'm there for. I didn't know that before. I was lost in my own home. I was lost in my own brain.

Jonathan: Wow. How long did you experience that for?

Barbara:

[00:29:30] It was getting progressively worse over probably three or four, maybe five years. I've been a professional healthcare provider for all of my adult life, and I saw what happened to people that lost their brains, or that lost the ability to use what was in their brains, and that was exactly what was happening to me. It was like I was standing outside a library. The door was locked. I knew where that book was inside, but I couldn't get to it. I knew the information was in that book, but I couldn't approach it. The door was locked. I couldn't get to it.

Jonathan: How did that feel for you?

Barbara: I was terrified. I was absolutely terrified. Where was this leading me? This is very emotional for me.

Jonathan: And it sounds like you weren't ready to go.

Barbara:

[00:30:00] Oh, no. Oh, no. I've got lots of living to do yet, lots of living.

Mekayla Clarke

Mekayla:

[00:30:30] It was quite quickly after she got out of the hospital. She knew what was going on. It wasn't like an outside looking in. She realized that she was having some memory problems as well and we would have conversations and then about three hours later she'd forget what I had talked to her about, which can be heartbreaking, frustrating, upsetting. All those kinds of things when you see a family member has that kind of suffering a little bit. But yeah, it was really just the dementia. It was really just the memory. She couldn't remember just the little things. It wasn't like she'd completely forget hours and hours of time but it was enough to really affect her lifestyle and the family dynamic for sure.

Jonathan:

[00:31:00] And did you see future images of her declining and losing cognition?

Mekayla: I mean at that point I wasn't looking ... I didn't really have a medical education at that point. I was still in my undergraduate, doing my undergraduate at the University of Manitoba. So I wasn't really looking long term, I was kind of that selfish 18 year old that was kind of being like, "Mom you're not listening to me, what's going on with you?" So it was scary but I wasn't really looking long term.

[00:31:30] Now, knowing what I know about dementia, it would have been terrifying. So sometimes ignorance can be bliss I think.

Jonathan: Tell me how your mother turned her situation around.

Mekayla:

[00:32:00] Well she saw her naturopathic doctor and they ran a whole bunch of tests. They found that she had a vitamin B12 deficiency which is super easy to fix, thank God. So within two weeks she was back to normal, she was doing vitamin B12 shots twice a week intramuscularly. And she still does them - but within that two weeks she was back to just the amazing person that she is so that was fantastic. It was like magic, it was really cool actually to see.

Jonathan: That's bringing up emotion for you.

Mekayla: It is, yeah. It is.

Jonathan: What is it?

Mekayla: I don't know, it's just ... Sorry. Knowing what I know now about dementia and how it affects the person as well as the family, it's scary. So I'm glad that there was a simple solution to such a complicated problem.

[00:32:30] Selfishly just seeing where she was and how easy it was for her to bounce back, it's that relief. Because knowing what I know now, and having seen people go through what dementia actually does to a person, it's really scary and it's really heartbreaking. So I'm just glad that I got my mom back.

Barbara Hansen

Barbara:

[00:33:00] I damaged my white matter. Forgetfulness.

Jonathan: That's the same as both of those. What else?

Barbara:

[00:33:30] Pretty much that was it. I was losing my vocabulary. I knew that I knew that word but I couldn't think of it. I knew that I knew that person's name but I couldn't think of it. I knew that I knew that phone number from here to here, and I couldn't put those two together. I know that my neurologist told me that there is no way to repair it, and I said to her, "Well I'm gonna do what I can. Now that I know what the problem is I'm gonna do what I can." I know that when a road or a bridge is washed out there's a detour, maybe I can find another way into that library. And I did. I did. I was able to reroute and get into that place where that memory was stored.

[00:34:00] I remember numbers now. I remember people's names, I remember their faces. I remember conversations, most of the time. I remember where I put things and why I'm in a room. I remember when I go to the mailbox, that letter that I'm holding, am I there to mail it or am I just collecting it? I know that I'm there to mail it.

Jonathan: Now each day do you feel that your memory's getting a little bit better? A little bit worse?

Barbara: Oh it's absolutely improving. Much better.

Jonathan: Great.

Barbara:

[00:34:30] I remember birthdays. I remember not only first names, I remember last names. Middle names. I remember how much my grandchildren weighed when they were born. I remember their little tiny faces.

Jonathan: Grandchildren are the most precious thing and they are the crown of grandparents. The crown right? Could you think of a better way to describe what a grandchild is to a grandparent?

Barbara:

[00:35:00] It's the rose of a thorny bush. It's the tomato on that plant. It's the sunshine. Not just the sun is there, but it's the sunshine on your skin. It's the joy. And it's not all the other stuff that goes along with being a parent. We get the fun part. As grandparents we get the fun part.

Dr. Daniel Nuzum

[00:35:30] [00:36:00] Alzheimer's is a degenerative condition of the brain which affects a person's ability to remember. They lost their memory. They lose their short term memory and then with time they lose all memory altogether. And Alzheimer's is a deadly condition, it can be fatal. As the brain degenerates so does control of bodily functions and when it gets to a certain point it can be fatal. Talk about the brain, let's talk about what affects the brain, by way of degeneration what causes the brain to start to fall apart like this. Let's see what different contributing factors that we know exist here.

[00:36:30] [00:37:00] So number one, number one is nutritional deficiency. In Alzheimer's you have brains are devoid of very key nutrients like essential fatty acids, B vitamins, certain minerals. In conjunction with the nutritional deficiencies there's also increased amounts of heavy metals that are deposited in the brains of people with Alzheimer's. And these heavy metal deposits seem to be a major contributing factor to the amyloid protein deposits that happen in the brains of people with Alzheimer's.

[00:37:30] My favorite analogy of what heavy metals do to tissues is heavy metals do to your cells what a splinter does to the bottom of your foot. Consider a splinter stuck in your foot. It hurts, it causes inflammation,

it causes infection, causes irritation and the area swells up and it gets all irritated, infected, inflamed, all these all at one time right?

[00:38:00] [00:38:30] So let me give you an analogy here. Heavy metals affect your cells the same way a sliver would affect the bottom of your foot. If you have a sliver in the bottom of your foot it causes irritation, inflammation, and then infection. Infection sets in, right? And you have this cycle as the infection clears up, your immune system clears that up, reduces the inflammation, the irritation is still there so with time it becomes inflamed again, then it gets infected again, and then that whole cycle just keeps going, and going, and going as long as the sliver's there. Until you pull the sliver out you're gonna have irritation, you're gonna have inflammation and you're gonna have infection. It's gonna be a cycle, you're gonna just continually get these three Is as I call them.

[00:39:00] In your cells, a similar thing happens if they're toxic with heavy metals. Heavy metals act as that irritant and keeps causing the cells to become inflamed and once they become inflamed they become more easy to infect and when they become infected they die off. And this same process happens in all of our cells. So for our cells, all of our cells, whether they're neurons in our brain or tissue in our finger, that process will go on if they're toxic.

[00:39:30] [00:40:00] There's two particular heavy metal toxin compounds that massively affect our brains and nervous system. One is the combination of fluoride and mercury. The other one is a combination of fluoride and aluminum. And these compounds, when they come into contact with each other and create a compound in our body, and float up into our brain, cause neuron death. They kill brain cells. And as they kill those brain cells, proteins are deposited in those areas and we have what are called the amyloid protein deposits. Those amyloid protein deposits don't contain memories. They don't allow us to access memories either and so they cause memory dysfunction and we call that Alzheimer's disease. That's one of the processes that can cause Alzheimer's.

[00:40:30] [00:41:00] There is an "autoimmune" component to Alzheimer's where there's such inflammation in the brain that as the immune system is trying to clean up the inflammation it actually does cause damage to the brain. Then, when we have this condition where we have nutritional deficiencies and these toxicities, particularly heavy metal toxicities, it affects the brain deeper and deeper and deeper and the longer that goes on the more damage that occurs in the brain and we end up with memory issues.

[00:41:30] [00:42:00] When I'm looking at the brain, I'm not only considering the gut but also what's actually inflaming the brain outside of that. You want to look at toxins, a couple of toxins that specifically affect the brain. Aluminum is a modern day epidemic right now. Even the bioengineering of dropping the stratosphere, bioengineering chemtrails, people call it. But aluminum is there to try to reflect some of the sun so we're not having damaging effects from the sun. Aluminum exposure is everywhere. Aluminum loves the brain. Mercury loves the brain as well, too. So, if you have dental amalgam fillings with Mercury inside we know there's going to be a certain amount of Mercury in the brain for every amalgam that you have and for a certain time period.

Sharon Porter

Sharon:

[00:42:30] [00:43:00] Well, Alzheimer's is a pretty tough one, right? Once it's set in it is pretty tough to get it under control. The main thing is prevention. Just like every other manifestation of over consumption of sugar, right, is to really get diligent about it. How do you do that? Managing our sugar intake is an emotional commitment. Everywhere we go we are surrounded by sugar. You're driving down the road, every convenience store is full of sugar. It is just ever present in our environment. People are using sugar for emotional comfort, for celebrations, for how to escape from sadness and depression.

[00:43:30] I believe, the first step of managing our sugar addiction is to increase our emotional IQ. To really work with a spiritual practice, work with a therapist if that's helpful to you, work with stress management. Start to find other ways to comfort ourselves besides sugary substances. That gives us a clearer choice over eating foods that are really nourishing. It's all about the prevention when it comes to sugar.

Jonathan: Do you think that that leads to a happier life?

Sharon:

[00:44:00] [00:44:30] It's an interesting question. I think it leads to a life with less disease, which in the long run definitely leads to a happier life. When somebody has cancer or advanced diabetes or Alzheimer's, the question of being happy is really not the main issue anymore. Now it becomes a matter of am I going to live or die? This is the tricky thing about sugar. Most people love eating sugar. It makes them feel happy. Why is that? It's because it releases endorphins. These are biochemical, brain chemistry, that gives us the perception of happiness.

[00:45:00] The more we can find other sources of joy that are not linked to sugar, dancing, learning to play music, all of the types of entertainment that our grandparents enjoyed that are non-electronic, that are not going to add stress to our lives. Playing cards, playing dominoes, exercising, playing sports, all of these ways that we can find joy and raise our endorphins and create a sense of well being without having to use sugar to create that is, I believe, the entry point to living a new life with a different sense of happiness, let's say.

Jonathan: Like eating fruit is good or bad?

Sharon:

[00:45:30] [00:46:00] Well, fruit is an interesting one. Most people can do well and benefit from eating a couple of servings of fruit a day. Some people will be reactive to even that level of fructose, the main type of sugar in fruit being fructose. That's processed directly by the liver. It puts a burden on the liver. If someone's liver is already stressed out just the smallest amount of fruit might create an inflammatory response in the body.

[00:46:30] I believe a lot of people over consume fruit in their attempt to lose weight because we're all told to eat our fruits and vegetables. Of course that's better than high fructose corn syrup or all the packaged processed foods in the center part of the grocery store but really the key is vegetables. A small amount of fruit, lots of vegetables and healthy fats and an appropriate amount of protein. That's the basics. It's really not that hard.

Jonathan Otto

[00:47:00] Let's talk, real quick, about sugar. Sugar, it's interesting. The average person in the United States consumes almost 100 pounds of sugar a year. That's astronomical. That's massive, massive amounts of calories in the form of sugar. Sugar is an essential nutrient. It's something our body does need. It doesn't need it in massive quantities but it does need some of it.

[00:47:30] [00:48:00] [00:48:30] [00:49:00] When we flood our system with sugar it's very similar to flooding a car with fuel. Our system will spit and sputter like a car that's "flooded" with fuel. So things don't operate as well. Another thing that happens with excessive sugar intake is that our red blood cells start to crystallize. Not only do they not carry oxygen and nutrients very well then but they crystallize with sugar crystals and they have kind of like barbs on them similar to prickles on a rose stem that are protruding from the red blood cell. As those crystallized red blood cells float around through the system they tear up the blood vessels. They cut and damage our blood vessels. Very, very damaging. This is why folks with diabetes have such poor circulation. Their blood vessels have

been tore up by these crystallized red blood cells and they've got scarring in their blood vessels. The blood vessels don't expand and contract very well therefore circulation gets reduced.

[00:49:30] With the projections right now, we're filming in 2017, the projections are that by 2030 50% of the US population will have type 2 diabetes. That being the case, type 2 diabetes is when the system has been flooded with sugar for so long the cells no longer will accept sugar very well. They do that by way of shutting down the insulin receptor sites. You've got this keyhole where insulin fits into and what happens is when the cells have been so saturated with sugar they close down the keyhole and so the key doesn't fit into it anymore. You get what we call insulin resistance.

Dr. Stephanie Daniel

[00:50:30] [00:51:00] Insulin resistance, if that happens in your brain, protein starts getting deposited in the brain, these amyloid proteins that disrupt our recall ability and disrupt our memory, and you end up with a condition very similar to Alzheimer's. They even call, some people call Alzheimer's type three diabetes. Instead of type two or type one, they call it type three diabetes, and it's insulin resistance of the brain. That's because the brain cells have been just chock full of sugar for so long they just, they don't want anymore. They lock the door by shutting down the keyhole, so the key can't fit in the hole anymore, and the key being insulin, and so we would become insulin resistant.

[00:51:30] [00:52:00] That's a very bad thing, because the only food source, the only fuel source for our brain is sugar. If we don't have enough sugar getting into the brain, the brain doesn't work well. Well, if it doesn't work well, think of all the different things, you know. That only affects everything that the brain affects, so think of what doesn't your brain affect. Your brain's your body's control center, so it affects everything. The path for correcting Alzheimer's has to include a whole food organic diet. We have to get away from chemicals, and pesticides, and herbicides, and things that are gonna be pro-inflammatory.

[00:52:30] [00:53:00] Let me just step over one minute. We'll come back to that thought here. Inflammation in our body will lead to insulin resistance because inflammation in our cells will cause damage of the insulin receptor sites. That keyhole for the insulin key to fit into, if we have too much inflammation in the cell, it can damage that keyhole. Instead of the keyhole being arranged like this, if the cell becomes oxidized because of too much sugar, or because of too much inflammation, the keyhole can get tipped, or turned, or damaged in a way that the key doesn't fit into it anymore. If it's supposed to be like this, and the key fits in like this, if the keyhole gets tilted, the key can't fit into there.

[00:53:30] [00:54:00] If it gets tilted this way, it can't get fit in. If it gets tilted like this, the key just doesn't fit in. If the keyhole get warped, the key doesn't fit in. All those things happen in the presence of inflammation. Inflammation causes oxidation of those insulin receptor sites. This is everywhere in the body that happens. In the course for correcting Alzheimer's, if we were to remediate Alzheimer's, we have to regulate fuel, and that would be your food. We have to regulate the amount of fuel coming in. What I do with Alzheimer's patients, as far as diet goes, is I have them eat two parts vegetables, and these are greens, yellows, oranges, red, green vegetables, red vegetables, yellow vegetables, purples vegetables on their plate.

[00:54:30] [00:55:00] One half of their plate has to be vegetables. On half, or the other half, is half protein and half fruit. They have two parts vegetable at every meal, one part protein at every meal, and one part fruit at every meal. This stabilizes their blood sugar. It brings it down to where it should be. It also maximizes the amount of nutrients, especially the brain protecting nutrients, that they're getting from their food.

Dr. Dale Bredesen

Jonathan: Should we get genetic testing to assess Alzheimer's risk?

Dr. Dale Bredesen:

[00:55:30] Yeah, so my opinion is that we should all get genetic testing to assess our Alzheimer's risk, and also biochemical testing. What we recommend is that everyone 45 years of age or older, just like you would get a colonoscopy when you're 50, should get a colonoscopy. That would look at your biochemistry and genetics. It would look at your function with things like brain HQ or online assessments of cognitive function, and it would, if you're symptomatic, look at your imaging studies. Of course, this would include your genetics, and there are many snips associated with Alzheimer's disease.

[00:56:00] [00:56:30] Of course, the most important genetic association as a risk factor is APOE, the Epsilon 4 allele. If you have zero copies, you have about a 9% chance during your lifetime, of developing Alzheimer's, single copy about 30%, and if you're homozygous, two copies, then you have somewhere between a 50 and 90% chance of developing it. But, in the past, people recommended not to check this, because you couldn't do anything about it. We disagree with that now. There's a lot you can do about it, and there are a lot of studies coming out showing that there is effective prevention, such as the finger study that came out of Finland. Our own work shows that you can not only prevent, but also reverse, especially early on, cognitive decline. Therefore, we recommend that everybody be tested.

Dr. Richard Lukens

Dr. Richard Lukens:

[00:57:00] [00:57:30] We haven't been able to fathom the depths of the brain. We don't even use 1%. Because of the synapses, there's 100 billion red cells, and there is 10,000 synapses. That means that the possibility is between 60 and 220 trillion possibilities, and we can't even think of that number, how big it is. I have to tell you this. If you've been alive for a million seconds, that's less than two weeks. It's just between one and two weeks. If you take a billion seconds, that's 32 years, but a trillion seconds is 32 thousand years. That puts it into perspective. That's a wonderful thing to realize that we have all those possibilities, and now we know for sure.

[00:58:00] We now know for sure that every day, a person is making around 7,000 new brain cells. They're going into the area of the hippocampus, where there's memory, and they're going into the area of the amygdala, where emotions are and everything like that. I mean, you're gonna be able to do fantastic things. I had a patient that couldn't talk for seven years. Her kids didn't even know that she was able to talk, but she was determined, and she was able to start talking.

[00:58:30] She would be a little bit slow on some of the words because she hadn't run into those in the past, and so she would explain what it is, but she couldn't tell you what the word was. I mean, this is just wonderful.

Jonathan: Yeah, wonderful. Thank you so much. That's great, and so that does give a lot of hope for things like Alzheimer's and dementia.

Dr. Lukens:

[00:59:00] Oh, yeah. That's the lecture I give. Alzheimer's is preventable, completely preventable, and a lot of it, the early Alzheimer's, is reversible, because you dilate all those little, tiny blood vessels up, and then those parts of the brain start functioning. When people come here, everybody gets a little bit of help from it. It depends on where in the brain it is, but some people get dramatic results.

Jonathan:

[00:59:30] Wow, and I think the key with the blue one of all these Seventh-Day Adventists, people that you've connected with, and worked with, and you see people that have reached 100 years old, and you see what they're doing. You know, I'm seeing them in interviews that I'm doing, and they're able to account things properly.

Dr. Lukens: Well, one of the things is they have the Loma Linda Lopers, and they get all these people dressed in a pink, bright pink shirt. On Sunday, you see all these people going by, and so there is their exercise, so that's why they chose Loma Linda, you know?

Jonathan:

[01:00:00] Oh, yeah, but look at these guys, and look at what they did. They had enormous community, right, so they're engaging their mind, their happy hormones, their laughter, their smiles, they were rigorous with having rest. They would mark a day once a week where they would not be working. They did that ... Most of them all their lives. They were part of these case study groups. They were adamant, were temperate, they wouldn't just overdo things. Then they had these eight different pillars that they were using for their health. What do you see are similarly effective solutions as a clinician? What do you see as what people can do today to effectively prevent Alzheimer's and dementia or to use these same strategies potentially to then turn back the clock as somebody is seeing the early onset or even later onset of some of these things?

Dr. Jay Davidson

[01:01:00] Yeah. I love healthy fats. Our brain is made of mostly cholesterol. Our culture right now, what's happening Jonathan is "Your cholesterol is too high." We're just going to pick the range we want, and keep lowering that so that everybody eventually will be into the cholesterol lowering medication category, and we're going to lower your cholesterol, and the brain is mostly cholesterol. When we lower that, we're literally taking cholesterol away from our body that could be used for the health of our brain. I see a kind of a correlation between the statin drugs or the cholesterol lowering medication. The more that goes up, then the more brain issues it seems like we're having right now.

[01:01:30] [01:02:00] I think we want to take almost the opposite effect of healthier fats. There's been some great research on medium chain triglycerides or otherwise known as MCT or MCT oil. There's MCT powders now that are there and things. But essentially it's a ketone body or MCT. It's processed in the liver. Only takes a few steps versus regular fats that take multiple steps to kind of get energy from it. But the ketone is very clean burning. Ketone, I like to think of it as natural gas burning versus regular sugar burning, which most Americans unfortunately are sugar burning. But when you're a sugar burner, think of it like an old school fireplace. Smokey fireplace, the black smoke, the more dirty smoke coming off versus the natural gas where there's like nothing giving off. There's no unhealthy byproduct or something like that.

[01:02:30] [01:03:00] Ketone bodies are basically fuel for the brain, and if we're stuck in not consuming a lot of healthy fats, not giving nutrition for the body, and we're stuck with a lot of sugar ridden things, high sugar foods, artificial processed ingredients, things that actually spike blood sugar, toxins actually spike blood sugar. But if we're consuming higher sugar foods or we're exposed to toxins that spike our blood sugar, affect insulin. Then now all of a sudden that's burning dirtier, and then it causes more damage to our brain. I believe diet is a big piece to it, what we're eating and how, and I don't think there's one diet for everybody.

[01:03:30] I always take a step back and I'm like "What fad are we in now?" Ketogenic, paleo, vegan, raw. There's all kinds of them. There's a big spectrum, and I like to think of the diet category if there's a season for it, and then also looking at your own blueprint. But diet is a huge engagement. You have mentioned the relationship

side that when we actually have a relationship with the community around us, and we're not hunkered in a kind of hermit-ish. My wife would laugh because I'm like the hermit of the family. She's like, "Hey, do you want to go out?" She's like "I already know your answer, no. But come on, let's go. Let's go over to Jonathan's house and see Jonathan and Lorrie."

[01:04:00] [01:04:30] I'm like "Yeah" because I feel so much better being around people. But in the chronic illness category when you're having unexplained illness autoimmunity it's really easy just to... Nobody understands, they don't get what I'm going through, and then all of a sudden you stay in your house, you don't leave, you don't have that community. When we're looking at keeping the brain healthy, relationships are huge. Not just with family, but community. Looking at your why, challenging your brain. People that do the word puzzles or Sudoku versus just the people that sit on the couch and watch TV. I mean you can already see the path that those two are on are different. It's engaging their brain, and working that "muscle" versus somebody that's just kind of like "I'm checked out, and I'm not using my brain."

Dr. Dale Bredesen

[01:05:00] [01:05:30] Diet and lifestyle are extremely important. D-E-S-S. Diet, exercise, sleep, and stress. Diet, very important, and there are several different approaches people have taken. Of course, the Mediterranean diet has gotten a lot of press, and has had a very positive impact in terms of cognition. Others prefer other approaches. Paleo diets, ketogenic diets. We use something that we call ketoflex 12 3, which recognizes that to drive someone into a mild ketosis, that it is a flexitarian. If you want to have small amounts of meat and fish that's fine. You can be a vegetarian or not as you wish. But if you're going to use them of course you want pasture chicken, you want the grass fed beef, you want low mercury so called smash fish. You don't want to have high mercury fish, and of course you want wild cod fish.

[01:06:00] [01:06:30] All these usual things. You don't want to exceed somewhere around 0.8 grams per kilogram of protein. You don't want to have too much protein. You want a largely plant based, mildly ketogenic with fasting 12 hours and 3 hours, and for the APOLI for positive individuals they often like to take it to 14 to 16 hours for the fasting at night to develop a situation biochemically in which you have optimum cognition, and inhibition of continued decline. Then, of course, other lifestyle things. There are many. Exercise, absolutely critical. It is helping to drive you into a mild ketosis. It turns out that beta hydroxybutyrate, among other things, increases the transcription of brain derived neurotrophic factor. There are other effects as well. Of course, many other salutary effects of exercise.

[01:07:00] Sleep of course is just one thing after the other coming out about how critical it is. It is a time for brain cleansing. Getting enough sleep at night is absolutely critical for your cognition. Then of course stress. Coming back to sleep for a moment, about 75% of people who have sleep apnea are not diagnosed with sleep apnea. It's a critical contributor to cognitive decline. Stress. If you want to kill off some hippocampal neurons, run up your cortisol. You'll kill off some hippocampal neurons. All these things are absolutely crucial, and I think that they've been under-recognized over the years for their important contributions that they make to what we ultimately call Alzheimer's disease.

Dr. Daniel Nuzum

Our next question was, does sleep deprivation affect Alzheimer's?

[01:07:30] [01:08:00] [01:08:30] Yes. Yes it does. It can affect the development of Alzheimer's, and it can affect whether or not someone recovers from Alzheimer's. The major factor in that is the lack of melatonin. The hormone produced by our pineal gland called melatonin is extremely neuroprotective. It's one of the anti-oxidants our body

produces. It's one of the most powerful antioxidants our body produces. Its growth hormone is the most powerful antioxidant our body produces. Next we have melatonin, and glutathione, and after that we have catalase and we have superoxide dismutase. But your melatonin and your glutathione are about neck in neck as far as their power as antioxidants, and melatonin has a particularly beneficial effect on the nervous system in that it protects the nerves in the nervous system, and the neurons from falling apart. It's an antioxidant to those particular cells in structures in our body.

[01:09:00] [01:09:30] If you're not sleeping, you're not getting that melatonin. Your body produces melatonin while you're sleeping. If you're not sleeping, you're not producing melatonin, you're not getting the beneficial protection from the melatonin. Yes, sleep deprivation will be a contributing factor to what's called neurodegeneration. The degeneration of the nervous system. Because that protecting hormone melatonin isn't there to protect things, so they are more prone to damage.

Dr. Stephanie Daniel

Jonathan: What about sleep deprivation in young developing children, or teenagers, or young adults?

Dr. Daniel:

[01:10:00] Those are typically the years where we believe and feel that we're invincible. Nothing can hurt us, nothing can happen, we're fine, right? Here's an interesting fact. 90 days of getting less than six hours of sleep causes disruption in 700 different enzymatic systems in our body. The enzymes are the chemicals that cause the chemical reaction in our body for our body to function. There's 700 enzyme systems in our body that get affected by way of down regulation, meaning they don't work as well, after only 90 days of sleep deprivation. Most of those begin after only 30 days of sleep deprivation. So say you're working nights and you're going to school during the day and you're only sleeping two, three hours, four hours a day. You know how many people are out there doing that? So to stay awake you're drinking energy drinks and coffee and all these other things, these stimulants, which some of them do provide vitamins and minerals, although they're synthetic vitamins and minerals. But energy drinks cause an increase in the utilization of nutrients in your metabolism. So in order to keep that energy going, they have to use nutrients that are in your system, which causes you to become nutrient deficient way faster.

[01:12:00] [01:12:30] [01:13:00] So you put in an accelerate into the system. It speeds up how fast you burn through the nutrients that are in your diet or that are stored in your body. As that happens, if you don't replace those nutrients, if those nutrients aren't replaced, you end up nutrient deficient. If you are nutrient deficient and you're exposed to toxins, you are a toxin sponge. I can't say that enough. That's universal. Anyone that is nutrient deficient, they're deficient in basic nutrition. They're 72 nutrients that you need on a daily basis. If you're not getting those and you're being exposed to toxins, which we are in our environment, you are a toxin sponge. Those nutrients act as gatekeepers. They keep the toxins from coming in. So if we don't have those nutrients, the toxins just come in. If we're using accelerants or stimulants in our diet in order to stay awake because we're not getting enough sleep, we're burning the candle at both ends. Problems will occur. It's not they might, might not. They will at some point.

[01:13:30] [01:14:00] We have to eliminate accumulated waste in the body in order to reduce inflammation in the body. As long as there's waste that's accumulating in the body, you have two things happening. One, the waste itself will cause inflammation. Two, the waste is going to be very attractive to pathological microorganisms. So all the bugs that cause infection like the waste that accumulates in our system. So if we want to reduce inflammation, we got to eliminate waste. That's cleansing the colon, cleansing the liver and kidneys, cleansing the lymphatic system. Those types of things have to happen. Once we've done that, then we have to start working on heavy metal and chemical detoxification.

[01:14:30] [01:15:00] [01:15:30] There are things like selenium and iodine and magnesium that all work. They work really well at neutralizing different toxins in our body. Particularly, magnesium helps to neutralize aluminum in our system. Zinc and selenium help neutralize mercury in our system. Iodine helps to neutralize fluoride and also things like MePA in our system. If we don't supply those nutrients while we're at the same time trying to eliminate the heavy metal toxicities and chemical toxicities, we go back to that problem. If our yard is full of dandelions and all we do is go out and dig up those dandelions and leave a bunch of holes in the yard and we don't fill that back up with nice grass or grass seed and fertilizer of some sort, we end up with a yard that's just as ugly as it was with the dandelions. Although those holes would be perfect places for new dandelion seeds to take root, right?

[01:16:00] So as we're pulling heavy metals out the system, we need to be infusing the body with nutrients. We have to get those nutrients into the system. So we off-set that load of toxicity with an influx of nutrition, which means the nutrients, so the body can heal and fix itself.

[01:16:30] To recap, we have diet or we have one half of the diet is vegetable, quarter of the diet is fruit, and a quarter of the diet is protein. We have cleansing. Detoxification of the colon, the GI tract, the liver, the kidneys, and the lymphatic system. Then we have where we move on into detoxifying the body of chemicals and heavy metals and these types of things. While at the same time infusing the body with nutrients.. We got to fill in the holes, right? So those are the steps.

[01:17:00] [01:17:30] [01:18:00] Now, there's other therapies. There's neurofeedback therapies. There's biofeedback therapies. There's cranial sacral therapy. Cranial sacral therapy, in particular, is a very, very good therapy for restoring proper blood flow in the head, in the cranium, in the skull, which is where your brain is, by the way. Then the neurofeedback therapy and biofeedback therapies are very good. They're electrical therapies that help to retrain the brain and can actually reroute neurons and are very, very good therapies. Very helpful for Alzheimer's. Some folks have a real difficult time with heavy metal detoxing. When we use things like EDTA or DNPS or DMSA, those are sometimes so aggressive that it just causes more inflammation for them. They actually have a real hard time with it. The things that we use, the things that I have, are very powerful antioxidants, while, at the same time, they're very powerful heavy metal removers. They neutralize pesticides and herbicides and things like that.

[01:18:30] [01:19:00] So when we got started in this field, nobody had used the ketogenic diet in Alzheimer's disease. The context for me was that it's not the first disease that this diet has been proposed for. It's nearly 100 years that the ketogenic diet has been used for epilepsy to control epilepsy when the drugs don't work, which is a lot of the time. So there was quite an experience with this. It was kind of an orphan treatment. The drugs don't work, we'll try a second drug, try a third drug. Oh, well, we've heard of the ketogenic diet, let's try and implement it. So I've worked with those parents. I've worked with those patients. I've worked with those doctors. I knew that it was considered to be outside the box, but I also knew that there was some brilliant successes with epilepsy. So we said, "Well, let's learn about how this would work in Alzheimer's disease."

Dr. Phillip Day

[01:19:30] [01:20:00] Alzheimer's terrifies a lot of people. They say, "I don't want that brain eating disorder that I saw my granny go down with." People, of course, know that labs are burning the midnight oil trying to come up with answers to this. What we've seen is some amazing studies. Vitamin D deficiency is very prevalent in this. Excess or high sugar diets would actually position Alzheimer's historically as being bang on target for 1906, which is when they named it after Dr. Alice Alzheimer because that's coming about 20 to 25 years after sugar and refined flours unleashed into our society for the very first time in unlimited quantities.

Other studies of the vitamin B group, high-potency vitamin B complex was studied at Guildford in London and shows that you get methylate buildups of homocysteine which, when those levels get over 13 micromils, people go into the fog. They start developing cognitive problems and, by introducing high levels of vitamin B12, we're seeing that that's methylating the homocysteine and bringing it back down under 8 micromils. Literally, it's like flicking the switch. It's like pulling people out of the fog.

[01:20:30] Vitamin D, coconut oil is being well studied. Dr. Mary Newport has done a lot on this. There's a lot of very, very good, well-constructed, well-structured studies that are showing that, if you get somebody going into early stage cognitive impairment, there's a huge amount you can do, and we should be doing it.

Dr. Mary Newport

Dr. Newport:

[01:21:00] My husband, Steve, was an accountant. He worked at home for my practice so that he could take care of our children at home. When he was about 51 years old, he began having memory issues, making payroll mistakes, having trouble organizing his accounting. Then, he began forgetting if he'd been to the bank and the post office, which was very odd. He was only two years older than me, and I didn't think I would forget that type of thing.

[01:21:30] At first, we attributed it to depression, but he kept getting worse and, in 2004, when he was only 54 years old, he was officially diagnosed with Alzheimer's disease, and he had the early onset form of the disease, which happens in about 2% of people with Alzheimer's in people who are less than 65 years of age. I just happened upon this information about ketones as an alternative fuel for the brain on the internet, a press release about a medical food that was being studied. It wasn't going to be out for another year. It improved the memories of nearly half the people who took it with Alzheimer's disease, and I had to find out what it was.

[01:22:00] [01:22:30] I learned from their patent application that it was medium-chain triglyceride oil, and I was familiar with that because I'm a neonatologist. We used to add it to the feedings of our premature newborns, a little bit to each feeding, our tiniest ones because they absorbed it very well and because it helped them grow faster, so I knew right away what MCT oil was. I think if I wasn't a neonatologist, nothing further would have happened. I wouldn't have known that I could get it and what it might be able to do.

[01:23:00] With Stephen, what happened was, I knew that coconut oil was available over the counter, and I learned from the patent application, that MCT oils extracted from coconut oil, and coconut oil's about 60% medium-chain triglycerides. He was scheduled for two screenings for two different clinical trials, two days in a row, and I learned this information the night before the first screening and didn't really have time to go out and do anything about it. We had a day before and a day that he started coconut oil. It was very amazing.

[01:23:30] The first screening when we didn't have it available, he scored two points below the threshold that he needed to get into the clinical trial, and that was devastating. He was asked to draw a clock. He drew a few little random circles and a few numbers. I think it was 9, 10, 11, 12, just a very random, nothing structured like a clock, and I was told that he was on the verge of severe Alzheimer's. I thought, what do we have to lose. I'm going to pick up some coconut oil, and we stopped at a health food store on the way home.

[01:24:00] When we got home, I looked on the internet for more information to remind myself, what are the medium-chain triglycerides? I found the fatty acid composition from a USDA website of coconut oil and learned that it was 60%, so I calculated how much coconut oil I would need to give him to equal 20 grams of medium-chain triglycerides that they were using in the medical food. The next day, that turned out to be a little over two

tablespoons of coconut oil, and the next morning, a few hours before he was scheduled for the screening, I put a little over two tablespoons of coconut oil in some oatmeal, and he ate that.

[01:24:30] Several hours later, he improved. We were in a different center than we were the previous day, but he remembered the different town that we were in. He remembered the day of the week. He remembered the season. He knew what floor we were on, and those were things that he could not remember the day before when he took the Mini-Mental Status test. This time, he scored 18, which was two points over the threshold to get into the clinical trial, so he was literally accepted into a clinical trial because of his response to simply taking coconut oil.

[01:25:00] [01:25:30] At first, I wasn't 100% sure. Did we just get very lucky or was it really the coconut oil, but we decided to keep it going. Every morning, in the beginning, he would get a little over two tablespoons of coconut oil, and then I started cooking with it and got every recipe I could get my hands on and, eventually, added MCT oil, as well because it's more ketogenic. Certain medium-chain fatty acids raise ketone levels higher. I continued coconut oil because that's what he improved from initially.

[01:26:00] I thought, what if there's something in coconut oil that's not an MCT oil that has something to do with this effect, so we incorporated both into his diet, and we saw steady improvement over about a nine-month to ten-month period where he went from the day before, not even being able to draw a clock. If we were gardening, for example, he couldn't remember if he was digging a hole or filling it in. He would get confused about the simplest things that he was doing. He had great difficulty finishing a sentence.

[01:26:30] Over a nine to ten-month period, he improved so much. Physical symptoms went away, like tremors and stiff gait. His memory began to improve. The animation came back in his face. People with Alzheimer's often have kind of a, they call it a dead look. That came back. His sense of humor came back. He had a visual disturbance where he could not read, and he couldn't describe it until after it went away with coconut oil. He said it was like the words were moving around on a page. The shaking stopped, and then he was able to read again.

[01:27:00] Nine to ten months after we started this, he was able to remember what he had read earlier in the day and tell me about it. One example of that is, we were in a doctor's office. I was the one that had the appointment, and he sat in the waiting room. There were Scientific American and other magazines on the table. Several hours after we left the doctor's office, he said, "You know. I was reading this Scientific American article about Albert Einstein," and he told me details about that.

[01:27:30] [01:28:00] It was just so profound to me that he had come so far that, before he started using coconut oil, he couldn't remember if he was filling in a hole or digging the dirt out of it, and now he could remember what he had read, something that detailed, several hours earlier. It was just really an amazing journey to see his recovery and reversal of a lot of symptoms of his Alzheimer's disease. One of the overwhelming things about it was now I have this information that nobody else knows. The medical food in the press release, they didn't say what it was or how it worked and, here, this is a little case study, a study of one person who responded very quickly to taking medium-chain triglycerides.

[01:28:30] [01:29:00] In this case, it was coconut oil in the form of coconut oil. This medical food wasn't going to be out for a while, and I thought, this is on the shelf. People need to know about this. They need to know about it now when there are 5 million people in the United States and 30 million or so people worldwide that have this problem. They don't have time. When you have Alzheimer's, you progressively get worse. Normally, there's no turning around. I felt like people's brain cells were literally dying while I had this information, so it became really an obsession of mine to get the message out and to just let everybody know about it as quickly as possible.

Jonathan: What would be a message to people out there that are suffering with Alzheimer's?

Dr. Newport:

[01:29:30] I would say to look at nutrition as a guide to trying to get better and, very specifically, to look at ketones as an alternative fuel for the brain and looking at ways that you can increase ketones in the blood. Exercise can do that. Taking foods like coconut oil and medium-chain triglycerides can do that. Reducing the carbohydrate in the diet can do that so that. There are things that can be done that could increase fuel to the brain, which is extraordinarily important in Alzheimer's disease.

[01:30:00] For people who want to prevent it, if you have family history of it, you need to know that this process could be starting 20 or 30 years before you have symptoms. Reducing sugar in the diet, I think, is just extraordinarily important and looking at ways to increase ketones, since they can provide alternative fuel for the brain.

Dr. Dale Bredesen

[01:30:30] So the conventional medical approach to managing Alzheimer's is to give a monotherapy. It's to give a medication and, typically, what's given is donepezil and/or memantine. These do not attack the cause of the problem, so you're essentially trying to trick nature, go around and say, "Okay, we can alter the system." They don't affect the large number of contributors, so we initially identified 36 different contributors, so we tell people, "Imagine you have a roof with 36 holes in it. You want to close all the holes." Of course, for different people, the holes are different sized, and your vitamin D, your estradiol, your NGF, your BDNF, these things all tell you something about your risk.

[01:31:00] [01:31:30] The conventional approach is to give a monotherapy like donepezil or memantine, and it's been relatively unsuccessful. You can get an improvement, but then you go right back to decline again. As far as an alternative approach, and I think we talk about alternative medicine, but for so many of these complex chronic illnesses, whether you're talking about Type 2 diabetes or metabolic syndrome or a number of the autoimmune diseases or congestive heart failure or atherosclerotic cardiovascular disease, instead of calling these alternative, we should perhaps call these effective because they are the most effective things we have now for Type 2 diabetes, the most effective things we have for autoimmune diseases, the most effective things we have for some of the gut-health-related diseases.

[01:32:00] This alternative or, in this case, first effective, approach for cognitive decline involves a very, very different approach. Instead of saying, "We have a small dataset. We don't know. We know that you have Alzheimer's disease, but we don't know why you got it, and we're going to give you a monotherapy, and you're not going to do well," we've changed everything.

[01:32:30] First of all, we want to understand everything about what actually caused the disease. Therefore, we want a much, much larger dataset, just as you would do in any sort of functional medicine evaluation. Frankly, the larger, the better. We'd like to know all of the potential contributors to systemic inflammation and to local inflammation, and then we'd like to know what are all the potential toxins you've been exposed to. These are all critical to understanding from that, then we have an algorithm, what is actually causing your cognitive decline or your risk for cognitive decline.

[01:33:00] When you have a much larger dataset, then you can look at that and, instead of saying, "Yeah, this is a mysterious illness. We don't know why you've got it," this becomes a non-mysterious illness, and you can see the actual contributors to the cognitive decline. Then, what we want to do is address each of these.

Barbara Hansen

[01:33:30] I think people give away their power instead of grasping ahold of it and really embracing it. They give their power to the doctors instead of relying on the fact that we are all born with the ability to heal, and we have healed ourselves so many times, hundreds, if not millions, of times, millions, if not billions, of times. We've healed ourselves because we are born with that ability. That's how we are made.

Jonathan Otto

[01:34:00] Too often, we think of cognitive decline as irreversible. We have heard over and over again that the damage to the brain that causes Alzheimer's and dementia cannot be repaired, yet here we have heard some incredible testimonies of those who've been able to recover their full brain function after suffering from these ailments. What an exciting possibility to know that our brains are capable of healing and being restored.

I just want to let you know that you'll want to be here for the next episode. We're talking about some very important diseases that affect every one of us, and I'm sure you have a loved one that has some kind of problem related to this particular challenge, Lyme disease, toxins, and parasites. In Episode 4, we're going to discover these things in detail.

[01:34:30] What you'll find is very interesting is, say for example, the topic like parasites, that our bodies are showing up symptomatology that put us in a certain disease classification, whether it's arthritis or lupus, or something else, but parasites have the ability to send off signals and make us feel pain and have certain problems in our bodies, but it's an invader. It's something far in that's inside our body that's wreaking havoc.

[01:35:00] You need to know the truth about these things. You need to know, however, how you can detox your body, get rid of the things that are harming it, and you can do that in this episode. We hold nothing back. We're going to tell you everything that you need to know without holding a single punch back because you deserve the truth. Thank you so much for being here. I look forward to seeing you in the next episode.

Episode 4:

LEARNING TO THRIVE INSTEAD OF JUST SURVIVE: THE TRUTH ABOUT LYME AND THE EFFECT OF TOXINS & PARASITES

Jonathan Otto

[00:00:30] Welcome to Autoimmune Secrets. I'm Jonathan Otto, I'm your host. Last episode, we looked at a number of neurodegenerative diseases. Today we're going to be exploring Lyme Disease, considered to be the most common tick-borne infectious disease in the United States. Most people know it as an infection caused by deer ticks, but there's more to the story.

[00:01:00] We'll also be considering the role that toxins and parasites play in autoimmune disease, since we're living in constant exposure to environmental toxins. This is going to be such an important episode, and I'm telling you, it's valuable for absolutely everyone. Lyme disease and toxins, parasites, are something that

we actually all need to think about. They can have dramatic impacts on our health. When we turn it around, everything changes. You'll see that and we'll prove it in this series. You'll see what you can do today. Let's dive into the rest of this episode.

Dr. Jay Davidson

Dr. Davidson:

[00:01:30] I got into the Lyme Disease world because of my wife. My wife has a long health history. Got "sick" when she was seven years old and just started all kinds of issues, coma, heart surgeries, sinuses scraped, just the list went on. I've actually weighed her hospital paper file. This is obviously when they did paper notes, back 25 years ago. It weighed 20 pounds. That's how many health issues she had.

[00:02:00] When she had my daughter a little over five years ago, when Lilo was born the bottom fell out. Leading up to it, we had a lot of signs and things that should have gave us clues as to this maybe isn't all going right. She was having some heart palpitations, some heart issues. The most common symptoms I see, especially with clients I work with: bad sleep, bad energy, which those go hand-in-hand. If you don't sleep, your energy during the day is just ... It's bad. Anxiety is up on the list, a lot of brain symptoms, brain fog. I would also say pain, too. Especially the arthritis, moving around type pain. You know, I've got shoulder pain and next day it's my knee, and now it's my hip. It just seems to move about. That definitely is pretty classic for Lyme Disease type symptoms.

[00:02:30] [00:03:00] But Lyme is tough to diagnose. It literally has over 150 different symptoms. 150! So you can have such variety of presentations based on that. Lyme's nothing new. There was an ice man that they found they estimate about 5,300 years ago. He was actually murdered and then frozen. They actually found the Lyme Disease bacteria in him. They named him Otzi, but the *Borrelia burgdorferi* bacteria, they actually found in him. Technically, for Lyme Disease it's a bacteria. The *Borrelia burgdorferi* is the bacteria, but there's *Borrelia mayonii*, *miyamotoi* as well. So there's a couple different strains that are "linked". But as far as the *Borrelia* species, there's over 300 across the globe. There's, by itself in America, a hundred. So there's a lot of different actually strains of this bacteria.

[00:03:30] [00:04:00] Lyme Disease comes in many different forms. Spiral shaped, so it's a spiral, spirochete. Likes to drill, so it doesn't like to float around in the bloodstream, which makes it tough to diagnosis or really tough to test, as far as lab tests, blood testing. So it joins to tissues, organs as well, too. When the Lyme Disease bacteria, the spiral shape gets stressed, it can actually change or morph. It can change into a cyst or a round body form. So instead of ... Essentially from going from that spirochete form, it'll literally engulf and eat itself and turn into a ball, or like a cyst form. That form itself is a thousand times more protective against antibiotics when it changes into that form. It can do it within a matter of minutes pretty quickly.

[00:04:30] It's also got an intracellular form, or what we call like a stealth form, where it will go inside of our own cells. This is where the autoimmune component comes in, causes autoimmunity. Then our body starts attacking our own cells, thinking that maybe that's Lyme inside there. Then there's also another form called the biofilm as well. So there's a lot of different forms.

Lyme Disease itself is evasive. I mean, it replicates as well, too. Gets other bacteria, other bugs, pathogens, viruses, fungus, to tag along with it as well, too. So going after disease, you really have to go after what's not supposed to be in our body, and what's attacking our body.

[00:05:00] ... too prevalent. CDC states right now that 300,000 people are affected each year by Lyme Disease. The previous number, Jonathan, was 30,000. So now they're saying that's probably 10 times more than what we thought, 300,000. A lot of the Lyme experts, or the people out in the Lyme Disease world believe that that number is even underestimated. It's probably 10 times more than what that is.

[00:05:30] It all comes down to, we can have Lyme Disease, we can have the bacteria *Borrelia burgdorferi* or there's some other actual bacterias, different *Borrelia* species that actually cause it too. But you can have it, but the key is how healthy are you as a host? If you're not well, you're going to exhibit symptoms and Lyme can thrive. But when you have a healthy body, no matter what bacteria, no matter what virus, no matter what parasite, your body should be able to fight it off to a good degree and not be affected. But when you are immune compromised, then that's really where the big issues come in and say, okay, now you're actually probably going to exhibit symptoms, now you're going to have issues happening.

[00:06:00] So if you just focus on, instead of "fighting the darkness", the bug ... If we focus on bringing light into the body, like life and healing and health, we're always going to win that battle. Lyme Disease is a clinical diagnosis. So we're all trained in our society test. What test do I run? Do I run the Western Block? Do I run the Eliza? I would tell you both of those are worthless, don't even waste your time. Too many false negatives, too many false positives. You might as well just do a coin flip.

[00:06:30] So if we go beyond the standard testing that's very inaccurate, now we get into, okay there's IGenEX, there's Pharmasan Labs that does iSpotLyme. There's DNA Connections. The favorite right now for me testing wise, if you want to run a test, is DNA Connections. They have a Lyme urine panel. But inevitably, it's a clinical diagnosis.

[00:07:00] So clinically if you have moving arthritis, you have arthritis pain that moves, like one day it's a shoulder, the next day oh it's my knee, the next day it's back to my elbow or a different shoulder ... Moving arthritis is classically a sign of Lyme disease. If you have Costochondritis, where it's pain in your sternum, basically where the ribs meet the sternum and you press on here. If you press on here and you're like ... Because that hurts, that would be a sign of Lyme Disease in my book. Right AC joint issues can be Lyme as well, too. Obviously, you could physically injure that shoulder, too, but if you have shoulder problems with no injury, that could be a sign of Lyme.

[00:07:30] [00:08:00] But Lyme is complex in the fact there's over 150 different symptoms. It mimics a lot of things, which is why they call Lyme Disease "The Great Mimicker". It's similar to Syphilis, or it's a spirochete, so then therefore it seems like it could be sexually transmitted as well, which get a little controversial. But when you really understand how many people are affected by it, it definitely does make you think that it's spread more than just by a tick, that is spread by multiple vectors, multiple things for Lyme Disease. But inevitably, it's a clinical diagnosis.

So when you're looking at clinical diagnosis, you're looking for two or more things. So if you run a lab test and it says yes, okay, great. But if you have symptoms or your exam comes up and shows, yeah these definitely look like Lyme Disease symptoms. When there's multiple things that match up, then that's when I would really consider Lyme Disease to be a piece of the puzzle.

Jonathan:

[00:08:30] So, Dr. Jay how would you go about treating Lyme Disease to get a positive result?

Dr. Davidson: Treat Lyme. This is the million dollar question, right? My approach ... I think this is a little atypical, because in the Lyme world, it's all about killing the bug. Right? You've got a bug, you've got a bacteria. I want to kill it, I want to annihilate it. But to some degree, it still kind of goes back to this whole antibiotic, antibacterial craze that we gotta kill all the bugs in our body.

[00:09:00] Well, we have a lot of bugs in us. Obviously Lyme is pathogenic and bad, but when I look at how do you get well from Lyme Disease, the first thing that I always look at is what is protecting Lyme? Why can't the immune system by itself take care of this bacterial infection? It's usually because it's protecting itself. So what protects Lyme Disease? Heavy metal toxicity.

[00:09:30] [00:10:00] So Lyme has multiple forms. It can be a spiral shape, a spirochete. It can turn into a cyst or a ball, which is very protective. It's pretty inactive activity wise, like metabolically, but it's pretty protective against like antibiotics a thousand times stronger in a cyst, ball, sphere type shape than a spiral shape. It's got its intracellular form, and this is where autoimmunity actually comes in with Lyme Disease, is Lyme will go inside of our cells and essentially kind of be inside of our own cells. Our body's like, "Wait a minute, I don't think that's right. Something's wrong with that cell." And it will attack it. Well, when it starts attacking our own cell, maybe Lyme is inside of it, it starts attacking other cells, and the immune system starts trying to figure out what cells have Lyme and what doesn't, and it kind of goes haywire. That's where autoimmunity specifically fits in with Lyme disease. There's a fourth form that I would consider with Lyme disease, and it's biofilm. Biofilm, just think of it as the bug is producing snot or slime. All this is doing is it's producing snot or slime. It's like a blanket where all kinds of different bugs, all the different forms of Lyme, all kinds of different bugs can live, and we've got this blanket over top.

[00:11:00] [00:11:30] When we want to annihilate, or we want to kill Lyme, it's hard to penetrate that wall or that blanket. What we want to do is identify how can we actually start peeling that biofilm away to then get the bugs active, so the immune system can take care of it? When you actually look at the ingredients of biofilm, calcium, iron, magnesium, are some of the ingredients, copper. Two of the ingredients in there that get thrown in, all biofilms are a little different but two of the ingredients that can be included in this manufactured biofilm, mercury and lead. Very toxic heavy metals. Mercury has a very high affinity for the brain. Lead has a high affinity for some different organs, and it loves the bone. These heavy metals will basically protect Lyme. If heavy metal toxicity is present, and you're going after Lyme, the likelihood of healing from Lyme 100% and not touching the heavy metal toxicity or detoxifying heavy metals, it's very unlikely. That's a shielding.

[00:12:00] [00:12:30] The other shield mentioned before too is Lyme lives inside parasites. When somebody comes to me or one of my doctors or helping somebody with chronic Lyme disease, the first thing we do is not jump in to try to kill Lyme. The first thing we want to do is open up the drainage pathways and then we want to start removing what is shielding or protecting Lyme, which includes heavy metal toxicity, which includes parasites as well. That's why in any Lyme disease I would always parasite cleanse first. I would always detoxify and then I generally like the mopping up of the smaller pathogens because it's just too hard to kill Lyme and these other pathogens when all these other things are protecting it. There's definitely an order to it.

[00:13:00] [00:13:30] For the person that's struggling with health right now as you're listening, if there's one thing that you can start focusing on, it's drainage and opening up the liver bile duct area. The liver bile duct, when that's clogged, that clogs up the body lymph. That clogs up the head draining into the lymph. If you want to put yourself at risk of Alzheimer's and dementia, don't drain your brain. Every time you sleep at night, your brain drains fluids but when the liver bile duct is backed up, when the body lymphatic is backed up, the brain has a very hard time draining. For you that's listening, memory issues, brain fog, just can't process, just very sensitive to smells and lights and things like that, drainage. Focus on drainage first, then come in and do some parasite cleansing. Depending on what it is, you can sometimes incorporate some detoxification. Focus especially on detoxification then as you get through parasites. Then do some mop up of some pathogens. I really think that that is a great timeline to understand how do you heal from Lyme disease.

Dr. Sruti Lam

[00:14:00] [00:14:30] I finished my undergrad degree in medical school. I am from India so that's where I finished my medical school. Then I came here and as every other foreign immigrant, I have to go through the U.S. Embassy Boards. While I was studying for the U.S. Embassy boards, amidst all of this studying and applying for application one, I neglected my health. Two, I over-stressed my body by working so hard and neglecting rest and exercise. All

these together started giving me symptoms. While studying, I started having headaches, I wasn't eating right, I wasn't exercising right, I wasn't releasing my bowels right.

[00:15:00] Eventually what happened is things starting building up and I had symptoms of constipation and diarrhea. Now my medical brain is like, "I have IBS and this is because stress related. It's just a lot of cytokines in my body." I tried to take care of myself and try healing it. Slowly, the constipation and diarrhea evolved into having blood in my stool. Immediately, I knew what was happening because this is something I've always studied but just the fact that it's blood in the stool that would immediately give me an idea that I have irritative IBS, which is an irritable bowel syndrome. I have IBD, which is inflammatory bowel disease, which could either be two things from what I studied, ulcerative colitis or Crohn's.

[00:15:30] [00:16:00] Ulcerative colitis, it's not smaller, I can't remember the word, defined disease. It's only in the colon. Crohn's disease is something that can occur all the way from the mouth all the way to the anus. It affects the entire GI. Both of them manifest initially as the same way. You have blood in your defecation, in your stool, you have fatigue, you're tired, you're weak, you start having all of these symptoms. Different people manifest differently. I had blood in my stool and that immediately scared me and I'm like, "No, I'm not going to call it autoimmune disease because I know the treatment for it." The treatment for it is an immunosuppressant or a steroid and I wasn't willing to go either of that route.

[00:16:30] [00:17:00] I started taking care of myself again and I said, "I'm not even doing this." The only way to diagnose you have either of these diseases is to do a colonoscopy or if it is something that is upper GI, then you do an endoscopy. I delayed this for a year and a half without doing one and trying to heal myself. It just worse and worse. It went from one to two defecations a day. I had to run to bathroom at least 10 to 15 times every single day. There were days where it was just blood instead of having any stool in it. There was so much pain, abdominal pain with it. There was a lot of cramping with it. I was losing blood so I become anemia. I become fatigued now. I was not absorbing any food that I was eating right so I was malnourished.

Dr. Stephanie Daniel

Dr. Daniel:

[00:17:30] [00:18:00] Like a 30 year old who was an entrepreneur, no issues, no history. Got a cold and never recovered and became so sick that he was wheelchair bound and had to move back home with his parents and was given very nebulous diagnoses like post viral syndrome that went from specialist, to specialist, to specialist without any real answers. What we have discovered is that the virus was really just the trigger for the impact of environmental exposures that his system now can't navigate anymore and we're in the midst of reversing it actually.

Jonathan: You've seen symptoms improve?

Dr. Daniel:

[00:18:30] [00:19:00] Oh, yeah. One of the major impact points was realizing that he actually had exposure to toxic mold in his apartment that until he got the virus, his immune system was able to manage and not succumb to. He had maybe little inklings of things. He was a little bit groggy in the morning and some congestion and things like that but wrote it off. Gets this cold virus. I think it progressed to the point that he ended up antibiotics on some point. It was from that place that he never recovered and then discovery of his story. He came in actually with a lot of data. He had to been to, I don't even know how many specialists, major academic centers. Even in the initial set of data, there were a couple small clues in some of his biomarkers that, to me, are just pieces of a pattern to

confirm. I already had my hunch about what it was to have an immune system so depleted that anytime he stood up, his heart started racing, he was so exhausted, and was not able to function on his own.

[00:19:30] As we dug in further, the hypotheses that I had to begin with were confirmed by all the other lab tests. In retrospect, being able to trace back to actually there's black mold in my apartment and that was the underlying imbalance that made his entire system shut down after getting a viral trigger.

Jonathan: Wow. That's incredible.

Dr. Daniel: Yeah.

Jonathan: His symptoms are improving.

Dr. Daniel: He's very much improving.

Jonathan: What kinds of things are you seeing?

Dr. Daniel:

[00:20:00] [00:20:30] He's able to walk longer distances. He's still in recovery but prior to that, he literally was bed bound pretty much and he used a wheelchair just to make it to appointments, for example, because he couldn't stay upright very long. His heart was race, he'd get a little bit of chest pain and shortness of breath and all of that's disappeared. He's slowly progressing through the process of getting his strength back and getting his life back. In the meantime-

Jonathan: -Sounds like he's quickly progressing.

Dr. Daniel: He is. Well, he's only 30 and this happened in November.

Jonathan: Quick progression.

Dr. Daniel:

[00:21:00] Right. I'm trying to remember when we started working together. Several months ago. He was very aggressively pursuing answers and running into all these dead ends from so called experts who almost thought nothing of a 30 year old bound to a wheelchair all of a sudden with no prior history and had no answers or solutions for him.

Jonathan: You couldn't accept that.

Dr. Daniel:

[00:21:30] No. I mean that's just crazy. Why would you? No real diagnosis. I mean, what's post viral syndrome? What's all these things that we call syndromes in conventional medicine are a way of trying to label something that really means we don't know. It's this constellation of symptoms and we call it a syndrome. Whereas, I was always looking for, okay, I knew that the virus was unlikely to be the main cause for his ongoing symptoms but I recognized it as a trigger for other things. That's where the excavation work was coming into play was to say, where was the foundation rocky that you were managing until this happened?

Jonathan:

[00:22:00] Interesting. Now, this is looking for root causes and accurately defining cause and effect, whereas someone would look, okay, he had a cold. Now he's in wheelchair, so this is because of the cold, which is an incorrect cause and effect.

Dr. Daniel: That's right. It's a misidentified cause and effect.

Jonathan: Then a logical brain will say that's not what happens after people get a cold unless there's some strange anomaly that happens in the universe where this is the only person I've ever heard of that has this happen after a common cold.

Dr. Daniel:

[00:22:30] Well, except for the fact that we see that now more and more as a trigger because people's foundations are so much more vulnerable. Instead of actually being identified, common cold viruses are causing this. What they're not looking at is what's all the impact leading up to that? That we can actually change. We can actually change that impact.

Dr. Eric Zielinski

[00:23:00] [00:23:30] My focus is to really help the people minimize the toxins and a couple of the big ones that are so widespread are antibacterial products, those that have Triclosan, Triclocarban, and other chemicals that are registered pesticides. To steer away from pesticide ridden genetically modified foods, especially grains that are conventionally harvested through a process called desiccation in which they essentially flood the field right before harvest with RoundUp. We don't realize what we're doing at this point. We don't realize the long term effects of this constant exposure to toxin.

Ariel Dochstader Miller

Jonathan: You passed your parents before their time in a sense, right?

Ariel Dochstader Miller:

[00:24:00] [00:24:30] Yeah. They were both pretty young. My dad was in his 50s. My mom was in her 60s. They both died of cancer, which is why I've been so committed to changing this whole pattern of disease in my family for my kids. This is my hypothesis. This is not scientifically proven. I grew up in New Hampshire in an apple orchard. When I was a teenager, I actually was paying attention to what was going on in our neighborhood. I lived on a short street but every single woman on our street, 30s or over, had breast cancer. Every single one including my mother.

[00:25:00] We had a very well known surgeon that lived probably three quarters of a mile. When my mom was diagnosed, he was the one who did her mastectomy. He did her surgery. I said to him, I said, "Do you drink your water?" He said, "No, I don't let my family cook with it. I don't drink it. They don't drink it." I said, "Why? What is your reasoning?" because I was putting this together in the back of my mind. He said, "We live in this apple orchard where they've been spraying for years and years and years and years. He said, "Where do all those pesticides go? They go down into the water table." We all had wells. He said, "There's no way that those pesticides aren't getting into the water." He said, "My family cooks with bottled water."

[00:25:30] [00:26:00] I started doing my own research and I started learning about water. I started learning about the hormones in the meat that we eat, the bovine growth hormones. I just started doing a lot of research myself

and learning about ... I was talking to my mom's oncologist and he said, "You're now in the highest risk group for breast cancer." He said, because my mom got it before she went through menopause, so he said, "You're going to have to be very proactive about your health." He said, "Don't eat meat with hormones in it. Don't smoke." He said, "I do think these things have an impact."

Jonathan Otto

[00:26:30] If you have an autoimmune disease, you might know that cutting red meat from the diet is often one of the first pieces of advice out there. Do a Google search on red meat and autoimmunity and you'll find this notion is almost in every click, but how often do you think about the toxins? As an attempt to combat autoimmune diseases, many patients are resorting to medications that mask symptoms triggered by toxins and introduce more pharmaceutical toxins. Hiding symptoms rather than trying to get the root cause of the disease only prolongs suffering in the long run.

Dr. Sruti Lam

Dr. Lam:

[00:27:00] I'm understanding there's a lot of different risk factors. It could start anywhere from birth, our genetics, our childhood, immunizations that we take, diet, the environmental toxins, our sleeping habits. There's a lot of different risk factors today in today's society around us that is actually causing all of these organisms, toxins, everything to be formed into our body, which is not part of the way it's supposed to be functioning normally.

[00:27:30] [00:28:00] When there's an imbalance in any of these, then we don't know how to react to it. This reactivity can become a negative reactivity and that's why we experience all of these problems. Now, whatever we take, we have a great self defense mechanism that can actually fight off things, but as they keep increasing, our immune cells are not able to replicate as fast as the amount of toxins that are ingested and that's why the toxins are able to fight against the immunity and that's why they win. It's like the enemy comes in, there's more of the enemy, less of the soldiers in the body. The enemy is able to overpower the soldiers. That's when we have all of these symptoms.

[00:28:30] Autoimmune disease is not really when a disease has already manifested itself. It's something that occur when symptoms start occurring. They could be a different kinds of symptoms. It could be something like a common cold. It could be an itch here, a rash there. It could be hair loss. It could be a lot of different things that occur but it's the way we're so used to just ignoring it or applying something like a Band-Aid immediately and say, "Okay, I've taken care of it," but it's still fighting and fighting and fighting and trying to push things out. That's what happens.

Jonathan: What do you see as being some of the biggest triggers that people are exposing themselves to today?

Dr. Lam:

[00:29:00] [00:29:30] Okay. It depends. It depends on where we're situated. For example, here in America, my biggest concern is diet and all the drugs that we're exposed to. I was with a patient the other day who was only six years old and have 45 antibiotics by that time in his life. Only six years of age. One, you're just giving all of these different medications externally to a child where an immune system is not fully developed yet. We're just suppressing and suppressing and suppressing the mechanisms that are able to fight off infections. Then it can cause the body to be like, "Okay, I'm suppressed. There's nothing else I can do." Something small triggers it and then it becomes a big thing. That's one thing. It could be all the different drugs we're exposed to.

[00:30:00] Second thing is diet. Look at the diet of a child nowadays. It's McDonald's and Burger King. I'm not saying anything against fast food but it's the same diet that we're eating that's fully processed. One, we're not eating something straight from the tree or straight from the environment. We're taking it out and processing it to 10 different machines and then ingesting in our body. How are we supposed to be able to break it down?

Dr. Stephanie Daniel

Dr. Daniel:

[00:30:30] How are we supposed to be able to break it down in the right way that we are created to do it? When things like this happen, it's just a lot of triggers that just happen. The environment, the perfumes we use, the lotions we use, the beds we sleep in that are full of all of this plastic. All of these different toxins. It's just not one thing. It's one thing after another thing that just builds up and piles on to this mountain of things that we're not able to resist. So those are some triggers that I think causing it.

Jonathan: Stephanie, I know that you are really interested when it comes to toxicity and finding out ... being somebody that had toxic issues yourself that cause some of these great challenges. I know you're really interested in finding out what so many sources are for people. What are they and how can people get rid of these things?

Dr. Daniel:

[00:31:00] [00:31:30] Right, well, I think there's across the board so many types of exposures over the course of our lifetime, every single day. Every time we eat food that's been grown conventionally, it's been sprayed with pesticides. Every time we drink out of a plastic bottle or a plastic cup there's chemicals that are leaching from plastic. Every time we put something on our skin whether it's a lotion or certain sunscreens, they all contain ingredients that disrupt the endocrine system, add chemicals that seep into our system. The water we drink, the exhaust fumes from cars. The exposure to certain metals. A lot of people talk about heavy metals. It comes both from mercury filled fillings, from certain ingredients from vaccines, from fish that we eat, larger fish that eat smaller fish and accumulate mercury in there.

[00:32:00] One of the kind of more recent understandings are biological toxins that come from organisms that we're exposed to or acquire, whether it's in certain bacteria that our immune systems kill off and those produce endotoxins that our immune systems can't clear. Mold is another one. Being exposed to mold and not the spores themselves, but again, the toxins that are released that some people's immune systems aren't able to get rid of on their own. The list is endless. Where do you want to start?

Jonathan:

[00:32:30] Wow. Then how do we get rid of them?

Dr. Daniel:

[00:33:00] In conventional medicine they always say, "Oh, we have a liver for that." What are you talking about? Toxic buildup and that might have been true maybe 100 plus years ago when the amount of toxic exposure was met by the ability for the liver to keep up with clearing it. Nowadays, though, the impact is so much higher and accumulates so much faster by just the way that we live. In addition to that we have these defense mechanisms that are part of the detoxification process, our microbiome, for example, that have been compromised.

[00:33:30] Our livers might be fine, but our microbiome, which is part of the bio-transformative process to allow toxins to escape the system, escape the body have been impacted by actually often times those same toxins that we get exposed to.

Jonathan Otto

Each and every day we're subjected to toxic heavy metals. Some, which, we can avoid and some, which, we simply can't. Those with Lyme disease, parasites and other co-infections have a more difficult time clearing heavy metals from the body. These toxic metals fuel inflammation, suppress the immune system, and hinder the body's detoxification systems. This sets the perfect stage for Lyme and other chronic infections to take hold in a body that becomes very toxic and without defense.

Dr. Daniel Nuzum

[00:34:00] [00:34:30] Heavy metal poisoning. Heavy metal poisoning is a huge, huge factor in autoimmune disorders, okay? When heavy metals bond to proteins in the body and get deposited throughout the body, okay, sometimes the immune system will try to go after those heavy metals and pull them out of the tissues because of those heavy metals are causing such damage in the tissues. When that happens, the immune systems digging into the tissue, okay, to pull this heavy metal out, but it damages the tissue in the process, okay? That actually goes back and is tied into leaky gut and also faulty liver metabolism, okay?

[00:35:00] [00:35:30] As we age, we have in our environment we have all these different toxins in our environment. If you look up my book, Detox For Life, I have multiple chapters in that book talking about how there are ... We are just being bombarded by toxins in our environment. If we don't do something to eliminate or cleanse our liver of toxins on a regular basis, our liver goes from being a filter to a garbage can, okay?

[00:36:00] How that happens is as toxins accumulate in the liver and the liver hasn't been enabled to eliminate these toxins, we haven't done things to flush the liver out to cleanse the liver itself, or provide the liver with the nutrients it needs in order to eliminate toxins, we end up with fat deposits in our liver. Okay, so the filtration cells in our liver get converted to fat deposits. Those fat deposits become storage bins. All right? So instead of the liver filtering toxins out of the body, those fat cells become storage bins and the liver becomes a garbage can instead of a filter. We call that fatty liver disease. Okay?

[00:36:30] You have non-alcoholic fatty liver disease, you have alcoholic fatty liver disease and then you have drug induced fatty liver disease, also. We also find, I've worked with a lot of miners and people who are also working in manufacturing where they are exposed to lots of heavy metals that have fatty liver disease because of heavy metal poisoning.

Dr. Stephanie Daniel

[00:37:00] [00:37:30] One area that not a lot of people look at to find sources is parts of your environment you've been exposed to that may have been incorporated into your body or that may be coming into your body as we speak. That's environmental toxins. When I say environmental toxins, I mean chemicals and toxic metals like lead, and mercury, and cadmium. Most of us think we live a healthy lifestyle, but believe it or not, every moment of every day we're being inundated by chemicals that our liver and kidney have to process just like the medicines we take just like the food we eat, they have to be filtered through and gotten rid of. Well, if too much is coming in, you can't actually get rid of them and your body tries to find places to stick those chemicals and those metals so they won't do too much damage.

[00:38:00] Why is your immune system not working so well? Toxins are a piece of the puzzle. Nutritional fortification is another piece of the puzzle, so not having the right nutrients to help you fight the battle, that's a piece of the puzzle. I love toxins. They're reversible. You can learn to avoid them. In your current environment, you can learn to get them out of your body. Once they've gotten trapped inside in your fat cells and in your other vital organs-

Dr. Sruti Lam

Dr. Lam:

[00:38:30] Okay, so certain things that you can use to actually heal the body from within is to clean up or stimulate or modulate our immune system in a way that it doesn't react instantly to something.

[00:39:00] It's just like anger management. When you're treating someone with anger management, you don't tell them to not get angry, you ask them to control it. You'll teach them ways of how to control it. You will give them ideas, tips on how to take care of it in the same way. You don't just tell the body to stop talking. If you just ask somebody to stop talking, this will just build and build and build and it will burst. In the same way, you're just modulating it and when you model it something, it will take its time. It will heal slowly and it will manifest itself slowly as well.

[00:39:30] Our body is one thing, right? But let's look at it as a whole. Rheumatoid arthritis is something about the joints. Crohn's or ulcerative colitis something about the gut. Alzheimer's, dementia, which is now also being taught about as a hypothesis, that it is an autoimmune disease. It's brain related. Everything is part of one human body. To treat the human body, you can't just treat one part of the body. You have to treat the whole body. But to treat the whole body, you have to start treating somewhere. What is the most common route of exposing the body to an external trigger? What is the most common route? Diet.

[00:40:00] I think it's diet. It's where we're directly ingesting something. Yes, we're inhaling something, can we stop ourselves from breathing? That's not something that we could do easily, but we could actually not stop, but at least control what we put in our mouth so it's digested and absorbed differently. Just like different organs in the body all work together, each organ has different layers around itself. Each one, whatever we eat has to be absorbed through this layer and go to different parts of the organs to function properly. If you can first change somebody's diet or control somebody's diet, and in any term, like we say appetite. When we control somebody's appetite, we can control somebody's hunger, change it slowly. You don't have to do a drastic change. Okay, here is this food. There's all you're able to eat. Now I want you to stop eating all of it and I want to give you just this one thing. The body's scared. It doesn't know what to do. It's like, "This is foreign." It will start fighting against it. It's a slow tweak of putting things back into balance.

Jonathan: The symptoms of an autoimmune disease can often mimic the symptoms of adrenal fatigue. The two conditions are related, and it's important to note that the differences between the two, the similarities, and how both can exist in a susceptible body.

Dr. Lam:

[00:41:30] [00:42:00] I was just sprawled on the floor, crying because I was sick. I didn't get into residency. I, not ... I'm going to cry. I sprawled on the floor and cried because there was nothing I could do about it. There was nothing I could do about it and I was like, "Lord, why me? You've given me so much in life. You've given me wonderful parents, a great family, a smart mind, somebody who can work hard." I was able to do all of this and achieve all of this in life, and here I am without a career, without good health, and just sitting at home at this age after achieving so much in my life, but not able to accomplish anything. It was very very hard. It was very very hard.

[00:42:30] [00:43:00] There were a lot of friends of mine and physicians that were able to help me. My church pastor, my close friends. There was like only a handful of people I shared this with. They were like, "Take strength in the Lord." That's what I was doing, but I needed medical help. I had a very good friend who was a gastroenterologist, who went to my church. I do Sunday school with him. I preach. I do all kinds of things with

him, but I was not able to share and open up and tell him I need help. My GI, my gastrointestinal system is dying. I couldn't tell it to my parents, too, because I was ashamed.

Dr. Peter Osborne

[00:43:30] Then the fourth trigger, infection, and I mentioned infection with other patients, parasites, bacterial infections, yeast overgrowths or yeast infections, prion infections, mycoplasma infections. There's all different kinds or types of infections, but when I say infection, I'm not talking about ... Some people are saying, "I don't have an infection. I don't feel bad. I don't have a cold or a flu." It's not what I'm talking about. Think of Lyme. It's a chronic infection. Think of, if you've ever heard, there's a bacteria called helicobacter pylori. It won a Nobel prize for its discovery. It was discovered that this type of chronic infection causes acid reflux heartburn and gastric erosions.

[00:44:00] [00:44:30] One of my favorite long time stories is a young woman named Jessica. Jessica came to see me and she was really struggling. She was actually accused of being an anorexic. Her doctors were accusing her of forcing vomiting because she couldn't put weight on. She was wasting away. When they brought her in, I was the first doctor that even believed that she wasn't anorexic. I loved her story because that was the backdrop to it. She had gone to several experts, several specialists. God led her to me. I believed her. What was interesting about her, she had some parasites. Parasites steal from you. They rob your nutrition. That was one of the main things we found. We found several things in her. She had a lot of different food allergies. She was manifesting all kinds of symptoms. Weight loss. She couldn't put weight on. She was having joint pains. Her hair was falling out. There were a lot of things going on. I don't think anybody could have really said, "Let's pinpoint it to this one condition." She had multiple autoimmune processes going on in her body.

[00:45:00] [00:45:30] If you're struggling with kind of a chronic autoimmune array, if you will, pay attention. In this case, she had parasites. That was one of the big factors. She was gluten sensitive. She had parasites. She was malnourished. The parasites were eating her food. In her case, what's interesting is we used some natural botanicals to try and knock them out. It didn't work. It just didn't work. This is one of those areas where melding of medicine and natural medicine can work. I sent her, we ended up sending her to a doctor in New York. His history is very interesting. He actually worked in third world countries for years studying parasites. We sent her up to New York to visit with him, and it actually ended up taking a pharmaceutical agent in this case to actually eradicate the parasite.

[00:46:00] Once we got the parasite under control and we got the diet under control and we got her well nourished, she's acting, she's singing, she's capable of doing great things in the world, all because I believed that she wasn't anorexic. All because I didn't accuse her of being a liar when she was in my office asking for my help. That, to me, is a travesty. We can joke about it today, but she visited how many doctors and was called a liar by how many doctors, when it was her intent to go to them to get help. What kind of a world are we living in when somebody comes and asks for your help and you say, "You're a liar and I don't believe that you really need my help"? When you're a doctor.

Jonathan Otto

[00:46:30] If you think parasites only lead to gut disturbances such as an upset stomach and diarrhea, then think again. Problems that happen in your stomach don't stay in your stomach. Parasites may cause autoimmune disease in two ways. First, the inflammation caused by intestinal infection can cause an increase in the permeability of the small intestine, known in colloquial terms as leaky gut. Second, over two thirds of your body's immune system is located in the wall of the small intestine. The immune cells, called lymphocytes, leave the intestine and travel all over your body. When activated by a parasitic infection, they can carry the inflammatory message to your joints, your skin, your eyes and your lungs.

Dr. Jay Davidson

[00:47:00] [00:47:30] Parasite cleanse. I always like the herbal route. There are anti-parasitic drugs and things like that, but I feel like there's just so many natural tools that are available. I had done parasite cleanses before, and I'm like, "I never see anything. I must not have parasites." A couple of years ago, when I actually took some mimosa pudica seed, organic mimosa pudica seed, just literally a few days later I had a couple of 20 inch worms. I went to wipe and they were hanging out of me. They were dead, but I took some toilet paper and pulled them out. Then for the next month and a half I just had piles come out. My brain just started, "What? I have worms? If I have them, a relatively healthy guy, who else does?"

[00:48:00] [00:48:30] Immediately, and this is maybe a benefit of my personality, but I immediately started implementing it with clients. I'm like, "We have to parasite cleanse. I think this is a big missing link." Sure enough, piles just started coming out. I think as long as we can do something that's effective, you'll see what comes out. Take this with a grain of salt, that only about 30% of parasites you can actually see with the naked eye. There's about 134 different species of parasites, so that the list is quite big and you won't see them all. When you see stuff come out, it's like, "Who needs a lab test?" Who needs any other confirmation when you see the stuff come out of you? I recommend everybody doing parasite cleansing. I love the mimosa pudica seed. I love that. That works really well. I also love ingredients like neem, clove. There's an ayurvedic herb, a very well used anti-parasitic called vidanga that works really well as well. I like using anti-parasitics like that, taking that.

[00:49:00] [00:49:30] [00:50:00] The rule of thumb with parasite cleansing or parasite killing, if you will, is be persistent and be consistent. When I first did that, I was like, "Oh my gosh. I've got to slew out. I'm not seeing any more worms." I just stopped. Then some symptoms came back and I'm like, "Maybe it's some more parasites." A month and a half later I started taking the stuff again and piles came out. I'm like, "Oh, I got them all. Good. Done." Then all of a sudden symptoms came back. A month and a half later I did it again, and I got more out. I was like, "Wait a minute. I'm missing something here." What I realized is that parasites generally have a life cycle where they'll reproduce every two weeks. When you're taking stuff, whether you see stuff or not, I like to recommend to be persistent and be consistent because you just don't know when they're going to hatch. Now, potentially full moons and new moons are more active times, especially full moons, but it's not a guarantee. I like being persistent and consistent with those ingredients. There are ingredients like black walnut or the tansy wormwood, maybe where you don't want to take those for super long periods, so you can cycle on and off those, but clove, neem, vidanga, mimosa pudica seed, be consistent and persistent with that.

[00:50:30] Vidanga, Mimosa Pudica seed, be consistent and persistent with that, but here's the key. Any time that you start killing parasites or you start attempting to, you're gonna have two things that happen. Parasites give off by products when you start killing them or when they start getting stressed 'cause they want you to stop. So they're gonna produce ammonia, they're gonna produce aldehyde, they're gonna stir up, they're gonna change your thought process, they're gonna stir your gut up and they want you to stop. This is again where the persistent and consistent comes in. Then the other thing is once parasites actually die, if there's heavy metals inside of them, if there's viruses, bacteria inside of them, if there's mold spores, those things can potentially release.

[00:51:00] Now Mimosa Pudica seed's really good 'cause it really suffocates and helps to pull out, but there's some parasite killers that kill and it explodes the parasite and these things come off so, regardless of which it is, if you're just making them mad and they're releasing chemicals or you kill them and there are basically debris or chemicals released, this is where we need something to help bind on and grab onto it. Ammonia is a really big issue if people have muscle soreness, brain foggy, if you drink alkaline water and you're like, "I just don't do well with it." Ammonia, big parasite issue.

[00:51:30] If you've had a moldy house or a moldy building before, you definitely wanna be taking something to bind onto it and science has really come along in the natural world so far that there's things like bioactive carbons that not only bind onto these toxins in the gut, but now they've been able to be modified where they actually go systemic throughout the body, and you can take them with or without food. It's really exciting where we're at right now, functional medicine-wise, but parasite cleanse and then take some binders with it to help mop that up and it should be really a good successful protocol for you.

Dr. Sruti Lam

[00:52:00] [00:52:30] I like to use the term, "Eat whole foods, mostly plants." That's where I would go. We are created, again, to eat something straight off the trees or straight off the ground, or when those are not available, to kill animals and eat them. When we do that, we are eating something that is easily digestible, easily available, clean without any preservatives used, without anything else from the environment that is actually ingested in it. Talk about plucking an apple from a tree. You pluck it, you eat it, that's good for your body. Now when you cut the apple, and then you put it ... you add caramel on it, you add a bunch of sugar on it and then you bake it in the oven and kill everything else that's in the apple, what you're really eating is just straight up sugar or straight up preservatives, that you'll be doing.

[00:53:00] My thought is, eat something that is whole plant-based. Eat a grain that is growing, eat grains from the fields. The way I would treat something is to go back to eating whole foods and to decrease eating processed foods. That's where I'll go.

Dr. Stephanie Daniel

[00:53:30] [00:54:00] I'll see disease labels across the board, but the causative issue is very similar across the board. So with fertility cases, what I see in the unexplained is a lack of the right kind of nutrient density, a lack of immune resiliency, too much burden on the system where the major message to their biological ecosystem is, "This isn't an opportune time to make a baby." That requires a whole lot of excess resources, that we at this day and age have less and less of because we're navigating and negotiating so much more impact over the course of our early lifetime, and we actually see it even more pronounced in kids these days. There's illnesses and behavioral issues and all sorts of labels of what children deal with these days, that were never present when we were young, and I think it's because they come into a world where the impact is so much more immediate and it accumulates faster.

[00:54:30] [00:55:00] So you'll even see, I'll see, in my patient population, a lot of them are actually quite young, even late teens, 20s, 30s, and they're pretty sick already, as opposed to the older generation that I'll see 60s, 70s, where they may start manifesting stuff, but they manifested it much later. My hypothesis is that their exposure rate was slower for a lot longer period of time as they were getting older, as this younger generation is getting the accumulation exposure that much faster. So much more impact right away.

Dr. Jay Davidson

Jonathan: There's animals that have been studied with their parasites in them and what the parasites have led them to. The particular one with little ants. What was that one?

Dr. Davidson:

[00:55:30] [00:56:00] There's a book called, "Your Brain on Parasites." You can find it on Amazon. It's got a black cover. One of the research things they went through in that was that they found that there was actually a parasite

that went into ants, that went into their brain and then manipulated their behavior. So an ant during the day would do its normal routine, but instead of going to bed at night, the ant would go out to the grass, prop itself up on a blade of grass and the reason that it would do this is that the target organ, or the target organism of that parasite was a sheep or a lamb. So it wanted to get a sheep or a lamb to be eating grass to then get that parasite in. But here's the thing, so if the ant went out to the grass and the sheep or lamb didn't eat the blade of grass, instead of staying out there and getting fried by the sun, the ant went back to its daily routine during the day and the next night, did the exact same thing.

[00:56:30][00:57:00] I know that's a little far stretching, animal or insect, basically, but it also shows how parasites, it basically means one that sits at another's table, it's robbing nutrients and stealing vitamins and things from you, but it shows how it can actually manipulate our behavior. It can actually change our thought process. So parasites are really big and one controversial thing I wanna mention here, is you'll see some research out there about somebody swallowing a pork parasite and then it fixes ulcerative colitis or Crohn's. It's a whip worm. No whip worms actually don't reproduce into humans and as soon as people see that study they're like, "Wait a minute, parasites are good, we don't wanna kill 'em." This parasite is not designed actually to reproduce in us, replicate, so when somebody swallows it, what it does is, it distracts the immune system, the autoimmunity of attacking its own gut, and it goes after this organism that doesn't replicate and then the symptoms dwindle.

[00:57:30] This is a little farther stretched than the holistic treatment, but I view that as you're still dealing with the symptom, you're trying to distract the immune system but you're still not digging at the cause. Don't be confused by the research where it's like, "Parasites are good." They can help minimize autoimmune reactions and symptoms, especially in really severe ulcerative colitis cases or Crohn's, but that doesn't mean that the solution is to ingest parasites. It's this overloading of parasites that actually replicate in us that's causing such big epidemic issues.

Dr. Sruti Lam

Dr. Lam:

[00:58:00] [00:58:30] Let me come to a specific disease, like colitis. What happens in colitis is now you have infected the body so much that now it is totally inflamed. When it is totally inflamed, whatever we're eating is not 1) being absorbed properly, or 2) being digested properly. Because our skin barrier now has been broken and that's where the term leaky gut syndrome comes in. 2) we don't have the regular or the conventional bacteria that helps break down the food particles in our body. Now we have pathogenic bacteria entering our body, because once you have all of this inflammation, once you have all of this break of the barrier, then you have different bacteria in your body so the term dysbiosis comes from it.

[00:59:00] Here now you have to think about the word dysbiosis, different kind of bacteria mixed in the same thing. 2) You're talking about breakage of barriers, so leaky gut syndrome, small intestinal bacteria overgrowth, all of these things happen. And third, you have inflammation. So because something is inflamed, it's not working the right way. Now you cannot just be like okay, eat this way because your body's not able to break it. Now you'll have to help the individual eat food that's already broken down for them, at the same time help repair everything that is broken down. So you'll be treating inflammation. You'll be treating the dysbiosis and giving them a diet that is easily broken down so it's not straight up, you're breaking a head of lettuce and here you're eating, no they're not able to digest it, and then it will also be eroding the intestinal walls.

[00:59:30] You're gonna break it down for them in a way that is either cooked or juiced or any form that will be easily absorbed and the body's not working extra hard to break it down into the body.

[01:00:00] That's a time you don't just do straight up whole food. It's still a whole food, but it's just broken down. It's like baby food. You can't give a baby an apple. You have to mush it down, break it into smaller substances that they can just swallow without chewing. It's the same way. It helps them to digest it and absorb it easily. And then you're also giving little quantities so your body's not really overworking.

Jonathan: And that's why a lot of people that have chronic inflammation in their gut manifest it in some of these autoimmune conditions, why they experience chronic pain after eating, correct?

Dr. Lam:

[01:00:30] Right. Because when something's already inflamed, red, it's like adding oil to the fire. It's not able to digest it, it's not able to absorb it, and now you're giving something new and it's trying to fight it and fight it. So it's trying to digest it, it's trying to fight it and then it's just exhausted and fatigued and that's when pain happens.

[01:01:00] [01:01:30] Autoimmunity happens over time. It's a chronic disease. It doesn't happen overnight. In the same way, the pain and the symptoms take time to heal. You cannot expect it to heal overnight, again. Say it's taken 10 years to get to this point of having Crohn's Disease, then it might not take 10 years, but it will still take a long time to kind of reverse everything. So, yes, we can eventually heal that person, but we have to start slow and start healing the barrier slowly because cells don't form overnight, like our RBCs take 120 days to recreate or to replenish. So that's why we maybe give something or we give a different diet or we give a different supplement or we give a different medication to help heal. It will take time to heal and come back, but eventually, yes. Once we heal the inflammation, once we heal the dysbiosis, then we're able to bring the person back to normal and able to eat whatever he was able to eat before, but now we're gonna give him a cleaner diet to work on.

Jonathan:

[01:02:00] What I've discovered is even beyond the pain, physical pain, people are actually more interested. Because they can take pain killers to stop the pain, but you can't take anything to get energy. Like you can't take a drug to magically give you energy. Coffee just doesn't do it. The energy people are seeking for, like we're just hungry for, we want it, we wanna feel alive, we wanna be able to be with our children and pursue our ambitions and all this. How can we effectively come after adrenal fatigue, chronic fatigue, hit the root problem and start putting things in our diet and our daily routine that give us great results, make us feel good?

Dr. Jay Davidson

Dr. Davidson:

[01:02:30] Yeah, so to improve energy levels, you wanna look at the science in the mitochondrial world. Mitochondria, it's really progressing so much, but they're basically like the energy cell ... They're the basic energy factories within our cells, so they're basically giving us cellular energy. Adrenal fatigue is definitely a big buzzword, especially in the functional medicine world. The key with adrenal fatigue, if the adrenals are stressed and they're not producing enough cortisol so you have a hard time waking up in the morning, you have a hard time sleeping at night. You're kinda in this dead zone where you're not really awake, but you're not really sleeping.

[01:03:00] [01:03:30] What we wanna do is we wanna reestablish that circadian rhythm. You can give some life to the adrenals. There's adaptogenic herbs that no matter if the adrenals are over functioning or underfunctioning, the word adaptogenic means that it'll bring it back into normal. There's things like Ashwagandha and Rhodiola and these other different adaptogenic herbs that are a safe place to start. As far as energy for the adrenals, there's other things like licorice root extract that help to typically boost up cortisol and kind of extend the half-life of it. The concern of that is blood pressure, but usually when somebody has high blood pressure as the concern. So when somebody has adrenal

fatigue, usually their blood pressure is actually too low, so licorice root can actually help with that. You can actually just take just a desiccated, like an adrenal glandular as well, too.

[01:04:00] But inevitably, all of those things are still treating the symptom of the adrenal and the question I love to bring into this is like well, what's stressing the adrenals out in the first place? It can be a pathogen, it can be a toxicity. Here was one big one that my wife had and I see this in the female gender side massively right now in our society. My wife went to chiropractic school with myself, we went together. She got her doctorate of chiropractic. Was working in a chiropractic office at the time. She got pregnant with our daughter and leading up to that labor, delivery, one of the last times she was in the office, she was like, "Oh, just give me a week and I'll be back in the office." And that should have been the first red flag.

[01:04:30] So what happened is she just didn't recover. That was when she was on her death bed, basically. Couple months in. Couldn't even basically care for my daughter anymore. Things were just so bad, but it should have been a red flag for me when she said that statement, even before the labor process because how can somebody be a full-time mom, be a full-time spouse, have a full-time career. There's not enough time in the day and I would classify that in what I would like to call the modern day adrenal fatigue syndrome.

[01:05:00] [01:05:30] There's this undertone in our society that says, "Oh, you're a female. You can be a mom and take care of kids and be a spouse, but you still gotta put food on the table. You still gotta have a career." And even if you don't follow that, there's this unconscious stressor that's like, "I'm not doing enough. I'm not doing enough. I'm not doing enough." And it stresses you out. I don't care what adrenal supplement formula you're taking, if your lifestyle is like that and you're letting those expectations stress you out, it's not gonna fix it.

[01:06:00] And the day that my wife and I recognized this and we sat down and talked, she's like, "I just wanna be a mom." I'm like, "Great." She still does stuff on our business, but her focus, she really wants to be a mom and a spouse and I think that's where we need to understand the season that we're in in our life. That it's career time? Great, it's career time. It's family time? Great, it's family time. And understand that, but there's not a protocol on the planet that can fix this mind-mental stressor that could potentially just constantly be there. So just wanted to share that 'cause my wife really went through that and once we identified it and then restructured our lifestyle around that and really communicated and talked, energy increased. There's definitely great things you can take to help adrenal function. Always wanna get to the source, but then don't miss out on that mind-mental side that can be so important.

Jonathan:

[01:06:30] For those suffering with Lyme, they often seem to be on a rollercoaster of secondary infections. If you or somebody you know has Lyme, you know how detrimental it can be, how much it can limit somebody's ability to really enjoy life and thrive. But it doesn't have to continue this way. With the right protocol, Lyme can be overcome and effectively shut down. As we continue to learn more about the body, we can learn the tools needed to finally break free of that up and down cycle of diminishing health.

[01:07:00] Dr. Davidson, when it comes to Lyme disease, let's look at the conspiracy. Is there one? People have said that the government was potentially involved in its modification or in its creation, inception. What do you know to be true?

Dr. Davidson:

[01:07:30] [01:08:00] Wow, that's a heavy hitter. I guess with all the experts that I've interviewed, all the research that I've done, especially in the Lyme disease world, my conclusion with Lyme disease, it's specifically called the *Borrelia burgdorferi* bacteria, which was found thousands of years ago so we know that it's existed, but when

you actually look at the science and the organism itself, it's unlike anything that's ever existed. So my mind really leans in the fact that it's probably been modified. It's probably been ... We could call it GMOD, genetically modified organism to some degree. I believe Lyme existed, but the reason it's so bad is I do believe that there was somebody that did alter it and changed it to make it more virulent because when you look at military and attacking other countries in war and things like that, it goes so much deeper than just shooting the missile, right? There's the pathogenic side of it. There's weather side of it. There's multiple layers to it so I do believe that there is some modification that happened with ...

Jonathan: Why would they do that?

Dr. Davidson:

[01:08:30] Good question. I don't know. I honestly don't know. I often think why is there so much evil? Why is there so much, almost, even, demonic things in our world that are out there? I don't know. I like to focus on the side that you know what? I'm gonna make a difference. Let's get people well. Let's teach them the truth. Let's change the society. Let's get us out from where we're at now and let's make a change.

Dr. Sruti Lam

Jonathan:

[01:09:00] And tell me how you turned around your condition?

Dr. Lam: So I changed my diet. I stopped using processed food as much. I started baking my own bread if I needed to eat bread.

Jonathan: You didn't have a problem with gluten?

Dr. Lam: No, I did not have a problem with gluten.

Jonathan: Have you noticed that it is a problem for many people with colitis?

Dr. Lam: It is.

Jonathan: More typically or less typically?

Dr. Lam:

[01:09:30] [01:10:00] [01:10:30] How do I put this? There are different diseases that manifest differently and the root cause of a lot of different things is dysbiosis and also celiac disease. Now, celiac disease is where you're totally allergic to gluten. You should totally avoid gluten because your body's not able to break down the bonds and eat it. That is celiac disease. Now, research has found out that many people do not have to be totally gluten intolerant, but they can be gluten sensitive. That means their body's not able to break down gluten and absorb it into their body. So I have tried putting myself on gluten totally and then noticing if there's any differences and I didn't, but I do not eat gluten as much. The only gluten I would eat is when I make myself a whole wheat chapati or roti, which is an Indian tortilla, but I stopped eating bread. But that's where gluten can come from and it's not the gluten by itself, it's the toxins that the chemicals in gluten that actually hold onto and break down in our body. That's what actually affects it.

[01:11:00] In our intestines there is a barrier and when that barrier is broken down ... It could be broken down by different things and gluten is one of the things that can break it down and cause leaky gut syndrome and when that happens, it actually prevents our food to be absorbed in the right way because now instead

of breaking down into particles that can be absorbed by our body, the huge particle is actually just going through junctions that are broken, like our skin becomes this way, and it's just flowing through different parts of our skin. Gluten has been found to be one of those causes.

[01:11:30] Other causes, dairy. These are the two things that we have noticed that will cause, worsen inflammation in the body or specifically in the gut. I ate more healthier and cleaner food so I ate more whole foods and now, slowly, from eating mashed food and cooked food and all, I was slowly able to eat all my raw food again. Started ingesting all kinds of salads and tomatoes and lettuces and kale and everything again and I was fine.

[01:12:00] Two years later, I went and repeated my colonoscopy and it was clean. There was no inflammation, there was no ulcer, there was nothing, and my physician was like, "Are you sure you were diagnosed with ulcerative colitis?" And I'm like, "Yes. I was diagnosed with ulcerative colitis. Pull up my previous record and you can see it's ulcers in my rectum." And he's like, "It's not Crohn's?" I said, "No, it wasn't Crohn's. It was ulcerative colitis." And he's like, "How did you do this?" And I explained that.

[01:12:30] [01:13:00] Now, in addition, in this six months I joined medical school, I mean naturopathic medical school, when I joined naturopathic medical school, I learned other supplements that we can use. I started using anti-inflammatory herbs. I started using curcumin, I started using Boswellia, which is frankincense. I started using herbs that I know that would heal the inflammation I have in my body anywhere. I learned herbs that were restore, so adaptogens that would actually help modulate your immune system and will help with different hormone balance in your body. So I started taking those supplements. I started taking vitamin C. I started eating fruits and vegetables that had high vitamins and minerals or nutrient dense food and slowly now three, four years later, I still have had no symptoms.

Episode 5:

YOU ARE WHAT YOU EAT: THE CONNECTION BETWEEN YOUR GUT & YOUR BRAIN

Jonathan Otto

[00:00:30] Welcome to Autoimmune Secrets. I'm your host, Jonathan Otto. In our previous episode we went through Lyme disease and some of the triggers of autoimmune diseases. We saw that parasites, which can affect gut health, can be an influential factor in autoimmune disease. Today, we'd like to look into how the whole gut-brain connection works and how that can help on the road to recovery. Now, let's continue on with the episode.

Dr. Neil Nedley

[00:01:00][00:01:30] Oh, there's a great brain-gut connection. Yeah. In fact, if we were to scrape all of the nerves off of the gut at the time of surgery ... there's quite a plexus of nerves there ... and weigh them out, they would weigh four times as much as the entire spinal cord. In fact, that's one of the reasons why I got involved in depression and anxiety. I was first involved in gastroenterology and doing all of the scoping and doing all of the diagnosing of GI illnesses, and I recognized that many gastrointestinal illnesses actually have their origin in the mind. Of course, there are things in the gut that can also affect the mind, which are, of course, the healthy

bacteria, and the healthy bacteria can actually produce cytokines that help our brain produce more serotonin, for instance. A healthy gut can help produce a healthy brain.

Dr. Daniel Nuzum

[00:02:00][00:02:30] There are things that we know. We know about leaky gut ... Okay, let me explain leaky gut real quick. Leaky gut is an intestinal issue where the intestines become swollen and inflamed. As it happens, the gut wall should be all knit together nice and tight. Right? In leaky gut, the gut wall has become inflamed and has expanded. It goes from being semi-permeable, where only small things can pass through the gut wall ... because everything's knit together nice and tight ... to excessively permeable. It goes from semi-permeable to very permeable, from nice and tightly knit together like this.

[00:03:00] As it expands, it separates and things just start to flow through the gut wall. When that happens, every time you eat, every time you drink, every time something passes through your gut, some of it just floats right into your bloodstream. If that happens, whenever you eat or drink, your immune system gets set on an alarm. You get a level-five alarm every time you eat, every time you drink because whole foods or food components are floating directly into your bloodstream, which shouldn't ever happen. That's not supposed to happen.

Sharon Porter

[00:03:30][00:04:00] Gut bacteria is one facet of gut health, and what many people don't understand is that 70% to 80% of the immune system resides in the gut. In the small intestines we have structures called Peyer's patches that produce the immune cells. That's there for a reason, because the job of the immune system is to protect us from foreign substances that could be damaging. Where is the main avenue that our body would be exposed to toxic substances? It's through what we eat and drink, so isn't it a beautiful design that our immune system is located in the gut, right?

[00:04:30] But if the foods and beverages that we're consuming are damaging, are full of toxins and are hampering the overall health of the gut, then the immune system starts to break down. Specifically, what I'm referring to here is leaky gut. A lot of people have heard of leaky gut. It's commonly known as intestinal permeability syndrome.

Dr. Neil Nedley

[00:05:00] Well, intestinal permeability is when the gut is letting things across into the bloodstream that were not supposed to be there, that we were either supposed to break down first before they were absorbed or they weren't to be absorbed at all. As the permeability increases, then our chance of autoimmunity, our chance of even some ill brain health can occur.

What produces intestinal permeability? Hot spicy foods can do it, alcohol. There's a whole list of things that are going to worsen the intestinal permeability. As we change the diet, we can get our gut to do a lot of good things for us. Our gut is really the center of our immune system as well, and our immune system can end up working a lot better.

Dr. Daniel Nuzum

[00:05:30] Let me give you examples, similar to cheesecloth versus a screen from a window. If you try to sift through cheesecloth, you're only going to get very small particles coming out. If you use a screen from a window or a screen door or something like that, the holes are bigger and larger particles will come through. Correct?

[00:06:00][00:06:30][00:07:00] Okay, so as we think of that, your gut wall should be like cheesecloth and only small particles ever come through there. When the gut wall gets inflamed, it swells up, and as it swells up, those

fibers expand. Now, it becomes more like a screen and bigger particles float through. Now those undigested large particles irritate the immune system, and the more consistently the immune system gets irritated, two things happen. One, it becomes hypersensitive to those particular particles if you're eating the same thing every day, day in, day out. Let's say every morning you have oatmeal, every afternoon you have a grilled cheese sandwich and every night you have chicken and pasta, for example. You have those three meals every day and you have this leaky gut happening.

Sharon Porter

[00:07:30] Once you have food particles that were not properly broken down entering the bloodstream, our immune system gets activated, because the job of the immune system is twofold, to discern between self and non-self. Is this substance in my blood part of me or is it not part of me? If it's not part of me, is it friend or is it foe? If it's a nutrient that's actually going to help my body, then it's friend. If it is a virus or a bacteria or some other protein-based structure that could be damaging, then it's foe. Our immune system's job is to mount an attack and wipe out the threat.

[00:08:00][00:08:30] The next step from there, the link between a healthy immune system like I just described and autoimmunity, is when the immune system has been overly stimulated. It's constantly on. It is constantly attacking all of these substances that we're consuming that are foreign substances, not recognized as a natural substance or part of us, and the immune system then starts to become confused and no longer recognizes self versus non-self. That confusion then transfers over to the immune system starting to attack our own body tissues.

Dr. Daniel Nuzum

[00:09:00] Okay. To make this real simple, when someone is suffering from leaky gut, that gut wall has become inflamed and we have food particles floating into the bloodstream. The immune system becomes sensitive to those particular particles that are consistently coming through the gut wall. If we're always eating the same foods every day, day in, day out, what happens is our immune system becomes sensitive to those particular foods and the proteins in those particular foods,

[00:09:30][00:10:00] Then, whenever it finds those particular proteins anywhere else in the body, it will start to attack them. There's two things that have happened here. One, we've hypersensitized the immune system by only eating certain foods, only eating the same things over and over and over again. What happens is the food we're eating becomes an irritant to the immune system, and there's a process the body goes through. Any time it becomes irritated, it inflames. Irritation causes inflammation, 100% of the time. It always happens that way. Once the body's irritated, it has an inflammatory response. So, the food becomes an irritant, because we're eating the same thing over and over and over again. We're getting the same proteins that are floating through that gut wall that's inflamed. Those proteins become an irritant to the immune system. The immune system has an inflammatory response against those proteins. Those proteins then become something the immune system looks for everywhere in the body.

Dr. Jay Davidson

[00:11:00] I think about my roommate back in chiropractic school. He was actually diagnosed with ulcerative colitis, basically going to the bathroom constantly, blood in his stool, and he went to the Mayo Clinic at the time. It still gives me chills, because the doctor at the time said that, "You know what? Diet doesn't matter. Eat whatever you want, but you need to take this infusion. Basically, we need to calm this immune system down because it's just going too berserk in your intestinal tract." It never sat well with me, but at the time, you only know what is in your tool box, and if you don't have a lot of tools, it's like, oh, you're limited of what to do.

[00:11:30][00:12:00] Anytime we're looking at the digestive tract, whether it's diverticulitis, celiacs, rheumatoid arthritis, diarrhea or constipation, all these different conditions and diagnoses are just symptoms of the gut. I think, really, we need to sit back, take a step back, and look at bacteria, because we have this whole biome, or what they call the microbiome, and now we know that there's actually a whole fungus biome, what they call the microbiome. We also know that there's a virus biome, or what they call the virome.

There's all these different organisms in us, and when I first started looking at the gut and saying, "Okay, somebody's got really bad digestive issues. What can I do?" I started looking. Okay, there's good bacteria and there's bad bacteria, and then there's some bacteria in the middle. They typically call them commensal. I just like to think of them as squatters. They're just taking up space. They're just there.

Jonathan Otto

[00:12:30] Surrounding the brain is a protective layer called the blood- brain barrier. Its job is similar to that of the intestinal wall, to make sure that large molecules and pathogens don't enter the brain where they can cause inflammation and cell damage, while allowing certain vital substances in to help nourish the brain.

In a process similar to leaky gut, the blood-brain barrier can become inflamed and damaged, becoming hyper-permeable. We call this leaky brain. Yes, leaky gut and leaky brain go hand in hand.

[00:13:00] Kevin, you've experienced some interesting things, man. I'm interested in knowing about your journey. What happened to you with your health?

Kevin Mackey

Kevin:

[00:13:30] So, started off like most healthy kids, super, super happy. My mom used to describe it as I would enter a room, and it would light up. People would just know that this, in my mom's words, "beautiful young boy" came into the room, and just was full of energy and life. The best way I can put it is, I saw sunlight. I saw color. Then sometime in my early adolescence, I view it now as I stepped into the darkness.

[00:14:00] For years, I couldn't even define what the word sad meant. I had no up or down. I was just flat line low, and learned to live a mask of what it looked like to be happy. If you saw me, I could smile, or I would really engage, and you would think I was happy, but inside, absolutely devastated, and never happy, never fulfilled, and it was really dark.

[00:14:30] I later, in late high school, got diagnosed with ADD, which, in retrospect, is really a weird, awkward time to get diagnosed with ADD. Then, throughout my life, I would get new labels, and new diagnosis, and never an opportunity of how to change it. It was just, ADD, a new you. Bipolar too, a new you. Chronic depression, a new you. Suicidal tendencies, a new you.

Jonathan: You had all those diagnoses?

Kevin:

[00:15:00] All those diagnoses, and I was an athlete. That's all I did. Ran track, played football, amateur bodybuilder. I went to college on a decathlete scholarship, so when I walked in the room, there was no question of, "Is he healthy, living a healthy lifestyle?" I was the epitome of health. I mean, I was 200 plus pounds, no body fat, solid muscle, and nobody questioned. The only cure was psychotherapy and pharmaceutical drugs.

Sharon Porter

[00:15:30] There's three issues with nutrition and autoimmunity. There's prevention, before an autoimmune condition manifests. Then after an autoimmune condition manifests, there would be management of that autoimmune condition, trying to minimize the damage. Then there's actual healing and reversal of autoimmune.

[00:16:00] Now, many believe that that's not possible. I do not believe that's not possible, and I have seen test results, and worked with individuals over a long period of time who have been able to reverse their autoimmune condition, okay?

[00:16:30] But, if we focus on that management piece, once someone has developed an autoimmune condition, then the goal is to let your immune system function in the most normal way that it could, function as a healthy immune system. So, this is about stress management, this is about avoiding toxins as best one can, providing the nutrients that the immune system needs in order to do its job properly. And all of these things combined will help to restore the discernment of self versus non-self by the immune system, right?

Dr. Daniel Nuzum

[00:17:00] The idea, the design here, is the immune system's going to go after those proteins to clean everything up. It's trying to clean up the system, okay, but it's become so sensitive to these proteins that it has this inflammatory response to those proteins everywhere in the body.

[00:17:30][00:18:00] That's what we call... we define those things as autoimmune disorders, but if you follow what I'm saying, it's not the immune system just becoming hyperactive and attacking the body. That's not the case. What has happened here is we've wore down the immune system to the point it's just so raw and irritated by what we've done to it day in, day out. That it gets worn down in an effort to go in and clean up the system, trying to get rid of these invaders, or these accumulated irritants, if you will, these proteins that have floated through the gut wall. In the process of trying to clean all that up, the body goes out and attacks those particular proteins everywhere that it finds them.

[00:18:30][00:19:00] It could be a thyroid where they find these proteins. It could be an adrenal gland where they find these proteins. It could be anywhere, okay? In this process, the immune system becomes hypersensitive, number one, and it becomes exhausted, number two, okay? In this situation, when the immune system is exhausted, yet hypersensitive, it will lash out against almost anything, and when it does this lashing out, we call that an episode, an autoimmune episode, okay? That's when someone has their symptoms, okay?

If they have MS, if they have lupus, if they have Alzheimer's, if they have Hashimoto's, all of these different autoimmune disorders, this is the underlying process that causes these autoimmune disorders to surface.

Dr. Jay Davidson

[00:19:30] Yeah, gluten, gluten's a big one for really impacting people, so gluten is one of those things that we stay away from as a family, so my wife, my daughter, and myself, I mean, she's a gluten-free kid, and she knows that. So she goes to school, and if they have snacks or treats or something like that, we bring special things in, but she's like, "Does it have gluten?" She's five and a half, right, so we've trained her, or really brought her up in this culture, and she just stays away from it.

[00:20:00] I'm not 100% set that it's the gluten, necessarily, that's people are reacting to? The gliadin protein itself, or gliadin, in there seems to be very reactive, but I also wonder about, okay, if you're consuming food with gluten in it, what about the Glyphosate, like what about the toxicity of that pesticide within it? Are we reacting

really more to that than even the gluten, or is it a combination? This goes back to you know, William Davis from Wisconsin/Milwaukee area, cardiologist, he wrote a book and then you know David Perlmutter came out with a book called Grain Brain. It's becoming more well-known. Basically, what happened with wheat, and this was before they "Classified" things as genetically modified, GMO, or GM,

[00:21:00] you know genetically modified organisms, as they basically irradiated the wheat and they changed it. So they made it more dense, they made it shorter so it was more drought-resistant, but what happened is it made it more reactive for the body. It made it more inflammatory. It gave more sugar to it and so the wheat that we're eating in America today is not what we'd call the ancient grains. You know before it was modified. So there's something to gluten and the newly modified grains, but there's also a consideration too to look at as far as the pesticides as well Jonathan.

Sharon Porter

Jonathan: If we have intestinal permeability, how does that show up symptomatically? How do we fix it?

Sharon:

[00:21:30][00:22:00] Okay, great question. So, the first, one of the first indications of intestinal permeability, aka leaky gut, is allergies. Right? A lot of people think allergies are caused by something outside of them. Oh there's a lot of pollen in the air, I've got allergies. Oh, I eat a peanut and it's that peanut that causes my allergies. That's not exactly true. The allergic response is an internal response in the body. Why is it that the person standing next to you is exposed to the same pollen and they're not sneezing and runny nose and itchy eyes, but we are, right?

[00:22:30] The source is not out there, the source is in here. So leaky gut, intestinal permeability syndrome, is one of the primary drivers of allergies, so someone who has chronic allergies should take note that this is a warning sign. This is a wake up call that their gut health is needing some help. We really need to heed that calling because if it's allowed to progress there are, you know, some pretty serious consequences that could come from having an immune system that starts to become dysfunctional. Both in terms of autoimmunity and cancer being a dysfunction of the immune system. Right?

Dr. Jay Davidson

[00:23:00][00:23:30][00:24:00] Then, I also like to kind of pair up taking some type of like antimicrobial herbs, anti-viral, anti-bacterial, you know, antifungal because you want to kind of hit the whole category, right? Taking all the biomes down and then let's eat some fermented foods. If you have histamine issues or like mast cell activation, then maybe you know fermented like raw sauerkraut or kimchi or you know, like a kaffir lime, you know, might not be the best for you, and then maybe more probiotics. There's tons of bacteria in foods, like just a ton of them. Consuming fermented foods, taking probiotics is really a good way to then add that to that. If there's any other problems, the missing link that I missed for years, even doing the starve bacteria down and then putting good stuff in, was parasites. So if you have loose stools, stomach rolls a lot, don't forget about the parasites. So I like those three things really to help fix the gut and it's autoimmune action that's happening inside of the digestive tract.

Kevin Mackey

Jonathan: You lived in the shadows for so long.

Kevin:

[00:24:30][00:25:00] About 45 days into being paleo, I went home just to say hi to my mom and I will never forget it, the glass my mom was holding dropped to the floor. Now, it wasn't as dramatic as you know, an actual glass

shattering. It was a plastic glass, but it dropped, and that really made me like, you know, “What happened?” My mom just looked at me, and tears in her eyes, said, “You’re smiling.” Like, not smiling like you smile, but smile like you did when you were a boy. She was crying. It was then that I realized like, “Wait, I’m not sad anymore.” That word sad is so like paramount to my life because years and years of therapy, I would have, the therapist would say, you know, “How do you feel? Describe the sadness.” When the only feeling you’ve ever know through life is sadness, you can’t define it as sadness because that’s your baseline.

Jonathan: Nothing to reference it to.

Kevin:

[00:25:30][00:26:00] Correct. There is no reference point. The only thing I could describe is sad and suicidal depression. Like there’s no difference. There’s either I’m out in the public and being me, but masking pain, or I’m in a room for weeks on end and trying to figure out how to climb out of a big, dark hole. I was gluten induced mood disorder, and because of, and you said it the best, I had the perfect mask because I looked so healthy. There was never a question to my diet, because the physicians that I went to didn’t ever take into account could the food or types of food or quality of food be the actual contributing factor to why he is what he is? Nobody looked at it. It was sad, you’re this label. Take this pill. This pill will mask your sadness, they’ll make you happy.

Dr. Jay Davidson

[00:26:30] The first thing to address is this idea of depression and giving it a label. Like it’s, like whatever happened to the fact that it could be a normal human emotion? Right? Like you’re a little “Depressed” because something didn’t go perfectly, you know, in part of your day or you know, somebody said something bad about you. Like, to some degree I believe we need to understand it is an emotion and not everything around just the word depressed is got to be horribly like a diagnosis, a disease, you know, a condition you’re going to be forever. Now, obviously, having a little bit of, like, “Oh I feel a little depressed today” emotion versus like, you know, you have full-blown depression and, you know, there’s a lot of things going on. Obviously there’s a range there, but just to throw that out there as far as the label.

[00:27:00][00:27:30] I think it’s a really good thing for us to process, and when we’re looking at schizophrenia, looking at bipolar, looking at depression, looking at anxiety, I mean people that are anxious. It still comes back to what are the upstream sources? Like what’s actually happening? You know my mom personally was on antidepressants. I was like, “Mom,” you know like, “What can we do to really get you well?” For her, found out parasites were an issue. Found out heavy metal toxicity was a big issue for her. Then also it seemed as if just giving her some basic nutrients, and there was a certain one called niacin, flush-free in really high doses, that I learned about years ago that absolutely was a game changer. So, assess the situation. Understand are we putting labels on it or not, but there’s a big links with Lyme Disease and changing our processing of our brain. There’s big links of parasites doing that.

[00:28:00][00:28:30] Heavy metals like mercury is classically, it’s known as the heavy metal of deception. It’s very like a deceiving heavy metal, but it is definitely up there on insomnia. It’s on there on anxiety, like this agitation that you, like “I don’t know why I’m feeling this. I’m just feeling like whoa.” So those, still we want to get to the upstream causes. So if you’re dealing with you know, a more severe form of, you know, I’m just feeling a little blue today versus I like, you know, have the depression going on. What I learned about years ago and I forget the nutritionist, it was an old school nutritionist, but high dosing of flush-free niacin seems to be a big helper for many people. I had a client -man it’s got to be about seven years now, maybe even eight years ago, so this was quite a while ago- a nurse, a very stressful job, overweight, pretty standard American diet, but I mean wanting to take her life, suicide depression. Really severe. On a couple antipsychotics, antidepressants not touching it.

[00:29:00][00:29:30] Nothing. I told her, I'm like, "Let's have you take some flush-free niacin." Always recommend, find the 500 milligram capsules of flush-free niacin. Start off with 2000 milligrams in a day. So two caps twice a day, take it with some food just to make sure you're okay with it. Then if you don't feel anything after a week, bump it up to 3000 milligrams. She did that and she's like, "Dr. J, I'm just not feeling anything," I'm like, "Increase it. Go up to 4000." You know, see her again and she's like, "I'm still not feeling anything," I'm like, "You're taking it?" "Yep, absolutely." I'm like, "Okay, let's increase it." She got up to 8500 milligrams, and when she hit that dose it was like, "I'm happy."

[00:30:00] Like, "I don't feel these thoughts," like all the chemistry in her body just changed. That is when I realized, I'm like, "Wow, the power of just a simple nutrient or a vitamin, and the impact it can have on our bodies." Now, when you start extrapolating that and say, "Okay, 8500 milligrams of flush-free niacin, that's a lot." That isn't a forever thing. What I found clinically is you gotta get to the point where you notice that it helps you and then you can start taking less.

Dr. Phillip Day

[00:30:30][00:31:00] We've had cases of multiple sclerosis, Hashimoto's disease, which is autoimmune thyroid problems and type 1 diabetes. These testimonies, again, you're gonna find them in the books, where people are just ... I'll give you an example. Vitamin D deficiency is absolutely everywhere because people are being told by the system the sun's gonna kill you. So we have over 17 very common types of cancer that are linked to vitamin D deficiency. So the first thing we do is we raise that. We've had a case of extreme depression in a family from African origin. I believe they're out of Nigeria living in England, where the daughter was put on antidepressants and was just suicidal. When she was tested on the vitamin D scale on a scale of 0 to nominally 300, she came in at 9 on the scale. I mean, there was more vitamin in a corpse than in this young girl. So she started putting high dose vitamin D in under supervision. That brought her up. Within six days, the mother describes like flicking a switch, all of a sudden, the transformation was just absolutely superb, from depression all the way through.

[00:31:30] So once again, the science is in. This science has been around for a long, long time, but it has not been put out to the public in an usable form because man is not in charge of this process anymore. God is using natural substance to be able to heal the body and that is what I think is the ultimate irony in an age of technology. We can't even make a blade of glass from scratch. Yet, man is still resisting the Creator in this way. It's a tragedy, but it's also giving rise to absolute hope for the future.

Jonathan Otto

[00:32:00] Although we identified a number of environmental triggers for autoimmunity, in the last episode, the frequently confirmed scientifically agreed upon cause for any autoimmune disease is gluten. As research continues to link the autoimmune spectrum of diseases to gluten sensitivity, we should look at it a little more seriously.

Dr. Peter Osborne

[00:32:30][00:33:00] The first trigger that's been extremely well studied is gluten, so one of the best things a person with autoimmune arthritis can do is recognize that gluten sensitivity as a possible potential reason why they've developed that condition and get appropriately tested to see whether or not they have the gluten sensitivity gene pattern. It's called an HLA DQ gene. Then there's also another set of genes called HLA B27 genes, which increase the risk for the development of autoimmune arthritis. So having those types of tests done can be very, very helpful and having information to teach or help a patient change their diet to accommodate their genetics, okay? Then one of the other triggers, so gluten is a trigger, but other foods can be triggers. I've seen

autoimmune arthritis be triggered by blueberries. We all think blueberries are healthy. For some people, one man's food is another man's poison, so doing the appropriate type of immune testing to help understand what a person might be reacting to becomes an extremely important part of the process.

Ocean Robbins

[00:33:30][00:34:00] So if you're struggling in this way, you might have symptoms like brain fog or digestive problems, burping, gas, pain in your stomach, bloating after a meal. You may struggle with just lack of mental clarity, feeling exhausted, feeling tired at 3:00 in the afternoon. That's not natural. None of those symptoms are natural. Those are all symptoms that are closely correlated with digestive problems. The best way to shore up your digestion is to get lots of fiber, to get lots of fermented foods and probiotics and also prebiotics, which tends to be certain forms of fiber that will help your body to make use of the probiotics that you consume. If you want to take some kind of supplement, that's great. If you want to eat things like yogurt, make sure it's not sugary sweetened because a lot of the heavily sweetened fermented foods, like yogurts and soy yogurts and coconut yogurts, there's a lot of sugar in there. Then you're actually feeding the bad guys. Active sugar in the digestive tract is a magnet for the bad bacteria that you actually don't want in your body. So we want the good stuff.

[00:34:30] So fiber is one of the most critical things and a whole foods, plant based diet is associated with healthy digestion. When you eat animal products, there are no animal products that contain any fiber. Zero, so you just gotta have more plants and also, frankly, sugar has almost no fiber. Oils have no fiber and white flour and white rice have almost no fiber also. So again, it comes back to the whole foods, plant based diet for fiber and for also generally a lot of the nutrients that can help restore your gut bacteria.

Dr. Jay Davidson

[00:35:00][00:35:30] In the functional medicine world and in the healing the gut world, so much attention is brought to pound down probiotics, eating fermented foods, all these things to get good bacteria in. But if you think about it, okay. Let's say I have bad bacteria and I have good bacteria and it's just not in balance and I'm gonna pound probiotics. I'm gonna take fermented foods and I'm gonna try to increase it. Well, we still have the bad there and there's only so much real estate in the digestive tract. So one of the groundbreaking things that I figured out clinically was, okay. Before we start putting bacteria into our body, what if we starve all the bacteria down, right? So we take the bad down. We starve the squatters down. We taken even the good down, which maybe sounds a little worrisome right away here. But we starve all the bacteria down. Then we can then put good bacteria, fermented foods and other things in. Now, look at this ratio, right? So instead of just having kind of this ratio, now we can get more of this ratio.

[00:36:00][00:36:30] What I've seen clinically at least, people get healthier because of that, so when we're looking at protocols, like what can you do right now, we can start starving bacteria down. You can fast. I could fast just water fast. Any fastings gonna starve bacteria down because it's not gonna feed them. Pretty much most foods are gonna feed bacteria to some degree. Then of course, there's other guy issues like SIBO, S-I-B-O. Some people pronounce it SIBO, but Small Intestinal Bacterial Overgrowth, where there's bacteria where it shouldn't be in the tract. Really the key with that as well is starving the bacteria down in the small intestine and then inoculation in the large intestine where the majority of bacteria is. So one of the good tools, though, is doing a bone broth. If you're a vegetarian or vegan, there's mineral broths. Just recently heard about a potato broth as well too, so I think there's many options in that category. But a bone broth or some type of broth will actually help to starve all the bacteria down. It'll give you some minerals where you don't become electrolyte deficient or anything like that.

[00:37:00][00:37:30][00:38:00] But then I also like to kind of pair up taking some type of antimicrobial herbs, antiviral, antibacterial, antifungal because you want to kind of hit the whole category, right? Taking all the

biomes down and then let's eat some fermented foods and if you have histamine issues or mass cell activation, then maybe fermented raw sauerkraut or kimchi or a kفير might not be the best for you and then maybe more probiotics. But there's tons of bacteria in food, just a ton of them, so consuming fermented foods, taking probiotics is really a good way to then add that to that. If there's any other problems, the missing link that I missed for years, even doing the starve bacteria down and then putting good stuff in was parasites. So if you have loose stools, stomach rolls a lot, don't forget about the parasites. So I like those three things really to help fix the gut. It's autoimmune action that's happening inside of the digestive tract.

Chad Kreuzer

[00:38:30][00:39:00] We look at a massive study in the journal Pediatrics. This was a study of 2,000,000 babies over the course of 35 years. So this is massive and what they discovered is that babies who are born by C-section have higher levels of asthma, bowel disorders, rheumatism and even leukemia. Now, why? You think, "Who cares? You get pulled out this or that way. One or the other, right?" But here's the thing. God created us. When we're in the womb, we might say that we're in an environment with very few bacteria. There are some that are maybe swallowed that they take in, but in general, they're in an area with not very many bacteria. When the child is born or going through the birth canal, we should say, as they're passing through, they begin to be inoculated. They begin to be covered with the bacteria from their mother and that is exactly the bacteria that they generally need to enhance their immune system potentially for the rest of their life.

[00:39:30][00:40:00] But if we go about it another way and that baby is cut out through an incision and removed by the doctor, the doctor then maybe from his glove gives that baby its first bacteria. Other bacteria maybe begins to come from the hospital around them and just guess which one or guess which bacteria would be better for that baby. You can quite imagine it's that which came from its mother. One of the questions might be, "Well, how do we get a greater diversity of gut bacteria so that we can be happier, social and more outgoing?" Well, before we go any further with that, I want you to think about this. So we know that toddlers who have less diversity of gut bacteria, are more cranky, more antisocial. They're just not as happy children. The same thing in true later in life. They found the same thing with alcoholics. They found that alcoholics specifically who had less diversity of gut bacteria.

[00:40:30] Specifically, who had less diversity of gut bacteria found it harder to overcome their addictions to alcohol. This is amazing. You think about that. Could you actually be struggling with an addiction because of lack of diversity of gut bacteria? Now this is a fascinating concept. Now, as the scientist looked at it, they looked at a group of alcoholics, and they found that the ones with greater diversity of gut bacteria found less anxiety, less depression, and less cravings for their alcohol.

[00:41:00] So we might want to ask, "How can I get more good bacteria in my gut?" The idea is, "Oh, I can just kill it off with a bunch of antibiotics." What's fascinating about that is, every time you take a round of antibiotics ... You know you go to the doctor and they say, "Go through this round of antibiotics. It'll take you two weeks, 10 days, whatever it is; that's a round of antibiotics." Every time you take a round of antibiotics, it increases your chances of depression by about 25%. For every two to five rounds that you take, it increases your chances of depression by right around 50%.

[00:41:30] This maybe another factor. We already know that children that don't have as much diversity of bacteria, they're not as happy. Same thing with adults. Now, why? Could it be that this bacteria actually ... Well, we know partly why. We know part of the mystery of it all is that this bacteria helps us to digest our food. And good food, healthy food like, fiber-filled food, which is only found in the plant kingdom by the way. There's no fiber in the animal kingdom.

[00:42:00] But when you eat plant-based foods you get bacteria. Your body can't digest this fiber. When you eat fiber, your body can't digest fiber, but the bacteria in your gut can digest the fiber. And what it does is it let's off a byproduct called, short-chain fatty acids, which lower levels of inflammation, which will lower level of chronic disease. But it also potentially can lower your levels of having depression, or lower your chances of having depression.

Dr. Jay Davidson

[00:42:30] You know it's a slippery slope. When you look at antidepressants, and these basically, these antipsychotic medications, a lot of them come with black box warnings. Like, increased risk of suicidal tendencies, increased risk of suicidal thoughts, and ... That right there is really something where I'm like, "Whoa." We really have to be careful about dispensing. We have to be really careful about people that are on them, people that are coming off of them. I mean, if you're on like antipsychotic or antidepressant medication, that is one of the last things where you just don't want to stop that cold turkey. Because it has changed your chemistry, and you want to work with obviously whoever prescribed if you ever get off of it or it's weaning and you want to support that process.

[00:43:00] I think there's ... I really believe there's a lot of people, unfortunately, on them, and in a perfect world you shouldn't need them. But when you're on them that's where it really starts to get a little bit dicey.

Niki Gratrix

[00:43:30] So ACEs is, Adverse Childhood Experiences. The ACEs study started in the mid-1990s, and what the researchers were looking at is the correlation of emotional trauma in childhood and illness onset in adulthood. Really the study was phenomenal, it's one of the most underexposed studies done in medicine, and it really demonstrates that emotional trauma is one of the most underexposed epidemics that is underlying ... is one of the root causes of chronic illness.

[00:44:00] Originally, the study was done by the CDC and Kaiser Permanente, and they were looking at 17 and a half thousand adults. The results were pretty staggering, and stunning. Even the researchers were amazed by the results. For example, if you had a high level of ACEs, these adverse childhood events, you had an increased risk of seven out of the top ten causes of death, and 67% of all adults said, "They had had an adverse childhood event."

[00:44:30] When we talk about ACEs, exactly what are we talking about? What are they? So the researchers defined ten different types of ACEs, and they just chose things that they had seen in the research, and that were commonly understood as emotional trauma. It's things like, physical and emotional neglect, physical sexual or emotional abuse. It was things like, incarceration of a family member, parents separating or divorced, mental illness in the family, substance abuse things like that.

[00:45:00] So they came up with ten, and then the results showed that for example, if you had six of those you had a 20 year reduction in lifespan. If you had just four of those types of ACEs, you had over 400% increased risk of things like, depression, Alzheimer's, mental illnesses. If you had just two ACEs, you had up to 100% increase risk of autoimmune diseases.

And if you had a large number like over eight ACEs, you had three times the risk of lung cancer, and three and a half times the risk of heart disease. Really what was also very interesting, and of personal interest for me, is that people with moderate levels of ACEs have a six fold increase risk of illnesses like, chronic fatigue syndrome, and fibromyalgia, and that was my background.

[00:45:30] ACEs are hugely important in illness onset in adulthood, and it's vastly missed in sort of natural medicine as well as the conventional medical approaches. So the researchers found that 67% of adults reported

that they'd had at least one ACE, and 80% of those said that they'd had more than one ACE, but that was actually an underestimate-

Dani Johnson

Dani

[00:46:00]... and you're right. Most people are not in touch with their feelings even.

Jonathan: Yeah.

Dani: You know, we live in a very disconnected society today. People have ways of masking their emotions, and if they cannot get underneath those emotions they can't be healed. Most people just try to build a wall to hide it, and to pretend like it's not there but it's beneath the surface. We're seeing it more today than ever.

[00:46:30][00:47:00] Our society is so hostile. I have watched, in the last 30 years, our culture completely change from a ... You know, their doing pretty good emotionally 30 years ago to today, I think the emotional maturity of our country right now is about 12 years old. Just the reactions are so heightened, they're huge, they're ... People are hostile. The amount of anger that is inside of our society today is terrible. Which again, is just proof that there is something lurching beneath the surface and there's a wound, there's trauma there, there's unmet needs there, and unmet needs and trauma lend to anger and fits of rage, and hostility, and judgments, and people excommunicating each other because of political views, which goes to show you what our maturity level is. So anyway ...

Jonathan: So true.

Dani:

[00:47:30][00:48:00] Yes, it is suddenly. So my story: Okay, well I grew up in a violently abusive , drug-infested home. That was honestly as a result of my mom and my father meeting on a Friday night to a sit down in Los Angeles. She's 17, he's was 24, and he was a foreigner. "Bada bing, bada boom." Here's me. That's pretty much how that went. It was a one-night stand, and then he was threatened with statutory rape charges if he didn't marry my mom the day before she turned eighteen. They actually got married. Hilarious. So they ended up married. Within three weeks, my mother and my grandmother kicked him out, and that was the end of it.

[00:48:30] So she ended up as a single mom. However, my biological father, still being married to her and supporting financially ... But I did not know this. I actually just learned this recently. So anyway, mom just kind of went with the next guy that would take her, and that man was six foot ten, 350 pounds, and he was as violent as his size. He was a very angry, angry man. He too, had a terrible, terrible, traumatic childhood where he watched somethings that nobody should ever see. Not only that, but beaten badly himself.

He was an athlete, and had an offer from the Los Angeles Rams to play professional football. Got injured. He got drafted right out of high school. He was 18 when he got drafted, and then got injured that very first season. Never made it on the field. So talk about a dream and a hope of becoming something that then is just absolutely crushed. I think it's horrible, especially for a man.

[00:49:00][00:49:30] He then meets my mom shortly after that, and my mom came with this little Hispanic thing. I think largely both of them were not ready to be parents. So they were products of the 60s. They did every kind of drug you can imagine, and out of those drugs brought in irresponsibility. They were not married, actually. They didn't get married until I was eight years old, even though I was lied to that my mom was a virgin on her wedding night with him. I did not know that I had a different dad then. The two girls that I grew up with; had no clue about any of that. There was just a lot of violence.

Dr. Antonio Jimenez

[00:50:00] ... world conflicts and biological traumas are the root cause, from an emotional perspective, of any pathology. For example, is an accident truly an accident? Why does someone have a fall and they fracture their left ankle. Other's have a fall and they get a bump on the head, right? So we look at the deep-seeded emotional traumas. What are these? These are acute events in our life that were highly traumatic we did not have a solution to at the time that they occurred. These occur like a deep high stress. So, your example of obesity is a great one because patients that are obese, we often time try to manipulate this with diets and exercise and all this, but if we don't work with the deep seated trauma, it's much more difficult to get to a healthy weight.

[00:51:00][00:51:30] What is the main biological trauma associated with obesity? It's being a child and not being seen by your parents, being ignored, being told that you were not good enough. So, then the body tries to survive, wants to survive. I have that trauma that I was worthless, you know, so I need to be more visible. So, I put on more weight so that people could see me. Yes, I am here, you see? So, on the contrary you have people that are very thin, and those are people that want to hide. They've had traumas that expose them, so now they just want to be invisible and not seen. So, they want to hide, so it's, you know, this is a long topic, and this is just as example.

And in cancer, we have patients with let's say bladder cancer. Biologically speaking, the urine is to mark your territory. Right? Animals mark their territory by urinating, so anyone with bladder cancer will have a territorial issue, or cash flow issue.

[00:52:00] It's important to know that every pathology, every cancer has deep seated emotional traumas and conflict.

Dani Johnson

[00:52:30][00:53:00] Again, the drugs produced an environment where we weren't watched. You know, I remember being at, my very first memory I actually that I've ever had is at three years old and I'm playing in an alley. We lived in an apartment building, and this Hispanic man came and took me, and brought me into his apartment, and had his way with me. And it happened again with my cousin, and repeatedly with my cousin when I was seven, and he would have been a teenager, close to teenage years maybe. Yeah, 13, 14 or 15, something like that, and right in my aunt's house. And then my dad picked up the molesting when I was 13, so it was, that was infuriating. That was absolutely infuriating. Yeah, my mom had just broken her neck, and there's a whole lot of trauma around that. She dove into a pool coming after me to play with.

[00:53:30] The trauma of being impoverished, being on Welfare and hearing my parents fight about money, us not having food, my grandmother bringing groceries over. Yeah, dinner sometimes being Wonder bread and margarine with garlic salt, but they have their weed. They had their street drugs. They could always somehow have their pot and their pills, but couldn't provide for us.

Niki Gratrix

Niki:

[00:54:00] There's also something else very important just to mention about ACEs. ACEs emotional trauma, especially emotional trauma and neglect, are very hard to self report. So, this is another reason why 67% is probably an underestimate. So, for example, if you asked somebody were you emotionally traumatized in childhood, or did you have emotional neglect, how can a child really know at that time how they should have been treated and what, you know, how they should have interacted with their parents? So, often that goes under reported and because it requires some skill and you need to go much deeper. When you just ask somebody that

question, it's just very superficial, and you're going to get a superficial response. In fact, attachment trauma is what is most trauma in childhood is to do with trauma in relation to your caregivers.

[00:54:30][00:55:00][00:55:30] So, when we talk about emotional trauma, a lot of people link that to PTSD, which is post traumatic stress disorder, and it's trauma in response to a specific discrete incident, so something specific that you can name, that you can remember. Whereas in actual fact, most trauma is relational. So, it's an ambient type of trauma. It's not a single incident, but it's to do with not attaching properly with your caregivers. And there's some major research looking at mother/baby interactions. There was a study of over 6,000 mother/baby interactions, and a staggering 50% of all adults actually don't properly attach with mom, and this is also played out with father relation as well, and it leads on to developmental trauma. And developmental trauma leads onto things like difficulty with self regulation of emotions, anxiety, depression, difficulties memory concentration, focus, and also difficulty in relations in adulthood as well. And we tend to, in adulthood, how we attach in our main relationships in adulthood is often defined by how we related with our parents as well. So, up to 50% of people don't fully attach properly, so that's really a huge part of it, and most people find that very difficult to self report on being questioned. But it is actually part what you could call emotional abuse, attachment and developmental trauma.

Jonathan:

[00:56:00] Wow, interesting. I want to go back to trauma being passed down generations. Do you have, how does that exactly happen? Do you have any further explanation how that can ... Because I guess, in a way, physiological, physiologically be passed down?

Niki:

[00:56:30][00:57:00] So, emotional trauma is passed down intergenerationally, and it's been shown that it gets passed both via the mother line and it can be passed down via the father line. So when, for example, a father may be emotionally traumatized, it changes the epigenetic expression of genes, and it actually affects the RNA expression of sperm. So, they've done experiments in major journals where they would take sperm from traumatized male mice, and they would inject it into the eggs of healthy untraumatized females, and the progeny, the offspring of the mice would have the same epigenetic expression as the traumatized father. So, epigenetics explains why something that happens to us in our lifetime changes our epigenetic expression and that actually is inherited by our children, which it's a stunning understanding, but it's true. And it can pass down seven generations, and there's research looking at certain mammals now where it's been passed down 12 generations.

Dani Johnson

Jonathan:

[00:57:30] Dani if you could take away all the terrible things that happened to you, if you could wave a magic wand-

Dani: And make it go away?

Jonathan: Would you?

Dani: No.

Jonathan: Why not?

Dani:

[00:58:00] Those ... God, no I wouldn't. No, I wouldn't. Because without those experiences, what are you? What are you? How we respond out of trauma either builds character or we make choices that makes us a bad character. So, I wouldn't take away a single one of those traumas, no way. What I've learned out of it is priceless.

Niki Gratrix

[00:58:30] So in terms of autoimmunity we know that most autoimmune disease is a female dominant illness, so it's mostly females that get autoimmune diseases. And the interesting thing is the correlation of ACEs for women and onset of autoimmunity is as strongly correlated as smoking is for lung cancer.

[00:59:00] So, what's very interesting when we actually start looking at case studies and when people start recovering from emotional trauma and they start recovering their health again, what's interesting is when we start to clear our emotions and resolve emotional trauma, what you'll see in patients is, like it's a total transformation. So, it's not just that they are transforming their body and their physical body is changing. When somebody is also dealing with the emotional component, they are not the same person they were before they got ill. And what I'll hear all the time with my patients and my clients is they'll say to me, "I can't be well and be the old person that I was because I'll just get sick again."

[00:59:30][01:00:00] So, it's almost the illness itself is almost a call to transformation, and it's requiring not just cure, but healing. So, you know often you can see that somebody maybe has been cured for an illness, but they didn't really heal, which means they didn't cure the emotional trauma side. But, you can be healed, you can resolve the emotional trauma and may not have a complete cure, but the healing has caused you to be very happy, well integrated living a happy and very fulfilled life even if you haven't got full functionality back. So, when somebody, I often see this with my patients when they've done a really deep healing, they will be a different person. They will be a different person. They'll feel different inside, and the process of healing isn't just to change in, say, diet and lifestyle and behavioral aspects like exercise. Their passions and interests may have changed. Who they hang out with is often changed. Their job focus changes.

Dr. Jay Davidson

[01:00:30][01:01:00] Yeah, it's interesting to think about this chemical imbalance. When I was younger, I was actually diagnosed with ADD and went to a psychologist, and then they referred me to a psychiatrist. They gave me mood altering medication. I remember just absolutely hating it, but that's all they ever talked about. Oh, this is helping to balance the chemicals in your body. For whatever reason, it just never really jived with me that that's what it is. It's a chemical imbalance in the body, and it's like, well, how does taking a synthetic chemical supposed to balance our chemicals? We have a hundred thousand chemical reactions happening every second in our body, and we're supposedly outsmarting it? I feel like our body's the great pharmacists on the world in that aspect. I'm not really sure what the right answer is. It is actually chemical imbalance or not in that aspect?

[01:01:30][01:02:00] I always like to look at the fact that what can you do to feel better? What can you do to heal in the digestive tract, just like you've mentioned, Jonathan. So, so important. Heal the gut, you can heal the brain. If you have a leaky gut, or intestinal permeability issues in your gut, you're going to have a leaky brain, and those are just asking for health issues. Really focusing on the gut, which is a foundation of healing autoimmune conditions and autoimmune disorders, and it's also a foundation, too, to have a healthy brain, and also a healthy foundation for happiness, joy. Having these emotions that we should exhibit daily, being grateful and just love, versus the fear and loneliness and depression and these other "emotions."

Niki Gratrix

[01:02:30] Other steps to recovery that are very important is, we do need to address the physical impact of the trauma, so the epigenetic changes that have happened. We know that early life stress leads to gut permeability. It changes the bacteria in the gut and the balance of the bacteria in the gut. It changes the immune system cells in the brain. It changes, as I mentioned, the way the immune system functions towards ... It changes the way the immune system functions.

[01:03:00] We need to also address the physical impact with physical interventions. Part of recovery from an illness that has an emotional component is looking at things like healing leaky gut. You may need to make some dietary changes, you may need to be on an anti-inflammatory low grain diet. It can be a very important part of reversing the physical impact. Diet is usually important. An anti-inflammatory type of approach often is very relevant for people, whether it's autoimmunity, whether it's leaky gut, and so on.

[01:03:30] Also, straightforward assets like balancing blood sugar, because all of that can lead to changes in your anxiety levels, proneness to anxiety and depression. It's a vicious cycle, because the emotional trauma at the beginning will actually change your biology, and then the changes that have happened in your biology will increase the anxiety and the impact of the trauma. For example, if you have dysbiosis in the gut, you're more likely to have things like anxiety and depression, and things like probiotics actually can make people less anxious. They're even starting studies looking at using probiotics to help people with PTSD, post traumatic stress disorder. So, you do need to look at that.

[01:04:00] You can also address the impact of trauma, which may have been over a long period, by addressing things like neurotransmitters, where you can work, again, nutritionally, and taking nutritional compounds, for example, to maybe balance levels of serotonin or dopamine, and so on. Those will be important contributing factors that I would address to help the overall balance.

[01:04:30] Diet and lifestyle factors, things around sleep and circadian rhythm is really important. Avoiding the blue light at night, getting up at a reasonable, regular time every morning, all the kind of things that we would look at, for example, if you went to see a nutritionist, you went to see a functional medicine practitioner. That is all part of recovery from the impact of emotional trauma.

[01:05:00] I guess the point that I'm making here is, don't throw out the physical approaches. Just because it was emotional, the psychical work that we do is still hugely important and it will be a fundamental part of the recovery. Make sure that you're looking at the physical side, and there's plenty that we could look at, that I'm sure you're looking at within these documentaries, as well.

Jonathan Otto

[01:05:30] We are never truly alone. On our skin, in our gums, and in our guts live 100 trillion organisms, together known as the microbiome. It's only recently that we've begun to study these organisms with any depth. Most of them live within the gut and can't be cultured, and only with the advent of advanced genetic testing have we been able to have a better understanding of the variety and numbers of microbes we're dealing with. What do they have to do with psychiatry? It turns out, way more than we might have suspected. The gut and brain have a steady ability to communicate via the nervous system, hormones, and the immune system.

Ocean Robbins

Ocean:

[01:06:00] Big crisis we face today is a crisis of the microbiome. We have digestive tracts that have been devastated. Practically carpet bombed by antibiotics that indiscriminately kill bacteria by the trillions. They kill the bad stuff, but they also kill the good stuff. We've been carpet bombed by pesticides and by glyphosate that is in our food supply that is wiping out our digestive tracts.

[01:06:30] Some people say you are what you eat. I say actually it would be more accurate to say you are what you digest. Depending on the digestive tract and the food consumed, you could be absorbing anywhere from 10 to 90% of the nutrients you eat. There's a big difference there, and a lot of people are getting the calories, but not getting the nutrients from the food that they consume, even if they're eating the healthiest food in the world.

Jonathan: Would that make sense why people are still hungry?

Ocean:

[01:07:00] A lot of times you're still hungry because your body is craving something that it's not getting, and it may be confused because, traditionally, our bodies were designed to crave food when there wasn't junk food. So, if you crave food, then that's a sign that you need more food, right? But nowadays, we may crave food because we need more nutrients, and it could be that we need more nutrient dense food, but it also may be that we're not absorbing the nutrients that we eat.

Dr. Jay Davidson

[01:07:30] Just to encourage you, keep moving forward. I know there's times that can come up where you get a little stressed out, or frustrated, or the results not happening. Always keep this in mind; we want to have our goals, we want to have our vision to move toward, but we always want to measure backward, right? Where are we today compared to a year ago, because we don't want to measure forward. If we measure forward, that's where anxiety, that's where stress happens. I encourage you, keep moving forward. Definitely share this with your friends and loved ones, and I also encourage you to take this home, support the mission, and take this home as part of your library, as well. I look forward to seeing you on the next episode.

Jonathan Otto

[01:08:00] The wrong foods can lead to wrong mindsets. These mindsets can lead to depression and anxiety. So much of what we eat affects our mood. Studies have conclusively shown that when our whole body health is addressed, the rates of recovery for depression, anxiety, and other mood disorders are incredible. They far exceed the statistical data on other methods of treatment for these mood related illnesses. From all this, we've been able to see the critical link between gut health and brain health, and that if we want a healthy, fully functioning, clear mind, we need to address the issues in our gut. We need to consider what we're eating and make it a priority to feed our bodies and brains the fuel that they need.

Episode 6:

IS AUTOIMMUNE JUST THE BEGINNING? THE CONNECTION BETWEEN AUTOIMMUNE, OBESITY, DIABETES, AND CANCER

Jonathan Otto

[00:00:30] Welcome to Autoimmune Secrets, I'm your host Jonathan Otto. Thank you so much for being here, shows your commitment to your health and I really value that. In episode five we learned about the complex communication system between the gut and the brain called the gut-brain connection. In this episode we'll find out how gut problems can also contribute to weight gain. We'll explore how obesity can actually influence the development of disease.

Barbara Hansen

Barbara Hansen: At 190 pounds of being 5' 5 1/2" tall, I was obese. I was wearing shirts now that look like tents that I could camp in.

Jonathan: Show me.

Barbara:

[00:01:00] I was wearing this shirt and it was loose but I thought I could hide in here. That's a big shirt, that's a size of a tent for a small child.

Jonathan: Wow. You say it was loose, a little loose or very loose.

Barbara: It wasn't very loose, it was a little loose.

Jonathan: So that was a shirt, that was a normal shirt that you would wear.

Barbara:

[00:01:30] Yup, I've got another one and I had a whole drawer full of them. I've gotten rid of most of them. I'm certified as a master scuba diver, I went all over the world scuba diving. So I collected shirts from wherever I went.

Jonathan: That's incredible.

Barbara: That's a big shirt. I can get two of me in here now.

Jonathan: What is it like for you when you pick up that shirt, what do you feel?

Barbara:

[00:02:00] I feel horrible. I got myself that big, I did that to me. Nobody else did that to me, I did that. I was ashamed. I felt humiliated.

Jonathan:

[00:02:30] Why did you do it? You said you did that to yourself and I feel bad for you saying that, but I'm curious. In looking back over your life and looking at yourself with compassion, I'm sure you learned to do it because you've looked after yourself, I'm sure you understand self-compassion and these things, but why do you think that you allowed yourself to do that yourself?

Barbara: I was hiding.

Jonathan: Yeah.

Barbara: I had been through three bad marriages. I was hiding.

Jonathan: Three bad marriages and you were hiding from what?

Barbara: Probably another serious relationship. I had put all this insulation around me so I would stay safe.

Faythe Miller

[00:03:30] I developed arthritis, I developed pre-diabetes even though I ate pretty healthy I thought, and I had a knee replacement from the arthritis in 2014. As a result of that I evidently developed a huge yeast overgrowth and so I finally had reached my limit with regular doctors because they were offering me appetite suppressants because I was so hungry at night and gained 14 pounds in nine months because I was so hungry. I couldn't sleep because I was so hungry and I was eating at midnight or two and I knew something was wrong.

[00:04:30] So I got so upset about it that I had already been thinking about Dr. Osborne because he had written articles that I'd seen and I'd read them and I thought it made a lot of sense and so when I reached my breaking point I made the appointment and four months later, went to see him. Right away, he said, "You sound like a classic person who has gluten sensitivities," but he listed several things of testing that I could have done, or that he wanted me to do, if I decided to follow the protocol.

[00:05:00] We found out the main problem that I was having right then and there was the yeast overgrowth. So he put me on a very strict yeast-free diet along with no grains because of my arthritis and having gluten sensitivities. He said I was also severely deficient in several vitamins and minerals that everybody needs to produce glucose so that was probably why I was hungry but also pre-diabetic. Within the first week of the yeast-free diet I started losing weight immediately, but amazingly I stopped the grains too and amazingly I had no joint pain just within days of going off grain totally.

Dr. Peter Osborne

Dr. Osborne:

[00:06:00] Faythe came to see me, she had had a prior knee replacement surgery and it was several years ago, and she came to see me because she couldn't satisfy her hunger like she was voraciously hungry; felt like she was starving even though she would have plenty of food. She had a lot of gut symptoms, she had a lot of intermittent gut problems in terms of her bowel movements and then she had just pain and uncomfortableness. She didn't know why, she felt like her diet was really good, she felt like she exercised and did a lot of the things right but in her case, we did some additional testing and one of the things we found was she had a major yeast overgrowth and that was in her G.I. tract.

[00:06:30] Yeast, interestingly enough, yeast is a fermentor, right? Fermentation. When you feed yeast sugar from your diet, again even if it's fruit, they can take that food and they can turn it into alcohol. You know, that's fermentation. We take grapes, we take yeast, we make wine, right? Well her gut was a distillery, it was its own distillery. So part of her gut symptoms were just from her own auto-brewery syndrome. She was basically making her own wine even though she wasn't drinking. That causes gut disruption but it also creates hunger.

[00:07:00] How does that create hunger? Well alcohol causes B vitamin deficiency, alcohol causes a lot of nutritional deficiencies so didn't matter how much she ate. One, she was feeding the yeast and the yeast were producing the alcohol and the alcohol's a diuretic but it's also a malnourishing agent that causes vitamin and mineral deficiencies so it set her off on this vicious cycle of starvation in the presence of plenty. She had plenty of food, it wasn't an issue of how much food's coming in, it was just an issue that it wasn't nourishing her. So we had to go after those yeast. First we had to identify them, then we had to create a plan to go after and kill them, and so once that happened her gut symptoms cleared up completely.

Faythe:

[00:08:30] The result was I lost weight over the course of six months I lost 30 pounds, I felt relief from no pain. Before I would like for instance wash some of my windows on the back porch and I would take a break and when I got up to walk around I felt like an 80 year old hobbling around with so much pain and now I can clean all my windows and keep going and no pain whatsoever, so that's a great improvement. I've also learned what foods I'm allergic to. I was eating eggs and found out I was allergic to egg whites and almonds, I was eating a lot of almonds. So I've cut those things out. I now eat duck eggs, which I'm not allergic to because I love eggs and I find them at the local farmer's market.

Dr. Osborne:

[00:09:00] She just needed to eat the right food and she needed to get rid of the yeast overgrowth and then her body received the nutrition from the food and it was able to satisfy her appetite and create a resolution for her gut symptoms. So a classic example of eating more doesn't solve the problem of voracious hunger or of a lack of ability to grow. I see this in kids especially, failure to thrive. Or little babies, their parents are, the pediatricians say feed the kid Pediasure you know these sugary processed drinks you know just get more calories in the kid and the kid's not growing and the kid is actually digressing and shrinking. We take that out and we start taking away all the chemicals and the processed junk and give them real food, guess what happens? They start growing. They don't even have to eat as many calories, they just start growing again.

[00:10:00] Now, again, not that Faythe was a kid but she was an adult post-surgically, who developed, in my opinion, probably developed a yeast overgrowth because of the antibiotics used, right? The IV antibiotics that are used during surgeries predispose someone to a yeast overgrowth. So you get... any time you take an antibiotic, you run the risk that your wiping out your good gut flora and that yeast will take over, they will start to replicate and populate your gut instead. A yeast overgrowth, again, it can produce alcohol, causes brain fog, it causes fatigue, it causes excessive hunger and excessive craving, it can cause disruption in your hormones, disruption in your blood sugar. It can cause thyroid problems. So, it can create a whole lot of different types of symptoms. Hers just happened to be that voracious hunger.

Jonathan Otto

Yeast overgrowth and autoimmune disease often go hand in hand to exacerbate each other. Many people are struggling with brain fog, digestive issues, fatigue and sugar cravings, are just actually struggling with yeast infection and they don't even know it.

Dr. Jay Davidson

Dr. Jay Davidson:

[00:10:30] If you are having gut issues, one of the things to look at is intestinal permeability, or leaky gut, and basically what happens, think of it as you have Swiss cheese in the intestinal tract and the holes are too big, so there's things sneaking through. And, when there's foreign things sneaking through, then we're now absorbing things that we aren't supposed to. Again, these are foreign objects, this can cause weight issues.

[00:11:00] This can often times do the opposite though, and actually create so much inflammation, so much autoimmunity that people become underweight. We've got the spectrum that yeah, you could definitely be overweight from having gut issues and leaky gut and inflammation there and foreign things getting in or under-natured proteins and things getting in, but you can also have the other side, which I usually see from a clinician's standpoint, of the chronically ill or this very severe chronic autoimmune state where it's really underweight.

[00:11:30] I feel like no matter if you're under or over, we still want to heal the body and go after the sources that are upstream and then the body will come back to whatever its ideal weight is for you, your body type, your age, all of the above.

Jonathan:

[00:12:00] Okay, let's be honest, our culture is obsessed with weight, right? Maybe you, maybe your family members, maybe there's a lot of conversation around weight, whether it's carrying an extra few pounds or feeling too skinny. Very few of us are ever happy with our body size, even when we're in the process of reversing autoimmune disease, we can prioritize our weight over our healing. Sometimes our weight seems so unhealthy that it makes us feel scared. Other times we just don't know how to look in the mirror.

Here's what we need to understand, almost everyone with an autoimmune disease has it affect their weight one way or another, because weight struggles are often a result of disease, so only by prioritizing healing will we reach that healthy weight we desire and that takes time and patience.

Barbara Hansen

Barbara:

[00:12:30] I knew that I was eating too much. I thought I was eating the right things. I quote unquote, tried to lose weight and then I realized the way that I was talking to myself, it wasn't beneficial to me. What do we do when we lose our keys? We find them again or we make duplicates and that's exactly what I was doing. I'd go down two and come back up four. I'd lose those pounds and I'd find them and they'd come back with reinforcements.

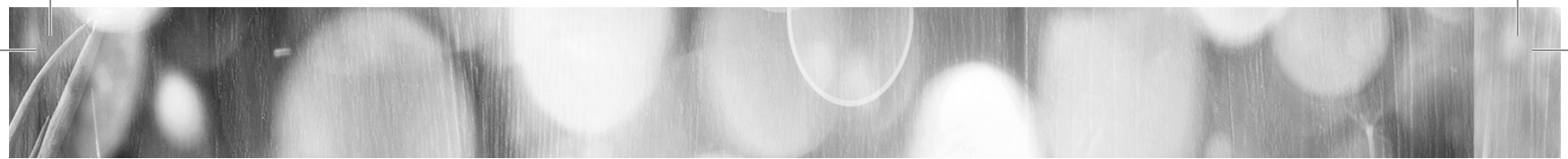
Jonathan: Yeah.

Barbara:

[00:13:00] I haven't lost 65 pounds. I have downsized, I have dropped it. I have used up that stored energy. I've done everything else but lose. I did not wake up any morning of my life saying, "Today I want to be a loser." No, that's not me.

Jonathan: You won.

Barbara: I won. Today I'm a winner. I won by another pound. I won by another tenth of a pound. It doesn't matter, a winner is a winner regardless of by how much.



Dr. Stephanie Daniel

Jonathan: Stephanie, can you tell me about cortisol? Where does it come from and how does it affect weight gain?

Dr. Daniel:

[00:13:30] Yeah, so cortisol is a major stress hormone and there's external stressors, that we all deal with, you know life, called life. It's one of the things that, cortisol, which is a hormone made in our adrenal glands. The adrenals sit on top of the kidneys and they're actually there to keep us alive and so the main job of cortisol is to allow us to buffer life stressors, but it's not just the external stressors that it's working to buffer, it's also working on buffering biological stressors, which looks like inflammation.

[00:15:00] If you're getting stress signaling, either from your lifestyle or from the food you eat, there's stress signals in food actually, like actual stress molecules or compounds in the form of omega six fatty acids and simple carbohydrates and so on and so forth, or there's biological stressors. There's inflammatory processes going on at either because there's either chronic infection or there's toxic burden. The body goes into protection mode and in protection mode, it's main job is to try to survive and cortisol is a signal that's there for survival. If we lose all cortisol we can't live and in survival mode the last thing it wants to do are what are considered more superfluous processes like weight loss, so it holds on almost like a shield or like a battle shield, because it's dealing with external stressor or internal inflammatory stressors, like a fire that is trying to dampen.

Jonathan: How do I reverse the effects of cortisol in the body with weight gain?

Dr. Daniel:

[00:16:00] Yeah, so I mean you have to deal with where the source of the cortisol excess is coming from. If it's lifestyle aspects, like you're sitting in traffic several hours a day and you're sitting at a desk all day and you have deadlines and your relationship is stressful and you're not getting enough sleep, those are things that you can control externally and start making changes to, that then give the signal to your adrenals that you can calm down and actually regulate and put out the proper amount of cortisol. The same goes for internal inflammatory impact. Looking for source of inflammation with what you eat being one of the lowest hanging, most abundant aspects of that, because we do it multiple times a day.

Jonathan: Excellent.

Dr. Daniel:

[00:16:30] You can change the source and the adrenals will self regulate and when they self regulate your body has a new signal that says, okay we're not in fight or flight, we're not in battle mode. We can now utilize and perform mechanisms that allow for normal metabolism again.

[00:17:30] Then one of the main hormones for weight is insulin. Insulin is an energy storage hormone or energy signaling hormone and it, along with its cousin leptin, which is a hormone of satiety, the brain signal that says once you've eaten you're full, play a role in the way the body utilizes the food you take in. If those signals are broken or down regulated, as opposed to eating and then utilizing that food for energy, the food instead goes into a storage form and it ends up as accumulated weight and fat. That all happens from metabolic dysregulation, like hormonal dysregulation, which is why also the efforts that people undertake in order to change the amount of food that they eat, doesn't really change the hormonal signaling. You have to change the programming, you have to change the response.

Dr. Daniel Nuzum

[00:18:00] Our question is, does obesity play a role in the development of Alzheimer's? The answer ... The bottom line answer is yes. The route is not that obesity causes Alzheimer's, no it doesn't, no. The processes that are going on that develop obesity in a person are similar processes that go on that cause Alzheimer's, okay.

[00:19:00] What that is, a lot of it comes back to blood sugar metabolism. In order to put on girth and become obese, you have to have a blood sugar disorder, okay. There's no ifs ands or buts about it. Blood sugar metabolism has to be off in order for that to happen. Blood sugar ... Sugar is fuel, okay, and if your body doesn't utilize that fuel, it will store it, okay, and if it is in the process of just storing fuel, storing fuel, storing fuel, you're going to gain weight. Your girth is going to increase, okay.

[00:19:30] If the cells ... Remember we talked about how those insulin receptor sites, if they're not working right and insulin isn't plugging into the cell and isn't opening the cell so the sugar can get into the cell and so the cell can utilize it, all that fuel gets backing up in the system and it has to be stored, something has to be done with it, okay. One of the things your body will do to it is it will convert the sugar to triglycerides and those triglycerides will be stored in your fat cells. That process is a similar process to the insulin resistance that's happening in the brain, so we have the same thing going on. People that are obese will be more prone to Alzheimer's because of the insulin resistance component.

Dr. Jay Davidson

[00:20:00] Yeah, so the Alzheimer's dementia category is what they refer to as type three diabetes Type three diabetes is diabetes of the brain essentially, but there's other types of diabetes. There's type 1 diabetes, which is classically known to be an autoimmune in nature, where basically the islet cells get attacked ... There's destruction: autoimmune attack, the islet cells and production. There's type 2 diabetes, which is classically known as just being like, "You're eating too much sugar. You have too high of glucose levels," but more recent research has actually shown that type 2 diabetes has an autoimmune component to it. That they're finding about one in three cases of type 2 diabetes are actually related to chemicals or toxins. What they're saying is that these chemicals or toxins are actually damaging our insulin receptors. Or they're occupying the insulin receptors so the body can't recognize it and then that's what's actually triggering us to have type 2 diabetes. A lot we're learning about it, but type 2 diabetes, yeah, one in three cases are autoimmune in nature.

There's also other types like diabetes type 1.5 or LADA, L-A-D-A. That's Latent Autoimmune Diabetes of Adulthood. I believe that's what it stands for. That's autoimmune in nature so we've got type 1. We've got type 1.5. Now we're finding that actually quite a decent amount of type 2 is actually autoimmune related as well.

Ariel Dochstader Miller

[00:22:00] I've never had to really focus on weight a whole lot, but what I was noticing was that I was carrying my weight very differently and I started having ... I've never carried weight in my stomach and I noticed that I was really starting to carry weight in my stomach and that I was having to work a lot harder to kind of maintain and not sleeping well. Then my temptation would be to get up and drink a lot of coffee, but coffee upsets my system. Then I wasn't feeling well and I don't think I was eating. I mean I don't eat a whole lot and I eat a lot of soup. I drink a lot of smoothies and Heather has said ... If I didn't have to eat, I wouldn't eat at all. Heather said, "Ariel, it's because you've been eating things that have made you feel bad." She said, "You don't like food because you equate it with ..." I think I do. At a really fundamental level, I think I equate food with feeling sick.

[00:23:00] I was told that the stomach weight piece, how to do with adrenal issues that I was having and I think ... not sleeping was getting tied in there and so I was drinking a lot caffeine. I was having cravings for things that

weren't really nutritious and so I think now I'm exercising. I think I'm eating things that my system isn't causing a lot of inflammation. My system is digesting, can digest, where I'm able to branch out between or beyond just soup and smoothies and eating more real food, more fibrous food. So ... I can just feel my system operating much better. I was able to go back down in my pant size as I got rid of all of the pants that I had bought 'cause now I'm back down to my original size.

Dr. Stephanie Daniel

Jonathan:

[00:23:30] Now when it comes to weight loss, Stephanie, I think a lot of people are trying to lose weight and really finding it super hard to do that. I sense that there are hidden reasons why that is the way that it is for these people. What do you think? Do believe that?

Dr. Daniel: Yeah.

Jonathan: And what do you think some of these reasons are?

Dr. Daniel:

[00:24:30] I do. The most obvious things, which are things that my patients come in with having already done are with the foods they eat so if it's not that and they're eating a healthy diet, the more nuance reasons that I have witnessed include ... I would consider subclinical insulin resistance, for example. As opposed to already being diabetic or even pre-diabetic, they're inching towards that zone where their insulin receptors are down-regulated and they're not processing the foods that they eat in the way that their body can utilize actually storing sugars and it's not just fat. That's one of the major reasons.

[00:25:30] Second major reason I see is because of inflammation. Again, the foods that you eat contribute hugely to how much inflammatory burden there is on your system. It's probably the biggest impact point in the sense that we eat multiple times a day. Food is information. It tells our system how to operate and how to organize itself and even when you start making healthier choices if there's a long establish inflammatory burden on the body, the biological ecosystem says, "Oh, inflammation is a battle that I'm waging." Before it wants to do things like get rid of excessive weight. It's in protective conservation mode 'cause it's busy dealing with the inflammatory fire that's in their system so that's another thing I see.

Then toxins, too, are another ... They're not only a source of inflammation, but they are stored in fat cells and they change the metabolic signaling that is involved in utilizing energy.

I could probably go into a lot more-

Jonathan: Excellent.

Dr. Daniel: Other options, but those are some of the patterns I see.

Jonathan Otto

[00:26:00] We know that autoimmune disease can affect weight, but there's also some overlap that suggest it works the other way, too. Metabolic disease can provoke autoimmunity. With new research, the distinction between autoimmune and metabolic diseases like obesity gets very blurry, which raises the important questions about how people should eat and manage those problems.

Dr. Jay Davidson

Dr. Davidson:

[00:26:30] The things that cause autoimmunity will also trigger weight gain, Jonathan. That's an important thing to look at. Really in our modern day epidemic right now, heavy metal toxicity, chemical toxicity, like pesticides, all these chemicals and toxins are what actually trigger autoimmunity and then they also cause weight gain. These toxins, when we're exposed to toxins, the body tries to process 'em. When it can't, it stores 'em in fat, as a way to protect the body from the toxin or chemical attacking and damaging tissue basically or inflaming other tissue.

[00:27:00] Somebody that's weight loss resistant, where you can't lose weight and like, you mentioned, you just breathe and you gain some weight. What happens is, often times, you need to start with detoxification first. You need to start detoxing these chemicals out and when there's no toxin inside the fat anymore, then often times the body's like, "What's the purpose of the fat here? We have excess. Let's get rid of it."

[00:27:30] Instead of counting calories and robbing Peter to pay Paul type of thing in the dieting and all that stuff, a lot of times when we work on detoxification, then it'll allow the body to go to more of the ideal body weight. Then the upside of that, too, is the more toxins we remove, the autoimmunity of the body, like this autoimmune storm and this autoimmune reaction we're having, often time decreases significantly.

Jonathan:

[00:28:00] Dr. J, are you saying that if somebody has a gut related issue that's being caused by say environmental toxin or if they're eating something that their body is extremely sensitive to, that it's an inflammatory for them, that it's going to cause them to put on weight drastically?

Dr. Davidson: Yeah. Toxins are foreign substances that cause inflammation that get stored in fat cells and that changes our metabolism. Our body literally changes its internal physiology to try to cope with the toxin so the key source is eat a clean diet so you're not exposed to the standard American diet of all this processed food toxins. Try to clean up your environment. You can never live in a bubble, but try to clean that environment up. Reduce the toxin load.

[00:28:30] The likelihood of you gaining weight from toxins is very unlikely and if you already are overweight, having health issues in the weight category and really struggling, consider detoxifying. It's been such a huge help for so many people.

Jonathan Otto

[00:29:00] Fat cells then just hanging out in your body storing energy, they're metabolically active in their own right and in particular, they control some powerful inflammatory messengers. Studies suggest that inflammatory signals from fat cells affect the immune response, which makes obese people more prone to developing autoimmune reactions.

Dr. Laura Fletcher

[00:29:30] Part of putting on weight is often a protective response to that inundation of chemicals and metals. It needs to secure them somewhere so they're not going to disrupt the processes that we really need and once they get into fat cells or once they get deposited into bone or deposited into the liver and the kidneys, they're a lot harder to get rid of. In my practice, I help people figure out where those exposures coming from. Test to see if

they're actually getting into the body and then how can we remove them to free up your body to start dumping the things that have built up? That's a wonderful approach.

[00:30:00] Instead of focusing on the fat itself, if you actually focused on what toxins that my body is having trouble dealing with are coming in. Where are they coming in from? And then you start to eliminate your current exposures to toxins. Your body breathes a sigh of relief. It says, "Okay, so now I can maybe start slowly-but-surely dealing with what's built up in me, and don't have quite such a burden of what's coming in everyday, all the time." And then it can start to slowly- but-surely release some of the chemicals and metals that have built up. And the weight can actually start to dissolve. So it's not the weight you need to focus on every time. Sometimes it's, "What is causing that weight to even be accumulating there in the first place?"

[00:31:00] Obesogens, in the research, the medical research, scientific research are literally chemicals or metals that have been found to make the body put on weight. So there are too many to name here, but you can start to research what are the sources, and how do they kind of change the hormone system? How do they move the body towards deposition of fat? So these obesogens are good things to start to avoid.

Dr. Jay Davidson

[00:31:30] The first step is ... I always like to differentiate drainage versus detox. Drainage is making sure your pathways are open. Liver bile duct, making sure that's moving. Making sure you're not constipated in the colon. The lymphatic system, the brain drainage, making sure you sweat. These are all the normal ... Kidneys, actually urinating. These are all normal drainage pathways that the body just moves things out, and out of the body.

[00:32:00] If you are clogged drainage-wise, if you're constipated, if the liver bile duct is clogged, which is one of the number one issues I see with autoimmune cases and chronically ill people, is this liver bile duct. If that's clogged, the last thing you want to do is jump into trying to detox, because the toxins have nowhere to go. So when we're looking at detox, drainage is first. And then now we can actually start detoxification.

Detoxification first starts by limiting how much we're exposed to, right? 'Cause you can't clear out what's built up in your body if you're constantly being exposed to things. So remove the source, is number one.

[00:32:30] Then the second thing is let's start emptying our bucket. We all have toxins throughout our lifetime that we're exposed to that kind of pile into our bucket. Our mom gave us some toxins. Add her bucket as well, too. So we want to start emptying that.

[00:33:00] Some easy ways to start is to increase glutathione in our body. So glutathione is a little bit longer word, but it's involved in what they call "Phase 2 Detox." But what you need to know about it, it's the strongest antioxidant in our body. Our body naturally makes it. But it's also a very good detoxifier. But here's the thing, those with autism, those with cancer, those with health issues, are going to have lower glutathione. So we want to do something to help boost that up and get that moving.

[00:33:30] So there's different things like liposomal glutathione. There's different foods, like whey protein, that can help raise glutathione. There's precursors as well. There's things that actually help recycle it. So I think doing some research in the glutathione category or side of it can be very beneficial and very valuable in detoxification.

[00:34:00] Also, if you have heavy metal toxicity, you can look at true chelators, like ALA, DMSA, EDTA, DMPS. These are not for the faint of heart, though I always recommend working with a practitioner that understands true heavy metal detoxification and what to do. But the cool thing, right now, too, is that there's great science on humic acid, and fulvic acid. And there's actually been ways that scientists have been able to modify it so that it doesn't

grab on necessarily to like vitamins and nutrients, but it just grabs on to chemicals and toxins. And that's a great place to start very gentle.

So I like bioactive carbons. I love glutathione. Some other things to consider are maybe like azealite, or even like a hydrolyzed clinoptilolite fragment, which is like a fragment of azealite, as well.

[00:35:00] So there's a lot of tools in detoxification, but glutathione is a great place to start. The bioactive carbons are a great place to start. And then you can start removing things. Just don't do too intense, off the bat. Right? We want to make sure the body can handle it. And then you can just slowly increase. And as you want to dig deeper and go layers, we always recommend finding a practitioner that can help guide you, because detox, especially of heavy metals, can be a little complex. And then if something comes up, you want to know exactly what to do and how, and it can be a little scary when you're doing it on your own sometimes, too.

Jonathan Otto

One of the diets used to address weight issues in autoimmune diseases is the ketogenic diet. It's a special diet, which is used to put your body into ketosis, which causes it to purge fat, and in turn, get rid of toxins.

Dr. David Jockers

[00:35:30] So a ketogenic diet ... And just to break that down for people, basically, all the cells of our body, they run off of one of two energy systems. So basically they're either breaking down sugar in a process called glycolysis, or they're breaking down fatty acids, which we call ketones. So fats go into the liver. The liver converts these fats into ketones, which are water soluble. They can get right into cell, right through the cell membrane, and right into the mitochondria, and be used for energy.

[00:36:00] Now, when we look at the process of glycolysis, we're using sugar for energy. Sugar is a dirty fuel. What that means is that it produces very little cellular energy, and it produces a rampant amount of free radicals, and what we call reactive oxygen species, within the cell. So it produces a lot of pollution, and it doesn't get much gas mileage. The only real benefit of glycolysis is that we can do it very quickly. We can break sugar down into energy extremely quickly, and we don't need oxygen to do it.

[00:36:30] Ketones produce rampant amounts of energy, 16 to 18 times more energy per ketone molecule versus a sugar molecule. And they produce somewhere between 40% to 60% less metabolic waste, less of these reactive oxygen species. And so therefore it's a clean energy, much better gas mileage, and less pollution within the cell. The only caveat there is we actually need the presence of oxygen in order to break it down, and it's somewhat slower to produce all that energy than sugar.

[00:37:00] So really, the ideal way to reduce inflammation and cellular damage is to be able ... When we have the presence of enough oxygen, like right now as we're talking, or when we're at rest, it's to use ketones as our primary energy source. And when we don't have the presence of oxygen, such as if I'm running a sprint, or I'm doing intense weight training, I'm going to be turning and using glucose as an energy source. So we want to use glucose as our energy source for the shortest period of time, and then go back to using these ketones and having, in a sense, this level of metabolic flexibility, where we're able to go back and forth.

[00:38:00] And so ketones are a great energy source, really because they reduce the amount of oxidative stress, and stress on the cell and the cellular components. Okay? They reduce inflammation. We know inflammation is the underlying marker that we find in autoimmune disease, and all chronic diseases. And so they reduce inflammation, reduce oxidative stress, and they're just a more efficient overall fuel source. Therefore, our body's able to produce

more cellular energy, so that all the cellular mechanics are able to eliminate environmental toxins more effectively. So we get less of a toxic bioaccumulation within our system.

Dr. Neil Nedley

Jonathan: What do you see as being that secret for why people aren't losing the weight?

Dr. Neil Nedley:

[00:38:30] Well, one of the secrets is actually undergoing a daily fast. That helps the body. In fact, there may be one benefit of this paleo diet, and that is, if you're really aggressive in it, it can increase your ketone levels. And that's why people can actually feel better.

[00:39:00] But the best way of increasing your ketones is be on a plant-based diet, and then not eat your evening meal. And a 15 to 17 hour fast a day, dramatically improves the immune system, it improves brain health, it turns the neural plasticity switches on, and it makes weight loss almost effortless. And you can get down to your ideal weight, losing a pound or two a week, easily in that manner.

Dr. Phillip Oubre

The ketogenic diet kind of came to me passively, and over time. It's something that I knew a lot about, as far as low-carb, and that was the way to lose weight and get healthier.

[00:39:30] Yeah, so the lose weight, low-carb diet was popular. It was what I was mainly promoting in my practice. And then the ketogenic kind of came along. And that was kind of the next step. Now, oddly enough, I had heard of the ketogenic diet when I was in my pediatric rotations, because it's used for epilepsy, even in conventional medicine. So when I heard about the ketogenic diet, I wondered like, "Well, that's used for epilepsy. Why are we talking about it in modern medicine for autoimmunity, and inflammation, and all that?"

[00:40:00] And then it started putting pieces together, "Well, epilepsy is an inflammatory brain condition, so why wouldn't ketogenic diet work for so many other inflammatory conditions?" So once I started hearing about it more and more, then I started looking into it more and more, and started experimenting with it, experimenting my patients with it and seeing how they did, and experimenting on myself. I usually don't tell people to do something that I'm not willing to do myself. So, weird things like probiotic enemas, ketogenic diet, I'll often experiment on myself before others. And we had great success so we kept using it and we promote it. We give people food plans, we tell them what to eat and how to eat, what to expect, because I think that's one of the first things people often think of, at least in Austin.

[00:41:00] We're a pretty healthy town, pretty holistic town and so many people think they eat great, for instance I recently had a patient that said, "I'm eating great, why am I pre-diabetic? Why do I have inflammation? Here are all the things I eat. All my friends wonder like, how am I pre-diabetic with all this?" And so we told her to do a sugar detox, and she had a miserable three days, getting into ketogenesis. And what that tells you is that she was actually eating a lot more sugar than she realized, and her body wasn't designed to operate off of fat at all. It was designed to operate off of sugar because that's the main source of calories that she was eating. So when you switch into a fat-burning metabolism, your body, your DNA has to wake up in order to actually use that fat as energy. Yes, your body can make the energy but if it's not used to surviving off of it, you can go through a pretty nasty crash.

Ocean Robbins

[00:41:30] The two of the foods that are most directly linked with excess weight are sugar and dairy products. As it happens, my family knows a bit about sugar and dairy products because my grandfather was the founder of the Baskin-Robbins ice cream company, and ice cream is fundamentally sugar and dairy with a lot of other flavorings and stuff added. My grandpa founded this company and it became the world's largest ice cream company and my dad, John, grew up with an ice cream cone shaped swimming pool in the backyard and 31 flavors of ice cream in the freezer. And he was groomed from early childhood to one day join in running the family company.

[00:42:30] But as he got a little older, he realized that ice cream was not contributing to health for humanity. And his own uncle, my grandpa's brother-in-law and business partner, Burt Baskin, died of heart disease at the age of 54. And my dad took a look at his uncle Burt and he was one of the most successful entrepreneurs in American history, but he didn't have his health. And he lost his life. And my dad didn't want to spend his life selling a product that would contribute to more people like his uncle dying sooner than they needed to and leaving their wives widows and their kids fatherless and he said, "I want to contribute to health."

So he ended up walking away from the ice cream cone shaped swimming pool and any access to the family wealth to follow his own rocky road, as we say in our family, and he moved with my mom to a little island off the coast of Canada, where they built a one room log cabin and grew most of their own food and named their kid Ocean. That's me.

[00:43:30] And in time, my dad ended up becoming a best-selling author, writing books about food and health, like *Diet For New America*, which inspired millions of people to look at their food choices as a chance to make a difference in the world. The media had a lot of fun with the story, they called my dad the Rebel Without A Cone. His own dad wound up in his early 70's suffering from serious weight issues, diabetes, heart problems, his doctors said he didn't have long to live, unless he read this book. And he handed him a copy of my dad's book, *Diet For New America* which my grandpa read, followed his advice, changed his diet, reduced his animal product consumption dramatically, ate a lot more vegetables and whole foods, gave up ice cream, gave up sugar, wound up losing 30 pounds, getting off all of his diabetes and high blood pressure medications, his golf game improved seven strokes, and he added 20 more healthy years to his life.

[00:44:00] So we have seen in our family what can happen when we follow the standard American diet, perhaps with a double scoop of ice cream on top, and what can happen when we make a change. And I'm passionate about spreading this knowledge to as many people as possible. The thing that aggravates me so much in the food world right now is that we have a status quo that is sickening and killing hundreds of millions of people. And we know better. We know unequivocally how we can transform so many lives. We could make heart disease a thing of the past. We could cut rates of cancer by 50%. We could cut diabetes by 90%, just by following simple, proven, known practices.

[00:44:30] And we see this modeled, I mean we can look at where people in the world live the healthiest and the longest lives. It's been called the Blue Zones by Dan Buettner. And we can - they all have certain things in common! They're eating whole foods, they're eating a plant based diet, they have strong social connections, they have lots of exercise built into their everyday lives, and when we model ourselves off of these communities, we can take advantage of the exact same principles and get the same kind of results.

Dr. Philip Oubre

[00:45:30] For the patient I just mentioned, she was inflamed, she was prediabetic and so for the first three days that she switched to ketogenic, usually we take people down slowly but she chose to go all in. And within about a week's span, she was already feeling better than she had felt in, she said decades. This is a woman that's tried multiple things, taken supplements, she does Cryo fit all the time, vitamin infusions, and she wasn't really getting

the success she wanted. As soon as she had ketogenesis, she started losing weight, feeling better, energy levels perked up, digestion symptoms improved. She had been bloated for years and didn't really fully understand why.

[00:46:00] Yeah, so she had a previous stool sample with yeast overgrowth on it that another functional medicine doctor had tried to treat her and never really got to resolution of symptoms. She didn't have a test to prove it, but she just didn't feel well, so she knew something else was missing. And so when she went into ketogenesis and she got so much better so quickly we pretty much know she definitely eradicated whatever fungus yeast overgrowth was in there. And I don't mean to say eradicate like yeast doesn't need to be there at all but at least bring it down into balance where it needs to be.

[00:46:30] And get the body switched over to more of a fat burning metabolism which is kind of healthier. That's how we were designed, that's where, if you look back at the paleolithic era what humans ate at that time was mostly fats. I forget the percentage but, our percentage of carbs was somewhere around five to ten percent and the other majority was fats. And of course, vegetables. So it's not a surprise that when we get to that kind of diet, when we eat in a ketogenic style, it kind of awakens our ancient DNA and can reset the body. I think America, we're so used to eating three meals a day and snacks in between and drinks and sodas and all that, that our body never really kicks into fasting. Yeah, we sleep for eight hours and you don't eat for those eight hours so you kick into fasting a little bit but that's not really enough to kick into ketogenesis and get the body to really survive off of fat.

[00:47:30] And you can tell because if you're someone that's never really done ketogenesis before, and has been eating a fairly high carb diet and all of the sudden you do ketogenic diet, you will feel so much different. So when you start from a high carb diet or a high sugar diet and you go to a low carb diet like that, you realize how much sugar you were eating because you feel terrible because your body's not used to running off of fat. And so, you can gradually do it of course to lessen the symptoms but it really wakes you up and says wow I was really eating way too much sugar, way too much carbs.

Ocean Robbins

[00:48:00] A lot of people go to Diet Coke and Diet Pepsi because they're trying to cut down on calories. And if weight loss was just about calories, that would work. But when we understand that it's about food addiction, we come to realize that actually, it doesn't work. And this is why, I think, studies are telling us that people who drink more diet sodas are more likely to suffer from weight problems. In fact, diet sodas are correlated with more net weight gain than sugary sodas.

[00:48:30] How could this be? They don't have calories in them? Well, here's what we think. And I don't think there's anyone that's completely definitive on this. But we think that because the sweet taste is tricking the brain, the body actually responds as if it was sugar. There was nothing in nature that our bodies were designed to consume that tastes that sweet, and that doesn't give us the sugar rush. So the body responds as if there was sugar there, but there isn't. Then it feels tricked. So guess what? People who drink diet sodas crave, even more, of the very foods we should be eating less of. So they're gonna have more junky calories later, typically, after having a diet soda. So if you want that crisp, refreshing, sparkling taste, go for some sparkling water with ice. Put a little lemon in it.

Dr. Philip Oubre

Dr. Oubre:

[00:49:30] You don't really realize, especially in America, how much sugar we crave, how your sugar cravings are when you open the fridge, what your taste buds gravitate towards. Is it gravitating towards the yogurts and the

ice creams and stuff, that's sugar cravings. And once you wipe out the sugar from your diet, it doesn't take long before those sugar cravings start to fade and it's so empowering to realize that you have the willpower to pass up the sugar. And the food industry has hijacked our taste buds, as Mark says, they've designed foods to be perfectly addictive with the right amount of sugar and the right amount of salt and so we've kind of beat people up in American saying the reason you're obese is because you don't exercise enough and you eat too much.

[00:50:00] Well that's not really the case. The reason we're obese is because we're eating the wrong types of foods and we're addicted to sugar. So once you get rid of the sugar you realize how much your sugar cravings go down, and how easy it is to continue that lifestyle. That's probably the biggest shocker to people once they get the sugar and carbs out of their diet, how easy it is to maintain. Now ketogenesis is difficult to maintain going forward. It's hard to maintain. Now ketogenesis is difficult to maintain going forward. It's hard to maintain that low of a carb, you have to want it. At least getting into ketogenesis resets your sugar cravings so that you can eat a lower carb food plan and still feel great.

Jonathan: By using methods such as the ketogenic diet, many people have been able to see the weight just melt off. Many people have struggled for years with no results, have been able to finally see a difference with this method.

Dr. Oubre:

[00:51:00] We've used the HCG diet, which I'm not sure if you're familiar with. The HCG diet is basically a ketogenic diet that people are on a highly restricted caloric intake, they're only allowed to eat 500 to 750 calories and it's pretty much just protein and vegetables. At the same time, they're actually injecting a peptide, the HCG peptide, which is the pregnancy hormone, and they kick into ketogenesis and the idea behind the HCG is that the HCG is the same peptide that the fetus makes while a female is pregnant and this peptide goes around the human system and basically says, hey you have to feed the parasite that's inside you, because your baby is more important than you. Sacrifice your fat stores, sacrifice whatever excess energy you have to feed this parasite, this baby.

[00:51:30] We use HCG, even for men, in a ketogenic diet to help appease the appetite and make sure we're tapping the fat stores that may be a little more resistant. We've seen incredible results with that. It's a 40 day program typically and we've seen people lose up to 40 to ... I've even had one guy lose 60 pounds. He was having terrible migraines and he was more focused on the weight, but I was more focused on the migraines. We decided to do the HCG diet and so he kicked into ketogenesis and by the end of the diet and he had lost 60 pounds and his migraines were gone.

Jonathan: That was incredible.

Dr. Oubre: It was. It was truly remarkable.

Jonathan: He would have been happy and he would have felt grateful, right?

Dr. Oubre:

[00:52:00] Absolutely, absolutely. He was on Topamax and Imitrex and all kinds of drugs to help manage his migraines and he didn't really realize that the ketogenic diet was going to help him with those too.

Jonathan: Excellent, so he didn't need to take the migraine meds anymore?

Dr. Oubre: Nope. Not after that.

Jonathan: You went after the root of the problem.

Dr. Oubre: Absolutely. Inflammation.

Mike Mutzel

Mike: A lot of people in the fitness space eat a lot of carbohydrates and they get big in the winter and then they have to cut down in the spring and so their body weight fluctuates a lot, but with this way of eating and this lifestyle, you don't have to worry about it. Stay lean year round.

Jonathan:

[00:52:30] Do you think that there's hidden reasons why people aren't losing weight?

Mike:

[00:53:00] Yeah, brilliant questions. There is a million hidden reasons, but I think the number one issue is just metabolic inflexibility, metabolic dysfunction stemming from circadian rhythm imbalances, gut bacteria imbalances, which we can talk more about, and just excessive carbohydrates that cause metabolic dysfunction. I think the biggest thing that I would tell people is to not starve yourself, not over exercise, just honor your body's circadian rhythms. First thing in the morning, get out, get some natural sunlight, do fasted cardio, it's surprisingly effective. In fact every fitness model and bodybuilder that gets down to 4% body fat, they do fasted cardio every single morning with a little bit of caffeine, like green tea or coffee.

I found that to be helpful. When I first got into this two and a half years ago, I went hardcore keto for a very long time and ended up losing strength and muscle mass and felt skinny and my hair was falling out and things like that, right.

[00:53:30] If you have a disease process, like cancer, like neurologic disorders, like maybe autoimmunity, like Crohn's or colitis, where a ketogenic diet could really help with that; I think, short term, high intensity, strict ketosis is needed in that context. But, if you want to lose a little weight, you want to prevent weight gain over time and just improve your overall health, reduce inflammation, I think the best approach is more of a cyclical ketogenic style diet. Incorporating exercise and periodic intermittent fasting.

[00:54:00] That's the advantage of losing weight. It's not just about health, it's other aspects of their life and so they can be a more productive member of society. That's one of the things that, you know again, because we're incorporating in the programs that I like to teach, it's not just about keto and low carb diets, we're talking about circadian rhythms, we're talking about detox, we're talking about exercise, stress management, sleep. All these elements that comprise our resting metabolic rate and our ability to burn fat or store fat, we're working on, so then people have these sweeping lifestyle shifts and they feel more awake and alive in their lives, right? More grateful, more opportunities.

[00:54:30] That's what I've seen with a lot of my clients, is just different changes in that regard.

Dr. Susan Peirce Thompson

Dr. Thompson:

[00:55:00] When I meet the people who are living in a right size body, who are not obsessed with food anymore and they give me a hug and they tell me how much Bright Line Eating means to them and how much learning about the message that I'm sharing with the world means to them ... I guess, I just relate it to my own journey and how getting to live this life instead of that life, getting to finally be freed from the torment of constantly having my life be about trying yet another path to try to lose weight.

Jonathan: Can you think of one particular person? Just think for a moment. Just get a moment. Think about one particular time when it hit you and it reminded you and it was a deeper seed than regular.

Dr. Thompson:

[00:55:30] Oh I think of Julia. Every time I talk to her she cries, she just cries and just ...

Jonathan: Why is she crying? Why?

Dr. Thompson:

[00:56:00] She cries because she was so desperate, but when she found me and Bright Line Eating she was about to die from ... Her blood work numbers were so bad. Her triglycerides were 300, her cholesterol was well over 300, she was pre diabetic. She was at a point where she was now counting down years of her life and it was fewer than 10. She was not an old woman, she was middle aged, thinking I am about to die because I can't get this food thing under control.

She's happy, thin and free. She's completely free. Her blood work number ... Her cholesterol is normal, her blood pressure is normal, her triglycerides are normal. No whiff of diabetes at all. She's completely slender, she's lost all her excess weight and she just cries and says, "I would absolutely choose this over winning the Powerball lottery any day. Not even a question."

Jonathan:

[00:56:30] No money could pay it, right?

Dr. Thompson: No money could pay. I feel the same way. I would give you my arm before I would give back my transformation. I would spend one day in that body that I used to have, but not many more than that. I would give you my arm before I would go there. I really would.

Dr. Eric Westman

Dr. Westman:

[00:57:00] After several years of research on the low carb diet, we opened a clinic at Duke University that pretty much uses the low carb ketogenic diet or ketogenic diet. People come to me now for the lifestyle change. They don't necessarily know what lifestyle change I'm going to help them do.

[00:57:30] My practice is also known as an obesity medicine practice and it's a holistic practice because what you eat really matters. The way I approach people coming to me for help with obesity, with diabetes, any chronic medical condition really, arthritis gets better, heartburn, is that what you eat really matters. I want you to eat real food, meaning food that's not in a box or a bag, generally speaking. Food that your grandmother would recognize as food, not things that are processed, highly processed. What that does is makes the food that you eat lower in carbohydrates automatically because you're not having lots of refined sugars, you're not having lots of potatoes, pasta, rice, things like that and that is the general principle, is eat real foods.

Jonathan:

[00:58:00] You have a study that's demonstrating that the low carb diet can be particularly effective with type two diabetes. Can you tell me about that?

Dr. Westman:

[00:58:30] Sure. A little history, 100 years ago the low carb diet was used to treat diabetes. It was forgotten over the last half of the 20th century, the 1900s, and thought to be bad. Our research started with looking at the safety of the diet and then as I was learning about the diet and that it was safe, I relearned, resurrected the information from 100 years ago to get it as a treatment for diabetes.

[00:59:00] Thinking about it, remember that diabetes is a condition where the blood sugar is too high and if you want to lower the blood sugar by what you eat then don't eat so much sugar. The problem with that simplicity is it flies on the face of most major organizations, which recommend that diabetics eat lots of carbohydrates. I think the reason for that is most of the doctors who are treating diabetes put people on a medication and a medication can make the blood sugar go too low and eating carbohydrates keeps the blood sugar from going too low.

In our approach, which involves nutrition and the medical management, if we lower the carbohydrate and we lower the medication, that treats the diabetes at the same time.

[00:59:30] We've done studies, other people have done studies with diabetes and the ketogenic diet as well, and you just want to be sure that you do it with a doctor or a practitioner who understands how to help you lower the medications.

We're trying to get the information out about the low carb diet and we've started a company called Heal Clinics, that actually will support people and help them come off the medications.

Ocean Robbins

[01:00:00] What breaks my heart is how many people are suffering right now with excess weight and with a society that blames people, shames people, even tortures people for that weight that they're carrying. I want to have compassion. I want to have compassion for everybody, you know, what you look like on the outside of course, it matters, but who you are on the inside is so much more important. That said, when we carry excess weight, it's harder to get out of bed in the morning. It's harder to exercise, it's harder to have vitality and joy in life, and it does increase your odds of getting heart disease, cancer, diabetes, and some of the other illnesses. I do want to help people break free.

[01:01:00] Now, let's look at the facts here. We have, right now, more than 105 million people in the United States alone who are on a diet right at this moment. The weight loss industry is more than \$100 billion a year. Do you know of any other place in the world or any other zone where people are spending this much money having this much suffering and trying this hard with so little result? Less than 1% of weight loss diets succeed long-term. Less than 1%. That's like sending your kid off to college and there's a 1% graduation rate. So if that happens, do you blame your kid? Or do you blame the college? People are blaming themselves. They feel ashamed. They think they're failing. They don't have willpower, they don't have motivation.

[01:01:30] I'll tell you what, we got plenty of willpower. We got plenty of motivation, but we don't have is the basic knowledge of why this weight is accumulating in the first place and what we can do to release it. There's a few facts with weight loss. I mean number one, obviously, calories and exercise are huge factors. There are nine calories per gram of fat and four calories per gram of carbohydrate or protein. More fat can tend to equate with more calories, and calories that are not burned as exercise can accumulate into fat on the body, of course.

[01:02:30] But there's a lot more to it than that. What we're learning is that there is a neuroscience to food addiction, and a lot of people do not actually have control over their food lives. So let me ask you, do you ever have cravings for foods that you know aren't good for you? Do you ever see a candy or sugary snack or a cake or

ice cream and feel some kind of insatiable desire to have it? Because most people do. The reality is that some part of our brain is hooked. A lot of people who are struggling with weight issues need to draw sharp, bright lines.

Think of it like an addiction to certain foods, and I'll tell you what the most common foods are that are driving this addiction are sugar and flour products because those are going into the body and functioning very much like a drug. Sugar can be more addictive than cocaine. We have so many people right now that are actually addicted physiologically and psychologically to foods that are not in their best interest.

[01:03:30] Just like an alcoholic can't have one drink, you've got to draw a sharp line. The same, I think, is true around sugar and often around flour products, and when people draw a sharp line and are able to stay with it, it gets easier and easier to break free. We also need to look at animal products here because there is a major correlation between consumption of animal products and excess weight. The average vegetarian is about 10 to 15 pounds lighter than the average meat eater. Now there are plenty of vegetarians who are struggling with excess weight, don't get me wrong here, but in general, statistically, there's this trend. One of the biggest reasons is that vegetarians are consuming more fiber, more plants, typically, and obviously less animal products, which tend to have high amounts of fat. The fat itself, it's a higher, richer source of calories.

[01:04:00] So when we restrict that then we have more opportunity to get our bodies functioning at optimal vitality and wellness. Animal products, and sugar products, and flour products are all associated with excess weight. What I want to say to anybody who is, whether you have a few pounds here or there that you might not like, or whether you're struggling with serious weight challenges, or whether you know somebody who is, what I want to say is that freedom is possible. That you don't have to be on the diet treadmill, you don't have to be stuck in this addictive pull, you can break free. Of course in this series I hope you're learning how.

Jonathan Otto

[01:04:30] So by dropping the weight we can reverse weight-related conditions like diabetes and heart disease. Even cancer risk can be reduced by addressing the weight issue.

Dr. Phillip Day

[01:05:00] Now I've seen transformations, my books are just littered with testimonies of people who you can call, you can go to their websites. Dr. Felicity Corbin Wheeler, we spoke in the early ... just after 2000 after the turn of the millennium, she had late-stage pancreatic cancer. She went out to Dr. Brian Clement at the Hippocrates Center, ate the best food on earth and completely cleared late-stage pancreatic cancer, which by the way, was the disease that killed Steve Jobs and Patrick Swayze.

[01:05:30] I've seen countless people with cancer who are taking control over their lives and enjoying the process of regaining their health again. Dr. Thomas Lodi is famous for saying that he often gets two types of people who come to him with cancer; one, who when he says to them here's what you're gonna do, you get one of two reactions. One is wow, what an opportunity! I'm gonna transform myself. And the other is oh I've really gotta start doing all of that? And his thing is, guess who's still alive five years later? It's the people who took it and ran with it. And it doesn't matter what it is, whether it's Parkinson's or MS or osteoporosis or anything like this.

[01:06:00] There's a lady called Bernadette Bowen in Dublin and she had breast cancer that was going away, coming back, going away, coming back, when she heard the message about simply eating according to species and not according to the food industry, and also doing some exercise and a few other things she completely reverses and now what does she do? She's getting the word out.

[01:06:30] Jessica Richards, she actually phoned me up just before I came out to Australia we were doing a large convention in the home counties on cancer. She phoned me up and she said can I come and address your convention and I said yeah. She gets up in front of these people and she says, look, I'm here, I'm living witness to you today that I'm still alive when I was told I wasn't gonna make it, I'm alive today because I assessed what the body needed to do and it didn't make sense for me to poison my body. So she said I basically trusted my senses, put the best food I could in my body, did some exercise, kept my thought-life under control and by the way, my oncologist has been monitoring me going through this whole process and he's amazed as well.

Dr. Jay Davidson

[01:08:00] So cancer's directly related to the immune system. We've got basically two arms of the immune system and the arms of the immune system need to be balanced. So think of it like a teeter-totter; we don't want one arm tipped more than the other. So, the two arms, and these are the main ones - there's some more complexities to it but there's TH1 immune system and there's TH2. And then there's a bunch of chemokines and cytokines that are part of these arms, per se, but TH1 is basically that immediate response of the immune system. So when there's a foreign invader, it goes in, it tags it, and then it also does cellular repair or basically like cell-clean out. And then TH2 immune system comes in and that's more longer-term. So let's say that you get exposed to mercury. Mercury goes in the thyroid, the immune system's like what is this foreign thing, it goes in to try to kill it ... it can't kill mercury because it's an elemental element on the periodic table, it's not a living organism, so the tissue around it starts being killed. That's autoimmunity of the thyroid.

[01:08:30] So what happens then is TH2 goes in and the body gets stuck in there because the mercury's not dying so it's chronically in this TH2 dominance. This is where we get the RA, the MS, the lupus, so we get stuck in this teeter-totter where TH2, you're stuck in. And what happens is now we're deficient in TH1 and TH1 is that cellular clean-up, or that cellular debris, or when abnormal cells are formed, it's gonna clean it up. So if we're deficient of TH1 that's where the cancer risk comes in because we're missing the cellular clean-up or the abnormal cell replication, and we're stuck in TH2.

[01:09:00] So cancer really revolves around autoimmune and nature of TH1 versus TH2 from an immune standpoint, so if we're dealing with cancer and abnormal cell replication, and stuck in TH2, then we wanna do things to help boost TH1 and bring down or modulate TH2. Or obviously if we're stuck in TH1 dominance then we wanna balance that. But on the cancer side it's usually TH1 suppression that then will put somebody at risk of cancer. I mean your body was designed to heal, so when you support the body, remove what's interfering with it, our job from a clinician's standpoint is identify what's interfering with it and let's work on removing it, and let's get out of the way, let's let the body heal.

[01:10:00] So your job as a listener right now taking all this information whether it's for yourself or a family member, is to identify okay what's holding me back, or what's holding them back, and how can we start naturally removing that and going after it to then let the body heal. And when it heals, there's life, there's health, there's happiness. And when things are inflamed and the body is not well that's where disease and sickness, unhappiness really thrives. So let's focus on, again, identifying what's holding you back, and how can we get you well and keep you well. That is always the goal. Keep moving forward, you've come this far on the journey of the autoimmune secrets docuseries with Jonathan Otto, maintain the hope, keep moving forward, and you will get well and stay well.

Episode 7:

HEALING & THRIVING: LEARNING HOW TO HEAL, ESSENTIAL OILS, INNOVATIVE DIET & LIFESTYLE APPROACHES TO AUTOIMMUNITY

Jonathan Otto

[00:00:30] Welcome to Autoimmune Secrets. I'm so glad that you're here. I'm your host, Jonathan Otto. In the previous episode, we looked at the link between metabolism and autoimmunity. In this final episode, you'll learn what a healthy anti-inflammatory diet looks like and the most useful herbal remedies, essential oils, and supplements for safely reversing autoimmune disease. These easy to follow strategies can have a drastic effect on your health.

David "Avocado Wolfe"

[00:01:00] Autoimmune conditions is just ... Most of these disease conditions are just a warning. It's just saying, "Hey, something's out of balance. Here's how you can correct it," because they also come with the information of not only what is wrong, but how to fix it. Pain has two messages. It tells us what is wrong, but if we meditate on our pain, it also tells us how to fix it.

Mike Adams

[00:01:30] Like a lot of viral diseases, lyme is an infection of opportunity. It happens to be especially ferocious and potent, but it is also more so when your body is vulnerable. Maintaining optimum health, and maintaining the adaptability of your body to respond to infections is really, really key to being able to overcome this infection, as well as many others.

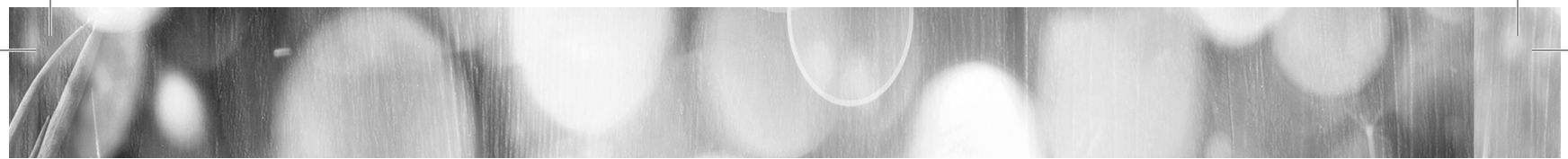
Emily Gerhke

[00:02:30] I wish with all my heart that I had had a holistic doctor like this one to test me from the moment I was born, and I could get this complete picture of what my life could be like, that I wouldn't ... I didn't get tested until I was 35, and I wish that I had known, and in the same way, I want my kids to be tested and learn as soon as possible, so that we don't have to do the medication route unless it's absolutely necessary, that we can heal with food and learn how our bodies process things and get just a full complete picture. There's so much information out there, and so much pain and suffering that can be either eliminated, or just healed in the process. I wish that every single person around me could get this picture. I can't even say it enough. I tell all of my friends about it. I don't know. You can't make anyone do something they don't want to do, but it's complete life changing, completely life changing.

[00:03:00] Just do it. It's worth it. Go for it. Take the plunge. Find a way to make it happen. It's totally worth it.

Dr. Jay Davidson

[00:03:30] Effective treatment protocols, first of all, I don't agree with the pharmaceutical approach, especially antibiotics for chronic Lyme Disease. Antibiotics can be detrimental. They destroy gut bacteria. That's commonly



known across the board, but also science is now showing that antibiotics actually damage the mitochondria. The mitochondria are the energy cell factories of our body. Every single cell in our body has mitochondria, these little energy cell factories in them, except for the red blood cells, but there's literally tens of billions of these things in our body. It's like there's a tremendous amount. The idea is, if you're having fatigue, if you're having energy issues, because these are the ATP energy cell factories at the cellular level, I think antibiotics can be a contraindication of when you're having fatigue and energy issues.

[00:04:00] So oftentimes, if you don't have energy, then you're not sleeping. If you're not sleeping, you don't have energy, and it just gets you in this downward spiral.

Dr. Peter Osborne

[00:05:00] This is something where you put that little girl in a rheumatology department at a major hospital. They're going to put her on steroids. They're going to put her, potentially, on immune suppressing medications. She's going to have a future where they're mitigating her symptoms and telling her, "It's just all we can do. This is all we can do for you. There's not a whole lot left we can do for you," but those long term steroids like that in somebody so young, what is the side effect? It's a very well, scientifically documented side effect of steroids that they cause bone loss. You'll have a little girl who's not gaining weight, right? We're going to put her on a steroid so that she now ... Not only does she not gain weight, but now we start implementing bone loss before she's even formed her skeleton. We saved her. We saved her from all of that in her future, because if she would've gone mainstream care, that's what would've happened. She would've been in that situation, because that's the standard of care for that particular condition.

Dr. Jay Davidson

[00:05:30] When my wife ... When she was diagnosed, she had some health issues when she was seven years old, the doctors gave her some medication. That caused brain encephalitis, which is basically brain swelling. During that, she went into a coma for a little while, and her mom was very persistent. She's like, "I'm hearing about this thing ..." This is 25, almost 30 years ago now ... "I'm hearing about this thing called Lyme. Can you test for it?" "No, no. I don't think it's that." Finally, they tested for it, and they found out it was. Then, they started her on IV antibiotics for a year, gave her oral antibiotics for another year, and I just look at that, and obviously I'm biased with her story, and just what I see from a client when I work with clients as well too, and their stories, but if that was the solution for her, she wouldn't have had any of these other health issues that happened.

[00:06:30] Having to have SVT, supraventricular tachycardia, where her heart would just take off racing. They clocked it one time in the ambulance at 260 beats a minute. She was literally just talking with her mom in the kitchen, not doing anything active, her heart just took off, passed out. Mom called the ambulance, ambulance took the heart rate, it was 260 beats a minute, and having a couple heart surgeries, supposed to go to the junior Olympics for swimming and having to pull out because of health issues. If that was supposedly the cure, I think she would've gotten well and stayed well, and that really wasn't the case. It really didn't get to the source.

Dr. Eric Zielinski

The list goes on and on and on. Don't take drugs preventatively, which is the most ridiculous thing that's been taking over our medical world by storm. You use a pharmaceutical, you'd get a surgery when it's necessitated, not because of a potential. You minimize. You minimize toxins and I'm telling you, you're going to be happy.

Jonathan Otto

[00:07:00] There are numerous dietary protocols that help a person with autoimmune disease feel better. In many cases, a dietary approach can produce a complete remission of the condition. The goal of the dietary approach is to help the body reset, nourish itself, and reduce inflammation caused by reactive foods, as well as to help you reconnect to an intuitive way of eating, where eventually, you'll naturally select foods that make you feel better, and avoid those things that make you feel worse.

Dr. Phillip Day

[00:08:00] The obvious things to do, of course, is going to start with diet. You've got to be eating real, uncontaminated, whole foods in the manner in which nature intended you to do so. It's interesting, isn't it, because if you look at, say, two groups like the Okinawans or the Seventh Day Adventists, you know what's interesting ... The SDAs are interesting, because they're blended into the general population, say, in America. What you see is much, much lower levels of metabolic disease in populations that are actually eating according to species. I'm a farmer's boy. Your pasture lifestyle don't die of human diseases, because they're not cooking in the fields, and they're not eating fake food. The same with wild animals, but I often say if you look at your dogs and cats, what are we feeding them? Cooked, ground up bits of their mates out of an aluminum can. When they get sick, we run them off down the vet for shots and drugs. We're certifiable with that sort of attitude, and once people have this explained to them, it does make all the sense in the world.

Steve Curran

Steve:

[00:09:00] Thru discussions with Dr. Oubre and the information that he's given me, and the books that I've read now, it's like you can also reverse autoimmune conditions strictly from the way you eat. In fact, one of the books that I read said that 65% of autoimmune conditions is diet, not genetics, so you can be completely predisposed genetically to an autoimmune condition, and it doesn't mean that your genes have to express that condition if you eat right. That, to me, was ... That was my light bulb, bright light moment, is that I was really, literally, eating myself to death, or to a very miserable environment of autoimmune stuff. The sad reality, though, is as a fitness professional, as I've told people about this, I've come to realize that there's a very small segment of society that will take the words and go, "I'm going to do what you did, Steve, and I'm going to eat right for the next month."

[00:09:30] 30 days is really all it takes to reverse a lot of these conditions. They just won't do it, because there's pills they can take, like Prednisone or other anti-inflammatory drugs that will help you get rid of the symptoms, but you haven't actually solved any of the underlying problems.

Jonathan: What proportion of people that you found that will say yes, and those that say no?

Steve:

[00:10:30] Out of the people that I've spoken to, probably 70% won't do it. Only about 30 percent will actually take a proactive approach to eating right because the issue is, it's not ... you can't just eat right a little. You've got to go all in or nothing and that's ... because it's not about removing gluten most of the time. If that ends up being the thing that ruins your small intestine, is the gluten problem, then you can't just eat a little gluten because the problem is still there. Like Doctor Oubre explained to me, and now that I've read, is like, if your immune system starts to fire off on gluten because it recognizes for some reason as an invading body, it has a long memory. And so you can't just get off gluten for a couple of weeks and go, I'm good, because even if your gut starts to heal, your gluten sensitivity, your antibodies are there, and your body remembers that. So you've got to go all in.

Dr. Phillip Day

[00:11:00] A good example of an autoimmune disease would be the problems with modern wheat. Modern semi-dwarf, high-yield wheat is a hybridized and a genetically linked version of emmer wheat. E M M E R, emmer wheat. Well, this was the wheat the Roman legions marched on, that the pharaohs farmed prolifically out of the Nile valley for all of those dynasties. And it was really as an outgrowth of World War Two, after the U-boat blockades, stopping the Canadian shipping coming over, bringing the wheat over to England, that we almost starved to death in Britain.

[00:12:00] So after the war it was determined that they were going to genetically modify ... by the way, this was before gene splicing, so you're looking at crude genetic manipulations of wheat to boost yield, that was essentially the task. What we end up with is something that's been described by leading American cardiologist Doctor Bill Davis as, "A perfect chronic poison" that can rip semi-permeable breaches in the gut allowing wheat peptides into the bloodstream, which essentially fires up the immune system in a panic attack, and this is one of the chief problems we see triggering say, rheumatoid arthritis. Wheat has been linked to a huge number of problems, again, not least of which that wheat tends to be heavily sprayed prior to harvest as well, so you're getting a lot of that going into the food supply.

[00:12:30] So wheat's very troubling and it's not the wheat our grandparents used to enjoy by any stretch of the imagination. This is something that's come into our midst. It's highly addictive because of the protein gliadin in it, which is an opiate, it binds to the opiate receptors of the brain. So wheat is an example of just what can happen when you come off the natural order and man's brilliance takes over.

Rachel & Celia Karnuth

Rachel: What's your diet now?

Celia: Well, I go grain free, dairy free, soy free, corn free, rice free, sugar free.

Rachel: Sugar free.

Celia: Is that all?

Rachel:

[00:13:00] I think that's it. So she eats a lot of meats and a lot of fruits. We try to get her to eat a lot of...

Celia: Vegetables.

Rachel: What do you have to do for school every day? Are you able to eat lunch at school?

Celia: Well, yeah, I'm not able to eat lunch at school. I always have to bring a packed lunch.

Rachel:

[00:13:30] We just have to do a lot of ... It's a lot of preparation and being prepared for leaving the house, making sure we have food, and hot containers or something to heat up. Or if we're going to be gone, taking a cooler with us and ... I mean, she's had some definitely hard times where, after a birthday party or something, I'd look at her and be, do you need to have a big cry? And she'd be, yes. And it would kind of come out every month or two that she was struggling, but haven't seen that in a long time, right? Because what have we talked about, about parties and stuff that ...

Celia:

[00:14:00] That it's really about spending time with friends, and having memories, and not just the food that you eat.

Rachel:

[00:14:30] So we've all kind of had to change our mindsets. That it's not about, Christmas isn't about, obviously it's about Jesus but getting together is not about what is everybody bringing to eat, and birthday parties aren't all about, which you don't realize how much that you think about those things, going in on that. And so we just had to have a lot of conversations about, do you want to go and have the experience, and have the memories, and the time with friends, and all that, or is the food stuff too hard for you because they're going to be eating pizza, and ice-cream, and cake? And she's always chosen, no, it's okay, I'll take my food and I want to go have time with my friends.

[00:15:00] And we've had to change that too, the way we hang out with people too, with our friends. It can't be about the food and what everybody's bringing because that's always going to ... we're going to be not a whole lot of fun when it comes to that but, I say that but we ... there's some fun things that we still enjoy, but we've had to just change our perspective to be, it's about hanging out with people and not about what we're going to be eating.

Dr. Peter Osborne

Jonathan: What did the protocol look like each day?

Dr. Osborne:

[00:15:30] So I mean it was, simply put, it was dietary avoidance. So we wanted her out of grain, right. Not eating any gluten, not eating any grain. No corn, no rice, no wheat, no barley, no oat, no teff, no millet, no triticale, no quinoa, no pseudograins, no buckwheat, amaranth. So a lot of people, they think they're going gluten free and they're following kind of a wheat, barley, rye free diet, but they're not restrictive enough if they're truly gluten sensitive because a lot of these proteins in these other grains, either look or act just like gluten to people and trigger autoimmune disease. So you've got to get all those things out.

So it was a dramatic change in her diet from what she was used to. That diet change, that grain free, gluten free diet change is permanent for her. It's not, we're not going to do that until the symptoms go away and then start reintroducing that food again, we're going to keep it out for the rest of her life so...

Jonathan:

[00:16:00] If you have that friend, it's based on them loving and caring for you, not for who they think you are, or something that you're just putting forward like a mask that you're wearing, let me just pretend like I'm everyone else, right. But that's not you. So how is that person going to love you if you can't just be you and be, hey this is me, I can't actually eat that right now, I can't eat these things, and this is what I can eat, and this is me.

[00:16:30] And you'll find, and you've already found, people that, obviously your parents love and care about you, they don't try and force you to do something that's not good for your body, and nor would your good friends. They're not all your friends. Some people are going to be people you can keep close, and some people are going to be people that you can't keep so close, right. And those that you can, have right by your side, right because they protect you, and they care about you. And if you're going to go eat something bad for you, they'll say, hey, you shouldn't do that. Right? You've got good friends don't you?

Dr. Osborne:

[00:17:30] So the biggest challenge for her was the learning curve, and just getting through that, and figuring out what food she could eat, that she also enjoyed, and that her mom could make or cook for her, and had to navigate social situations in school. And those are where the biggest challenges come for a lot of these types of patients. But I mean, think about it Jonathan, you've got pain and you've got rashes all over your body, would you rather change your diet or live with those things? Right? And that's the decision that people get to make, that's the great thing about functional medicine. It's their choice, not mine. I just deliver the message, and then they get to figure out whether it's worth it for them to be pain free, to be rash free, but to change the way they eat. And I say change the way you eat, change the rest of your life.

Dr. Jay Davidson

Dr. Davidson:

[00:18:00] Okay, what might I react to, the top sensitivities, the top allergens? Nuts are up there, corn's up there, soy's up there, dairy's up there, wheat's up there. So easy thing is lets ... if you're struggling with health, and you're, I just, I'm not sure what I should eat, pull those out to start with and see how you do. I mean, that alone might immediately help you. But the key with diet is, let's avoid the process food. So there's a lot of arguments as to what the right diet is. I think changing it up, rotating the foods you're eating, the timing of when you're eating is key, but definitely avoid anything that's artificial, like artificial sweeteners, Splenda, aspartame is absolutely toxic. It will absolutely make your condition worse.

[00:19:00] I love to avoid sugar, especially in its artificial form like high-fructose corn syrup, which majority of samples when they tested them, about 40 to 60 percent of studies, when they were tested ... 40 to 60 percent of high-fructose corn syrup actually showed mercury in there. So we're getting, not only a bunch of sugar but we're also getting toxins like mercury in there, so minimizing sugar content. I do think minimizing grains can be helpful for many people because it does turn to sugar, it's like super sugars. Vegetables is usually a safe place to start. Meat, Paleo, Ketogenic is very popular if your body seems to do well with meat, can do that. I always like to stay away from pork though, if you do consume meat.

[00:19:30] And then look at your genetics and see, can you even handle red meat, lamb, beef, those type of things. So really looking at your blueprint can help dictate and guide what you should consume because there's genes for fats that say you should absolutely stay away from. This high saturated fat red meat, pork, lamb, it will increase the risk of Alzheimer's in the body.

[00:20:00] There's other genetics that we know that actually, if you consume all grains and vegetable, actually can put you at a higher risk of cardiovascular disease. That gene's called the ABCG8, and they like to term it the anti-vegetarian gene. So really I think it boils down to, what's your blueprint, where are you at, and what would be best? But easy places to start is, keep away from all process food, I would remove cow dairy if you do consume dairy, but in general, remove the top allergens, which dairy is in that category. Limit the sugar intake and that should give you a good foundation as far as foods.

Dr. Peter Osborne

[00:20:30] There are a lot of reasons why a person can develop autoimmune disease, but one of the reasons is because they just eat garbage. They eat foods that's bad for them. It tastes good. They get immediate benefit in terms of sugar. Sugar's a very addictive food. You get dopamine release when you eat sugar, but nobody will

ever argue that sugar is good for you unless you're talking about the sugar industry. They may argue that sugar is good for you, but sugar is bad for you and we all know that.

Kyle Holub

[00:21:00] Well so Dr. Oubre he talked about how by going on this holistic diet, rather than doing what the conventional doctors recommend, I can actually stop the problem by essentially limiting the amount of antibodies that are in my system because it's the antibodies that are triggering my thyroid to become overactive and dump a bunch of hormones in my system, which is causing the problem. By going gluten free and on this holistic diet, gluten free and dairy free, and being as Paleo as possible.

Dr. Jay Davidson

[00:22:00] The number one food I would recommend to stay away from is actually cow dairy. That one is a big issue. There was a book wrote called, The Devil's in the Milk, Keith Woodward or Woodford, I believe, wrote it. Basically through the research what he was finding was that there's the casein protein, which is in dairy. In cows, there's actually a mutation that happened so there's a beta casein protein. There's one called A1. Then there's one called A2. A1 is the mutated one that actually causes harm for us. A2 is actually fine. When you look at beta casein protein, goat, sheep, they don't have this mutation so they're only A2 beta casein protein, which is often times why people do fine with goat dairy versus cow dairy if they have sensitivities to cow dairy. But in the cow dairy what happened is the mutation happened years ago. When the mutation happened with the beta casein protein with this A1, those cows actually started making more milk.

[00:23:30] As a farmer you get paid per weight of milk and production. The farmers, without even realizing it, bred the cows so they basically all have A1 beta casein. Well, to swing it back in here, research shows that there's basically a by product or a chemical in there, BCM7. This is 23 times more reactive than gluten is in our body, this beta casein A1 protein. It's becoming more and more known that you can actually find A2 dairy, A2 milk, A2 cheese, from cow. Not as much quite yet but it's a safer bet, if you're going to consume dairy, to do more like the sheep and goat. I really think if you're struggling with autoimmune issues stay away from cow dairy because the chances of ... I mean, 99% of the cows out there have this A1 beta casein mutation. It's so much more reactive than even gluten. We know how much reaction can happen with gluten and autoimmunity.

Jonathan Otto

One key point is understanding the issue of leaky gut. Many health professionals are trying to say that it's not a true health concern, but if we really take the science and we study and we understand how the gut works and we understand what's really go on then all the puzzle pieces start to fit. We finally can understand why our bodies are attacking themselves. When doctors in the medical community are not actually understanding what's causing autoimmune conditions.

Dr. Daniel Nuzum

[00:25:00] Now that we've covered that what do we do about this? Okay, how do we correct this? Doc, what can I do, right. Okay, the fastest and most effective things that I've found in autoimmune disorders. Number one, digestive enzymes and not just a little bit of digestive enzymes. You gotta take a significant amount of digestive enzymes. Now, what does this do? One, it digests the food that you're consuming, okay, into the smallest particles possible. Instead of a particle the size of my fist floating through the gut wall ... If this is the gut wall, I got a particle this big coming through the gut wall. This is going to cause massive inflammatory response from my immune system, right. If I had this tiny little particle float through, that's not going to be so bad. Okay, the immune system

can actually do something with that. It can work with that. These big particles floating through it can't work with that, okay. That hasn't been broken down enough for the immune system, or the body, to actually use. It's treated as if it was a toxin, okay.

[00:26:30] Digestive enzymes breakdown the food into very, very, small particles. That helps. It's doesn't fix the problem, but it helps reduce the inflammatory response. If we can change diet where at least we just have a rotation diet, where we have more variety. We're not eating the same thing every day, day in day out, okay. Number one with the diet if we can change the diet so we're rotating. We're always eating something different every meal, okay. That's one. Digestive enzymes, adding digestive enzymes into the routine. That's number two. Very, very, helpful. Number three, we have to seal that leaky gut. We got to reduce the inflammation in the gut itself. At [drnewsome.com] I have an inflammation protocol. It works very well. There's another product that we've developed called, Black Brew. That is extremely good for sealing or ... Has an astringent action, okay. An astringent tightens up the tissue, okay. This has an astringent action on the gut. Very, very, helpful for sealing up that leaky gut.

[00:27:30] The next thing is probiotics. We go rotation diet, enzyme therapy, natural herbal anti inflammatories, right, to reduce inflammation, and then probiotics, okay. You can not heal a gut without probiotics. You have to have those probiotics. Without probiotics you'll just spin your wheels, okay. You'll spend lots of money, lots of time, lots of effort, and stay in the same situation. It's the probiotics that get into the gut and actually fix it and keep it fixed, okay. If we don't recolonize the gut wall with the proper microbes the gut wall will always stay irritated, okay. You'll reduce inflammation and it'll get irritated again. All right, so it just becomes a cycle.

Sharon Porter

Jonathan:

[00:28:00] Then how do we fix leaky gut?

Sharon:

[00:29:00] Well, two things. Remove the stressors that are causing the inflammation and bring in some healing agents, okay. What are the stressors? Again, back to that tube of the digestive tract and the lining, the single cell thick lining, on the inside of it. When we consume foods and beverages that are inflammatory than that single cell lining starts to break down. Inflammation will break that down and now you have the holes that particles move through. Some of the inflammatory stressor are obvious, right. We know that alcohol consumption for example, can weaken the lining of the gut. Packaged, processed, foods definitely. These are foreign substances that the body doesn't know what to do with, right. Inflammation is part of an immune response.

[00:30:00] We eat a foreign substance and our body, in particular, the gut lining says, that looks unnatural to me. That's a foreign substance. I am going to reject this the best I can, mounts inflammation. Returning to a whole foods diet, moving away from processed, packaged foods, and particularly if one can start producing some of their own food and medicine at home so that, that food has the highest nutritional quality and the least amount of toxicity, right, then you'll be removing a lot of the stressors that can cause the leaky gut condition. What if someone chooses a diet that's more of the plant-based vegetarian direction?

[00:30:30] Then some of the best healing ingredients are aloe vera and chlorophyll. So, you can buy liquid aloe vera at a natural health food store or you can grow your own aloe vera and juice the pulp of your aloe vera plants and drink it. About a quarter of a cup, couple of two or three times a day. It's very much like how we use aloe vera on our skin when we have a sunburn, or a cut. It's the same type of tissue on our skin outside as it is on the interior lining. So, aloe vera and liquid chlorophyll, this will stimulate the regrowth of those cells. Those are my two top recommendations.

[00:31:30] I would say the best way to manage and minimize an immune attack on thyroid gland, is to manage your overall immune health. That would be the same as any other type of autoimmune condition. So, minimizing the stressors to your gut. Packaged processed foods, sugar, alcohol, stress, right? When we are under stress, our adrenal glands are pumping out excess cortisol, if they still can, and that cortisol weakens the immunity, the SIGA, in the lining of the gut. So, there's a very well-known connection between stress and weakening the lining of the gut.

[00:32:00] So, how do we really reduce stress in our crazy lives these days? It's making a commitment to get to sleep on time, right? It's making a commitment to go for walks and spend more time out in nature, right? It's making a commitment to eat whole foods instead of packaged processed foods. These are biochemical stressors in the body, right? Mindfulness, meditation, practicing loving kindness in our relationships with others. All of these things will help us manage stress. And for anyone who's managing an autoimmune condition, they really need to be employing every kind of stress management that they can.

Jonathan Otto

[00:32:30] One of the keys to good health is real commitment. If you don't have the commitment to stick with what you're learning, then it can only benefit you as far as you're willing to go with it. So, when you're looking at this information, don't just let it pass you by, really consider making a life change. Decide to make the commitment to follow through. And when you see those changes in your life, it's going to feel worth it.

Dr. Jay Davidson

[00:33:00] Diet perspective. We can look at it a couple different ways and I don't believe there's one perfect diet for everybody. And we're understanding this from a science side more and more. Just looking at genetics, carbs, and types of fat, and protein and the amounts that each of us can handle, and what seems to be the best, but looking at dietary across the board, I think it's good for everybody to stay away from pork, or pork products. Also, the bottom dwellers, as well too.

[00:33:30] That's Biblically referenced, as well. That's Leviticus 11:7. And it's all related to toxicity. That these animals don't sweat. They don't really chew their food well. They don't digest well and if we consume them, we're gonna be bombarded with toxins. And even modern science back this up and really show that, "Yep, yep. Pigs really, even in a clean environment, still are definitely dirty, toxic animals."

[00:34:00] And the bottom dwellers, the whole fish and scales thing, which you can read it in Leviticus. But the whole idea of bottom dwellers is that they are the ocean cleaners. So, whatever toxins are in the ocean, these creatures or animals are cleaning that, if we consume them, then we're getting that bombardment. So, I really believe staying away from that type of food is important, personally.

[00:34:30] And then, also too, food wise. So, we've got foods that we eat or stay away from. And then we've also got foods timing, when we eat. So, okay, let's say we have ... Let's use calories, for example. You have 2000 calories that you consume every day. Instead of consuming them from six a.m. to eight p.m., we can literally change that window of when you eat. So, you're eating the same amount of food, but in a smaller window. And that ... Popularize, now is the intermittent fasting word for that.

[00:35:00] What that means is, basically, you're eating within maybe a six to eight hour window. And then the other, roughly, 16,18 hours, you're not eating and that's allowing your gut to heal. That's allowing your intestinal tract to heal. And fasting was something my wife was ... Through her crisis, when the bottom fell out, it was something that literally, her body forced her to do. So, there's intermittent fasting.

There's also block fasting. That's what my wife really did, is more of like a block fasting, like 17 days water and bone broth. She dropped all of her baby weight super fast. And not recommended, it was just the crisis she was going through and that's what she had to do. But block fasting is where you're taking a few days and you're doing water fasting. You always want to monitor electrolytes. And make sure you're getting enough electrolytes in with water.

[00:35:30] But, fasting can be really important. And also, the foods. And then, another topic that's super important in the food diet side, is making sure to not consume GMO's, genetically modified organisms. So, really eating non-GMO's.

Dr. Eric Zielinski

[00:36:00] You need to be empowered. And we need to realize that there are things we can do. And what is that? You need to eat organic as much as possible. You need to eat GMO free, non-genetically modified foods. You need to, as much as you can, make your own health care products, and cleaning products, specifically. And if you don't have the time, I get it. There are trusted resources that you can find that sell good stuff.

Jonathan Otto

There's a whole plethora of pharmaceutical goodies that often come with an autoimmune diagnosis. Rather than let western medicine tell you that you have to go on steroids, or autoimmune drugs for the rest of your life, take matters into your own hands and include supplements in your autoimmune reversal regime.

Dr. Peter Osborne

[00:36:30] So, we have chemicals and we have foods. Then we have what food provides, which is nutrients, right? Vitamins, minerals, immunoacids, proteins, right? Going back to what I said earlier about selenium. Selenium deficiency can trigger an autoimmune thyroid condition. Vitamin D deficiency has been very well studied to be causative. Meaning, Vitamin D deficiency can cause, listen to this if you have rheumatoid arthritis, can cause rheumatoid arthritis.

[00:37:00] Now, how many of you listening to this program, are seeing a rheumatologist and you've never even had your Vitamin D levels checked? Right? One of the very first things that you should demand. One of the very first things that you should do. And if your doctor won't run the test, get with an independent lab that will run it for you. And there are lots of those out there that will do it for you, without a doctor's order. But it's critical, right? Vitamin D.

Rachel & Celia Karnuth

Rachel: She takes a lot of supplements, which have decreased a lot over the year. But we started off with...

Celia: Twenty-five.

Rachel: Twenty-five pills a day, she had to take.

Celia: Vitamin and mineral supplementation.

Dr. Osborne:

[00:37:30] So, for her, part of her diet, was cleaning that up. For her part of it, we did some supplementation. She was deficient in Vitamin B2 and some other B vitamins that we had to clean up. B vitamin deficiencies can cause

skin rashes, right? So, we wanted to put her on these B vitamins because she was deficient in them and that was part of her plan, that was part of her protocol.

[00:38:00] The other part of her protocol, was as the pain subsided was to get her back to function, was to get her back to gymnastics, was to get her back to activity. And to be able to get her back to being a little girl again, right? Living life again, as opposed to being crippled with pain and crippled with a rash that ... Other kids are cruel. They look at your rash, they make fun of you. So, again, in her case, it only took four or five months to really get that down. But it's a lifelong change for her.

Rachel:

[00:39:00] She still takes lots of supplements to help with her vitamin and mineral deficiencies that I can't explain really well, but he explains amazingly. And how they relate to joints and all that stuff. And then, she takes stuff to help with inflammation, like fish oil and different things like that, that help with that. If she ate vegetables a little bit more, maybe you might not have to take as many. But she's working hard at it. So, she started out like, "A little pill, I can't do that. I can't swallow it." And now, we're laughing, she's like, "Oh, those are so small. Those are so easy." Right? And now she only takes nine a day instead of the 25 she started on.

David "Avocado" Wolfe

[00:39:30] I think autoimmune conditions for sure, salt deficiency plays a massive role. Now, when I say salt deficiency, I'm not talking about some iodized kiln-dried salt. I'm talking about the real salt that nature prepares for us, which is like sea salt. Sea salt and water, which is wet periods hydration, that is very important for autoimmune conditions. It's essential. So, I have a sneaking suspicion is that, what I've noticed about autoimmune conditions in myself, for sure, shut off immediately so that they start drinking salt water. When somebody has similar things to my allergies, like my asthma, salt water works. I've seen it over and over again.

[00:40:00] So, then I started looking at things like, "Oh, maybe, Lupus. Maybe it's salt water." Or, gut problems, right? Where somebody gets an IBS flare up that keeps ... "Oh, it's an autoimmune condition." What do you do there? Maybe they're deficient in salt in their gut, which is what Dr. Norman Walker, the great raw foodist said all those years ago.

Jonathan Otto

The goal in healing or reversing autoimmunity is to find the root cause of the inflammation and put out the inflammatory fire. Putting the autoimmune fire out is a multifaceted process through many lifestyle changes. A supporting factor in extinguishing inflammation from autoimmunity can be the use of essential oils.

Dr. Jay Davidson

[00:41:00] Jonathan, one of my favorite essential oils is frankincense. I love that oil and it seems to work really well with brain drainage. So for somebody that's suffering with brain fog, memory issues like you know you just can't think clearly or remember things and just more like the brain inflammation, frankincense is an amazing oil. One of my favorite things to do is you can just take a drop of frankincense and then essentially all you're going to do is smear it from one temple, across the forehead to the other temple. You can also mix it if you wanted to, you could mix it with a carrier oil. And all that means is you're just mixing, you're putting like a little bit of olive oil or jojoba looks like jojoba oil, or coconut oil, or like a MCT oil or fractionated coconut oil with a drop of frankincense or you could just put the drop on, smear it from the temple across and then you'll have some on your hands you can kind of rub it on the sides of your neck and even the base of the skull.

[00:41:30] What I found with frankincense oil clinically is if you feel just like pressure or headache, you know memory stuff, that usually improves just from frankincense oil. I believe clinically it's because it opens up this pathway from the brain to the lymph to clear toxins out. Here's an easy way I think of this, Jonathan. When you're awake during the day your brain basically is inflaming. There's fluids that are being added, there's these cells in our brain called glial cells. So they become inflamed and there's a bunch of fluid in there.

[00:42:30] When you sleep that's when those cells actually drain. So this is where the term glymphatic, if you've heard of the glymphatic system, comes in where it's basically the glial cells draining at night. So for somebody that doesn't sleep enough, they're going to have inflammation in the brain because there wasn't proper time for the brain drainage to happen. So frankincense is a way, frankincense essential oil, is a way to actually open that pathway up and help the drainage. There's some other things with brain drainage as well too like just getting enough sleep. You can always prop your bed up actually just a few degrees so your head's actually a little bit higher than your feet and that actually kind of promotes brain drainage as well. Again, focus on lymph and the liver bile duct too, but frankincense I really love that as an essential oil.

Dr. Sruti Lam

[00:43:30] So I will explain what tinctures are. The tinctures that I use are herbal tinctures, they're straight up herbs they're not essential oils. So essential oils are, say I use lemongrass, very common essential oil, you're going to like break the lemongrass into tiny particles and then compress it to make one drop of oil. That is essential oil, it's a highly concentrated part of the substance lemongrass. A tincture, an herbal tincture of lemongrass, also called *Melissa officinalis*, is broken down in the same way but it's not put in an oil base, it's put now in an alcohol base. So it's still, or a glyceride base for a child. So it's still a broken down plant but now it's not as concentrated as an essential oil is. So yes, I use tinctures, so that is my herbal remedy. So instead of giving straight up plants where I have to give large quantities to attain the same amount of effect, I would give it to you in a tincture form or I can break down that plant and give it to you in a capsule form, depending on how you would ingest it.

Dr. Eric Zielinski

[0:44:30] My goal and my purpose is to help people use natural therapies like essential oils to really get down to the basics and do it yourself. Now I get it, I get it, I get it. I have four children, I'm married, I'm busier than I care to admit, we're not going to make very single home and body care product. We're not going to make all of our cleaners, there is balance yet the purpose is to minimize those chemicals that we know are bad. I mean there are so many of them and about focusing on creating products at home that you really can pronounce the ingredients. You know basic essential oil based DIY recipes are absolutely key, that you know for sure that you're doing your best. And airborne pathogens, there are so many different things that we need to consider.

Dr. Jay Davidson

[00:45:00] So there's essential oils and you'll get some disagreement out there of you know should we actually ingest oils or not, I think if it's good quality I think there's no issues with ingesting essential oils at all. But I've seen you know when you're taking essential oils you can actually do essential oils internally even for parasites and other basically bacterial disturbances and microbiome disturbances. That tends to help too, autoimmunity, so yeah I can definitely see that but again as soon as you say autoimmune, I'm like gut. You've got to work on the gut to some degree, somehow you got to focus on it and even if it's just rubbing an essential oil topically over your stomach because you've got a stomach ache or like massaging to try to get peristalsis moving. I mean there's so many different methods you could use.

Ariel Dochstader Miller

Jonathan: And what about essential oils do you ever use essential oils?

Ariel Dochstader Miller:

[00:45:30] I do use essential oils, I love them.

Jonathan: Okay can you tell me about them? Why do you use them and what situations, what for?

Ariel:

[00:46:00] I have a really really defined sense of smell, it's by far my strongest sense and so I love love love essential oils because I love the smells. So I use essential oils, I take a lot of baths. I use them in my baths. I actually had a young person I know give me a bracelet with beads that you put essential oils, they're real porous and so they absorb the oils so you can smell them all day long. I think it's a real de-stressor. When I'm not feeling well, I've always had peppermint oil beside my bed because when I'm not feeling well I'll take a peppermint oil and put it on a cloth and put it on my chest and that helps me not throw up.

Dr. Neil Nedley

Jonathan: Do you think there's a use for essential oils in psychiatry?

Dr. Neil Nedley:

[00:47:30] There is, there's one in particular that's had a lot of studies done. It's a oil that comes from lavender, it's called Silexan 80 and there's multiple lavender oils but the Silexan 80 has been extracted and purified. It's been shown to be an antidepressant as well as anti-anxiety relieving without frontal lobe suppression. In fact, it seems to enhance the frontal lobe. For instance, in people that have test anxiety, they'll take this lavender oil preparation, it's called Lavela or Silexan 80, and they will actually do better on the test. Their anxiety will be better and they'll actually do better. So cognitively they'll perform better than if they had the test anxiety without the lavender onboard. And so there are things like that that we study. We've actually published studies on it our self, several of them and also helps people get off of benzodiazepines, these are your Valiums and the Restorils and the Xanax's and those sorts of things that are so prevalently used that are used for anxiety but suppress the frontal lobe and are going to cause more problems down the road.

Jonathan: Have you seen any people individually that have used lavender oil and they've got results like this?

Dr. Nedley:

[00:48:30] Oh absolutely. Well we had a case in our last program that she was on Xanax for a while and then changed over to Valium in preparation for the program because that's a little easier to get off of. And she had been on this drug for years. When she came to the program we took her off it wisely through a weaning method and then replaced it with lavender oil and she was able to successfully get off benzos where previous to that she thought it was impossible for her to be able to get off it even though she knew she was having bad effects from it. She thought she would have to be on this drug for the rest of her life and her doctor thought that too. But now she's completely benzodiazepine-free and part of the solution, it wasn't just the lavender oil, but it was the physical exercise and the light and also the spiritual program that was very helpful for her to be able to get off that. But we actually did studies on, and it's one of our published studies, comparing in our own program those who were put on lavender oil versus those that we didn't in getting off of benzos and we found that the ones with the lavender oil did better. So we know it's having an effect.

Jonathan:

[00:49:00] Wow, lavender oil. So now what does that lead you to believe in regards to other essential oils and their potential help?

Dr. Nedley:

[00:49:30] Oh yes, well I mean there are ... you know I mean the classic essential oils that are essential are your omega 3 oils and when you get down to essential there's only two absolutely essential oils and that's omega 6 and omega 3. And omega 6 are essential but they're, I mean they're abundant in our food supply, omega 3's not as much. But the omega 3 oils help with focus, concentration, they help with mood, they help prevent mania spells, they help prevent depression. And the various forms, you know there's several, there's three main forms of omega 3 but they all can have their positive effect.

Jonathan: And where can somebody get omega 3 oil?

Dr. Nedley:

[00:50:00] Where it comes from is from, I mean some of the omega 3's only come from the plants of the waters. Our body can make those oils from land plants like flaxseed or spinach but we can get those oils directly from eating fish, which has it's risk now because of the toxins that are present in fish or get it from where the fish get it from and that's the plants of the waters. There are preparations called Opti 3 that have DHA and EPA in them that are far safer than any fish oil on the planet and have some very positive effect in mental health. We utilize those quite a bit as well.

Jonathan: Yeah, wow. For instance, people are using it for different things. Some people are using it in part of their regimen for cancer. That's just a part of it, not everything but a part of it.

Dr. Nedley: It can be used for certain gastrointestinal disorders. We utilize it ourselves.

Jonathan: Frankincense? Excellent.

Dr. Nedley: Yeah.

Jonathan: Do you see results with...

Dr. Nedley:

[00:51:30] Yeah, yeah, absolutely. I had a patient just today that I was seeing with significant nausea, vomiting, abdominal pain issues, couldn't, he'd been to many doctors and had all these scope tests and couldn't figure out what was going on. We did a comprehensive analysis and one of the first things I put him on was frankincense. This was a young man who to tolerate his condition, was having to utilize marijuana every day, multiple times a day and he said after he started the frankincense, the form that we were using was called Betaine HCL but after he started utilizing that he noticed that he was so much better that he was able to go days now without marijuana and be fine, where prior to that he couldn't tolerate life or the nausea without it.

Jonathan: How did he ingest the oils?

Dr. Nedley: It was in a capsule.

Jonathan:

[00:52:00] Capsule, cool. Carrier oil with it, like olive oil, something like that?

Dr. Nedley: Um hmm. Yeah, you can take it, I mean, you get a little better absorption when you do it with food, so at the end of a meal or something like that.

Jonathan Otto

You want to be conscious that you're not further inflaming or boosting the immune function, since some essential oils are immunostimulants. You don't want to double your body's effort in attacking itself. You may want to consider leaving out palmarosa or rosalina essential oils out of your stash.

Dr. Eric Zielinski

[00:53:00] When we look at one of the underlying ubiquitous causes of autoimmune conditions is inflammation. I know of no other natural solution that could target inflammation, not only at the cellular level but at the emotional and spiritual level. You know, essential oils have a direct ability to primarily affect the lymphatic system, which is our primal brain, your mood, your emotions, your remembrance. Studies have shown that diffusing, just simple diffusing citrus oils like lime, lemon, bergamot and others like orange have created positive work/life balance for nurses specifically, who have arguably one of the most stressful, under-appreciated jobs on the planet.

[00:53:30] They found just by diffusing essential oils on the nurse station that they reported being happier at work, less stressed, less anxiety and overall their life became better. What else can do that? I mean, it's a couple scents, you put a couple drops on and that right there can stop the toxic thoughts. That could stop the inflammatory response that we have shown and we know is a direct correlation to the sympathetic reaction, this fight or flight overstressed reaction that people get. Why? Because we're chronically stressed as a people.

[00:54:00] We're chronically stressed, we wake up in the morning, we're worried about our job. We get in the car, we're stuck in traffic and that causes stress. We go to work, many people hate their job. Stress, stress, stress. You go home and chances are you're having marital problems because divorce rates are through the roof and time after time after time after time things happen and we're just chronically stressed. This puts our body in a position that when you see that bear, for example, you're designed by God to see that bear and have what's known as that fight or flight response that shunts energy and blood to the right places that you could quickly move and you could quickly get out of Dodge real fast.

[00:54:30] Where that's not the place that you want to be all the time because that will cause oxidative stress, which has been linked to heart disease, which has been linked to autoimmune conditions and it will drain you. What we need to do is, we need to calm and we need to get ourselves into what's the opposite, is known as the parasympathetic response which is the rest and digest. How many people eat and they're stressed while they're eating or they're eating in their car, getting fast food because they've only got 15, 20, 30 minutes between driving from work?

[00:55:00] That's not where we want to eat our food, that's not how we want to digest. Using essential oils to calm stress, to improve mood, to balance your life and also essential oils have a direct effect on inflammation, actually proven to decrease salivary cortisol levels, which are a direct marker of stress throughout the body, which is the hormone that the adrenals produce when we're stressed. A lot of people that have adrenal fatigue are just burnt out adrenals because they're producing so much cortisol because they're chronically stressed.

[00:56:00] They find that simply applying a topical application of essential oils like bergamot, like lavender and many others like ylang-ylang, which is a fantastic oil for harmonizing the body and creating peace. Just simply applying those oils diluted with a carrier oil over your adrenals has been shown in a lot of folks that I've worked said, it saved my life, it helped me. People with autoimmune conditions, their hair is falling out, they're chronically

stressed, they have so many food sensitivities they don't know what to do. Just approaching the root causes, which are stress, which are inflammation, so you could do that.

[00:56:30] Another approach are the anti-inflammatory oils, your peppermints, your eucalyptus, your rosemary, your sweet orange again. You're going to hear orange and citrus a lot going back and forth because these oils are highly versatile. These oils have a direct response or can help your body dramatically decrease inflammation as a whole. There's so many different ways that you could use essential oils, there's a topical, an internal and inhalation benefit that you could get, yet I want to caution people, just not to go willy nilly.

You really need to understand, you don't need to be trained in aromatherapy but you need to understand the basics and you need to find an essential oil educator that you could trust, that you could go and learn from because as they could do benefit, they could also do harm.

Dr. Phillip Day

[00:57:30] Well anybody even reading the newspapers knows there's a huge war going on right now over the ethics and also the scientific use of cannabis oil or it's legal variant, CBD hemp oil and there have been tremendous, tremendous results as a result of using this. We also see that if people are suffering from previously intractable problems, for instance Parkinson's, Alzheimer's, a lot of the brain tumors have responded very well to this. Science has found out that each of us have what's known as an endocannabinoid system, which is essentially a dashboard for the immune system and the endocannabinoid system, or ECS, can be recalibrated using terpenoid and cannabinoid oils.

[00:58:00] This has excited a lot of people in medicine and a lot of patients who are now traveling to areas where they can get this type of treatment, sadly not in all countries. There's a big push now to get this done because, by the way, the social use of cannabis aside is not something I would really continence, I saw enough in my youth to see just how problematic that can become but medical applications are absolutely phenomenal. This needs to be brought in straight away.

Dr. Jay Davidson

[00:58:30] Second thing is really focusing on drainage and parasites. Drainage, I believe, is a great word and I love to distinguish the difference between drainage and detox. Drainage, I think about it's the normal pathways to clear things out. Detox is really focusing on it's pulling chemicals out of the body, so you're removing radiation, heavy metals, glyphosate, pesticides, herbicides, like you're literally pulling the chemicals out. That's a detox in my mind. Drainage is really focusing on the pathways, so the colon's a drainage pathway.

[00:59:00] If you're constipated, that's a drainage pathway that's blocked up. The kidneys are drainers, the skin, if you don't sweat. My wife didn't sweat for years. We thought it was such a blessing, she didn't need to use deodorant, not realizing that's a drainage pathway clogged up and toxicity buildup is going to continue to ensue. You've got lymphatic also is the drainage. The brain draining into the lymph, what they call the lymphatic into the lymph and then probably the biggest one is the liver bile duct.

[00:59:30] Some people call liver/gallbladder area, some people don't have the gallbladder but liver bile duct as far as the key, when you look at the anatomy of the liver, the liver processes toxins two phases. Phase one, phase two and then there's this thing called phase three and it's how does the body or how does the liver get rid of the toxin. Most of those toxins actually end up in the bile. They actually end up getting dumped in the bile. Liver detoxifies, the liver actually produces bile, the bile is used for two things, for excretory mode of clearing toxins out but it's also used in digestion. It will neutralize stomach acid. It will also help to emulsify fat.

Dr. Stephanie Daniel

Dr. Daniel:

[01:00:00] We can get rid of them by first reducing your exposure. If you can slow the amount of accumulation, you have better opportunity to support your system in getting to a healthier baseline that is able to clear a lot of those toxins. You can add certain foods that help with detoxification. You can work with supplements. Another major way of getting toxins out of the body is through sweating, whether that's through exercise or sauna, like heat therapy. You can make sure that your digestion stays very efficient. That's another major escape route, for toxins, through elimination and if you have digestive issues and things aren't working as well as they could then you get toxins accumulating because they don't have a way out. I could go into specifics but there's a lot.

Jonathan: That's great and I'd love to have you even answer what I could do in my own house that's super basic and easy. One's that ... Chances are, my body's designed to do it and it does it naturally but I might not be doing it because I'm not drinking enough water or certain little things that I could do today and I could see an improvement. What would they be?

Dr. Daniel:

[01:02:00] I think probably the lowest hanging fruit is just reducing your exposure. Put a filter on your water source to get rid of some of the major compounds that are toxic, things like fluoride for example. The other things are clearing out your household products and changing them out for more natural products. There was an article that I posted this past week from a major news source that confirmed that laundry detergents had carcinogens in them with all the fragrances and the over fragrancing of our lives with febreze and glade plug ins and all this deodorizing stuff that is really toxic. I think probably more than anything, the biggest impact would be from just greening your home and greening your life and making choices that reduce the impact, allow your body to catch up to what it is designed to do naturally.

Dr. Daniel Nuzum

[01:04:00] There's more that would need to be done. There's detoxification that has to happen. As long as there's accumulated waste in your body, that waste is a pro inflammatory substance and anybody with an autoimmune disorder can not afford to have inflammation in their body. They have to remove inflammation. Here's another example, inflammation in a body of someone who's dealing with an autoimmune disorder is kind of like having a fishbowl that hasn't been cleaned in weeks. You might not be able to see the fish in the fishbowl, well that's kind of your immune system can't see the toxin or the pathogen or the microbe that it's trying to get to, the virus that it maybe needs to get out of your body. If the water in your body is toxic like a fishbowl that hasn't been cleaned for weeks, the immune system's going to have a hard time finding that fish. The fish is the toxic, the fish is the virus or whatever's causing the irritation in your system right. If we don't clean the water or detoxify the fishbowl our immune system's going to continue to have this problem.

[01:05:30] We do our rotation diet. Digestive enzymes, natural anti inflammatories and probiotics to stabilize the system and then once the person gets to where they're feeling pretty decent, we need to move on to detoxification. As they then detoxify and that fishbowl gets cleaned up, we clean all that water, the immune system can actually start to function better and do what it's supposed to do. Not do what it is doing but do what it is supposed to do. That takes time. By the time an immune system has become dysfunctional to the point that someone's dealing with an autoimmune disorder, there's retraining that has to happen. The immune system has to be retrained. This is what I'm talking about. This protocol here by rotating the diet, eating something different every time you eat, never eating the same thing twice ... The rotation diet. That's paramount. Then enhancing digestion with digestive enzymes. They get those digestive enzymes in there to break things down properly.

Reducing inflammation with natural anti inflammatories. Alkalinizing the gut with proper microbes and then detoxification. These are the things that will retrain an immune system so that it actually operates properly.

Dr. Jay Davidson

[01:06:00] There's actually a lot of great products in things out there, natural that can really change lives and help people. In the parasite category, there's something called Mimosa Pudica. You want to specifically find Mimosa Pudica. You want to find that specifically from the seed. That's actually the fat soluble portion of it seems to work way better. The other portion is not fat soluble so it doesn't get into our cells. Fat soluble by nature is just different from Liposome. Liposome is your casein and fat for absorption to get into the body but actually like a fat soluble like Mimosa Pudica, that's actually how I got a couple 20 inch round worms out, was literally Mimosa Pudica. That was key.

[01:06:30] There's other natural things like Neem, Clove. Clove is pretty well known. There's something, especially Ayurvedic medicine, Vidanga, that works amazing for parasites. Coffee enemas too actually help to purge through some veins in our rectum area. It's called the hemorrhoidal veins or the hemorrhoids people have heard of and that goes right to the hepatic portal vein. All you've got to know is that when you put coffee about six inches into the rectum area, let that absorb, it goes right to the liver.

[01:07:30] There's a couple things that happen when you do a coffee enema. It actually increases glutathione, which is a detoxer for the body. The main thing that I really love coffee enema's for, especially in the drainage phase and especially when you're working on parasites is it causes and increased bio production and it causes a purging. When that bio gets thick and sludgy and the stuff's not moving, coffee enema's actually help to move that flow or push that out. Parasites love the liver bile duct, they love to clog it up and bugs in general, you want to think of this across the board, that bugs and pathogens in general love to cause stagnation. Stagnation of the fluids. Cardiovascular, the lymph. The lymph is two times more fluid than the cardiovascular system so the lymph is huge. The liver bile duct system. They love to clog this up because it gives them an environment that they can thrive in and when things are moving, that's an environment our body can thrive in, not these bugs. Coffee enemas help to really move that along.

[01:09:00] There's also really some great natural products for drainage as well. Milk thistle, that one is awesome to help open up the liver bile duct system just to get things open and flowing. You want to think movement is key. Motion is life. Another one is dandelion root. That one helps with bio production. Also it actually helps clear the kidneys too. A couple different drainers. There's something called TUDCA in our body, the fancy name is *taurochenodeoxycholic acid*. We'll just know it as TUDCA. T-U-D-C-A. TUDCA, our body actually manufactures a little bit of this but you can get it extracted from plants and vegetables and take it and it's this water soluble bio acid. I've seen the most amazing testimonies of people taking this where their liver bile duct is just clogged up. Literally all you do is take up to one capsule with a meal up to twice a day. If you have two main meals in a day or if you have three main meals, just pick two of them, whether it's lunch or dinner, take a capsule of TUDCA with the meal and it helps to move the bile duct.

[01:10:00] I've had people with heart palpitations and arrhythmias and within a month disappeared. Other people they got so much drainage down the back of their throat, they felt like they were going to throw up and that really relates to the fact that you move the liver bile duct, now the lymph has been able to clear, now the lymphatic in the lymph has been able to clear. It's opening that whole pathway up. TUDCA, I've definitely seen some great things from it. There's an enzyme DPP roman numeral four or dipeptidase four it's called. It's definitely gaining more popularity in the last few years because it helps with gluten and can even help with casein as far as breaking that down. This enzyme specifically, actually helps to squeeze the liver. It really helps to again, create movement. You want to think that motion is life. We want to get movement in there. Carbons and charcoals, clays are really good as well too to

bind on to the bile. And now there's even better things that are available like a bio-active carbon that actually goes systemic through the body besides just with the liver bile ducts.

Dr. Daniel Nuzum

[01:11:30] That's one of the things that I've seen over the years that's been very helpful for people with Alzheimer's is we start to do heavy metal detoxing. We do detoxing in general, heavy metal detoxing where we're doing things that are going to pull those heavy metals out of the system, while at the same time giving them nutrients. The body can't heal itself effectively if it doesn't have the raw materials to rebuild itself. If you remove toxins and don't replace them with nutrients, all you have is a hole. You take the toxin out well, there's a place for things to get stuck into again. If you don't fill that with nutrients, all you have to do is get exposed to the toxins again and they go right back where they were originally. Trying to make these concepts really simple here. Heavy metal exposure, heavy metal toxicity is, in my opinion, one key component to the development of Alzheimer's.

[01:12:30] There's another issue that we have in our environment, in particularly in the United States, and that's glyphosate. Glyphosate is the herbicide in the product Roundup made by Monsanto. Glyphosate will cause neurologic disorders. It kills brain cells. Glyphosate also will bond to heavy metals in your system and move them around in your system, depositing them wherever it goes. Glyphosate's a very, very small molecule and can pass the blood-brain barrier so if it passes the blood-brain barrier, well, it's carrying aluminum and fluoride at the same time. It takes those neurotoxins right into the brain, deposits them, causes death of the neurons. You get brain damage from it so glyphosate's another contributing factor. I believe, it plays a pretty big role in the explosion of cases of Alzheimer's that we're seeing today. We're seeing lots of people with Alzheimer's and at younger and younger ages.

[01:13:30] In the process of healing this condition, we got different things that work very, very well at both detoxifying the brain in the nervous system and introducing nutrition to the nervous system. There are herbs. One of the very best and this might come to surprise to many is green coffee bean extract. The chemical chlorogenic acid that occurs in green coffee beans is excellent for both protecting brain cells from the depositing of this amyloid protein, number one.

[01:14:00] Number two, it acts as an antioxidant, protecting the brain cells, the neurons in the brain. It also helps with the third factor that we're going to talk about here with Alzheimer's and that is it improves insulin sensitivity so it helps with the metabolism of sugar. We'll get to that in just a minute.

[01:15:00] We also have rhodiola. Rhodiola is a herb from Russia that is extremely beneficial for the brain, for memory and for folks with Alzheimer's. Ashwagandha, an herb from India, that also is excellent for the brain. Both of these again, they're not only good for enhancing memory, but they're good for protecting the brain so if you were to start on these earlier on in life, they would be good preventatives for Alzheimer's or for neurologic disorders. They're also very beneficial in the treatment of neurologic conditions, including Alzheimer's.

[01:16:00] Another herb, ginkgo biloba is very, very good. Ginkgo biloba is both an antioxidant and it helps the microvascular circulation in the brain. There's an old saying in medicine. It's a tenet of medicine and that is that "healing is proportionate to blood flow." Ginkgo biloba is one of those herbs. Also, rhodiola falls in this category also, that increase microvascular circulation and that microvascular circulation improves the blood flow in the brain so if we improve that blood flow, the blood flows better, we get more nutrients flowing into the tissue and more toxins flowing out of the tissue, which is extremely important.

Dr. Jay Davidson

[01:16:30] All these things are so interrelated. Lyme and other pathogens, they can hide inside parasites, which I mentioned, but they also can hide behind biofilm. In biofilm, think of it as ... It's like slime or a snot layer so if you've got all different pathogens. You've got the spiral shaped bacteria. You've got the cyst form. You've got the intracellular form and you've got other bugs and fungus and viruses in this colony. This colony, often times, they'll be a biofilm. It's like a blanket or a layer over top of it and this blanket basically is a way that it can protect itself from the immune system.

[01:17:30] Biofilm, when you look at the ingredients, there's a bunch of minerals in it, natural ones like calcium, magnesium, copper, iron, but there's actually a couple heavy metals that can be part of the ingredients of biofilms and biofilms can be in different locations and different material, but mercury and lead have actually been shown to be ingredients in biofilm so if somebody has heavy metal toxicity, one of the reasons that can hold 'em back from getting well of pathogen issues is that there's biofilm protecting. There's heavy metals that are actually part of this biofilm so detoxifying can actually help basically peel that blanket or that layer off so then allow the body immune system to actually get to it.

[01:18:00] Take a bite of something that's got fat in it, you start eating. The body's going to secrete stomach acid. The food's going to go in the stomach acid, start getting dissolved. The body's then going to release once it gets digested enough, predigested enough. It's going to release it in the small intestine, into the bile that actually neutralizes the stomach acid. Otherwise, the stomach acid will literally just eat holes right in the small intestine so what happens is through like toxicity and even through parasites, this bile duct can get clogged up, can get sludgy and when it gets sludgy, then we're not getting enough bile to actually neutralize the stomach acid. Then the body says, "Wait a minute. Hey, there's too much stomach acid. I need to decrease it."

[01:18:30] It decreases stomach acid, which means then it's a gateway to getting more pathogens into the body. The stomach acids the first like wall of defense essentially against pathogens so if you get a bacteria, a virus or a parasite, stomach acid will work to kill that so if the stomach acid decreases, then you've got the gateway, where you can let other pathogens in the body.

[01:19:00] It also decreases how the body can digest. A lot of that stems just from the fact that, the bile is clogged up and get this. When the bile is clogged up, then that automatically means the lymphatic is clogged and also the brain glymphatic-to-lymph is clogged so for anybody that's getting brain fog, just not the clarity, just feel all puffy, swollen lymph nodes, one of the first things actually to focus on is that liver bile duct. Open that up to get movement 'cause that'll help the GI as well, but it also helps drain the lymph and even the glymphatic as well. Drainage is super key.

Making sure the pathways are moving. You never want to really jump in to killing pathogens or necessarily detoxifying chemicals if these drainage pathways are clogged because that's when you're going to react.

Dr. Daniel Nuzum

[01:19:30] Our question is "Are autoimmune disorders fatal, doc?" Yes. The answer to that is yes. The most fatal that I have seen in practice are muscular dystrophy, ALS or Lou Gehrig's disease and then MS. Those are the ones that I've seen be the most fatal of the autoimmune disorders that I've seen.

[01:20:30] Another question is, well how long, how long does it take to correct this? Or is it correctable doc? The answer to that is yes. Yes these are correctable. Just because you've been diagnosed by an autoimmune disorder doesn't mean you're going to suffer from that. Doesn't mean that you have to suffer from that for the rest of your

life. Okay you don't have to suffer from this forever. Okay, the protocol that I'm talking about is basic protocol for anybody with any auto immune disorder. This is something that if you follow this course, you will get better.

[01:21:30] You know if we're beginning ... if you've just started to have symptoms and just ... this is just a very new thing in your system it may take months to correct. If this is something that's been going on for years and it's very entrenched in your body, it will take years to fix this. Okay, but following this path you will get improvement, you can get improvement and we can slow the freight train down. Think about this. Auto immune disorder is an inflammatory disease. Okay, it's a disease of inflammation. Okay, it's not a disease of your immune system going haywire and becoming overactive and just attacking everything. It's a disease of chronic and massive inflammation.

[01:22:00] If that was ... let's just take ... If what I'm saying was not true Corticosteroid treatment wouldn't help, okay? In conventional medical treatment the number one treatment for autoimmune disorders is Corticosteroid treatment. If it was not an inflammatory disease Corticosteroid treatment would not help. Okay so think about that for a minute.

[01:23:30] In the treatment ... In healing of the autoimmune disorders we always have to go back to the healing process. There's something you've seen me before in any other videos or anything, you've heard my spiel on the healing process. The healing process starts with stabilization, progresses with detoxification and is realized in fortification. So we have stabilization, detoxification and then fortifying, we have to fortify the system. It's the same with autoimmune disorders. And ... so how long does it take to fix an autoimmune disorder? It's individual. There's really no way to answer that accurately and honestly. What I can tell you is that autoimmune disorders are a runaway freight train of inflammation and you have to slow the train down before you can reverse it. Okay, that train has to come to a stop before it can start to reverse.

[01:24:30] And so there's a whole stabilization and detoxification process that has to happen in your body in order to bring that runaway freight train to a stop. Once we've got you stable and detoxified enough so that freight train stops then we can start rebuilding you. We can reverse, put that train in reverse, okay. Hope that makes sense and that's a ... I'm trying to give you some pictures here, some word pictures so you kind of get the concepts. But just like anything else the body has to be stable, has to then be detoxified and then has to be rebuilt. And it's the same in autoimmune disorders. It's the same in immunodeficiency disorders. It's the same after traumas and injuries. It's always the same ... it's always the case. That's the way the body heals.

Dr. Philip Oubre

Jonathan: My assumption would be in the vast majority of cases, if somebody applies themselves and really does a planned protocol it works.

Dr. Oubre:

[01:25:30] Absolutely. I would say a majority of people would really benefit from it. I would say that the people who maybe have metabolic disturbances that doesn't allow them to process fat or they're more toxic, if they kick into ketogenesis one of the problems is you start burning weight, or burning fat. I dropped five pounds in two or three days. The problem is that toxins often sit on our fat tissue because the toxins that we struggle with getting rid of are fat soluble toxins, right? If you drink a water soluble toxin, you can urinate it out pretty easily. That's what your urine is. But the fat soluble toxins like to stick in us and obesity has actually been kind of termed as toxin storage ... rent free toxin storage. You just put the toxins in the fat, hide it so that the body doesn't see it. And so when you kick into ketogenesis ... if all of a sudden you drop those fat cells, drop your fat pounds, those toxins have to come out.

And once those toxins come out you have to deal with them. And if you can't deal with them ... if you have methylation problems or poor detox pathways, then you're gonna feel worse. And so those are some of the people that we won't kick into full ketogenesis in the beginning. We'll do a lower carb or work on the methylation cycles, we'll do a detox and then we can kick them into ketogenesis later.

Jonathan: Excellent. When you say methylation cycles what do you mean?

Dr. Oubre:

[01:26:00] So, methylation cycles is kind of a vague word for discussing how humans really detoxify. Methylation is a cycle that occurs in every cell of the body. Anything that makes energy has to, has to methylate in order to detoxify those energetic processes. Methylation is also used to break down our drugs. It makes them neurotransmitters. So methylation is really used for so much. Too many people kind of get lost in methylation as it being the cure all and it is extremely important for the body and it's something you need to focus on and optimize your pathways but it's not the end all be all.

[01:26:30] So, the methylation primarily when we're talking about it in the ketogenic diet is mostly revolving around detoxification.

Jonathan: Excellent. And how do you detoxify people?

Dr. Oubre:

[01:27:00] So, it really depends on the person. We, at my office we like to do really personalized medicine instead of just saying, "Oh, you've got these symptoms, here's the supplements we're gonna put you on." We like to check homocysteine levels, inflammatory levels. We like to review genetics. And based on their genetics and based on their levels we put together an individualized supplement plan for them in order to speed up their methylation pathways. And once you speed up the methylation pathways they are naturally detoxifying. But if someone struggled with, with heavy metals. That's an even long stand ... you know, longer standing methylation problem. Methylation helps us get rid of heavy metals. So if you had a significant exposure and you didn't have the methylation pathways to handle those, first step is to optimize the methylation pathways, then you start working on pulling on some of those heavy metals out of storage and then trying to get rid of them through the methylation cycle.

[01:27:30] You can also, we like to use the metagenics plans, ultra clear plans, which are basically canned detox programs. If you had a 10 day program and a 28 day program. It comes with food diets, it comes with a protein powder that's a detox shake. It comes with pills. That's detox pills. And so all these things are designed to ramp up our liver detox pathways, phase one and phase two to actually make these fat soluble toxins water soluble. So you can urinate and pull them out.

Dr. Jay Davidson

[01:28:30] Parasites are big for food allergies and reacting, especially to dairy. If you have a dairy allergy the ... parasites love to eat the milk protein and when they eat that then they produce a byproduct, a toxic byproduct and that's what actually our bodies react to. But then our body, you know our brain correlates, oh it's the dairy. I must be sensitive to the dairy but it's actually the toxic byproduct the parasite gives off. So if you have a dairy allergy definitely consider parasite cleansing absolutely. But I've seen just food sensitivities in my own journey. I realized a lot of my health issues, chronic skin issues, actually some teeth grinding, stomach issues, constant like loose stools and rumbling stomach and sensitive stomach. The EDD the ADHD that I was struggling with when I was younger.

[01:29:00] I mean, those things, my allergies, my severe allergy especially to dairy actually were all linked to parasites. So when I cleared those up I noticed a lot of my sensitivities and they pretty much all disappeared. And I can't imagine what I would be like if I didn't go down that route. So, if you have a lot of sensitivities definitely consider parasites.

[01:29:30] So, looking from a protocol side of things. The first thing is that if you are in a moldy environment, you have to remove yourself from that environment. Often times, people can be rather stubborn and, "I'm just gonna get an air filter or it's really not affecting me that much." And, people are affected differently. Certain people are more affected by mold versus other people. And the idea ... if there is mold and it's affecting you, you have to remove the source from your home or from your workplace and if you can't relocate or get into a different environment.

And for those that stay sensitive, so they're really reactive, allergic and just seem to be reactive to everything, even as you progress through protocols and it's like, "Why, I should be getting better. I shouldn't be this sensitive and why am I still staying in this?" One of the first things that I think about clinically is that there's still mold in the environment. And it creates this sort of hyper activity, this hyper sensitive state.

[01:30:30] So the first thing, remove yourself from the source of mold. First thing is remove mold if you have mold. Remove yourself from the source. That's definitely very important. In carbon, charcoal can be a big helper. You actually wanna take that more frequently. So, generally, like with carbon or charcoal or like a bioactive carbon, you would take it away from food. 'Cause it's gonna bind anything you eat, so if you take carbon with supplements or you take carbon with food, it's gonna bind onto that. So, you always wanna take it on an empty stomach and then wait, you know, probably at least an hour after you take it with a bunch of water to bind on. And that can be a big helper for those that are suffering with mold.

And you think, not just once a day, typically you want small amounts of carbon or charcoal multiple times while you have, you know, mold exposure to bind onto the bile tip to clear it out. So, that can be a really big tip. So, remove yourself from the mold environment-

David "Avocado" Wolfe

David:

[01:31:00] There's a number of things I could say about autoimmune diseases. And I think, city living is a big part of the problem. We need to turn back to nature. First of all, get grounded. Get back on the earth, get back on the sand. Get back with the animals, and, you know, get that direct connection with the electricity of the earth cause that's one of things we're losing in cities. When we're in shoes and we're in high rise buildings, or we're off the earth as we're separated. We know that autoimmune conditions improve about ten percent from when you're grounded. That's amazing. That's good. Okay, we'll take that.

Jonathan:

[01:31:30] I do yeah and there are excellent protocols in autoimmune disease, removing, cleaning out the diets. City living versus ... Well country living versus city living and hardly anyone is ever talking about that because it's quite inconvenient that ... But really, we're all looking for happiness and if it's the part the happiness is a question and that's where we should be, right?

David:

[01:32:00] On that right there I usually tell people, New Yorkers get this cause they know that you always have that place in New York and that place in the country. So that's where you start. Like if you live in the city, start thinking

about getting that place in the country and then eventually, as the years go by. I know what happens, eventually you start going, "I don't think I'm going back to the city. I think I'm gonna lease my place in the city, I'm gonna stay in the country." And I try to bring people into that pattern.

Dr. Joseph Mercola

[01:32:30] You know one of the principles is rest. We know, we see this. People think a little bit of ... It's like the Goldilocks. A little bit is good and as Americans, a little bit's good, more is gonna be better. And especially when it implies exercise. So if you over exercise, and exercise is a stress. If you're digging a deep hole, you don't give your body time to recover you're gonna get worse. It will make you worse. I personally have violated that many times for long periods in my life and as a result I have suffered health damages. As a result of ignoring that principle.

[01:33:00] So I wanna encourage you to ... Don't make the mistake I did. A lot of time it's so simple, just learn from other people's mistakes. It's so much easier. But we see this a lot in competitive athletes or seriously training individuals who think that a little bit of exercise is good and more is better. But you need to rest, you need to have your down time. It's so important, it goes with sleep too. We have Superman, if you're young you can get away with it but we all need eight hours. There's very few genetically enhanced individuals, sort of not enhanced but unusual, that they can get by with less sleep. And they do exist, I think it's called advanced polyphasic sleep syndrome. But you're not one of them, I can guarantee you. It's like one in 10,000 people.

[01:33:30] We all need eight, you get six you're gonna have a problem. You can go with six or seven for a while but that's still an issue so you need eight. So engage in and allow yourself the time to get that sleep. That means going to bed in time. There's no way you're gonna get eight hours of sleep if you're going to bed at 11 or 12 o'clock at night. I mean you can but most of us needs to get up early, have a job and have responsibilities. So you got to turn off the TV, shut off the lights and get to bed and give your body the opportunity to get that sleep to recover and repair. Because that is an absolutely essential component of health. No question about it.

Jonathan Otto

[01:34:00] The problem with autoimmune diseases is that by the time your body gets to that point, a lot of damage has already been done. So if you're suffering through an autoimmune disease or a similar condition, you have to take it very seriously. It means that there's damage in your body that needs to be healed. If you can look at that and really value yourself, and realize that healing will take time. But in the end you're going to have a healthy, strong, well functioning body and you're going to be thriving in life. Then this journey of healing is worth every moment.

Dr. Sruti Lam

[01:35:00] You can prevent autoimmune disease certainly. We have to be ... We can control our appetite for food, for lotions, makeup whatever we use externally. So it's not just internally it's externally. We can change an environment, we can change substances that we use, plastic. We can ... It doesn't necessarily have to be living in a bubble but we can tweak little things in our life that would actually help us live in a cleaner place. So it happens before birth. Mothers can start doing it so their child is born healthy. And then we start treating the child from infancy to eat right to sleep right, put in the right amount of exercise.

[01:36:00] Sleep, sunlight, everything together and you can live a healthy life. It's the things that we do that we worsen our life with. But because of the way society is and because of all the diseases in this world, I believe you and your wife and all the people around you are experiencing all of these diseases. And they are just popping up everywhere. And when you keep hearing this again and again. You're just like, how can I help this dying world? And one of my favorite things to do is to educate somebody. And I think by doing this series you're actually putting it

out there to the world that there is something you can do to prevent getting to this point of no return. I want to use the word no return but getting to the point where this ... More difficult to work on healing it.

[01:37:00] So education, teaching somebody the right way, cause people are so used to just following what they read in books, watch on TV, but nobody sat with them and one on one taught them, this is how you should be doing this. This is how you could change your life, this is how you could change your microbiome, this is how you can live a healthier life to prevent yourself from having all these diseases. Now or in the future. And so I think what you're doing really is educating somebody and making people aware of the vastness of how debilitating this is and also to prevent people from looking down upon somebody or giving them the chance of shame and guilt, of having the disease. Like some diseases like ulcer colitis was something that's internal but some autoimmune disease like risus is an external thing.

[01:37:30] And people are hiding their skin, they're wearing this long clothes. They're not able to go to the beach, because they're hiding it because one it's not a pretty site to look at and two it's just by disrupting it, all the organisms in your body, all the different functions in your body cause not just shame and guilt but this depression, this fatigue, this pain. There's a lot of things associated with it. So I think our service to mankind could be raising awareness, teaching them and sitting with one person. One day at a time and be like, this is what you could do, this is how you can change your life around.

Dr. Stephanie Daniel

[01:38:30] So if you're in that place where you feel like you're suffering and you feel like there's ... You're not sure which way out. Just start somewhere, pick one thing that you have some level of control over and engage that. Whether you stop a particular habit like, you don't reach for the donut or you don't reach for the soda. If you just do that consistently for a while, it becomes a habit and then you can take on the next thing. Cleaner water, filtering your water and baby step your way out of it. Find resources that will support you as you feel able to access those and don't get overwhelmed by all the information. Just start where you are.

Jonathan Otto

[01:39:00] Going through difficult times has the ability to strengthen or break us. And that's really all in the way that we respond to it. So by taking this information today, you have the opportunity to make a choice in your life. Are you going to let the difficulties in your life break you or are you going to make the choices that you need to make in order to find strength, build character and change your life. We've provided these resources to you so that we can help you on your health journey. We hope that everything that you've learned here, that you can take it and make it a part of your life and that you can share it with others and help them improve their lives as well.

BONUS Episode 8:

NEURODEGENERATIVE (ALZHEIMER'S/DEMENTIA)

Dr. Dale Bredesen

[00:00:30] [00:01:00] I became interested in the brain when I was 18 years old. I was a freshman in college and I read a book that's called "Machinery of the Brain," by Dean Wooldridge. I was really fascinated by what the brain does and by the way it was organized, by the neuroanatomy, the neurophysiology, the neuroscience of it all, and its

relation to so much that we do. I thought if you get a broken leg or something like that you're still the same person. If you get a broken brain that really affects who you are personally, so I became very interested in how things like memory are formed, how we learn, how we memorize, how we respond, behaviors and things like that. I decided to go from a more scientific-based background to a medically-based background. So in medical school and then neurology residency I could see that an area that had very little success, and you could argue that it's the area of least medical success.

Dr. Michael Merzenich

[00:01:30] We actually decline about a third of a standard deviation for a decade. That means when you go from your 30th birthday to your sixtieth birthday you've moved a standard deviation across the distribution. That means if you were average when you were 30 you're at about the 16th percentile in performance when you're 60. Who wants to see that happen to you? That's a disaster. By the time you're 90 you're at the third or fourth percentile. Who wants that to happen to you, right?

Dr. Dale Bredesen

Dr. Bredesen: I think actually the doctors have been quite good about telling people that these therapies are not terribly affective, that you'll get a small improvement, and that the will not affect the decline.

Jonathan Otto:

[00:02:00] Okay, well that's good, right? Honesty is a good thing.

Dr. Bredesen:

[00:02:30] It's good... But it then tells people things are hopeless. Unfortunately what happens is people know that there's not a lot to be done so they will wait as long as possible. Instead, what we would like to see is just the opposite, people should come in as early as possible, preferably, prevention, but if not prevention then come in as early as possible for reversal. The idea of saying since there's very little to be done I'm going to take some medicine and my driver's license is going to be taken away, I will not be able to get long-term care insurance so I'm going to wait as long as possible, is the wrong idea in the long run.

Jonathan: What are the ... Yeah, far out. It caters to the fear that a lot of us have that drive our live and we just don't want that terrible news. That fear in living in that place is often worse. It's the feeling that something dreadful is going to happen.

Dr. Bredesen:

[00:03:00] And the hopelessness. This has become the number one concern of individuals as we age. People are worried about getting cancer. Now they're worried about cognitive loss often even more.

Jonathan: Wow. So you've seen that, people are in that age group probably from 50 up, is that right?

Dr. Bredesen:

[00:03:30] Yeah, yeah. It's a ... And again, we're also seeing people even into their 40's if they've had it in their family. If they've watched a loved one, especially a mother or father, go through this as they call it the long goodbye, then they're of course concerned about themselves and want to make sure that they don't have this. Being able to offer some hope and say, "Look, there are things you can do to put this off or to prevent it." The hope would be that this becomes a rare disease and it should be with what we know now. This should be a rare disease.

Dr. Michael Merzenich

[00:04:00] [00:04:30] From the point of view of thinking about our life, not as beyond the middle of life as a period of slow regression where you ultimately wait for the dementia to occur. Think about an older life beyond the middle of life as a time of continuous growth, sustaining ourself, sustaining a healthy organ inside our school, growing our powers. We have our power. Our brain is plastic and we're in charge of it. We know basically how to throw that switch in a positive direction. I have been trying to strongly encourage people as strong, as emphatically as I can that they should take advantage of this great gift, this great resource.

[00:05:00] Well most people don't realize that they have the power to continue to grow. They think of themselves as sort of victims of their age. They sense their deterioration and they know vaguely that they should be doing things about it but fundamentally they think that it's going to be a losing battle. Of course, none of us live forever. It ultimately is a losing battle. We do have a power to continue to grow our faculties, our abilities.

[00:05:30] Another thing that's plastic that most people don't realize is the machinery that controls change. What happens in most older individuals is that this machinery that also controls how vital your operations are, how lively you are, how happy you are, how fulfilling, how motivated you are in life, you're willing to take on new challenges and do new interesting things. That machinery slowly dies off if you don't exercise it. But you can exercise it, everything in the brain is plastic.

Dr. Dale Bredesen

[00:06:00] [00:06:30] We identified several different types of Alzheimer's and these are based on metabolic profiling, and to some extent on genetics. The idea is if you look at the molecular biology of amyloid precursor protein, the precursor to the amyloid that collects in Alzheimer's, you really see that its signaling looks like molecular switching, that it goes one way if it's cleaved at one site, and you get two peptides that are actually supportive of neurite growth and inhibition of death. On the other hand, you take the same parent molecule if you cut it at three different sites you end up with four pieces that support the opposite, pulling back, reorganizing. So you basically have the remembering side and the forgetting side.

[00:07:00] [00:07:30] [00:08:00] Of course, we wanted to know what are all the things that contribute to that. What we found is that there are dozens of things, many different things that effect that but they fall into three groups. What happens is you go in the direction that we associate with Alzheimer's disease and produce this amyloid among the other peptides that you're producing in response to inflammation, be it infectious or sterile. We call that Type I Alzheimer's disease. Then atrophic responses, so withdrawing trophic support, brain derived neurotrophic factor NGF, estradiol, B-12, Vitamin D, thyroid, you can go on and on down the list. If you withdraw atrophic support that changes the signaling of your APP. We call that Type II Alzheimer's disease or atrophic Alzheimer's disease. Then there's actually one in the middle, Type 1.5, which is glycotoxic. These are people that have insulin resistance and chronically high glucose. What ends up happening, you get the inflammatory part from the glucose and from the advanced glycation end products and the glyco cells and the things that are associated with glucose. But you also get the atrophic part because you have insulin resistance, so you no longer respond as well to insulin and trophic support.

[00:08:30] [00:09:00] Then what we discovered is there's a third type, which is quite different from the other two, which is when people are exposed chronically to specific toxins. Guess what, amyloid interacts with some of these toxins, such as mercury, for example. So, what we say is that what we call Alzheimer's disease is actually a protective response. Type I it's actually an antimicrobial, as Rudy Tanzi and Robert Moir, and their colleagues at Harvard showed, it's an antimicrobial. It's also something that is part of a downsizing, as Callesano and others in Italy showed when you withdraw atrophic support you produce amyloid as part of a downsizing event. It's also a

binder of toxins, so you are protecting yourself from these insults when you are producing what we call Alzheimer's disease. We then want to find out what are you protecting yourself from and let's remove those inducers.

Dr. Michael Merzenich

Jonathan: It makes me think of retirement and some of the challenges that could come in that stage of life.

Dr. Merzenich: Right.

Jonathan: I could just foresee perhaps people getting out of a career, I've been exercising my mind all this time, I just want to relax...

Dr. Merzenich: Right.

Jonathan: ... I just want to kick back.

Dr. Merzenich: Right.

Jonathan: But the word retire is comparable to like...

Dr. Merzenich: Sure.

Jonathan: ... Death.

Dr. Merzenich: Right.

Jonathan: It's to stop the use of something.

Dr. Merzenich:

[00:09:30] [00:10:00] Well we know pretty well why the brain slowly degrades operationally. In the early phase of life, from your brain's perspective it's about continuous change. You are in a skill acquisition phase, you're continually challenging yourself to acquire skills and abilities to a period in which you are educated, not just in school but in physical and social life, time of dramatic change in life in almost every dimension of your life until roughly your 25th birthday, something like that. Then you begin to decline. One reason you begin to decline, is that you move from predominant schedule, you could say of new engagement, new learning, skill acquisition, the elaboration of ability to operating largely on automatic pilot. Now, most of the skills and abilities that define new operation, they are in place, and you're using them. So, you're a user more than you're an acquirer. Very slowly, the machinery becomes noisier and noisier, because you're no longer really engaging yourself in exercise, in the same natural way that you were in the learning phase in life. I liken it to being something like a professional musician, and you have to practice every day to sustain your hireability, and if you don't practice, you cannot retain your position as a professional musician.

[00:11:00] You have to practice, but in older, natural life, people stop practicing. In a sense, life is not challenging enough to us in the sort of immediate physical way that it was to our ancestors, and it's that lack of practice, and unfortunately, the withdraw that commonly occurs in an older age, that are contributing to this progressive decline.

Dr. Dale Bredesen

[00:11:30] [00:12:00] We are doing things to give ourselves Alzheimer's disease all the time. It's actually ... As you know, it's become an incredibly common problem, and figures were just released, showing dramatic increases in California, in deaths from Alzheimer's disease, as well as around the United States, so the bottom line is many of

the contributors, many of the things from the standard American diet to the stress levels to the lack of sleep to the exposure to specific toxins, to the exposure to specific pathogens, to the insulin resistance that occurs, to the ongoing inflammation, gut leak, gut dysbiosis, on and on and on. These things all turn out to be contributors to cognitive decline, so addressing them, recognizing them, measuring and addressing them, very helpful.

And we know that brain training actually inhibits the development of dementia, so the idea that sitting down and doing nothing, not exercising that network could be harmful. I think very reasonable possibility.

Dr. Michael Merzenich

Dr. Merzenich:

[00:12:30] [00:13:00] [00:13:30] I'm writing a book about this. We've done it about a month. The book is title Alzheimer's: It's Not a Disease; which it isn't. It isn't a disease, and it's the end stage. Nothing unexpected about it. Nothing unpredicted about it, of a decades long progression, negative change progression, that unfortunately results in a catastrophe, but there's nothing unnatural about it. It's not really a disease, and the problem is is that when they think about things so primitively, they have no understanding what could be the genesis of such a problem, because the science is so primitive, and soon as they called it a disease, 110, 12 years ago, they put everybody off in thinking that when you have it, you treat it, as opposed to how you should think about it, and that's to stop the decades long progression. That's really how you should be dealing with it. You should be stopping it from ever happening in life.

But we don't think about it that way. In the mainstream of medicine. And that's one thing I sort of like about this group, 'cause they're a little bit more open minded about thinking about things in those terms, and that's what my book is about.

Jonathan: From what you're saying that, do you believe that Alzheimer's can be prevented?

Dr. Merzenich:

[00:14:00] Oh, absolutely. No question. Or you could say delayed. For probably and definitely in most people, but I also think that when you do that, the changes that you drive in the brain will lead to substantial increases of longevity.

Dr. Dale Bredesen

[00:14:30] Gives you a rush. It gives you a real excitement to see, hey, here's someone who actually was headed for a nursing home, who's now going to have a much better life, and that makes me very happy. It's great to see that. I mean, that's, I think, what so many of us went into medicine to see, to see if you can actually help people out, and we've been told over the years, that these are people you cannot help, that people who are getting demented, unlike someone who has appendicitis, where you're thinking, yeah, you can probably help these people, this is something where we've been told you can't help these people, and yet, we're now seeing that. We're seeing, so that part's very exciting.

Dr. Michael Merzenich

Jonathan:

[00:15:00] And just while we're on that topic again, 'cause I've seen a lot of people feel really overwhelmed and bewildered by neurodegenerative diseases, because many people, maybe even the person watching, feels that it is a mysterious strike of nature, and there's nothing you can do about it. You don't believe that?

Dr. Merzenich:

[00:15:30] [00:16:00] I think that once it's in place, once the train wreck has occurred, it's extremely difficult to deal with, because it generates such damage in the physical brain, and the physical brain, by this point, has undergone very substantial changes that are very difficult to reverse, but up to the point of substantial destruction, the brain has been changing itself plastically. It's been making natural adjustments, you could say, to make the most out of the circumstances that apply to its operations, and all of those changes are reversible. We know that now. We know that we can change them on a dime. We can throw a switch in a brain. We can engage a brain, by, for example, training it intensely in the right way. And we can throw all of those things that are changing physically, chemically, functionally, in a youth forward direction again, so we can actually rejuvenate a brain rather remarkably.

[00:16:30] First experiments in which this was done were in animals. We've showed that we could take an animal near the end of life, supposed to die pretty soon, and look in the brain to a whole series of things. We looked at about 25 things, and we saw all of those things were degraded in the old brain, versus a young, healthy brain, and then, all of them disadvantaged the old brain. The old brain was slow, inaccurate, disconnected. Cell populations were degraded. Everything we looked at was degraded. The avascularization of the brain was degraded. Its immune response was poor. All of these things down regulated.

[00:17:00] [00:17:30] So, we asked, how many of these things can be reversed by engaging the brain with appropriate intensive training? And the answer is all of them. Every physical, chemical, functional change that distinguishes an old brain that's losing its way from a young brain in the prime of life can actually be reversed, and most of these things can be driven almost all the way back to the condition that applies for a young brain. We now know in human studies that we can train a brain intensely in appropriate ways, and with not very many hours in a life. You could say less than one 24-hour period worth of time from a life.

[00:18:00] And we know from a study that was conducted over the past, 14, 15 years, that that results in a random assigned control trial, a protection in trained subjects, in a reduction of the onset of dementia by about 50%. It's almost certain that if we increase the way in which we engage the brain, in which we actually controlled it, we've controlled dosing, so that we've kept the brain in a state of high functionality, reliably. We can do this, that we'd have seen much greater protection than that. So, I believe that we have, within our ability now, to manage brain health, that is to say that defined through relatively simple assessments of evaluations, what's inside, and then, to do something about it. To make it stronger.

Dr. Dale Bredesen

[00:18:30] [00:19:00] But if you look at the overall information that you need to do optimal care for everybody, it would fill volumes and volumes and volumes, so we really need a lot more Silicon Valley in our medicine practice, as essentially as a helper, as an assistant, so not only an assistant. You might have a health coach who might be an assistant, or an administrator, but you actually need access to very sophisticated expert system software, that can say for you, "Okay, I've gone through the entire genome for you. I've gone through the [inaudible 00:19:03] so forth, and so on, and I can generate for you an initial idea. Here's what's the problem with this person. Here are the problems. Here are the contributors, and here's an initial plan." Then, of course, you as a physician, and with the patient can talk about how you can fine tune that for the things that are best, but it'll give you access to tremendous amounts of information that you wouldn't otherwise have.

[00:19:30] [00:20:00] You can't cram all the CME in the world into one lifetime, especially as we learn more and more and more. These things become more and more nuanced and complicated, so you need support from a Silicon Valley type approach, and we talked yesterday about closing the complexity gap. That's how you close the complexity gap. What I mean is the human organism is unbelievably complex, beyond what any physician can

understand in his or her lifetime, and can learn, so in other words, you can't be an expert in every single thing, and therefore, what you're doing, is you're trying to look at a very complex system. Just the DNA, just the genome alone is 3.3 billion base pairs, and that's the simplest thing, because that's just unidimensional. But you look at all the other things, all the biochemical parameters, all the physiological parameters, and then try to come away with what's actually the problem here.

[00:20:30] [00:21:00] And what would be very, very helpful with these larger datasets, is to have an assistant that would be an expert system, that would then run through all these data, beyond what you can do for a single person. And certainly beyond what you can do in a half an hour, or an hour, or two hours. And to then give you ideas and say, "Okay." As a simple example, a 20th century diagnosis might be, "Mild cognitive impairment, so you have a pre-Alzheimer's condition, and it might be single domain amnesic."

[00:21:30] [00:22:00] So, a 21st century diagnosis might be, "Mild cognitive impairment due to interaction between genetics, 11 3 52B HLA DRDQ, MTH FR. A snip, C677T," or something like that. "Type one 70%, 1.5 20%. Type two 10%, and related to Borrelia infection, and specific mycotoxin, gliotoxin and ochratoxin A." In other words, you have a much more substantial picture of what is actually causing the problem. For complex chronic illnesses, we don't have enough support in terms of our medical practice to know what is at the heart of this. This is what functional medicine is trying to do, but we are running up against a dataset size issue.

[00:22:30] So, that's why I say, Silicon valley may think about it for a moment, what it takes to fly a plane, or what it takes to put a man on the moon. The sophistication of the calculations, these sorts of things are needed in spades for one to look at a human organism. And the way we're doing it now, looking at sodium and potassium, it doesn't give you the information that you actually need. You need much, much larger datasets. So, that's where Silicon Valley comes in with larger datasets. And then ultimately, expert algorithms, to give you an idea. Of course, this sort of thing is beginning with looking at Cancer.

[00:23:00] So, you have the whole genome sequence of the tumor, you have the whole genome sequence of the host. And then, the computer will look through that and say, "Okay, we can infer from this, that these three or four pathways are likely driving the tumor." What we're doing with cognitive decline is very much the same thing, we're looking at all the different pathways that are involved. However, we don't have a tumor to biopsy, of course. So, we're having to look at biochemistry and genetics, rather than at a tumor biopsy.

Dr. Michael Merzenich

[00:23:30] [00:24:00] Well, we believe that in general, guidance and health should be managed by your medical doctor, and that when you go to the doctor, I think what's going to happen pretty soon in the almost immediate future, is for the first time the physician is going to actually make a first level examination of what's inside your skull. Now, you can actually do this, you can actually define the integrity of the operations inside your brain, you could say on a first level, by doing relatively simple assessments on a computer.

[00:24:30] ...sit in front of a computer and, for example, you can relatively rapidly define the speed of processing in the brain. And speed and accuracy of processing of the brain, is a very good index of brain health. It's a little bit like taking your blood pressure, and taking your pulse rate, and measuring oxygenation in blood. Because, if your brain is fast and accurate, it means that all of these 25 things I talked about earlier that relate to its basic integrity and health are in good shape.

Dr. Ben Johnson

[00:25:00] What do we do? Well, if your mom or dad, and if Alzheimer's tends to run in your family, or if you've eaten tons of sugar over time, it's coming. But if we want to look at testing, genetic testing you want to look at APOE. And if you've got three, you're good, if you've got two, you're great, because that's actually anti-Alzheimer's. If you've got four, you're in trouble. So, we can look at those markers genetically, and then other genetic things that we can look at. Imaging, MRI, and actually ultrasound is coming back into its own, as we can do a lot more things with ultrasound than what we used to do.

[00:25:30] [00:26:00] We can do cognitive testing, the Wechsler Memory Scale, the revised one. So, those are your tests to look at, and there are more of course, but we can do testing to look at that ahead of time. It is important to get those done, because Alzheimer's doesn't happen overnight, it doesn't happen in a year, it happens over 20 or 30 years. So, get tested early, get tested every four or five years, because it is preventable. Alzheimer's is preventable. And it is even reversible, certainly through stage four, maybe stage five. We can hold the line probably at stage six, if you're stage seven there's not much we can do.

[00:26:30] Well, again, the family tree, if aunt Betty, or mom, or dad had it, then you certainly want to look at it. Or if you have been a sugarholic over the years, you're a prime candidate before, because again, it's diabetes type three, is another synonym for Alzheimer's. So, if you've been a sugar addict, a dessert addict, lots of potatoes, lots of corn, lots of starches over the years, corn syrup, colas, death by cola, then you really, you want to go ahead and look at those things, because you're a prime candidate because you've been having all these sugar spikes over the years. So, that's what testing looks like medically.

Dr. Dale Bredezen

[00:27:00] One of the major problems is insulin resistance, so you're trying to restore that insulin sensitivity that you have lost over time. So, you need to bring down the insulin level, you need to restore the appropriate phosphorylation of the IRS1 that is signaling through the receptors. So, you've got, normally, you have a high Tyrosine phosphorylation and a low Serine/Threonine phosphorylation as professor Ed Goetzl out of UCSF has shown.

[00:27:30] [00:28:00] When you have Alzheimer's disease, it flips. So, you now have more of the Serine/Threonine, which is essentially turning down the sensitivity of the signaling, and you've got a low Tyrosine phosphorylation. So, you are trying to restore the insulin sensitivity. The second thing of course is if you actually look at an Alzheimer's brain, even before you have full blown Alzheimer's disease, there is a change in the glucose utilization in the temporal and parietal regions. And so, you are providing an alternative source, presumably, for energetics. So, you're changing the energetics of the brain, and you're trying to heal the insulin resistance.

Dr. Ben Johnson

[00:28:30] Another thing that's not frequently talked about is the microbiome of the gut. Unfortunately we frequently damage that. We damage it with antibiotics and drugs, killing off the microbiome. So, antibiotics are a primary cause of Cancer. We know, for instance, of girls/women, that have had six doses of antibiotic before their 18th birthday, have a threefold increase in Breast Cancer. Just recently there were nice publications, because the nipples have their own microbiome, they have bacteria in them. And the antibiotics have changed that microbiome, and that changed microbiome in the breast, from antibiotics is now being shown as a cause of Breast Cancer.

[00:29:00] [00:29:30] We knew it, we know it statistically, but now we're understanding why. The microbiome of the bow communicates with the brain all the time, and gives it information. So, we must have good bacteria in our bowel. If you want to think about it in a different way, we are parasites, there's only about 10 trillion of our cells,

and we have a 100 trillion bacteria in us and on us. So, we're a parasite on our bacteria. So, we want to have the absolute healthiest microbiome of bacteria that we can possibly have, if we're going to be using them for energy, power, and creating different things that our body needs.

[00:30:00] And so, restoring the gut-biome is critically important. And truthfully, there aren't many good probiotics out there. Most of them are Lactobacillus and Bifidus, whereas there's over a 1000 different bacteria in our bowel. And so, we want diversity of bowel bacteria there. So, eating things without washing them to death, without cleaning them to death. Go out and eat a little dirt like you did when you were a kid to help increase your gut biome. We can be too clean. We can absolutely be too clean. Taking care of that gut biome. I'm not against anything medical, I'm just against the wrong use. We pass out antibiotics like candy. It is not healthy for us. Antibiotics can and should be used at critical moments. If you have sepsis, if you have this overwhelming disease, if you have this methicillin ... but we can use other things. We can use ozone, we can use hydrogen peroxide, we can use natural herbal agents that kill bacteria, oregano. There's a lot of great herbs that help kill. We can use silver. There's many things that kill bacteria that we can't use because they're not FDA approved, but we can certainly use them at home. We can use them outside of the hospital. Antibiotics, when we're critical and we absolutely have to have them, yes. But other times, randomly ... doctors prescribe them for a cold. Well, we know that colds are viruses and we know that antibiotics don't kill viruses.

There's kind of an insanity going on out there with our use of antibiotics. And they're very destructive. They cause a lot of disease.

Dr. Dale Bredesen

Jonathan:

[00:31:30] Wow. So we need to be looking at the immune system, looking at the gut in order to-

Dr. Bredesen: Absolutely.

Jonathan: ... look at the brain, is that true?

Dr. Bredesen:

[00:32:00] [00:32:30] And the rhinosinal microbiome as well. A lot of what's found in the brain of Alzheimer's patients are things that are coming from access, P. gingivalis from the dentition, herpes simplex from the lip, various fungi and molds from the rhinosinal microbiome, various things that are coming throughout the face, nose, sinuses. These are all critical. And then, of course, systemic as well, things like Borrelia and Ehrlichia and Bartonella and things like that, as well. Environment is critical, and there are many reasons for that, exposure to various toxins, very important. Exposure, especially, to biotoxins, things where you have a chronic activation of your innate immune system. Amyloid is emerging as a part of the innate immune system and, therefore, anything that activates that innate immune system chronically is a potential major problem and a major player in your Alzheimer's disease, in your cognitive decline. And then, Borrelia, Lyme disease, other tick borne illnesses. Again, anything that causes chronic activation of the innate immune system can contribute to cognitive decline.

Dr. Ben Johnson

[00:33:00] [00:33:30] [00:34:00] [00:34:30] Back to that antiinflammatory thing. So many of the processes that cause Alzheimer's, that cause cancer, that cause plaque in the arteries. The problem with plaquing in the coronary arteries, leading to heart attacks, and carotid arteries, leading to strokes, the problem has never been cholesterol. Lowering the cholesterol is the wrong thing. It's putting out the fire after the fire's lit. Let's stop the fire. The fire is

inflammation. What we've got to do is stop inflammation. And then cholesterol, we need cholesterol. If you don't have enough cholesterol, your liver will literally make cholesterol. Cholesterol is not the problem, and by lowering your cholesterol too much you can get aging of the brain and you can cause your sex hormones to be lower, because cholesterol is a primary building block, structural block. We do not want to lower cholesterol too much. What we want to do is stop inflammation. Your natural agents for doing that are curcumin and SAME, berberine that I've already mentioned, Honokiol. There's a number of great agents for lowering inflammation naturally, and I take all of those every day, because inflammation is a key cause of disease and aging. Blueberry extract, and I eat wild blueberries most every day. Phosphatidylserine is an amazing substance to help prevent brain aging and Alzheimer's. Pregnenolone is another one of those key substances. Vinpocetine, ashwagandha, an Indian Ayurvedic herb. Super important.

Dr. Dale Bredesen

[00:35:00] [00:35:30] To some extent, you can think of Alzheimer's disease as being the neurosyphilis of the 21st century. With neurosyphilis, it was simpler because it's one organism, *Treponema pallidum*. You can destroy it with penicillin. In this case, it's the response that we're calling Alzheimer's disease. It's many different contributors to that response. The first thing you have to do is look for them, identify which ones are there, and then for each one there are ways to address it. And sometimes it's as simple as improving the immune system's response.

Dr. Ben Johnson

[00:36:00] [00:36:30] Supplements. Let's go over some supplements, 'cause there are a number of supplements to help prevent aging of the brain and the body, keeping things fresh, alive, new. We talked about DHA, EPA, and that's essentially fish oil. If you're eating a fish or two every day, then you're probably getting enough, and that presents its own set of problems because of all the mercury that we've dumped into the water. If you're eating that much fish, you need to be taking EDTA or DMPS or DMSA to help remove heavy metals. If you have mercury amalgams, silver amalgams which are over 50% mercury, your dentist didn't tell you that when he put them in ... if you have those or have had those, then you have way too many heavy metals in your body. You need to be actively removing those. And that doesn't happen over a week, a month or a year, because our fat cells store those, and fat cell might live for five or 10 years, and then when it dies it releases those toxins. We're all the time getting a fresh dose of those, even if we took our amalgams out 20 years ago, because of the storage problem. We need to be taking heavy-metal-removing agents on an ongoing basis.

[00:37:00] [00:37:30] [00:38:00] As far as nutraceuticals ... I talked about DHA, EPA, and then there's benfotiamine, which is pretty amazing at removing heavy metals and as a longevity agent. ECGC, which is green tea extract, Alzheimer's prevention, cardio preventative, prevention of diabetes, a truly significant agent for anti aging. Magnesium L-Threonate, the form of magnesium that crosses the blood-brain barrier much easier, because we are mostly magnesium deficient in our society. N-acetylcysteine, alpha lipoic acid, amazing. AC/DC antioxidant can be water soluble or fat soluble. Most antioxidants are either fat- or water-soluble, but this is a go-anywhere, do-anything antioxidant. PQQ. Hormones ... as we age, our hormones diminish. Testosterone, estrogen, progesterone, bioidentical only and probably in lesser doses than we're frequently getting. The body can do a lot with a little, always. Berberine which is, I think, Oregon grapefruit, another one of those amazing basic substances. B vitamins, of course, we all need those in significant quantities.

[00:38:30] [00:39:00] As we age ... if you're over 50, if you're over 60 certainly, probably at the end of the meal, you should be taking betaine or hydrochloric acid because we lose a lot of digestive ability because we don't have enough acid in our stomach to help digest the protein. And we do need that temporarily. People don't understand why we have ... one of the reasons we have acid in the stomach is, it's actually a waste product. As we metabolize all day

long, we're making acid. The stomach is actually an organ of excretion to dispose of excess acid waste, because it's making bicarbonate to buffer the acid in our systems all day. If you make alkaline substance, you have to make an acid substance. The pancreas makes alkaline, puts it in the bloodstream, and then secretes the acid through the stomach. And this is a dual organ. But it's also useful in the initial phase of digesting food. And then, it has to go [inaudible 00:39:25] we've got to have a lot of alkalinity there.

Dr. Dale Bredeesen

[00:39:30] [00:40:00] Again, it's part of a program. One of the arguments here is, we want to do everything possible. The goal here is to make people better. It's not to take a monotherapy and say, "Does this help?" We've assumed this idea that if you study each thing by itself, then it'll tell you what works and what doesn't work. But if each thing by itself doesn't have a statistically significant effect but when you put them together it does, then studying each one by itself is not terribly helpful. We want to look at combinations. This is something where multi-variable clinical trials are the way of the future. We want to look at essentially concerts, it's as if people said to you "Okay Jonathan, what's the one instrument that makes the orchestra?" Well there isn't one instrument that makes the orchestra, you've got to put the whole thing together to make it work. And the results we've seen have been unprecedented, I mean just remarkable. People improving in their MoCA scores, people going back to work, people increasing their hippocampal volume, people where their spouses will say "I have my spouse back," it's absolutely striking. Now it doesn't happen overnight, you have to remember this disease has been progressing typically for a decade or two before you have a diagnosis.

[00:41:00] [00:41:30] It takes some time, and typically we recommend three to six months before you see really striking differences. But keep at it and include the diet, the exercise, the sleep, the stress, as well as the rest of the program. And again, if you're not improving then you're missing something, there's something that's been missed in your evaluation and/or treatment. Now not everybody, but there were some people within four days, and in fact I've seen people who would gain clear things that they could not do when they had started that they could do after four days. But again, we usually suggest three to six months. Now on the negative side, people who have then stopped for a number of reasons, going on a trip, or running out of things, it takes about 10 days and they start seeing a decline again. It's something that you want to keep doing, again just as you do with keeping a healthy gut, things like that. It's an ongoing process and we continue to optimize over the months and years.

Dr. Ben Johnson

[00:42:00] [00:42:30] Treatment all the dietary things that I've discovered, but in the aug medically intervention that we can do, there is a type of ultrasound that we can use, which can have dramatic benefits on reversal of [inaudible 00:42:09] and Alzheimer's. There are certainly intravenous things that we can use, and then super cool things happening in the stem cell world. So much of the future of medicine is going to be stem cells. Some amazing things happening in the realm of stem cells, we've always known that that was a huge wave of the future for health, and healing, and longevity. But the technology is getting there now, we can now harvest your very own stem cells out of your body. Not out of fat, we don't have to do the liposuction, and not out of bones, literally out of your bloodstream, that have full telomere compliments.

[00:43:00] [00:43:30] [00:44:00] These cells aren't aged like you are, these are very young youthful cells, your own stem cells that we can capture and then we can activate them with laser and certain frequencies. And now not only can we activate them, but we can place them, we can direct them where to go. Phenomenal advances in stem cells happening right now that are available to us today. I've seen significant with my therapies from diet, to exercise, to nutritional, to laser, to stem have significant reversal. A number of my clients are from Hollywood, or stars, or very important people that I can't talk about but preserving their brain trust is critical to the nation to

have those minds around, to the movie industry, to different industries. But to have those brain trusts vital and vivacious into the future we've got to have those, and we need yours. We need your brain working and working well, we need you healthy, we need your brain functioning.

Dr. Michael Merzenich

[00:44:30] [00:45:00] [00:45:30] I like to call your generosity of spirit the river that flows two ways in a sense that you're basically contributing to the health of the machinery of the brain of the person you're interacting with. Because you're actually exercising the machinery that's controlling aspects of their mood control and how well they're controlling their own life and their own happiness. But also, you're stimulated just as much, the machinery of your brain that's controlling your positive good spirits by being a generous person, as you are by being a recipient of generosity. And so operating, and this is a characteristic you see in all of these healthy long-live populations, they're people that interact with one another generously. And so get into that mode, that's a really good thing. You can actually do relatively simple things that a clinician can and have a first level assessment about the state of the health of what's inside. And the first the approach to it might be in remediation just like you have a problem with your blood pressure your medical doctor might suggest to you, you might realize you might need to change your lifestyle.

[00:46:00] [00:46:30] I've got to live life more directly and with the consideration of the health of my brain, I've got to think a little bit more carefully about what I eat and how I exercise physically, and how I exercise mentally, how I'm engaging my brain. I've tried to guide people, I've tried to provide advice to people, I've written a book about this called Soft Wire, which is a source of advice to people about how to think about living their life to the advantage of their brain. The first line of defense I think would be that natural one, and then beyond that we'll get more serious, just like we do if you've got cardiovascular problems. The equivalent of taking that blood pressure medicine is to go to a computer and intensively exercise your brain. It's to more seriously consider issues of supplementation and diet. It's to more seriously consider how you should be engaging in physical exercise, and in other ways doing things that assure that the integrity and the health of the machinery inside is restored to a stronger position and then it's maintained there.

Dr. Dale Bredesen

[00:47:00] [00:47:30] And I don't pretend to be the expert on what Alzheimer's patients should be eating, what we're looking at is what's the biochemistry that we want to drive them to? You can achieve that in multiple ways. In general, as I said, we use what we call Ketoflex 12/3, which is a multi-colored largely plant-based Flexitarian, mild ketosis, periods of fasting 12 and 3 diet in which you are providing an alternative source and restoring insulin sensitivity. However, there are others that would say for example, you want to be careful about lectins. And I think Steven Gundry has made some good arguments about what lectins actually do and their potential contributions, we're very interested in his work as well. I would say others may have other ways. Obviously as I said earlier, the Mediterranean diet has achieved some good results. I think that there are different ways to get there, but you want to get to a point in which the biochemistry that is abnormal in people with cognitive decline is restored not just to normal but to optimal.

[00:48:00] [00:48:30] [00:49:00] I always tell the patients we're now going to treat you as competitive athletes, we want you to have optimal not just within normal limits biochemistry. I think it's pretty clear that people that have cleaner diets, who have more appropriate biochemical diets, we already have the data they live longer. People who are doing more Omega 3's, are we really surprised that people who are eating processed foods as their main inputs with high glycemic indexes and really these are non physiological foods. The problem is that there have been assumptions made over the years isn't it just as good to raise your animals all stuck in one place? Isn't it just

as good to have a lot of meat and forget the vegetables? Isn't it just as good to use vegetables that are sprayed with poison? These are assumptions that have all turned out to be wrong, so not surprisingly the way it was done previously, the way we've actually adapted to use these things is the way it works. And the people who do it that way, guess what, they live longer, they live healthier, and we shouldn't be surprised.

Dr. Ben Johnson

[00:49:30] [00:50:00] Recently one of my patients in her late 50's was experiencing some cognitive decline, she has noticed that she couldn't follow having to take many more notes, and then pretty soon she was literally unable to work. We were able to reverse her cognitive decline using many of the techniques that I've just mentioned and get her back to work, full-time back to work, instead of housebound afraid that she would not find her way back home from the grocery store. A gentleman in his early 60's, big family history of cognitive decline Alzheimer's. Again struggling, his wife wouldn't let him go out, wouldn't let him go to the grocery store by himself, so at least stage five Alzheimer's. He back fully functioning, doesn't have to make lists anymore, finds his way back home from the grocery store just fine, and is helping to remind her of things again. She knows he's back, because he's his old self reminding her to do things.

[00:50:30] [00:51:00] These are stories that happen every day. We're seeing some new amazing things with the stem cells because stem cells cannot only ... All the things that we could do before were your cells at your age with short telomeres, your age cells. Now we can give you your cells, the age that they were when you were a newborn and active, so that they are creating new tissues, new interactions full of life and full of that primal life force that babies have, that we lose as adults, we lose with aging. We are getting to the point where we can recreate that life force. That is an amazing thing.

[00:51:30] The reason that I do what I do is for people. It's about caring for people. It's about helping people stay healthy. I was in my cancer clinic a number of years ago, and I had that moment, that epiphany. I was taking care of 20 or 30 patients at a time, and helping them get over critical moments in their life. I had the aha moment, what if I could help tens of thousands, hundreds of thousands, millions of people stay well, instead of trying to help a few get over their severe illness?

[00:52:00] That's what this is about, mostly about the healthy talk, how not to get there. Then certainly those that get there, I can still help them. We can reverse Alzheimer's. We can prevent Alzheimer's. Prevention is there, and if you need reversal, I'm here.

Dr. Michael Merzenich

[00:52:30] The scientists have talked about this a lot within the framework of what they call cognitive reserve, because they know that if you just look at the pathology in the brain, you cannot account for the losses in the functionality of the individual by the pathology. They say, "What's the difference? Why do some people develop Alzheimer's disease and some people have terrible functional losses?" They're terribly demented. There's a mismatch in what you see in the pathology. They say the difference is, is that the person that's still doing well has this magical thing called cognitive reserve.

[00:53:00] Turns out cognitive reserve, we now understand what it is. In fact, we now understand in a sense how we can deliver it to somebody by intensively engaging them in training. It's that delivery, that is what accounts for the reversal in the physical and functional brain that we see in these studies that we've conducted in animals in humans.

[00:53:30] There's another really important aspect in this. It's not just about reversing it by training. There are also really critical nutritional and nutritional supplemental considerations, because part of this process of the brain

destroying itself results in a strong change in the brain chemistry and the way the brain is. Basically, the brain has to have nutritional help to restore itself.

[00:54:00] What's really going to be effective is to integrate these forms of re-engagement of the brain, natural and delivered in by computer based training, like our training on Brain HQ, with nutritional supplementation, and with physical exercise. It's going to be a combination of these different resources brought to bear to strengthen brains and to keep them healthy.

[00:54:30] By the way, you do not want to be a typical 60 year old. It's not good enough. You want to be a 60 year old that's operating like a 20 or 30 year old. Of course you do. You do not want to be a typical ... Definitely don't want to be a typical 80 year old. You want to be an 80 year old that's operating like a typical 30 or 40 year old.

Dr. Dale Bredesen

[00:55:00] One of the striking findings is that there are different people who have different capabilities. There are certain people who can hit home runs, can smash the ball 500 feet. Most of us can't do that. There are other people that have abilities that don't understand as well. They can determine when something's happening. They may have some clairvoyant ability. They may have whatever that ability is, it's reproducible for them. They can do it repeatedly.

[00:55:30] I think there's a lot we don't understand. People have argued about whether the whole neural network has some sort of emergent property that you don't see when you break it down into simple synopsis and things like that. I think the idea, that is not terribly surprising, because you've got this very interesting network that can do things that are not the simple things of one synapse. At the same time, you have to remember that things that are relatively straight forward, neurotransmitters, mood, inflammation, these things have big effects on exactly what you're talking about.

Dr. Michael Merzenich

Jonathan:

[00:56:00] Can you tell me, what are some of these brain exercises that you do that are effective?

Dr. Merzenich:

[00:56:30] Well, there are two critical forms of exercise that are important. You can think of them as being ... What they accomplish is to re-refine the way the brain is processing information at the bottom of brain systems, you could say. The brain has to resolve the details of what you see or hear or feel. It has to basic, in very fine detail in time and in place, and it has to always be distinguishing it sharply, sapiently, from the background of things happening that are less meaningful to the individual. It has to be operating with accuracy at speed, you could say, on the bottom of the machine. That means from the point of view of the physical and functional brain that it's operating with high facility and accuracy.

[00:57:00] Then at the top of the machine, when you're operating from the domain of, you can say, of thought, with mind generated activity. It also requires forms of exercise that sustain and sharpen your operations from the top. When it's operating at accuracy and speed, you can say from the level of operations and thought, from the mind side and from the reception side, or perception side, if both of those things are restored to high functionality.

[00:57:30] Now just take brain speed itself. Brain speed accounts for about half of the variants in adaptive intelligence. It's dramatically degraded in the average older human brain. It can be almost completely restored at all levels by retraining the brain at any age, to the powerful form of operations that apply to a young person.

Dr. Ben Johnson

[00:58:00] Aging, stopping aging ... I was recently spoke at the Carlisle Conference in Cambridge. There were so many things that are coming ten years out, 20 years out. If you saw Doctor Aubrey Grey's Ted Talk on aging and preventing aging, just a super fun Ted Talk. You should watch it. These things are coming ten years down the road.

[00:58:30] [00:59:00] As I looked at my audience, I said, "Many of us don't have ten years to wait on these things." Aging can be prevented now. We can hold the line for about ten years right now so that when we get to ten years from now and we have all these new amazing agents, we can use them. Nicotinamide riboside is here right now, amazing anti-aging agent. All the other things that I mentioned, dietary supplements, phenomenal anti-aging agents. You can go down to your nutrition shop, you can go online, you can order those today and start taking them today to slow down aging, or stop aging, so that when those get here in ten years, you will still have an active, healthy mind and body, and you can take advantage of those things.

[00:59:30] [01:00:00] The phenomenal things that are coming down the pipe, and actually we have today with stem cells, so the future is bright. The future is amazing. We have many things available to us right now to use to prevent aging, to actually reverse aging to some degree, and the future, the sun is just dawning, just peeking, over the horizon. This is going to be a bright, brilliant day for stopping aging and preventing Alzheimer's, and for longevity and for having a vivacious, lengthy, lengthy, healthy life.

Dr. Michael Merzenich

[01:00:30] The typical Brain HQ exercise is game like. Basically what it does is, it rapidly adjusts in difficulty. Basically, you'll play a little brief game. It's a little bit like, we call it the Angry Birds format, because you play ... You work at an exercise for about two minutes. In this two minutes, you basically move as far as you can in performance from an initial position that's pretty easy, but if you can't get the answer right, you can say at that initial level it'll get easier still. It'll rapidly adjust to a level in which you begin to make errors.

[01:01:00] What it's trying to do is, it's trying to define the limits of your performance to that elemental ability. First in a very simple form of exercise. Then what it's going to do, it's going to drive you to improve on that ability under progressively more difficult forms of that class of engagement, maybe through 60, or 70, or 80, or 100 steps, forms of exercise. Think about if you've ever played Angry Birds, you know that it starts in a very simple form, and ultimately in the last form, maybe 100 challenges later, it's very, very difficult. It's just like that.

[01:01:30] [01:02:00] You could say you're going from a level in which, and it's always self adjusting, so that you're always mostly getting the answer right. It's always challenging you to drive you forward in an elemental ability that's important to your brain. It does this in ability after ability that relates to your attention control. It relates to your brain speed. It relates to the machinery that controls your learning and brain change and your alertness, that relates to your operations and your people skills, your social skills. It relates to operations that relate to your memory. It relate to operations that relate to your navigation in the world, and operations that relate to your elemental aspects of intelligence. It's going to go through exercise after exercise, and each case it's trying to find your place.

[01:02:30] [01:03:00] Also, every time you work on an exercise, it's calibrating you. Let's say that you're somebody using Brain HQ software, and you work on an exercise, it will tell you how you performed in relation to everyone else of your age that's ever done it. You can quickly calibrate yourself and say how am I doing as a 70 year old, let's say, or a 50 year old. You might find that you're actually operating like an 80 year old. You might find that with a little exercise, pretty soon you're operating like a 20 year old again. That's really what you want. You want to calibrate yourself, and then what you want to do is, you want to drive your performance so that it's like the

Questions & Answers 1:

Dr. Jay Davidson

[00:00:30] Hi. This is Dr. Jay Davidson. And I want to help answer some questions that listeners had on the Autoimmune Secrets docuseries. Many questions came in about finding a practitioner or finding a doctor or a functional medicine specialist in their area with this type of autoimmune condition, and a few words that I want to throw out there or say here is that I really believe that functional medicine is the future of true healthcare, and then within that customization. I really believe the traditional medical model is going to be left behind by functional medicine specialists really getting to the underlying root cause.

[00:01:00] But a couple things that I've seen in my journey of learning, and I've also seen colleagues go through, as well, is that it's almost like the typical person starts in the medical model. They're given medications that cover up symptoms. Then they're like okay, I want to switch to ... and I want to find natural things. And then we switch and we find natural things, but inevitably some of these natural things are just focused on trying to minimize symptoms, as well.

[00:01:30][00:02:00] The focus to get you well or a family member well while you're watching this, the key is to find the source or sources. That's really what it comes down to. Finding a practitioner in your area that specializes in functional medicine I feel like is a great focus, but more importantly, going to the upstream sources or upstream causes. And as far as, from a practitioner's standpoint, I've seen mold, Lyme disease in the coinfection category, parasites, toxicity, specifically heavy metals. I would say those are the top four causes underlying a lot of the autoimmune conditions that I've seen personally or worked with clients with.

Another thought, too, is it's great now that we're in an era where we have technology and that we can work remotely with individuals or doctors, as well, so we're not even necessarily limited to who's within our city or even within driving distance, but really now we can open our scope and say well, who's the best practitioner for what I have going on?

[00:02:30] The whole new medicine or true medicine, if you want to call it, I believe is really functioning in going to the source via more of a functional medicine approach, and then finding somebody that really you can work with via video or phone. Technology has really, really changed a lot. So just a few words in that category.

[00:03:00] Also had some questions about fasting, and if I'm doing a couple day fasting or a three day fasting, should I take supplements? And generally, from my approach, if you're just doing fasting to down-regulate inflammation ... obviously there's many benefits to it ... but if the goal is down-regulating inflammation, healing the gut, digestive tract, then limiting supplements, I do believe for those few days, could be good, because any supplement you put in to the digestive tract, the body's going to have to process it in digestive processes, and if you're really true fasting and you're not taking any supplements, then it really gives the body a chance to heal, the gut to heal. Down-regulate inflammation.

[00:03:30][00:04:00] However, the caveat is the purpose. So if you're fasting because you want to down-regulate inflammation, but also you have a massive parasite issue or overgrowth, fasting is a great way actually to kill parasites and take parasite populations down. Now what I've seen is when you fast, you can also add in some antiparasitic-type herbs while you're fasting to help speed that process up, but there's probably nothing as powerful dietary-wise as far as for parasites, then water fasting. Obviously you want to monitor electrolytes. There's a bunch of other options, though, too. Vegetable, fresh juice fasting. There's bone broth fasting. So there's many different types. But just think about what the purpose is, and if you have parasites, then maybe adding some antiparasitic herbs and then some binders can be extremely helpful, too.

[00:04:30] And then I know another question that came up quite a few times was this idea of adrenal fatigue. And it references back to this finding a practitioner that goes upstream and to the source. Because there's many people that focus or specialize in adrenal fatigue or adrenal insufficiency, not enough energy, not enough adrenal life in the body.

[00:05:00][00:05:30] What I find from a clinical standpoint, a lot of it seems to revolve around how do we support the adrenals, whether it's adaptogenic herbs or desiccated adrenal or enough vitamin C, enough sea salt. These minerals, these things that help support the adrenals. The key focus always is finding out okay, what's upstream? What is the source from? And if the source is from that you are really stressed out emotionally, it doesn't matter what type of adrenal formulas you take. Really have to work on the underlying issues of why the adrenals are tanked or why they're fatigued in the first place. And obviously, we can't all fix our emotional situation and environment perfectly and overnight, but it's really this key of okay, yeah, you can definitely take adrenal fatigue supplements or adrenal support supplements, but we always want to find out what's the upstream source.

[00:06:00] Mind mental stress is big. Again, chemical stress, like Lyme disease, toxicity, other pathogens. And there's also even physical stress, too, is a possibility. It's really diving into all those categories and uncovering. Because typically, there are actually multiple things for somebody's "condition" or illness. We don't want to just change one thing. We want to identify what are all the weak points or what are all the points that are holding me back, and then how do I address those, and really get to those.

[00:06:30] There were multiple questions about drainage. And I got to tell you, these questions I get so excited, because I'm like, all right, people. Processing the difference of drainage versus detox, and obviously you can go back to previous episodes of the Autoimmune Secrets where I dive more into that. But the key is, before any protocol, whether you're going to parasite cleanse, whether you're going to detox, whether you're going to kill off pathogens, whatever you're going to work on, I feel clinically that if we focus on drainage earlier on ... it doesn't have to be the very, very first thing that you deal with ... but if we focus on drainage early on, it's going to make it so much easier.

[00:07:00][00:07:30] And drainage is all about getting the pathways that normally excrete and clear things out moving. For instance, the colon. If you're constipated, that's a drainage pathway. If you are constipated, get the bowels moving. It could be actually a lack of water. Hydration is critical for the bowels to move. It could be a lack of fiber. Maybe poor dietary choices. That's also an option. Parasites actually clog that up, as well, too. If there's a parasite infection or infestation, that can clog it up, specifically rope worm or M-A-L-T, mucus-associated lymph tissue. Those things definitely clog it up. So making sure to increase magnesium, increase vitamin C. These are good things to increase the bowel movements and the colon.

[00:08:00] The kidneys are also drainage pathways. So making sure again, staying hydrated. Getting plenty of electrolytes and minerals are really important. There are a ton of different kidney herbal things, as well, support-wise, if you need help in that area. BioResource sells a brand called Pekana, P-E-K-A-N-A, and they have what they call the Big Three Detox and Drainage Kit, and they have something in there called Renelix that does kidneys. There's also one for the lymph called ITIRES, and then there's a liver one that's called apo-HEPAT. These are spagyrics, kind of a German new medicine approach. Little bit of a herbal homeopathic type thing combined. Typically very gentle. These are great things that you can start with.

[00:08:30] Like I mentioned, the liver bile duct is by far the most important thing, and I know there was questions about what can I do to open it up, and I want to get to that in a second. But the liver bile duct, if that's clogged, that means the lymphatic system is clogged. If the lymphatic system is clogged, then the brain draining to the lymphatic system is clogged, what they would more appropriately call the glymphatic system. Glial cell/lymphatic combined, they call it glymphatic.

[00:09:00][00:09:30] And lymphatic system actually primarily drains when you're sleeping. If you're not getting enough sleep, lymphatic system is definitely going to be a major issue, and you want to focus on optimizing sleep, going to bed at a good time, trying to optimize sleep and the quality, and that's going to help in the drainage process. I love frankincense oil, again across the temples and forehead. Nutrimetics has something called Pinella, P-I-N-E-L-L-A. And they also have another one called Burbur, B-U-R-B-U-R, by Nutrimetics. Burbur's a lymphatic drainer, Pinella is a brain drainer into the lymph, so these again are great tools.

[00:10:00] Infrared heating pads, infrared saunas, anything that helps warm the core body temperature up can actually really increase draining in the body, as well, too, because basically pathogens will often cool the body temperature down. And they do this because it causes stagnation. And it's stagnation where they thrive, but it's stagnation where our body does not thrive. So increasing the core body temperature, like I said, infrared heating pads or infrared saunas or even both, can be very beneficial.

[00:10:30][00:11:00] That will actually help to open up the drainage pathway of the skin tremendously. The other tool or the other area really to focus with is the liver bile duct. This one is the key. I had questions come in about how can I open up the liver bile duct? I understand now this is the most important area but what can I do? Your liver processes phase one, phase two detox and then there's something called phase three where it gets rid of it. A majority of what the liver's getting rid of ends up going into the bile. The liver makes the bile, it dumps most of the toxins and products it's processing into the bile. Pathogens love the bile and toxins tend to be in the bile. Both of those things could actually make the bile duct area sticky, sludging, and less movement. Again, less movement favors inflammation. It also favors pathogens, and it doesn't favor our body. Motion is life. We want to get the drain pathways moving.

[00:11:30] I absolutely love castor oil packing. Castor oil, you can put just a little bit of castor oil on your skin over that lower right quadrant, basically around that front right rib cage at the bottom there is where the liver bile duct and gallbladder sit. You can put a little bit of castor oil on that. Put a little six by six inch sheet of cotton or flannel over top just so it doesn't leak all over and then you can also put a heating pad, ideally an infrared heating pad because infrared actually penetrates the skin a couple inches versus a traditional heating pad is more surface heat. Infrared, one of the benefits is it really penetrates. Castor oil is very drawing so it's a great way to really pull things out of the liver bile duct area and to really assist in that drainage.

[00:12:00][00:12:30] There's a little bit more aggressive things like the liver gallbladder cleanse, where you're drinking Epsom salt. You're basically fasting for the second half of the day. You start drinking some Epsom salt, which causes diarrhea and gets the bowels open. Then before bed, you drink some grapefruit juice and olive oil. That causes basically the gallbladder, liver bile duct area just to squeeze and purges a lot of it out. Then in the morning, drink some more Epsom salt. That's a little more aggressive. That's classically known to be a great tool to open it up. For somebody that's really struggling, I wouldn't necessarily start there. That's something you can definitely do as you're progressing a little bit better. For somebody that's dealing with gallstones and a lot of clogging, that's a real easy way to see those bile stones and things actually come out. It's pretty eye opening.

[00:13:00] One of my favorite tools though for liver bile duct are coffee enemas. Coffee enemas, when they're done right ... I've got more details on my newest book, *How To Fix Lyme Disease* by Dr. Jay Davidson. You can just go on Amazon. There's basically four elements to coffee enemas. We're going to prepare coffee, organic, shade grown, non-chemical because you don't want to steep your coffee and release the chemicals and put them in your body. You want to make sure you get good, clean coffee. You want to put this tube about six inches up the rectum area and then that's going to go right to the liver. When it goes to the liver, it increases detoxification, glutathione, which is protective for the body but it also causes that liver bile duct to purge.

[00:13:30] Coffee enemas are probably one of the bigger leaps in your health journey to get up over and be like, "Okay, I guess I will maybe try these out or embark on them." I know it's kind of been a challenge for my mom. I've been talking to her about it. I'm like, "Your next step, Mom, is coffee enemas." I totally get it. I was against it for a few years because just the whole idea of putting something up the rear end. I'm like, "I don't even want to hear it." Then the more I did research, I understood this is super important.

[00:14:00] A couple elements to it is you can actually add a tablespoon of molasses to the coffee enema solution. That'll help you hold it so if you hard time holding the solution in, molasses will actually help to improve that. I would also recommend to add some good quality salt. Himalayan sea salt is great. Celtic, looks like Celtic, sea salt is also an option. Then Redmond's Real Salt is also a fairly good brand. Anything that's an unrefined salt, super important.

[00:14:30][00:15:00] I know there was another question about what kind of salt because I feel like the traditional salts are really contaminated. Yes, that's the key. You want to look for unrefined salt. Anything that says sea salt doesn't mean it's safe. Usually it's been refined, it's been heated up, it will probably have more minerals than traditional table salt, just the sodium chloride toxic bomb of regular table salt. The key is, let's look for unrefined salt. Himalayan sea salt, it's that pink hue. Celtic, or looks like Celtic, sea salt is more of like a grayish with speckles. Anytime you see salt where there's actually speckles in it, the speckles are the trace minerals. There's so many more trace minerals in unrefined salt. Then again, another option is Redmond's Real Salt. My favorite right now is Himalayan sea salt.

[00:15:30] Going back to the coffee enema, you have the coffee enema solution. You can put some molasses in there that'll help you hold it in. You can add some Himalayan sea salt to there so you're adding electrolytes in the body, not dehydrating and not becoming deficient of electrolytes. Then the third thing, too, is you can add a little bit of tangerine essential oil. That causes that purging of the liver bile duct very well, super effective. Coffee enemas are a great tool, again, the liver gallbladder cleanse, castor oil packing.

[00:16:00][00:16:30][00:17:00] If we're looking at herbs, Standard Process has something called Phosfood Liquid. That's a good tool. Stone Breaker from Herb Pharm is another herb. Lb, L for liver, b for bladder or gallbladder, by Systemic Formulas is also another great option. One of my favorites is TUDCA and it's a long name and they shortened it down, kind of abbreviate to TUDCA, but it's Tauroursodeoxycholic Acid. I won't quiz you on saying that again. TUDCA, you can just get it on Amazon. There's one called Nutricost. That works really well. You just take one capsule with a meal up to twice a day. Let's say you eat three meals in your day. Pick the two bigger meals of when you take TUDCA with it. For instance, lunch or dinner, or if you just eat two meals, do that. Or if you just eat one big meal in a day and just kind of a little snack between, then you can just take one capsule with food with TUDCA. It's a water soluble bio acid. There's something really extraordinary about it that it gets that moving. Not even sure totally the mechanism. There's ton of PubMed research and I've actually had an article on my website, drjaydavidson.com. You can type TUDCA and find a ton of resources on that. TUDCA's a great helper for that.

[00:17:30] Detoxification could also help liver bile duct in getting that flowing but you don't always want to be detox before the body's drained. So, focus on draining first. Liver bile duct is super important but don't forget about the other pathways. That should really make any protocol that you're doing easier to do and it should improve it and it really should help minimize symptoms. If you're somebody that has sensitivities, reacts to a lot of things, histamine intolerance and allergies and things like that, drainage is very important, very effective.

[00:18:00][00:18:30] Then probably one of my favorite pieces of the draining, too, is binding onto the bile because the bile will recirculate. The body recycles a lot of it and if it recycles it, the toxin typically comes along with it as well, too. So, if you were going to take some type of activated carbon or charcoal or clay, my favorite is a BioActive Carbon Plus and BioActive Carbon 1 by Microbe Formulas. Those are what I've seen to be the most effective because they not only go to the digestive tract, but two thirds of that product actually goes in the body even deep

into the cells and tissues to bind systemically, where classically, the activated charcoals or carbons and the clays just sit in the digestive tract. There's benefits of being in the digestive tract but obviously there's massive benefits of really being systemic throughout the body.

[00:19:00][00:19:30] Melissa has a question about, is it dangerous to do ketosis or a ketogenic diet or try to go into nutritional ketosis if you have a sluggish liver? Yes, I really believe that there's three dangers to look out for, for ketosis, ketogenic. I personally don't believe it's for everybody. I don't think it's a great long term tool either. I really believe the body does well in cycles. It's very individualized. There's not a one size fit all diet. That being said, a few dangers to look out for with ketosis is, if you do have a sluggish liver, bile duct, gallbladder area, then yes, ketosis or a ketogenic diet could potentially make you worse because you're consuming majority fat, moderation protein, low carbohydrate. Well, a lot of the fats will require the liver bile duct gallbladder to squeeze to release the bile to process those fats. Now there are some fats like MCTs, Medium Chain Triglycerides, that don't require that and that makes it easier but traditional ketosis where you're consuming just high amount of fat where the bile duct is required, you could potentially react to that. That is something to look out for.

[00:20:00] The other two reasons that I would say to be careful about ketosis is when you're looking at genetics, there's a gene called the PLIN1.

[00:20:30] This gene basically says that if you have your genes in a certain way, you actually do better with carbs, or if you have it in a different way, obviously you do better with lower carbs. Some people that react that I've seen clinically, that react to ketosis, or they just don't do well. They don't do well adapting, even they adapt, and then get into it, but then they just don't feel good, they just crash, and just feel like crud. I've actually found that they're the people that need more carbohydrates actually to be at more an ideal body weight.

So genetically speaking, we're not all programmed for low-carb, high-carb, middle-carb like ... Again we all have different blueprints. So the PLIN1 gene is a great gene to look at on your 23 And Me or in your genetic reports to see. That's really what I consider a lifestyle gene for carbohydrate and food intake.

[00:21:00] Then the other gene or genes to look at is saturated fats. Now this isn't always so important with ketosis, if you're following more like a Mediterranean type ketogenic diet, where you're not going to have a lot of saturated fats. But there are some genes like the ApoE, which is classically known as the Alzheimer's gene in the disease risk. But ApoE for a lifestyle impacts a lot of things, like Vitamin K2, and how much or less you can actually process and how much you have in your body. But it impacts fats very heavily.

[00:21:30] So if you have an ApoE status of 3/4 or even a 4/4, then you're somebody that actually wants to reduce saturated fat intake, which if you're following ketosis where you're consuming a lot of saturated fats, then yeah you can react to it and you want to steer away from it. There's some other genes like the PPARG, or PPAR Gamma, what they call. That one you can look at and see if you actually have a genetic privilege to fat or not. If you don't, then maybe ketosis is not for you.

[00:22:00] So I think those are three good reasons why ketosis might not be for you. But there's definitely been a lot of research and science done on it to convert your body into a ketone burner and things, but again, it's a tool. I don't think it's a forever thing. Just my personal opinion.

[00:22:30] "So I have some questions about how do you use herbs for parasite cleansing like clove, like neem, like vidanga, like Mimosa Pudica." So what I would recommend, MicrobeFormulas.com. They have organic Mimosa Pudica seed. So that's just one supplement, no fillers. All you're going to do is you're gonna ... The typical adult dosing is two caps, twice a day. Now if you're not sure how you're going to react to it, or you feel like you're a very sensitive individual, you can always start off with one cap once a day or even one cap twice a day, and then work

up to two caps twice a day. But if you're somebody that hardly ever reacts, you're like, "I can take anything and not react," you'll be fine at two caps twice a day.

[00:23:00] Then if you don't see anything after a while, you can always increase it to three caps twice a day, or even four caps twice a day, or even get up higher as well, too, until it really starts clearing some worms and some mucus and biofilm out of you. Because Mimosa Pudica seed is an amazing biofilm buster which can completely transform the gut. When it comes back to it, again, a lot of autoimmune conditions, a lot of autoimmune struggles reside in the digestive tract. So if we can heal the gut, that can be a great saver.

[00:23:30] Mimosa Pudica seed, it can definitely be done as a long-term parasite gut helper, where some parasite herbs, you don't want to take long term, Mimosa Pudica is completely different. So that's an easy one, but the thing about when you're taking it is you don't want to take it with food, and you don't want to take it with any other type of binders. Keep it away from diatomaceous earth, keep it away from charcoals or clays as well. Mimosa Pudica, you can mix typically with other herbs, but try to keep it away from food and try to keep it away from binders by about an hour.

[00:24:00] Now the clove, neem, vidanga, Microbe Formulas has a formula called Formula One that has all three of those in it. You could take Mimosa Pudica seed, two caps, and then you could take one cap of Formula One together, twice a day. That's an easy place to start parasite cleansing-wise. Again, if you feel like, "Oh man, I'm really sensitive, I'm not sure if I can handle this," you can always start at Mimosa Pudica first, and then shortly after, add in Formula One as well.

[00:24:30] If you do this and you don't see anything, like, "I don't notice anything, I don't feel anything, I've been doing it a couple weeks", increase the dosing. You're not going to overdose on Mimosa Pudica, you're not going to overdose on Formula One. So these are very safe to do. If you're a child like 10 to 12 years old or have a child that's 10 to 12 years old, typically half-dosing is for their category. Then obviously if they're smaller, it's even less than that. You can work with a practitioner to help guide you in that. So that's an easy place to start for when you're parasite cleansing.

[00:25:00] Then the diet question sometimes will come up, "Well what diet is best?" Parasite cleansing will work regardless of the diet you're on. Now obviously, we don't want to be consuming processed foods. But there are times where if you do some fasting, you actually accelerate that process of clearing worms out. So that's something to look into.

[00:25:30] Then we had another question about binders. What type of binders are the best for parasites? This comes back to understanding, again, any time that you're going to kill parasites or attempt to kill parasites, you're going to make them mad. They're going to disrupt the body. They're going to become active. They're going to release chemicals, because they want you to stop. They don't want to die. Then of course, we want them to die and leave our body.

[00:26:00] So in that releasing of chemicals, one of the chemicals that's a big factor, especially with somebody that's very, very sensitive, it's called ammonia. So Bioactive Carbon Plus, by Microbe Formulas, binds on to not only mold and some bad aldehydes, but actually ammonia. It binds on systemically throughout the body because ammonia is an extremely alkaline toxin and it happens in patches throughout the body. So if we can drain that, so helpful, for when somebody's sensitive but extremely helpful when you're actually parasite cleansing.

[00:26:30] Now, the second thing that happens when you're parasite cleansing is you kill parasites. Now Mimosa Pudica seed works amazing because it really is thick and gelatinous and helps to suffocate them out instead of kind of exploding the worms and everything releasing from what's inside. But parasites can have mold spores inside of them, which again, the Bioactive Carbon Plus will absorb just like it'll absorb the ammonia and bind on and detox

and drain that out of the system very safely. Parasites can also have heavy metals inside of them. They are heavy metal sponges, so when you kill parasites, heavy metals can release.

[00:27:00] Then there can be other chemicals and toxins and pathogens as well, but there's something called Bioactive Carbon Number One, by Microbe Formulas, that is specific for heavy metals and pesticides or environmental toxins. So if you take both of those carbons while you're parasite cleansing, you will minimize a lot of the symptoms and the reactions that parasites actually create in order to try to get you to stop.

[00:27:30] So a very effective protocol for parasite cleansing would be Mimosa Pudica seed, Formula One, along with both carbons. Now the key is you don't take Mimosa Pudica with the carbons, because the carbons are binders, but the bioactive carbons are in a whole different category. We can actually take them with food. So this completely changes the whole functional medicine world and realm, knowing that these carbons will only bind on to what they are programmed for. They're actually extracts of fulvic acid, humic acid, and they've been specifically modified so they don't bind on to nutrients and vitamins like traditional carbon and charcoals do.

[00:28:00] So the Bioactive Carbon Plus and the Number One, you can take them together. You can take them with or without food, with or without other supplements. The one thing to stay away from though, is the Mimosa Pudica seed. The Mimosa Pudica seed is a little bit more picky. So keep that an hour away, and Mimosa Pudica seed as well as away from food, empty stomachs. Hope that's extremely helpful in understanding what to do parasite-wise or where to begin.

[00:28:30] Deborah had a question about MTHFR and its relation to Lyme Disease, Hashimoto's, which she was diagnosed with, or a family member was diagnosed with. MTHFR is definitely a buzzword. I've got, I feel like a little different opinion on it, so I want to tell you this is my clinical opinion about MTHFR. MTHFR stands for methylenetetrahydrofolate reductase, basically. It's a pathway. There's many experts out there that study the whole MTHFR pathway, and all the things, and how do you take 12 different supplements to fix the whole pathway.

[00:29:00][00:29:30] I believe MTHFR is just one of the pieces to the puzzle. I try to avoid, clinically ... And again, this is my approach, but I try to avoid clinically of going right into MTHFR, because I don't want to miss all the other things. MTHFR is basically a piece to phase two detoxification. So the liver does phase one and phase two detoxification. Phase one does a lot of the estrogen processing from basically bad toxic estrogen, more into safer, good estrogen. Then, that's where a lot of the drug processing will happen, whether it's an over-the-counter medication or a prescription medication. Then also, cigarette smoke, car exhaust, nitrates, nitrites from food, these things. That's phase one.

[00:30:00] Phase two detoxification involves MTHFR, which is again, what I feel like a very big buzzword fad right now. Then there's also glutathione, there's acetylation,

[00:30:30][00:31:00] And then there's also glutathione. There's acetylation. There's oxidation, so there's actually a few pieces to phase two detoxification. MTHFR is part of that, so it's not to discount MTHFR at all, but I feel as if William Walsh, he has a great book. I believe it's called nutrient power. But he talks about 80% of our population has MTHFR gene variants or some people call them mutations. I believe a better word, especially for our mind is a variant. But 80% have variants at MTHFR, but 80% of people process the whole MTHFR fine, so it's not just based on the genes. There's other circumstances the body has to navigate and work around it. But essentially, if you have MTHFR issues, you want to look at the B vitamins that you're taking. B12 classically is generally a good recommendation just to stay away from cyanocobalamin, which is a lower end form of B12. Then there's other forms like methylcobalamin, adenosine. There's hydroxocobalamin, so generally B12 supplementation, if you're taking a supplement and it's got cyanocobalamin in it, generally one I would stay away from. But there are uses for methyl. There are uses for hydroxy.

[00:31:30][00:32:00][00:32:30] So you can have a combination of those as well. Obviously, you can work with a practitioner to help analyze your genetics more deeply, MTHFR, to see for you. Then the other one that comes up is folate or folic acid and I really believe that there is no reason to have folic acid at all in our supplementation. Folate or a natural folate form or folinic acid, calcium folinate, 5-methyltetrahydrofolate for 5-MTHF are so much better forms than folic acid. So if you're supplement or herbs have folic acid in them, I would try to avoid those completely and just go with a more effective form of folate or folinate or folinic acid, something that's more processed and it's easier. So if you do have MTHFR issues, you're less likely to build toxicity up to folic acid or have any other type of issues. Michelle is asking about IV heavy metal chelation and what should she know about it. Is this a good approach? I believe that IV heavy metal chelation is not something for the faint hearted. I do believe in many times it's actually dangerous. There are practitioners that understand a lot about it.

[00:33:00][00:33:30] The key to understand about heavy metal detoxification is what they call half life it's how when you take something in, whether it's a pill, a powder, you put it in rectally, or even you put it in IV, which IV heavy metal chelation would be when you'd put it right to the bloodstream, right via IV. There's a half life and EDTA is about an hour and a half. So half life basically means that if I was to give somebody 1000 milligrams or 100 milligrams, for instance, how long would it take that 100 milligrams to be cut in half and that's half life. So how long to absorb, process, and get rid of, that's essentially half life. So EDTA, if you were to put 100 milligrams in, for instance and then half life would be one and half hours, roughly. So about one and half hours later, you have 50 milligrams left. Well, one and a half hours after that, which would be three hours total, you'd have half of 50, which you'd be down to 25 milligrams.

[00:34:00][00:34:30] Then another few hours later, it'd be down even more significantly. So the key when your heavy metal detox of doing heavy metal detoxification is you want to have a steady stream in your body. So for instance, if you were doing IV EDTA chelation and that was it, I mean, potentially to follow half life rules, you want to be doing an IV almost every hour and a half, which is not practical, cost effective and nobody's gonna sit in a clinic all day every day and get IVs constantly of EDTA. So what happens with IV is there's a big rush into the body and then the body processes and it disappears real quick. Now when it disappears real quick, this is the danger because if there's metal floating around after the big amount that stirred them up, there's not a consistent stream to grab onto and to pull them out. So now, they redistribute and then that's what makes people sick. So you can do IV heavy metal detoxification effectively. But you need to follow it up with or you need to take along with it an oral chelator, like DMSA, DMPS.

[00:35:00][00:35:30] You can do rectal EDTA as well too, but something where you're doing it more drawn out, so I like to lean more into the DMSA, ALA in very low doses along with maybe you had hydrolyzed clinoptilolite fragment. That's what I've done for years clinically, seen great results, less likely to react, a lot cheaper typically too when it's in oral supplementation form than IV. But you can always do the IV in the front end and then introduce or have the oral as well too to try to speed the process up. But now that science is advancing, there's more and more tool. The bioactive carbon number 1 bi-microbe formulas actually go systemic throughout the body. So if you actually look at that, it just says that it's basically extracts folic acid. But it's essentially different chains and there's different sizes. So there's long chains, medium, and short chain polysaccharides and some other things in there that grab onto heavy metals. So about a third of it will stay in the digestive tract. A third of it will go into the body, into the tissues and grab onto metals there.

[00:36:00][00:36:30] Then a third of it will go deep into the cells, not only go into the body, but deep into the cells and actually across the blood brain barrier. So that's really, I believe the safest route to go. If you want to go more in depth as far as DMSA, ALA and smaller things, you definitely want to look at working with a practitioner that well versed in it. The IV heavy metal chelation I precaution you on unless you have other tools that will assist that. But IV heavy metal chelation by itself I really believe is actually dangerous and should try to stay away from that. Julie has a question about how do you remineralize your water after you filter it? So if you're filtering it with

distilled or even RO, reverse osmosis, and pulling everything out, then yeah. There's a potential that you'll need to re-mineralize. People will disagree either way that do you actually want total dissolved solids or minerals in your water or not? Should we just get minerals from food? I like filtering through the Berkey filter. It doesn't require any electricity. You just pour water in the top. Gravity pulls it through.

[00:37:00][00:37:30] I would get the additional white filters on the bottom. They do arsenic and fluoride as well too because I believe those are really important. But I like the Berkey and then with that water, you actually don't have to re-mineralize it. But there are systems, for instance, with reverse osmosis that they have basically cartridges after it filters, that it will re-mineralize so you can look into those. There's also a company that sells I believe it's Trace Mineral Research, but they sell what they call concentrate drops that have a ton of different actually trace minerals in them that you can then put the drops in the water after you filter it if you wanna add minerals to the water. You could also potentially just add a pinch of sea salt as well too, like a Himalayan sea salt to add minerals in there too if you felt that was necessary. We got some questions about multiple sclerosis and is it curable? Can I heal from it? What should I know about it? I believe that any disease or condition, I mean, why can't you get well. I believe our body was created to heal.

[00:38:00][00:38:30][00:39:00] It's just identifying what's interfering with that healing issues, removing that and getting it out of the way and letting the body work. Now MS or multiple sclerosis is basically demyelination of the neural sheath, so if you think about your nerve fibers, it's basically like an electrical cable that's got the wire inside. That's out nerve and then it's got this protective coating on the outside, the rubber basically of an electrical wire. Now MS is when the rubber starts basically disappearing or what they call demyelination of the myelin sheath, so there's a few factors to this. Mercury causes has been shown to cause demyelination of the neural sheath. Lyme disease, I believe will also cause demyelination of the neural sheath, so you can have Lyme disease and then get diagnosed with MS. It could actually be Lyme causing that. You could have heavy metal toxicity like mercury and get diagnosed with MS. It could be causing that and that's really the key factor is, okay. If you are diagnosed with MS and let's say it actually is MS, then what is the source or what are the sources to those things?

[00:39:30][00:40:00] Those are some really important ones to look into toxicity, heavy metals for sure, pathogens as well. Those I believe are well worth research. There's experts out there that have healed from MS, like Dr. Terry Wahls. She has a whole Wahls protocol that you can look at as well. I mean, there's just tons of resources out there and I really believe you can heal. Often too, it's important to know that MS can be misdiagnosed, where you can be labeled as MS or you can be labeled as lupus or can be labeled as RA and not actually have it. It could be coming from other factors. The third thing to throw out there, too, about multiple sclerosis is looking at the spinal structures, specifically the neck. So when you look at somebody from the side, they should have basically a banana curve. It should be a forward facing curve in the back. Research has shown that if you actually have a reverse curve, it's curved the wrong way, research-wise, they call it a kyphotic spine or reverse cervical spine. But if you have a reverse cervical curve, that'll actually cause demyelination of the neural sheath as well.

[00:40:30][00:41:00] So it could be pathogen, Lyme, could be toxicity, heavy metals. It could also be structural in the neck curve actually impacting MS or even affecting or even causing it or all of those things. So I would look at that for sure if you're struggling with MS.

Valerie asked a question about resources for diabetes. She has diabetes and looking for help. Do you have a good book? I don't necessarily have a good book, but Dr. Brian Mowll is an amazing expert on diabetes. I would look at his material. He's got great resources. Mowll is M-O-W-L-L, so Dr. Brian Mowll for diabetes.

Then we got another questions about parasites and it being used as treatment in autoimmune. Can you touch on that? Yes, I would recommend revisiting Autoimmune Secrets' regular episodes, but it's very controversial and I believe it's a little bit of a mistake, actually. Let me explain that for a second, so basically what's happening is if

somebody has an autoimmune condition, especially of the digestive tract, like an IBS, ulcerative colitis, Crohn's, something like that, there are people that are giving parasites to people to actually fix their autoimmune condition.

[00:41:30][00:42:00][00:42:30] Now I say the word fix there, but it's not, so I believe that it's still taking the symptomatic approach. Inevitably, the key for us to get well, health wise is to figure out, okay, what are the upstream sources to our health issues? Then, how do we remove those? Once we remove those, then our body can be really, truly well. But in the meantime, as we're going upstream and dealing with the sources, then we can modulate and help with symptoms and that's where ingesting a foreign parasite to the human body like a whipworm, that doesn't even replicate in humans, can actually calm down IBS, Crohn's, and ulcerative colitis. Yeah, that's a potential treatment, but I don't believe it's long term because if the parasite's not there, does that mean that the autoimmune disease is gonna come back? We're not getting to the source. So I really believe that the parasite treatment, we're actually swallowing parasites that are foreign to humans to try to help calm the immune system down. I feel like the attempt or what it's doing is actually distracting from what the upstream sources are.

[00:43:00][00:43:30] So I don't have anything necessarily wrong with it as long as we're going upstream to the sources, but in general, when you look at research and you see that, people extrapolate, "Oh, well then parasites are good." I would say, No. Parasites are the biggest epidemic right now not only in America, but really around the world. It's not being addressed well. When you actually start addressing parasites, it is absolutely amazing the health and healing that comes back to people. I mean, I struggle personally with parasites and not even knowing it, did all kinds of health things and really viewed myself as healthy. But once I actually started clearing parasites out, a whole new world came out health-wise for me. Then I immediately started implementing with clients and saw a tremendous difference. So I think there are both sides to the aisle in the parasite thing, but even the parasite treating the autoimmune, it's more just symptom. It's trying to modulate symptoms, which in extreme cases absolutely can be beneficial. But again, if we want to get well and stay well, we need to identify what are the upstream sources? As long as we go after the sources and remove them, the body will not only heal, but it'll stay well. So I hope this helps tremendously. Have a blessed rest of your day.

Questions & Answers 2:

Dr. Philip Oubre

[00:00:30] Hey guys, this is Dr. Philip Oubre here in Austin, Texas, and I'm going to go through some of these questions and answers that Jonathan has compiled from y'all's various comments and things. The first one I'll answer is Jennifer Carman. She's got multiple questions. Jennifer, so what I will say after reading your questions is it sounds like you really need to meet face-to-face with a Functional Medicine doctor, a Naturopathic doctor, or something, because you do have a lot of specific questions. I'll do the best I can in answering multiple of yours.

[00:01:00] The question is, "So this is amazing, but I don't know if I missed it but need to know where do we begin if we suspect adrenal fatigue or autoimmune disorder?" I'd say some of this is done by testing, so if you have adrenal fatigue, or if you're not sure if you have adrenal fatigue, you can do cortisol testing to find out if you really have it or not. Typically, in my practice, we go based on clinical symptoms, the most common ones being restless sleep, meaning you don't sleep very well, you wake up tired, you have an afternoon slump. Those are the three most common ones for me. Generally, if you're saying two out of three of those are positive, then I'm going to tell you you've got adrenal dysfunction.

[00:01:30] Adrenal dysfunction is so common in today's society, so pretty much if you have an autoimmune condition you can pretty much consider that you've got adrenal dysfunction, in my opinion. If you want to be

tested for an autoimmune disorder that's fairly easy. Most of that can be done by blood work. Most of it's covered by insurance companies, typically. You just have to have a doctor willing to write the orders, otherwise you have to pay out of pocket for the autoimmune testing.

[00:02:00] "Or do we go straight to a diet change, and if it's a diet change then do we get tested for food sensitivities?" I'm not a big fan of food sensitivity testing, because many times, if you have leaky gut, you will just be sensitive to whatever food that it is you're eating, because the food you're eating is leaking through the gut, and your immune system is reacting to that. The first part of healing leaky gut is the most important part. We never do food sensitivity testing right out the gate, because you're just ... I can't tell you how many times I used to do food sensitivity panel tests and people would go, "Strawberries, seriously? That's my favorite food," and I'd say, "Well, that's why it's one of your major reactions is because you eat it so often." That's one of the reasons we encourage people to alternate their foods and change their foods, because if you're having leaky gut then you're sensitive to anything you're eating, but if you're constantly changing it you're likely to be less reactive to it.

[00:02:30] [00:03:00] "How do we do that, because I eat a mainly healthy diet, and I didn't test positive for having gluten problems, but I know I'm sensitive to it?" If you know you're sensitive to gluten then don't rely on any test to tell you that you're not sensitive or are sensitive. Removing gluten doesn't harm anyone from their diet. There is no needed nutritional components to gluten that any human being needs, so if you're on the autoimmune spectrum or adrenal dysfunction or, quite frankly, any kind of disease, disorder, symptom, whatever you want to call it, remove gluten. It's so easy to do, anyone can do it, and it might have profound effects for you. If you're an autoimmune disorder at all then you just need to remove gluten, no questions asked, until you're feeling better, and then once you're feeling better if you want to add it back in that's up to you.

[00:03:30] "My doctor ran some basic tests and told me my thyroid was fine." Well, I will tell you that most doctors will tell you your thyroid's fine, but unless they do the advanced testing and look at the free T3, free T4, reverse T3, the autoimmune antibodies, all of it, then they're not really doing a thorough job. I've done a separate YouTube video on how to interpret your own thyroid labs, and what thyroid labs to request. You can go to my YouTube channel and look that up.

"Another doctor said my TSH would be higher. Another doctor said it looks like beginning of Hashimoto." I'm not even quite sure what that means. You either have Hashimoto's disease or you do not. You either have autoimmune thyroid levels or you do not. It sounds like you really need to get a Functional Medicine perspective on this.

[00:04:00] "What if it's done other autoimmune issues?" Well, that's always the concern is if you have an autoimmune condition, just because you have autoimmune thyroid doesn't mean that that autoimmune condition is not also attacking the brain and the joints and the heart and anything else. Your immune system can destroy anything inside your body, including your own tissue. Just because you have autoimmune thyroid doesn't mean other organs aren't taking damage.

[00:04:30] "Do I ask to run a whole autoimmune panel?" Not necessarily. We run a standard autoimmune panel on all of our patients that come to see us, because many people don't even realize they have autoimmunity, but if you're looking for a specific autoimmune disease, like Hashimoto's, because you have thyroid dysfunction, then you don't necessarily need the whole autoimmune panel. We do it on all our patients, because if we detect any autoimmunity then we're going to use that to track to show people that they are getting better.

[00:05:00] You asked, "And what exactly is that?" Well, that's a long question. There's tons of autoimmune testing we can do. In my standard panel we do an ANA Reflex. We do a rheumatoid factor. We do the inflammatory testing, of course, which I kind of consider autoimmune. We do the celiac disease panel, and we do the Hashimoto's thyroid antibodies. There's much, much more you can do, but that's kind of our standard panel for everyone.

"I'm trying to get to the bottom of some issues that RBs clear whether they are totally connected to the same thing, or not." I'm not sure what you meant by the rest of that question, so let's take someone else's.

[00:05:30] Deborah Bedell. "The MTHFR gene mutation runs in my family with its inability to detox heavy metals. My daughter has Lyme's and Hashimoto's. What can help with MTHFR gene mutation complication?" Hi, Deborah. So, MTHFR has a ton of knowledge and research and, quite frankly, just lots of information out on the internet. I'm going to simplify it, because I think too much emphasis has been placed on the MTHFR gene. The MTHFR gene is one mutation in a series of genetic mutations in your methylation cycle, whether you have mutations there or not. I didn't mean to say mutations, but series of genetic enzymes that are in your methylation cycle.

[00:06:00] [00:06:30] Don't lose too much sleep on the MTHFR gene. Your main goal is to get a homocysteine less than 8, and you can use any version of B vitamins to get that homocysteine less than 8. I typically recommend about 400-800 micrograms of methyl folate with a B complex. That's what I do. There's tons of opinions out there, but my current opinion is, I use the Pure Encapsulations B complex Plus once or twice a day, depending on how severely the MTHFR is mutated, and then I'll possibly add DIM Detox, if the COMT gene is also mutated.

[00:07:00] I would say there's a lot of hoopla placed on the MTHFR gene. As long as you're taking 800 micrograms of methyl folate, a good quality methyl folate, there's a lot of fake stuff out there, then that's a minor problem. It's important to remember that you stress your methylation pathway with toxins coming in and toxins that you already have in your body, so if you're eating a clean diet you're supporting your methylation cycle. If you're watching your toxins that you're putting on your skin and breathing in through your mouth through furniture or clothes, whatever, then you're already supporting your methylation cycle. Don't get too hung up on just supplements to improve your methylation cycle.

[00:07:30] The other issue that we commonly find with our patients that we see as far as autoimmune, chronic fatigue patients, many times they have such leaky guts and such malabsorption that they're not even absorbing their vitamins, so we can give them methyl folate till the cows come home, but if they're not going to absorb it then it's not really going to do anything, so we do a lot of vitamin infusions in my practice to help restore vitamin levels in people. Often times what happens is when we do those vitamin infusions people feel better dramatically, usually pretty quickly, within weeks. What we're doing is we're giving the body the ability to repair itself, so as it repairs itself then it doesn't need IV vitamins, it can then get them from the diet, it can then get them from supplements. Frequently we'll have autoimmune patients that just can't absorb the vitamins they're taking, which is unfortunate.

[00:08:00] Michiko Oyama. Hello, from Japan. I don't know if I said your name right, hopefully I did. You're question is, "I feel confused by Dr. Nguyen's presentation about the leaky gut. He mentioned that if we eat every day the same thing it could be a cause of the leaky gut. We can prepare a variety of healthy recipes by using almost the same ingredients, and these ingredients are defined often by seasons and local productions. I would appreciate if he could clarify this point more deeper."

[00:08:30] Well, I'll back up and say, it's not necessarily the food that you're eating every day that's causing the leaky gut, but it can certainly contribute and propagate, or perpetuate, that leaky gut. I answered someone else's question and said that if you eat the same thing every day your immune system is likely to respond to that and cause an immune reaction to that food. We often encourage people to rotate their food as much as possible so that they don't keep reacting to the same thing.

[00:09:00] That being said, we often have similar foods and spices in our diets. It's not a big deal if you eat similar stuff every day. The real root of the problem is the leaky gut so, yes, the food might be causing inflammation to perpetuate the leaky gut, but if you're eliminating the major food triggers like gluten, and dairy, and possibly

lectins, peanuts, legumes, all the other things that have been mentioned in the documentary, then you're doing as best you can to heal the leaky gut, so that you don't react to common, healthy foods, but it's possible to react to spinach and kale, perfectly healthy foods, if you've got leaky gut.

[00:09:30] Don't obsess over changing your food so much that you don't eat anything, because that's not healthy either. Focus on making sure you give your gut all the components it needs to heal, whether it be glutamine, bone broth, prebiotics, fiber, probiotics, all that stuff to heal the leaky gut, so that you can then eat food without having to worry about it. Now, you should never eat the same food over and over and over again. Frequently I have body builders that just eat chicken and broccoli, and chicken and broccoli, and chicken and broccoli, and they will get sensitive to both of those foods. You want to always alternate your foods within reason, right? But, that was a good question.

[00:10:00] Sherry Richardson. "Everything you have and the doctors have shared here is over the top, so valuable." Well, thank you. We appreciate that. I hope it helps. "I was wondering, could you guide me in the direction to a good functional medicine doctor here in Dallas, Texas," and you put FT, so Fort Worth, I assume. "My husband needs one badly."

[00:10:30] Well, I'm sorry your husband is suffering, first of all. I would direct you to the Institute of Functional Medicine website. That's where I go to for most of my training. It's called ifm.org, and there's a Find A Practitioner button. Now, since they updated their website, it's a little fishy to really find someone near you, but in Dallas, there's several functional medicine doctors. I don't really know of anyone in particular that's good or bad. There's, in my opinion, some really good functional medicine doctors out there, and some not so good ones, but there's really no way to know until you show up.

[00:11:00] What I will give you, some advice is that in Texas you can actually see anyone via telemedicine. That was a law that was passed, actually, this year, in 2017, that allows me and any other doctor to see a patient anywhere throughout Texas via telemedicine, and they never actually have to show up in the office. Now, we always encourage people to show up in the office, because there's a face to face connection that really happens when you touch someone, and in functional medicine, there's really not that many providers around, so if we can provide telemedicine to someone who can't really make it to us, then that's reasonable.

Many times, people from Dallas, what they'll do is they'll drive down once or twice, get to know us, meet us, say "Hi," and then we'll do the rest of their consults via telemedicine unless they're in Austin for something else, or they'll use it as an excuse to come to Austin to do something fun.

[00:11:30] Anyway, look for any functional medicine doctor in Texas. You're welcome to call my office, but there's multiple functional medicine doctors in Texas that can help you via telemedicine. Usually, you can't use your insurance if you're going to do telemedicine, though.

[00:12:00] George Rishell, Ritchell? Norton Shores, Michigan. Hi George. I butchered your last name. I apologize, but here's your question. "Episode 5 did a great job explaining what leaky gut is, the comparison of a cheesecloth to a screen from a screen door." Your question is, "I desire a similar detailed explanation about what causes leaky gut, and how to fix leaky gut. Thanks, and God bless."

[00:12:30] George, what a great question. I wish we had explained it better in the documentary, but I've answered a couple of other questions about leaky gut, so I won't repeat too much of that, but will summarize. Leaky gut just says that the barrier, your intestinal barrier ... if I can balance my laptop ... your intestinal barrier is completely sealed from the outside. When you eat a food, that food passes directly through you and becomes poop. Your body decides what it absorbs and everything else that it does not absorb stays in the bowels and turns into poop, and you dump it, hopefully every day, and if you're not, you need to work on that.

[00:13:00] But the idea behind leaky gut is, instead of a perfectly sealed wall, where things do not enter our body unless we choose it, the wall starts to open, and as that cheesecloth opens, things start to leak through that were never supposed to leak through. Those things that leak through must be destroyed. We do not want them in us, so then we must destroy them, and now comes the immune system, and the immune system causes inflammation, and then the inflammation causes more leaky gut, and now you've got a snowball effect until you have an autoimmune disease.

[00:13:30] To answer your question of what causes the leaky gut, there's a myriad of things that cause it, and quite frankly, I don't think we know it all, and I don't think we understand it all at this point. We're still naïve in all of this understanding, so I'll say that anything can contribute to leaky gut. Stress is a big one in my practice. I frequently talk to people about adrenal dysfunction and the stress that they're under, because the stress hormones cause bad bacteria to overgrow, good bacteria to undergrow, fungus to overgrow, and all that bacterial warfare at the intestinal lining causes leaky gut.

[00:14:00] It's important to remember that our intestinal wall is a single cell. A single cell lines up next to each other, and they lock arms side by side, and they are the only thing protecting you from whatever is out there -- bacteria, fungus, inflammatory foods -- and that single cell could easily get disrupted, whether it doesn't have enough energy or whether there's too much bacteria killing it. If that single cell gets disrupted, then all of a sudden, your barriers open. That's so much different than our skin.

[00:14:30] I like to use our skin as an example of leaky gut. If you make slices in your skin, then you're going to have leaky skin. You're going to have inflammation and cuts and infections all over your skin, because you've opened up that barrier. Now, your skin is not one cell. Your skin is thousands, millions of cells that actually start at the bottom, and as they grow, they die, and so basically, your outside skin is all dead skin cells, and that's a good barrier, because something can't infect something that's dead. We put out this dead exterior on our outside, on our skin, to protect us from pathogens and things trying to come inside.

Your intestines don't have that choice. There's one cell, and that one cell has to stay alive, and that one cell has to choose what it's absorbing. That one cell has to protect and keep out what it doesn't want. That's a hard job. I'm glad I don't have that job, because I couldn't do it all day long.

[00:15:00] If you start eating McDonald's and inflammatory foods, and you don't have the correct anti-inflammatory nutrients that you find in a plant-based diet with spinach and kale and broccoli and curcumin, and all those things that you need to appropriately turn off inflammation, then that single cell takes damage, and all of a sudden, you've got massive leaky gut, and then anything that's coming across the threshold is causing inflammation, perpetuating the problem.

[00:15:30] Maybe I went a little off topic there. To go back to your question, what causes leaky gut, I hope I answered that part, and how do you fix leaky gut? The way you fix leaky gut is by fixing all of those components that contributed to leaky gut. You got to remove the inflammatory triggers, gluten, dairy, whatever other food issues that you might have. You've got to remove the trans fats, the unhealthy oils, the carb, the sugar. You've got to remove the stress, or change your perception of the stressors. You've got to give your body the components it needs to turn off inflammation, so whether that's CBD oil or fish oil or curcumin, Boswellia, bromelain, whatever you need to appropriately turn off that inflammation.

[00:16:00] And then, one of the final components, although I could talk probably for hours on this, is you have to digest your food appropriately. So many people in America and other countries -- I don't know where you're from, George, did it say? It said Michigan, so from in the United States -- so many people in America have grown up on this fast food, processed diet and tons of stress and that's lowered our stomach acid production. If you don't have

enough stomach acid, you can't break down your food, and if you can't break down your food, then some other bacteria or fungus will, and you may not like how they break down the food. Your intestinal cells may not like it.

[00:16:30] So, it's important to get an analysis of how well you're breaking down the food, and if you can't get an analysis, then experiment with betaine and with restoring stomach acid, maybe adding in digestive enzymes, and if you notice that your digestion is so much better, then you know you needed that component. Gas, bloating, too much acid reflux, pain with meals, any of that is a sign that you're not breaking down your food very well and that food is inflammatory.

[00:17:00] I hope I answered that question. That's what functional medicine is for as far as doctors. We're here to help guide you on which portions of that plan are still important for you by doing lab testing and stool testing and all of that, and really helping show you where you need to head. Now, everyone needs to be on proper nutrition. That's 90% of the battle right off, but if you're already doing that 90% and not getting better, then you're missing components that a functional medicine doctor can hopefully narrow down, and instead of saying, "Do everything all at once," "Here, focus on these major components, and see what you can do to repair."

[00:17:30] [00:18:00] One of the supplements we have had astronomical results with, unfortunate, because it's quite expensive, is something called Ultra GI Replenish from Metagenics. It's a protein powder. It's got L-gluten, it's got a dipeptide L-glutamine, a prebiotic fiber that's found in breast milk, and one of the components that's not coming to mind right now. But anyway, that protein powder, we've had amazing success with helping people heal their leaky gut, and the reason why it helps is because glutamine is the main protein or amino acid that feeds that single cell that's flapping in the wind in front of the bacteria and fungus and inflammatory odds, so when you give it the energy source that it needs, that L-glutamine, then it's much more likely to survive, and if it survives, then it can lock arms with the cell next to it, and really seal the leaky gut.

[00:18:30] Metagenics made an L-glutamine better. You can get that all over the place, L-glutamine, but they made a dipeptide out of the L-glutamine, and I never realized it, but it makes sense. We were taught in medical school and in biochemistry that our intestinal cells don't absorb single peptides, they absorb dipeptides, or Tu Peptides, so Metagenics took L-glutamine and attached it to alanine, and so they made this L-alanyl-L-glutamine. Well, this dipeptide is so much better absorbed than just regular glutamine, and I think that's one of the reasons we're having so much success with that dipeptide than other glutamine products that we've used in the past.

[00:19:00] The fact that it also has this prebiotic fiber that only feeds good bacteria, the one made from breast milk, it helps restore the healthy bacterial balance, and so if that one single cell is flapping in the wind and there's too much bad bacteria, then no matter how much glutamine or dipeptide you give it, it's not going to get better. Adding that fiber in boosts the good bacteria and puts less inflammatory fire and inflammatory stress on that single cell, so hopefully, it survives.

Hopefully that answered your question, George. That was a good one. I talked a lot time about it.

[00:19:15] [00:19:30] Noor Aldeem. I hope I didn't butcher that one. "Hello, I would have liked you to also talk about the disease of multiple sclerosis. Is there a solution?" Well, Noor, multiple sclerosis is a common autoimmune disorder. We don't see it a ton in Texas. For whatever reason that autoimmune disease gets worse and worse or more common as you head further north, so down in Texas, we don't have as much, although we do have patients with multiple sclerosis. It is very common. It's a neurodegenerative disease, where you start damaging nerves in your brain so that you get less and less sensation or motor function throughout the body.

[00:20:00] I will say that first of all, you should look up Dr. Terry Wahls. She is an amazing speaker, amazing woman, and she has an amazing personal story. She herself had multiple sclerosis. She was bed bound in a hospital bed before she discovered functional medicine and started treating herself. Now she's walking, talking, multiple

sclerosis is almost completely reversed, and she teaches all over the world. She wrote a book. It's called The Wahls Protocol. Her name is spelled "W-A-H-L-S." Terry Wahls. She's a great speaker. Watch her on Facebook. She's got YouTube and all kinds of stuff. She is a multiple sclerosis expert. She is a neurologist by training and so she's doing research in the functional medicine world and reversing multiple sclerosis and other neurodegenerative diseases.

[00:20:30] When you see multiple sclerosis or, quite frankly, any autoimmune condition, you can apply the same principles to any autoimmune condition. It doesn't matter which one. There's no special diet or special thing for each autoimmune disorder. Now, there may be a special diet for each person, or one person does better on this than the other person does on that. Each person is an individual, but not necessarily each disease. You can apply the same principles. If you heard someone talking about Hashimoto's, then treat yourself the same way Hashimoto's. Keep experimenting and find out what works best for you.

[00:21:00] [00:21:30] Here's an easy one. Valerie Rochy works at VNS of Northeastern New York. "Welcome, from New York." Hi, Valerie. Your question is, "Could you recommend a book on understanding diabetes?" Gosh, there's so much research and so much information out there on diabetes. I'm a big fan of the ketogenic diet as far as Type 2 and Type 1 diabetes. I believe anyone can reverse their diabetes fairly quickly by switching to a ketogenic diet. There's a ton of information about the ketogenic diet, but the main emphasis is eat lots of fat, eat a small amount of protein, and eat almost zero carbs, as close to, you can get it zero carbs.

[00:22:00] If you look at your macros, you want about 70% to 80% of your caloric intake to be fat. You want about 20% to 30% to be protein, not to go overboard on the protein 'cause the protein converts to carbs. Then, less than 5% to 10% of carbohydrates. Now, the books I would recommend probably from Mark Hyman is one of the best ones. It's called The Blood Sugar Solution. He does a great job of laying out what to eat, how to reverse it, but reversing diabetes should not be too difficult. The hardest part is that many times, your body gets addicted to the foods that are causing the diabetes.

[00:22:30] I'd say the hardest component is gonna be upstairs and convincing yourself that you have to get rid of these foods and go through the period of not feeling too good before you feel better. When your body's running off of sugar and all of a sudden you switch to fat, that feels terrible. You will go through what we call the "keto flu." You will feel terrible while your body adapts to working off of fat. You may wanna do a slower transition unless you wanna just gung-ho reverse it, switch to keto immediately, but we usually recommend to people to slowly switch to keto. Hopefully that answers your question, Valerie.

[00:23:00] Marilyn Bosler, Reading Area Community College. You had a long comment, but mainly your question is, "Can you give information to all of us to where we can find doctors or health professionals that can work with us?" I will let the other doctors and people in the documentary say where to find people similar to them. I normally send people to the IFM website, or Institute of Functional Medicine, IFM.org. You can do a Find a Practitioner and you can look anywhere in the United States for practitioners near you. Now, unfortunately, there's not a ton of us out there yet. The IFM is training as many doctors as are interested as quick as possible, and they're doing a good job. But it's taking awhile to get enough people out there.

[00:23:30] But using that website can narrow down some doctors that are near you and trained in functional medicine. I would say there's a lot of different organizations out there that are promoting functional medicine, but IFM seems to be the leader in the field that's really training people to do functional medicine in a similar fashion. They're who I support that I go to all their conferences and things. It's IFM.org. At the top right of their website, there's a Find a Practitioner link.

[00:24:00] Melissa Orowego works at Homemaker and Homeschool Teacher. Your comment is, "I'm really concerned that you are promoting the ketogenic diet. Yes, it has been helpful for children with epilepsy, but it is

not a healthy long-term solution. I would highly recommend the Nutritarian diet as promoted by Dr. Joel Fuhrman.” First of all, I’ll say I’m not very familiar with the Nutritarian diet. I’ve not even heard of that. Probably the diet with the most research is something called the Mediterranean diet, which you’ve probably heard of.

[00:24:30] I will say that, yes, the ketogenic diet is rather newer as far as popularity. But the ketogenic diet has been around for decades. It was made popular by children with epilepsy, but it’s become so much more than that. We’ve learned that. Why is it so popular for epilepsy? Well, it’s popular for epilepsy because it’s an anti-inflammatory diet that allows the brain to recover and regenerate and gives it all the nutrients it needs to regenerate. I would say if it weren’t good for the long-run, then it probably wouldn’t be good for the brain in the long-run.

[00:25:00] While the research may still be lagging and not really appropriately able to tell people that the ketogenic diet is good long-term, I would say that so far, we don’t have any data to say that ketogenic dieting long-term is not good. What I will say, and I believe Dave Asbury backs this up, is that cyclical ketogenic dieting. What I mean by that is not staying on a strict ketogenic diet 365 days a year, maybe coming out of ketogenesis every two to four weeks, not necessarily having a full feast day where you go to a Mexican restaurant and pig out on whatever you want to. But just coming out of ketosis, eating different foods, eating grains, whatever you might need to come out of ketosis and whatever doesn’t upset your inflammatory cycles.

[00:25:30] But would say there is research coming out five and six years now showing that ketogenic dieting long-term is perfectly safe. But that’s another thing that it’s important to be watching your lab work, your electrolytes, your minerals, and making sure that the the diet you chose, whether it be ketogenic or Nutritarian, that you’re getting the minerals and vitamins that you need. That’s where laboratory testing comes. Now, obviously, if you feel bad while you’re doing the ketogenic diet, then maybe you shouldn’t be doing it. But I wouldn’t necessarily say that the long-term effects of ketogenic dieting is bad. I don’t know about your Nutritarian diet. You’re welcome to continue that and promote it, I’m just not familiar with it.

[00:26:00] “I’m listening to all these specialists all talk about very different diets. I feel confused because I do not know what diet to follow. I do not have weight problems, but I do have rheumatoid arthritis and have struggled for years trying different things with no success. What is the right diet? What is the right thing to do?” Ooh, that’s a tough question, Alba. I will say that there are very different diets out there. There’s all kinds of stuff that you can do in the autoimmune world and no diet is perfect for everyone out there. The most important thing that you can do, Alba, is that you can pick a food plan or diet, whatever you wanna call it, that works well for you and does not have inflammatory triggers. You can do your lab testing.

[00:26:30] Do a rheumatoid factor. Implement a diet plan. Implement a probiotic and gut-healing restorative program. Then stick to it for six months. Check your rheumatoid factor again. If it’s going down, then you know that’s working and it will continue to get better and better. If it doesn’t, then you need to change it up a bit. But maybe you’re missing a vitamin. Maybe you’re missing a mineral. Maybe you have so much gut dysfunction that no matter what diet you do, it’s not gonna go away. I would say if you’re struggling to get better, this is exactly what functional medicine doctors and naturopathic doctors and all that are designed to help with.

[00:27:00] [00:27:30] We can help do the testing and find out what problems individually that you’re struggling with that maybe once we fix those underlying problems that you can get better. I will use the metaphor that Dr. Bredesen uses in his End of Alzheimer’s book. He says, “It’s like having a roof with 36 holes in it and 36 different types of holes.” When it rains, you always get water in the house but one patch is not gonna fix every hole. One patch fixes one hole. Yes, food planning is the 90% of your plan, in my opinion, but maybe you’re missing 35 other holes that make up that 10%. Until you fix that 10%, the 90% won’t do anything.

[00:28:00] I would say that at this point, Alba, it's probably time to look up a functional medicine doctor or someone who can help guide you into fixing whatever might be preventing you from reversing your autoimmune condition. If you've had RA for years, it's really important to remember that it is going to take a long time to reverse. Our general anecdotal thing that we tell people in functional medicine is however many years you've been struggling with something is how many months it's gonna take to reverse. Now, the difficulty with autoimmunity is by the time you show signs of autoimmunity, you've had it for years already.

[00:28:30] Now, unless you're unusual and lucky and you catch it pretty quickly, but most people by the time they show signs of autoimmunity, they've already had it for 10 years. You can already add 10 months to your program if you're already having autoimmune disorder. If you've had RA for years, let's say you've had it for five years. You most likely had autoimmune disease for 10 years and didn't know it. That's 15 years total. That means it's gonna take 15 months for you to reverse it. That's a long time. Gotta be patient, Alba. If you have someone to do the testing, that really helps guide your treatment.

[00:29:00] Jean-Luc Charlabois, Université de Montréal. I'm sure I butchered that, but hi. "I really enjoy this series and have a question. What do you think of the Bulletproof Coffee Diet?" Dave Asbury has some neat, interesting suggestions as far as the Bulletproof Coffee and ketogenic dieting, all that MCT oil. I'm a big fan of Dave Asbury, but once again how I answered some of my other question, find something that works for you. If you're doing the Bulletproof Coffee and you're having diarrhea or "disaster pants," as we call it, or any other side effects, acne, I don't know, whatever else might be happening, then it's not the right diet for you. Try anything that makes you feel good. If it works, stick to it. If it stops working, change it up.

Dr. David Jockers

[00:29:30] [00:30:00] [00:30:30] Hey, everybody. I'm Dr. David Jockers and really excited to join my good friend, Jonathan Otto, for the Autoimmune Secrets. I know this documentary has been amazing. I know it's inspired many of you and really given you hope. I know going through medical school myself, I was told really there's no solution, there's no real cure, I guess you could say, for people with autoimmune disease, but instead, we've got to rely on really strong medications, and these people typically die 15, 20, sometimes 30 years earlier than everybody else, so their life expectancy is lower, but you know what? What I found when I got into practice and I started to really study from other holistic doctors and people that were helping these types of conditions, these autoimmune conditions get well. I found that that's not true at all, that, literally, lifestyle change, using lifestyle change, plant-based medicine, functional medicine protocols, changing our diet, our lifestyle, the way we see stress, sleep habits, we can see people literally reduce their symptoms and, in a sense, put the condition in remission, so it's not like we cured it, but we put it in remission where it's not expressing itself in as little as sometimes 30 days seen people get results like that.

[00:31:00] I've had people that, within a week, have seen significant changes in conditions, like rheumatoid arthritis and Hashimoto's and different types of autoimmune conditions, psoriasis, that have been plaguing them for 20+ years, and so I've seen many people be able to come off of medications because their bodies were doing so well.

[00:31:30] I really hope that this documentary has given you hope. I would encourage you to invest in it, so that way you're able to listen to it over and over and over again and share it with other people. I wanted to take a moment here and just answer some of the questions that a lot of you guys posted again, and Jonathan wanted some help. He wanted some help from some experts and so he contacted me about this, so I want to jump in.

[00:32:00] [00:32:30] [00:33:00] I know Julie had asked a question about finding a holistic doctor that can help her assist in reversing vitiligo. Vitiligo is basically an autoimmune disease that affects the skin pigmentation cells, and

so you'll see splotches. People with vitiligo, they have little splotches of no pigmentation, just whiteness compared to the rest of their skin. It's an autoimmune disease. Because it's rare, a lot of times, doctors and different individuals believe, hey, there's really no hope for it, but that's not actually true. There actually is a lot of hope, even for people with vitiligo. We've got to get, number one, to the root cause, which is typically going to be bad diet, lifestyle, exposure to too many toxins, and so we've got to start to change the diet and follow an elimination diet. When we get rid of things like grains, we take out grains, particularly gluten, but really I recommend all grains, all dairy, except maybe ghee. It's usually the proteins, the casein, the whey, that are in the dairy that contribute to autoimmunity and chronic inflammation, so we want to take that out. We want to take out other things, like nightshade vegetables.

[00:33:30] I know somebody else had a question about rheumatoid arthritis. I find that nightshade vegetables, like tomatoes, potatoes, eggplants, peppers. Really good foods, but you know what? We find that a lot of times people, they have sensitivities to these types of things, and they can trigger more pain, more autoimmunity, more chronic inflammation for different individuals. We'll take people off of the nightshade vegetables, off corn products, sugar, of course, lower carbohydrate diet. What else? We take them off nuts, eggs.

[00:34:00] [00:34:30] These are all common foods that a lot of people have sensitivities to, and they cause chronic inflammation, so an elimination diet. We start to work to heal the gut using things like enzymes, digestive enzymes, probiotics, things like L-glutamine, which is a great amino acid that helps to repair the gut, the enterocytes of the gut. Really run off with L-glutamine, so it's super critical for their digestion, for basically for their strength and integrity of the tight junctions in the gut, so we use L-glutamine, use things like aloe vera, deglycerized licorice roots. There's a lot of different compounds that can be really helpful for helping reestablish integrity in the gut lining. The gut lining is kind of like my hand here, where it's got these little junctions, and so when it rips, like a zipper opening up, now there's these holes, so we need things that are going to help close it. Again, all those different compounds, marshmallow root, slippery elm. You can get teas with these types of things, as well, aloe vera, deglycerized licorice roots, L-glutamine.

[00:35:00] Let's see. What else is in there? Colostrum can be really, really helpful, quercetin, curcumin, which is the active ingredient in turmeric. Zinc is really, really important for that, magnesium. Getting a lot of these compounds, really important for helping to heal the gut.

It takes me into the next thing I wanted to really focus in on, which is nutrients, in general, that I find people to be very deficient in that have autoimmune conditions. These are things that are really powerful for reducing inflammation that we all need optimal levels of.

[00:35:30] [00:36:00] [00:36:30] Number one is vitamin D. I see most people with autoimmune disease, they're vitamin D-deficient, and so their vitamin D levels are not good, and even if they go to their medical doctor, they're going to be looking at levels of 30 nanograms per milliliter or above. Optimal levels, the ranges can vary, but typically it's going to be between 50 and 80 nanograms per milliliter. That's the optimal range to get your vitamin D levels in, and people with autoimmune disease sometimes need more. Sometimes, they'll have vitamin D gene receptor mutations, and they just need more vitamin D, so getting them up in that higher range, 80, maybe even up to 100 can be really, really good. Vitamin D helps coordinate the two arms of our immune system, a TH1, TH2. It helps to coordinate the T-helper cells, which help to calm down inflammation in our system, so vitamin D's so important. If your vitamin D is 10, 20, even 30 nanograms per milliliter, that's a significant deficiency that we've got to raise, and it's very inexpensive to do. Vitamin D supplementations are really inexpensive.

[00:37:00] [00:37:30] Also, you can use the sun, of course, getting good high quality sun exposure is so powerful for your body, just get the natural bio-photons from it. You get the vitamin D, so getting out in the sun more often, and that's just something that most people are not doing, unfortunately, in our society, and so we've got to get

that good high quality sun exposure as much as possible or do vitamin D supplementation. I recommend both, a combination of both. Another good supplement is cod liver oil, has vitamin D, also Omega-3 fats, and that's another thing that I see a lot of people really deficient in is high quality Omega-3s, particularly long chain Omega-3s, like EPA and DHA, which we find in fish oils, and that's where cod liver oil comes in. It's so good. We get the EPA, the DHA, real powerful for reducing inflammation in our body. Cod liver oil also has vitamin A, which is another thing that we need when we're trying to reduce inflammation, getting good high quality fat-soluble vitamin-A.

[00:38:00] We're also going to get that from things like ghee, grass-fed butter or ghee. Even though I said, "Take out the dairy," usually people with autoimmunity can do pretty well with grass-fed butter or, even better, ghee. Typically, if they have autoimmunity, I'll have them do ghee, which is completely free of casein and lactose and whey, which are the typical sensitivities, and they usually do pretty good with that, and it's got tons of vitamin A, vitamin E, lots of fat-soluble nutrients in it. I'm a huge fan of doing that if that person's able to tolerate it. It's a great food source. Also, a lot of dark green, leafy vegetables, really good source of vitamin A.

[00:38:30] [00:39:00] Another nutrient that we need for autoimmunity is zinc. I see a lot of people really deficient in zinc for a number of reasons. Number one is heavy metals will displace zinc, so if we have a lot of mercury or aluminum or things like that in our system, it's going to take the binding sites for zinc, and so we're not going to be able to, in a sense, absorb enough zinc, but now, also, the other big thing is most people are not consuming enough high quality zinc, and that's a huge factor, not getting really good food sources of zinc, like, for example, our ancestors would consume a lot of seafood. Seafood is rich in zinc, whether it's fish, different types of seafood. Also, the liver, like cod liver oil, but just the actual liver, in general. Organ meats are very rich in zinc, and we really don't consume organ meats on a regular basis in our society today. Organ meats, really, really good source of zinc there. I recommend that. Also, supplementing with zinc.

[00:39:30] [00:40:00] [00:40:30] The RDA for zinc is about 12 milligrams a day. I think that is just so low. I typically am going to recommend my clients getting somewhere between 30-60 milligrams of zinc, depending on what I see maybe on a micronutrient test. A zinc supplementation's a staple for me, in particularly people with autoimmune disease getting high quality zinc. I like a zinc glycinate form. Glycine itself, that amino acid, is a great carrier for the zinc to get it into the system where it can be used, and glycine, when it displays, glycine is really good for calming, helps improve GABA production, which helps reduce anxiety, helps promote good sleep, and really good for phase 2 liver detox, as well. I like a zinc glycinate form or bisglycinate, whether it's two glycine forms on it, or two glycine molecules. Getting good high-quality zinc supplementation, eating zinc-rich foods are very, very valuable. Let's see. Another good one, glutathione, so we need to support our glutathione, which is our body's master antioxidant. Glutathione is really what helps tame the immune system. If you have autoimmune disease, you really don't have enough glutathione. It's a sign that you don't have enough glutathione, so we've got to really address that. Food can help with boosting glutathione.

[00:41:00] We can do sprouted broccoli, for example, broccoli sprouts, cruciferous vegetables in general. Particularly the sprouted forms are great, but just doing broccoli, cauliflower, kale, collard greens, those are all rich in glutathione compounds. Also, you can do things like avocados are rich, organ meats like we talked about, high-quality animal products, organic, grass-fed. Animal products can be rich in glutathione-producing compounds.

[00:41:30] Typically, you're going to need to supplement. There's a lot of different things you can supplement with. An acetylcysteine is the major ... Cysteine is the major rate-limiting factors. Glutathione is made up of three different amino acids, and cysteine is the one that typically we're most deficient in, so adding more cysteine, like acetylcysteine, can be a great way or doing a liposomal glutathione where there's a liposomal carrier that gets it into the system and gets it right into the cells or other forms, like reduced glutathione. I'm a huge fan of that.

Acetylated glutathione is also really good. It gets through the gastrointestinal system. If you were just to take a pure glutathione, it would be broken down into amino acids in your digestive system, so that's really key, getting the glutathione.

[00:42:00] [00:42:30] I wanted to actually jump back to zinc. I was talking about reasons why people would be zinc deficient. I talked about heavy metals in general. I talked about a zinc-deficient diet. Also, blood sugar insensitivity or blood sugar imbalances are going to deplete our zinc level so, when we have blood sugar that jumps way up and then jumps way down, it ends up causing a depletion of major minerals like zinc and other trace minerals. Magnesium is another one that gets trained, chromium, vanadium, a lot of really key ones. It's just supplementing with trace minerals in general that incorporates zinc can be really, really helpful.

[00:43:00] Also, doing high-quality salts, as well, so Himalayan sea salt or Redmond's real salt to get those high-quality trace minerals back into our system is important, also, low stomach acid. I see this often. We know that stress, in general, is the antagonist to good digestion so, when people are stressed out and they're trying to eat ... For example, the whole idea of fast food or, in America or really Western countries in general, we're so busy.

We're just always busy, and we try to just throw food in there. It's like, "Okay, I'm busy, but I'm just going to eat on the go. I'm going to eat in the car. I'm going to eat on the rush. I'm going to eat while working. I'm going to eat fast and quickly." When we do that, that's not going to allow our body to produce the right amount of digestive juices, so we want to produce a high-quality amount of stomach acid, bile, pancreatic enzymes.

[00:43:30] [00:44:00] It's so important that we produce these digestive enzymes and these digestive juices in general so we can sterilize, break down our food, absorb key minerals like zinc, vitamin B12, iron, different things like that and be able to metabolize our food effectively, absorb it, and then, on top of that, we also want to make sure that we are not putting too much stress on the gut. If we don't produce enough stomach acid, we're not going to trigger the right amount of bile to release. We're not going to get the right pancreatic enzymes. Stomach acid kind of just starts. It starts to train in a sense. It gets all the other digestive juices going.

[00:44:30] If we don't do that, then we're going to have large, undigested food particles in our gut, which is going to cause more inflammation, more fermentation by bad bacteria, bad microbes, and are going to cause that leaky gut and, on top of that, are going to cause just more inflammation in our bloodstream and lead to autoimmunity, so very important that we are addressing that. I find that to be a big factor with a lot of people with autoimmune disease, and that's another reason why people are zinc deficient. That, and then just jumping on the back of that, is stress.

[00:45:00] Stress, in general, is going to cause blood sugar imbalance. It's going to cause low stomach acid, and it's going to cause this whole vicious cycle where we're stressed, so we don't produce enough digestive juices. We produce more inflammation in our gut. We don't absorb our nutrients, which causes more stress in our body, which then causes even worse digestive juice production.

[00:45:30] It's just this vicious cycle, like an avalanche, that starts as a small snowball but, over time, it just builds and builds and builds and gets more and more and more momentum until, all of a sudden, we're overwhelmed with this just kind of overwhelming force that's leading us down a path to chronic disease and triggering off an autoimmune genetic pathway in our system. Whether it's vitiligo or Grave's disease or psoriasis, affecting the skin, or colitis, affecting the colon, or Hashimoto's, affecting the thyroid, whatever our genetic tendency is going to be, that's the organ system that's going to be affected.

[00:46:00] Really, the key to solving any one of those is the same. It's going back to the source, removing food sensitivities, improving your digestive system, stabilizing your blood sugar. One of the most stressful things we can do to ourselves is have blood sugar imbalances. Blood sugar drives way up, causes a massive release of insulin,

which triggers inflammation in our body, and then insulin takes the sugar out of the bloodstream, blood sugar drops way down, then we have cravings, then we have massive desire to eat, so we eat.

[00:46:30] Oftentimes, we overeat or we eat high sugary foods. Again, we get “boom,” another huge rise of blood sugar, and we just do this all day long, and it’s massively stressful on our body. High blood sugar is really stressful on our body and inflammatory. Low blood sugar is really stressful and inflammatory. We want to keep that blood sugar really, really stable with high-quality foods, in particular, a lot of good healthy fats like avocados, grass-fed butter or ghee. Also, things like olives and olive oil are really, really good healthy fat sources that stabilize our blood sugar.

[00:47:00] There’s also coconuts. I’m a huge fan of coconut products, whether it’s coconut oil, coconut butter, coconut flakes, coconut milk. Coconut is so good for helping stabilize blood sugar. I tell people you want to have at least one of those in every single meal, at least a high-quality coconut fat, olives or olive oil, or avocados or avocado oil, or grass-fed butter or ghee.

[00:47:30] You should have a good amount of at least one of those, if not more than one. You can obviously do avocados and olives on a salad, for example, or use avocado on your salad and put olive oil on there, so you want to have at least one of those fats in a high proportion, being generous with it at every meal, and that’s going to help stabilize your blood sugar.

[00:48:00] It’s also a good idea to have healthy protein, so whether that is sprouted seeds, like pumpkin seeds, or it’s a high-quality animal product, like free-range chicken or wild-caught fish or something along those lines, or a high-quality protein powder. It’s a good idea to have good quality protein, lots of healthy fats, and some sort of vegetable or herb or multiple vegetables and herbs.

[00:48:30] You want to get high-quality antioxidants in your system, so vegetables are great, and herbs are really good. Some of my favorite herbs are things like basil, oregano, thyme, ginger, turmeric, rosemary, sage. These are really powerful polyphenol-rich antioxidants that are great for the gut. They’re carminative so they help with gut function. They help to kill off bad bacteria and microbes and parasites. They help with motility, meaning moving the bowels, getting the bowels moving, which is super critical for reducing inflammation in our body and helping the gut heal. We’ve got to have good gut motility. These herbs really help out with that, and they smell good, and they taste good.

[00:49:00] Anything that smells good or brings an aroma to your meal in a positive way is going to help stimulate digestive juice production so, again, things like stomach acid, bile, pancreatic enzymes are going to help stimulate that so our body’s going to be able to digest that much more effectively. We definitely want to make sure that we’re getting those high-quality herbs into our meals, lots of good vegetables, our non-starchy ones especially, like our cruciferous vegetables. We already talked about how they produce glutathione, also different salad greens.

[00:49:30] Romaine lettuce and spinach can be really good unless you have an issue with oxalates, which is a whole nother discussion, but that can be super, super helpful, just getting these high-quality, non-starchy vegetables into our system. Celery and cucumbers would also be included in that.

[00:50:00] Talking about these nutrients for autoimmunity, I talked about vitamin D, I talked about zinc, I talked about glutathione, talked about omega-3 fatty acids. Another really key one is magnesium, getting high-quality magnesium into your system. Blood sugar imbalances and stress deplete magnesium levels, so magnesium is really key. Sprouted seeds, dark green leafy vegetables, great food sources. Oftentimes, we will need to supplement with magnesium as well. I find that to be super helpful for myself and for others.

[00:50:30] Let’s see, the last one is probiotics. Just making sure we have good high-quality probiotics, restoring the right microbiome balance into our guts. Autoimmunity is characterized by dysbiosis, so leaky gut and an imbalance

of the right types of microbes in our guts. So high-quality probiotic can be really helpful for re-establishing that. Sometimes you need to experiment with different probiotics to get the right strains that are going to work for you.

[00:51:00] I'm also a big fan of probiotic rotation, where you rotate different probiotics that you're using every one to three months. So if you use a 30 day supply of this probiotic, then try to get one with different strains in it for the next 30 day supply. So I'll usually cycle through three different types of probiotics, throughout the year, and just continually taking them and just cycling out different strains. It seems to work great, so I recommend that for my clients.

[00:51:30] Okay, so let's get back to some questions. I gave you guys just a lot of foundation right there. I'm sure we'll go back to some of that, so Julie hopefully that helps you. We talked about the vitiligo and looking for a holistic doctor. We discussed vitiligo. I didn't actually address where to find a holistic doctor. A good idea is ... Obviously, you can do a Google search, functional medicine, naturopath, chiropractors, in your area. You can find out information, you can look at reviews. That's always a good idea.

[00:52:00] Also, on top of that, what you can do is ask around your health food store. I find that to be a really good idea. Go to your local health food store and just ask people there. Ask employees, ask different people, kind of take a poll. Say, "Hey, do you see a holistic doctor in the area?" They'll tell you if they do or not. Or say, "Hey, have you heard any good things about a holistic doctor in your area?" They'll let you know if they have or not. So I think that's a really great idea.

[00:52:30] [00:53:00] Also, you can work with a lot of people long distance. I know myself and I've got a coaching team as well, health coaches that work with me. We work with people all over the world. So, you don't always need somebody close to you, but it is nice to be able to sit down right next to them. I will say that. So if you're looking for somebody, go to your health food store and poll people, or find a good doctor that you really resonate with that can work with you online. Or a health coach, doesn't even need to be a doctor. Can be a health coach, a nutritionist that has a great program, has got a great track record of success, or is with working with a team that has a great track record of success that's an expert. There's a lot of us in this autoimmune secrets documentary, so basically you can find one of us or somebody else that you resonate with. Okay, so again, Marlene asked the same question. "How do I find a functional medicine doctor?" Again, you can Google search that in your area. I think that's a great question.

[00:53:30] [00:54:00] Let's see, Carmen says, "Would love to get info on limited scleroderma", which is an autoimmune condition that affects the connective tissue in the body. So a general diet would be an elimination diet, taking out again, sugar, grains, taking out dairy, particularly dairy protein, ghee would be okay. Taking out eggs, corn, soy, what else? Nightshade vegetables, so again tomatoes, potatoes, bell peppers, eggplant, things like that, things in the nightshade family, and nuts as well. So definitely taking out all of those and then kind of just seeing how they do. Do it for 30 days and then you might add something back, and just kind of see.

[00:54:30] I'll typically have my clients do a pulse test. They can get different apps on their phone to test their pulse. Then they'll put ... Like for example, if they want to add back in almonds, okay, almonds are a healthy food but let's see if you're having a stress response when you consume the almond. So you take your resting pulse, so let's say 60 beats per minute. You go ahead, you put the almonds on your tongue, you take your pulse again. Let's say it jumps up to 64 beats. That's a sign your body's having a stress response to that almond. There should be little to no change, maybe one to two beats at most, increase or decrease, when you challenge that food and you put it on your tongue. If you're seeing more than that, three or more, definitely a sign you're having a stress response to that food, so I would avoid.

[00:55:00] [00:55:30] Now, let's say it comes back fine. You did that stress test, that pulse test, and it came back okay. Then I would add it back. So for one day, I would consume almond. Might be almond butter, or just just raw

almonds, or even better would be sprouted almonds. I would just try to do it without trying back anything else that you hadn't added back to your diet. Then I would see how your body responded over the next week. So I'd try one thing at a time, one week at a time, and see how you respond. Did you notice, like in this case, scleroderma, did you notice more of the symptoms associated with scleroderma? So did you notice more of these types of problems, more fatigue, more pain, more rashes, and a classic rash on the face that people with scleroderma have. Did you start to notice this or not? Did it seem like the body stayed the same, no increase of symptoms? That's usually a good way to know when you can add back foods.

[00:56:00] Also key supplements like we talked about, Vitamin D, Zinc, Glutathione, boosting agents. So, N-acetyl-cysteine, acetylated glutathione, or liposomal, it can be really helpful to reduce glutathione. Curcumin is another really good one that can help. That's the active ingredient in turmeric, so curcumin supplementation. Definitely omega-3s. Vitamin A, fat soluble Vitamin A that you get something like a cod liver oil or a grass-fed ghee, can be really helpful. Organ meats also have that. So all of those types of things can be super helpful for somebody with scleroderma, and probiotics for sure, like we talked about. Support the digestive tract.

[00:56:30] [00:57:00] You know, another big thing, actually I didn't talk about was doing liquid nutrition. So, people with autoimmune disease, their digestive system is really compromised. They're not producing enough digestive juices. So let the blender do the work. Make protein shakes using coconut milk, so you get the coconut fat in there. Might even throw an avocado in to get more fat, and makes it more like a pudding. Use a high-quality protein powder like maybe a collagen, bone-broth protein, or like a hypoallergenic pea protein base could be good for helping reduce inflammation in the body. It's already pre-digested, so it's really easy on the body. So I find protein shakes to be super, super helpful for people with autoimmune disease. I highly recommend them.

[00:57:30] [00:58:00] Oftentimes, I'll have my clients do something like a week of just smoothies and maybe soups and stews. So it's food that's really broken down and easy on the digestive tract, before they start adding other things back. So just doing a week, kind of a reset like that, can be really helpful. Then I'll do just one meal a day where it's solid foods. So doing lots of protein shakes and with a lot of healthy fats like we talked about, and then one meal a day where we're doing more solid foods. So healthy meat, lots of vegetables, big gigantic salad, maybe. Or steamed vegetables, healthy fats on everything. Then taking digestive enzymes with that sometimes extra stomach acid, like a Betaine HCL, which can help with stomach acid production, especially if there's meat in the meal to help to break it down so it's not as inflammatory in the system and the body's able to really metabolize it well.

[00:58:30] So that's typically a really good nutrition strategy. We talked about supplements, keeping stress under control, really prioritizing sleep. They say every hour before midnight of sleep that you get is a equivalent to three hours. So if you can get really high-quality sleep, that's going to be so helpful and restorative for your body. So I definitely recommend focusing in on that. Chiropractic care can be really helpful, especially if you have a lot of issues with your C1, right up here at the very top of your neck. Getting a really good chiropractor to work on that, and kind of stabilize that region plays a huge role with keeping inflammation under control and helping reduce autoimmune tendencies.

[00:59:00] [00:59:30] What are some other things you can do around your house? Good exercise. Just getting out and moving, getting out in nature on a regular basis. My wife and I, we take a barefoot walk around our neighborhood pretty much almost every day unless it's freezing out. Why? Because we want to make sure that we're grounded. When we're grounded, we've got natural electrons that act as antioxidants in our system, coming up from the ground. We're always exposed to all these electromagnetic frequencies, these really negative ones are stressful on our body, coming from our computer, our cell phone, all the different devices around us. So when we get in touch with the earth ... Like this computer I'm talking into here, this is new. My ancestors three generations ago had never seen something like this, never been exposed to this level of electromagnetic frequency that I am

right now. So it's stressful on my body. But, all of our ancestors were exposed to the earth and the earth's natural electromagnetic frequency, so we want to really be exposed to that.

[01:00:00] Now, rubber soles block us from that exposure. So if we're wearing shoes, I mean, we can literally go through our lives and not really be touching the earth. So we want to do it without shoes. Maybe you could wear socks, or something without ... Like leather shoes, things like that ... like leather shoes that don't have the rubber, and still get the exposure. The good thing is we even get healthy magnetic frequencies through concrete. Even if you're walking on a concrete sidewalk, you still get some of the earth's natural magnetic frequencies, even better would be grass, dirt, sand, especially if it's slightly wet. Then, we're gonna get better conductivity so that's a great idea. Basically, just getting out into the earth.

[01:00:30] There's even something that's called forest bathing, where you go into the forest. You hug trees. You get around the trees. You lean against them. You take a nap under a tree. Things like that. Set up your hammock, and go lay in your hammock.

[01:01:00] [01:01:30] These types of things are so helpful for restoring electromagnetic balance in our body. We don't do them enough in our society, so I highly recommend that. It's just natural, easy things that we could be doing to help improve our health. Good relationship time. Great thing to do would be go for a walk in nature. Right. Or, a little hike in nature with your spouse or significant other or best friend where you can have communication, high-quality relationship communication, be in nature, be in the forest, or just be around nature while you're getting high-quality movements in. I think that's a really, really helpful idea for reducing inflammation in your body and reduce autoimmunity. Whether it's scleroderma, or vitiligo, or psoriasis, or rheumatoid arthritis, or anything like that, it'll be really, really helpful.

[01:02:00] [01:02:30] Let's see. Another question is, Velma asks about psoriasis. One year ago, her teenage daughters had a period with psoriasis. I actually personally, my mom has psoriasis. I have psoriasis as well on my knees. I keep it in remission. The way that I do that is through strategies that we're talking about here. I really hydrate my water well, really good hydration with high-quality filtered water is a very important strategy. Just staying well-hydrated keeps things moving through the gut, helps sweep out bad microbes from our system, really helps us. I avoid grains. I avoid pasteurized dairy. There's a lot of things that I'll avoid for my nutrition. I keep my blood sugar stable. These are really, really important. I even notice if I eat too much nuts that I'll end up with a little bit more psoriasis the next day. I've gotta watch out with some of these foods, Which I so thoroughly really enjoy the food that I consume.

[01:03:00] [01:03:30] You can check out my website, drjockers.com. I've got hundreds of recipes with amazing, amazing food. It's everything you can imagine that tastes incredible. We've got coconut flour breads and all kinds of different things. That's using ... It's all grain free and tastes awesome. Lots of desserts. There's a lot of great things that you can be consuming on a regular basis and avoid a lot of these common yearnings. That's the good news. Definitely staying away from those such things. Hydrating your body well, keeping stress under control, really prioritizing sleep, working on the gut. Supplements, we talked about, so important for psoriasis. Also, topically, I'll put coconut oil on my knees where I have this psoriasis. I put coconut oil on several times a day. Coconut oil is really stable so it reduces free radical damage in skin. I know this is a condition coming from the inside out so it's not really what I put on my skin that's gonna matter as much, but it still helps soothe the area, can really help improve it.

[01:04:00] Really, it's more important to eat the coconut oil and get it in my body because we heal from the inside out. Even skin disorders like psoriasis, vitiligo, scleroderma, rosacea. These types of issues. Acne. We're gonna heal from the inside out. Not necessarily from the outside in although we can do some things from the outside in to help.

[01:04:30] By the way, I'm drinking a little bit of broth. This is diluted broth. This is not homemade broth. I actually bought free-range, organic chicken broth. I put about 1/3 of it in my cup, and then 2/3 filtered hot water so it's diluted broth, just like a mineral drink, lots of trace minerals in there, really good stuff. I fast in the morning. I don't consume food. I do a lot of hydration. I do my broth right here to get the minerals in. I drink probably a gallon of water before I consume my first meal, which is usually around the middle of the day, and it really, really helps with everything we're talking about, helps flush the gut, helps me move my bowels, get the wastes out, really good for the liver bile duct. Really good for just detoxifying my body. It's so helpful.

[01:05:00] Rena says, "I've been suffering from adrenal fatigue and IBS for many months now. I wanna go to a doctor that can help me. Can you recommend a doctor that can help me please?"

[01:05:30] There's a lot of things you can do for adrenal fatigue and IBS. We talked about a lot of them here. I would definitely recommend for adrenal fatigue getting a lot of minerals, real mineral-rich diet, consuming foods in the beginning phase every three or four hours and making sure you have a lot of good fats. You wanna take pressure off the digestive system. I would highly recommend that. Consuming foods that are gonna help your body to cleanse and detoxify, cruciferous vegetables, onions, garlic, things like that. As long as you tolerate them, can be really, really helpful.

[01:06:00] Also for IBS, I see a low-fat diet actually can be really helpful. Sometimes, we need to take some of those food I just mentioned out, but making sure we're consuming foods with a lot of healthy fats. I really like the shakes, particularly for people with digestive complaints so doing super smoothies and shakes and consuming that often throughout the day, really well-cooked soups and stews take pressure off the guts. That can be really helpful.

[01:06:30] Personally, I suffered with adrenal fatigue and IBS in my early 20s. I had terrible irritable bowel syndrome, ended up losing 30 pounds of muscle because I couldn't absorb food, and I had orthostatic hypertension, where I'd go from sitting to standing, and I would lose my balance and get dizzy because my adrenals couldn't pump up. My brain couldn't communicate well with my adrenals. I had a lot of issues there. I was able to heal it naturally, fortunately following the strategies that I've been discussing so there's a lot of hope there.

Okay. Let's see. We have a question from Donna from Wichita State University. She says, "Will you address collagenous colitis?"

[01:07:00] [01:07:30] Collagenous colitis is gonna be an autoimmune disease that affects the collagen tissue, particularly in the colon. Colitis means inflammation in the colon. Ulcerative colitis, collagenous colitis, these kinds of conditions can be really tough. I tell you what. They can be definitely really, really tough. I would definitely do the smoothies. I would focus on smoothies. Take all the stress off of the gut and the digestive tract. Make sure you're doing a high-quality probiotic in there. Also, things like L-Glutamine can be super, super helpful for people with colitis. Sometimes going up to 30 to 40 grams daily can be super helpful with the L-Glutamine. There's a couple key strategies along with everything else that we've talked about. Getting movement, getting out in nature. It's super critical. Thanks for asking that, Donna.

Brittany says, "Several experts are claiming the diet should be high in healthy fats, vegetables, and protein while others are saying low fat."

[01:08:00] [01:08:30] A lot of us have disagreements. You know what? Good news is this. Both sides have seen results, whether the person has a low-fat diet doctor or a high-fat diet doctor like I am. Both have seen good results. I definitely lean towards high-fat, low-carb because it's what worked for me. It's what works for most of my clients. I see great results with it, a lot of research on it. That's what I recommend in general. Do what resonates best with you. That's really the key. You wanna find a doctor that works with your philosophy and that's gonna resonate with what you desire. That's why it's so important to get something like this Autoimmune Secrets

documentary so you can have the knowledge to know what strategies you want to take. Then, find a holistic doctor that can help support you in that process.

Okay, so Regina says, she's asking about Alzheimer's. "Is Alzheimer's Disease an autoimmune disease?"

[01:09:00] It's not technically an autoimmune disease. At least we haven't found out that yet. They're finding more and more of these inflammatory conditions are related to autoimmunity, but right now, it's characterized as a chronic inflammatory condition, a neurodegenerative condition where we have chronic inflammation in our brain, particularly the temporal lobe, the hippocampus region of our brain that promotes degeneration in these cells, accelerates the degenerative process in these cells. We have trouble with memory. Oftentimes people are irritable and moody. Again, they can't remember things, particularly short-term memory. It's a really, really tough condition.

[01:09:30] [01:10:00] [01:10:30] [01:11:00] Really, the same strategies apply. We gotta get the blood sugar under control. Alzheimer's Disease is Type 3 Diabetes meaning that it's characterized by the blood sugar imbalances so the more we can get that blood sugar stable, the better off it's gonna be. There's research coming out about ketogenic diet being really helpful for Alzheimer's Disease. That's what I do when I'm working with people with Alzheimer's or really any neurodegenerative condition like Parkinson's, dementia. I'm always using ... I'm working to get them into ketosis and using a ketogenic diet, really supporting vitamin D, a lot of research on low vitamin D with Alzheimer's, glutathione, excuse me, other things. A lot of issues with the gut, so we've got to address the gut. With that, Omega 3's are really powerful. Curcumin, really, really powerful for Alzheimer's disease. So we've got to really support the body with these things and all the strategies we discussed already, all that kind of foundational lifestyle strategies, very important, whether you're dealing with autoimmune disease or chronic inflammatory condition, it's really very similar strategies that we're gonna take. With Alzheimer's, it may even be more important to get that blood sugar stable because most of the time, these are people with insulin resistance, which is key. Now another thing, actually is B12 deficiencies. There's a lot of people that are misdiagnosed with Alzheimer's disease and it's actually a B12 deficiency that's the main underlying root cause. So getting the B12 levels checked is super important, looking at the thyroid, thyroid antibodies can be really important because thyroid plays a key role with mental function and memory. So that's also very, very important. Okay, so let's see. So we just finished that question. Harold asked a question about fasting.

[01:11:30] He says, "When fasting, say for three days, I guess that you don't continue to take supplements." Yeah, I'm a huge fan of fasting, whether it's intermittent fasting and you're consuming your food in a six to eight hour eating window or for me, yesterday, I consumed my food in a two hour eating window and it was very helpful. I feel amazing today. Tons of energy. Feel great. Lower levels of inflammation. So if you tighten that eating window, okay, that's a way to fast, called an intermittent fast or if you do a block fast, which is multiple days, like Harold is talking about here, it's a three day fast, five day, seven day fast, it can be so helpful for autoimmunity, especially the really tough cases. Doing a fast like that is just extraordinarily helpful, so do you take supplements? You definitely can take some supplements and others, you wouldn't take.

[01:12:00] [01:12:30] [01:13:00] I don't recommend taking supplements that you would need food, that absorb best when they're with food, so that would be vitamin D, omega 3 fats, enzymes or stomach acid support. You wouldn't take things like that, but things that you would take away from you, like probiotics can be helpful. Proteolytic enzymes can be really helpful. I'll often do that where I have my people at Autoimmune Disease do a fast and then just we do a lot of proteolytic enzymes, which get into the body and they help to break down circulating immune complexes, like C-reactive protein, interleukin 6, interleukin 17, a lot of these inflammatory protein molecules, cytokines, that help to get in there and just metabolize and then break them down, which reduces autoimmunity even faster. So that can be really helpful. Sometimes things like charcoal to help detox, different herbs can be helpful, and you can take those away from ... just without any other food. So some

supplements, supplements you would take without food, you definitely can use. Supplements you take with food, you would avoid during a fast, so that's great recommendation. Last question I'm gonna answer here is Lucy.

[01:13:30] [01:14:00] She asks about more information on rheumatoid arthritis and Lucy, rheumatoid arthritis, same principles apply here that I've been talking about. But I find that nightshade vegetables seem to be a major trigger for people with autoimmune disease, so taking out the tomatoes, potatoes, eggplant, peppers, so critical. I remember a lady, Leanne, that came into my clinic years ago. She had a walker to get her from the front of my clinic to the exam office. She couldn't walk. She needed help with a walker and literally six months after making these diet changes, she ... Well, quicker than that. It was within six weeks. She was off the walker, walking fine. After three months, pain levels were reduced about 80%. After six months, she was actually enjoying a beach vacation with her grandkids and her whole family, a family reunion. She was able to bend down and make sandcastles with her grandkids. One of her granddaughters ran off to go in the water. She was three years old, so Leanne got worried and all of a sudden, without even thinking about it, didn't think, "I can't run. I've got an autoimmune disease."

[01:14:30] [01:15:00] She was able to get up and sprint and grab her and it wasn't until after she did that, she was like, "Oh my gosh." She was like, "I haven't run in 25 years," and she was able to do this. So this is a lady who was in her 60s and so she was able to get these kind of results in as little as six months after making nutrition changes, following a precise supplementation protocol that I set up for her. So there's a lot of hope. There's a lot of hope for all of you guys out there. That's why I just want to encourage you guys to go ahead and consider owning the entire Autoimmune Secrets documentary for yourself. That way, you get access to the transcripts. You get access to the MP3s. I mean, everything you need, the videos, and you can resource these for a lifetime. You can share them with others and really provide hope for the people in your life. So there's a lot of hope and it's a blessing and an honor to be a part of what Jonathan's doing here with the Autoimmune Secrets.

[01:15:30] [01:16:00] Really hope that this interview provided a lot of value for you guys. Hope you got a lot out of it and of course, you can find out more information. We got tons of articles and I have a whole program called "My Autoimmune Elimination Program" right on my website, drjockers.com. So bless you guys and wishing all of you guys a really, really awesome and incredible healing journey. We know that your biggest tests in life are really your setup for your biggest testimony, right? That we get stronger through the test and your testimony is gonna bring hope and inspiration to so many others. I really pray that you're committed to improving your health and consider owning the Autoimmune Secrets documentary for yourself so that way you'll be able to resource that, listen to the testimonials, listen to the experts, and have hope and inspiration to follow through with the protocols and follow through with the healing journey. So bless you guys.

Dr. Philip Oubre

[01:16:30] [01:17:00] Anna Tomachari, sorry if I mispronounced that. Your question is, "I tested positive for one copy of the MTHFR gene 677T and one copy of the 1298C." You would be considered a compound heterozygote. "What exactly does this mean for me and any advice regarding what I can do to improve my health, given this result?" There's a lot of data out there about MTHFR. There's various people saying what to do, what not to do. There's a lot of hocus pocus in my opinion out there. I kind of simplify the MTHFR issue. Basically, I usually recommend for anyone with MTHFR copies that they need to take additional methylfolate. The usual recommended dose is between 400 and 800 micrograms, depending on how bad your mutations are. So usually for one copy, I'll do once a day. For two or more copies, I'll do twice a day on the methylfolate. I always recommend methylfolate with the entire B complex because the whole B complex supports the whole methylation cycle. If you take just methylfolate, then you can actually get over methylated. We're now learning that over methylation is just as bad as under methylation.

[01:17:30] [01:18:00] So you really want to talk to someone who's knowledgeable about methylation before you try to overdo the methylation pathway too much. You have more questions. "I have psoriasis and some of the known triggers causing flare ups are gluten, refined sugar, and coffee, maybe dairy. I'm unsure. I love coffee, but plan to give it up as soon as the flares are painful. Where to start with healing? There are so many gurus out there saying to fast, juice, eat raw, do ketogenic diet, paleo. It all gets confusing and it would be so great to have a path laid out to start the healing process specific to what is ailing me. Great videos." Thank you. "If anyone has specific guidelines, feel free to let me know." So, Anna, there's no great answer. That's why there's so many gurus promoting different things. Functional medicine is all about an individual approach to healthcare. There are some general consensus that seems to work for everyone, like you mentioned gluten, dairy. No one really needs either of those foods. They do seem to be toxic. They upset people's intestinal barriers and inflammation, all that.

[01:18:30] [01:19:00] So both of those should be removed for sure. I'd say there's a lot of coffee out there that doesn't really affect people. Your other comment is sugar, though. Sugar is pretty much an inflammatory substance. I usually tell people it's usually not the compound that causes inflammation necessarily by itself, although we don't really know that. I like to think of it as if you're going to eat a food with sugar attached to it, it's like taking a strawberry and sticking a dynamite on it and swallowing that. It doesn't mean that the strawberry is dangerous. It's the sugar that went along with that strawberry that made the strawberry dangerous. So sugar feeds the yeast. Yeast causes inflammation. It disrupts your bowel. That causes leaky gut and when you have leaky gut, any food can be a problem. So your main question was, "Where do I start to improve my health?" Really you want to undergo a gut healing plan. You want to remove the gluten and dairy in any foods that you know trigger you.

[01:19:30] [01:20:00] You can pick up a book like The Autoimmune Solution by Amy Meyers and try to do the whole autoimmune approach without seeing a functional medicine doctor. But it sounds like you're needing more help and you do need to get in touch with someone who can lay out an individual plan that they feel will work best for you. An elimination diet is always a great place to start. There should be tons of places to get the elimination diet online. So the elimination diet typically is three to four weeks. Remove all the foods that you may be reacting to and then slowly add them back in so you can kind of see what you might be reacting to. Psoriasis is quite a difficult autoimmune thing to resolve. It's pretty stubborn. Of all the autoimmune diseases that I treat, psoriasis is one of the most stubborn and difficult to resolve. The other issue with psoriasis is that what you're seeing on your skin is really a reaction of six to eight weeks ago, what you did. So, you can't really use your skin as your barometer of, "Are you reacting to something," because it may not show up immediately. Now if you get gas or bloating, or digestive issues, or anything like that then that's a better indicator of, "Does a food bother you?" But the truth is, if you're just going to look at your psoriasis as a marker of, "Do tomatoes bother me?" Then you have to eliminate tomatoes for six weeks before you can really say that's doing anything. Or if you're adding foods back in, you would add a tomato back ... add tomatoes back in, but you wouldn't make any other changes until six weeks go by. So, really it's important to be looking for other things that you might be able to attribute food changes to, other than just your skin.

[01:21:00] [01:21:30] So, I won't say that any ... eating raw, ketogenic, paleo is better than the rest. I will say whatever works best for you. I will say, though, I'm not a big fan of juice fasts or not eating and just drinking juice. I think that's a little strange, and we were never designed to do that. That being said, I don't necessarily think they're dangerous, I just ... I'm not a big fan of them. That's my opinion. Barbara C. Sagraeves. This is an interesting question, I like this one. "I know this is a stupid question, but here it goes." There's nothing wrong with stupid questions, okay? "When you cleanse for a colonoscopy, are all of the parasites killed, and if so how quickly can they return?" So, that's a good question, I like it. It's something that's off the beaten path, and I wouldn't expect that question.

[01:22:00] So, I would say, "No," parasites are not killed by a good colon cleanse. All parasites like to be where they are. They're parasites because they must attach to a host, must hang on to that host, and they don't really want to

let go of that host. So, all the colonoscopy prep is basically just ... You can look at it as drinking from a water hose and letting it flush in the system. So, a good parasite that has a good strong hold in your system isn't going to get flushed out. And many of the parasites that stay in the small intestine, not necessarily all in the large intestine, so even when you go for a colonoscopy they may not see the parasites that are there. Especially if they're more microscopic parasite like blastocystis hominis. But, the larger hookworms and things ... tapeworms, those are usually going to be picked up in an endoscopy, but not necessarily always. Especially if they're all in the small intestine.

[01:22:30] So, no, I won't say that kills parasites. Is it going to decrease your parasite burden some? Probably, but no, you're still going to have the parasites if you have any. How quickly can they return? Well, chances are they're not gone to begin with. So, they return immediately.

Shay Storm. Hi, Shay. "All of this information is so valuable." That's good, I'm glad you're finding this helpful. "Can anyone talk about or better explain polymyalgia rheumatica?" You have other questions, so I'll address the polymyalgia rheumatica first. So, polymyalgia rheumatica is quite a miserable autoimmune condition.

[01:23:00] I mean, if you break down the words; poly, meaning multiple; myalgia, muscle pain; rheumatica, autoimmune. Basically, it just means you have muscles everywhere, right? From your scalp, all the way down to your toes. So basically, your whole body can hurt, and your whole body does hurt in polymyalgia rheumatica and you can even get weakness because as your autoimmune disease destroys those muscles ... Well, then they stop working as much, and they stop being recruited when you fire them. So, it's both a debilitating disease in a sense that you get really weak, but also a painful disease. Everyone's is a little different, but that's the classics.

[01:23:30] [01:24:00] So, "Can you better explain polymyalgia rheumatica?" So, I'll say it's an autoimmune disease just like anything else where the body's attacking itself. Your immune system is so good at destroying things, that it can destroy anything in your body; any protein, any cell, any structure, it can destroy it. So, when your body identifies some sort of bacteria, food, fungus, pathogen, inside your bowels that has molecular mimicry towards your muscles, your immune system gets tricked and thinks it needs to destroy your muscle tissue as well. So basically, it starts infiltrating different sections of the muscles, and wherever it's infiltrating the muscles and killing the tissue, you have pain. That's natural. If you stub your toe, you get pain, that's inflammation.

[01:24:30] If your immune system is destroying your muscles, it hurts. It's supposed to do that. So, really the idea as far as what causes polymyalgia rheumatica, which was your next question, it goes back to leaky gut. All autoimmune disease begins in the gut and it begins with that molecular mimicry. Now I've answered other people's questions in regards to leaky gut, so I won't go into detail with it right now, but basically seal the gut, fix the gut, fix inflammation down there, and then your immune system will stop attacking your muscles and stop causing PMR, polymyalgia rheumatica. You ask, "What is the appropriate diet? Paleo diet helped me, but mega doses of vitamin C and turmeric help the pain and inflammation for me."

[01:25:00] [01:25:30] Well, I would tell you that whatever diet works best for you is the one that you should maintain on. I do have a patient that's actually a close friend of my nutritionist who developed polymyalgia rheumatica years ago and has successfully reversed it. But when stressors come up and she stops eating the diet as well, it tends to come back, and that's just part of the disease process, unfortunately. So, it's really finding the diet that works best for you, as far as gluten, dairy-free, corn, eggs, peanuts, there's tons of stuff that you can remove from your diet, but you want to make sure you're eating enough food. Too many people go about eliminating foods, and don't really add enough back in, so making sure you're eating a high quality diet and taking plenty of anti-inflammatory foods and supplements to keep the immune system at bay. But, you've got to get the immune system to forget that it's attacking this bacteria or fungus in the bowel so that it stops attacking your muscles.

[01:26:00] So, "All of the knowledgeable doctors that are in these episodes, I am hoping to gain a better understanding of this autoimmune disease, thank you." You're welcome Shay, I hope that questions ... or, my answer helped your question.

Pamela Miller, "Are we able to get a hold of these doctors, and if so how?" That's a great question, I wish I were able to make myself available to people all day long, but unfortunately we all have busy practices, usually. So, you can't necessarily get a hold of us directly, but you can certainly Google and look up each one of us and become a patient and get on our schedule to get consultations, personal medical advice, all that. One of the reasons Jonathan is trying to put this information out there in these documentaries is to spread as much free knowledge as we can and so people can try to implement plans on themselves without even seeing a functional medicine doctor.

[01:26:30] [01:27:00] Getting this information out there, if you can decide what might work for you and implement it, and then it goes away, great. You never even need to see a functional medicine doctor. But, chances are everyone on this show can be looked up, and found, and called, and contacted.

Okay, Kathleen King Turner from the University of Utah. Hi, Kathleen. You seem pretty passionate about your comment. So, I'll read it with passion. "No mention of the GAPS diet or Natasha McBride? No animal fat emphasis from humanely raised animals and holistic farming???? Really? Is it that nobody knows about GAPS?" Kathleen, you are absolutely right. Not enough discussion about the GAPS diet in general. My nutritionist is a certified GAPS practitioner and even she doesn't use the GAPS diet that often. It is very restrictive and difficult to follow, and it's not good for everyone and many people end up giving up and not maintaining the GAPS diet.

[01:27:30] The GAPS diet is a great diet, especially for healing leaky gut and things, but it should not be people's first go-to. It's a little more complicated than most elimination diets and things. So what I'll say is, we probably should have talked more about the GAPS diet in the autoimmune documentary, but I think our main goal with the autoimmune documentary is get the most common things out here that works for most people that are rather simple to employ, so that they can take this information and try to implement it themselves without having to see a GAPS provider or something. That being said, if time were unlimited and people had unlimited time, I'm sure we would have included more about GAPS in the documentary. The GAPS diet is great, so thank you for asking that question, Kathleen.

[01:28:00] [01:28:30] Vera Duffy works at ... it says, "Works at retired." So, here's your comment, "I have multiple sclerosis," I'm sorry. "No power. Have lost all power on my left side, have not got the will to hear about other conditions, too sick. Hope you get this message, Jonathan. Can you tell me what I can do? I believe you are trying to help sick people first, and money for your time, I have parted with thousands over the years. Everything was useless, looking forward to your advice." So Vera, I don't fully understand some of your language that you chose, but I'll try to answer the best I can. So, I'm sorry you have multiple sclerosis, and it sounds like it's affecting you pretty heavily, but multiple sclerosis is reversible just like all the other autoimmune conditions we talked about in the documentary.

[01:29:00] I always encourage all of my multiple sclerosis patients to look up Terry Wahls. W-A-H-L-S. She's an actual M.D. She herself had multiple sclerosis. Very advance multiple sclerosis to the point to where she was bed bound, I believe for at least a year. She was completely bed bound in a hospital bed and she started doing her own research into functional medicine and she took matters in her own hands and created her own functional medicine protocol and fully reversed her multiple sclerosis, at least as far as I know. Right now, she still has some lingering side effects from it, but as far as the multiple sclerosis, it's mostly reversed. She's doing research on neurodegenerative diseases and multiple sclerosis, since she had it. That's her passion and she's good at it.

[01:29:30] [01:30:00] [01:30:30] She's got a lot of information out there. She's got a book called, The Wahls Protocol, and that's W-A-H-L-S. She's great, she's a great speaker. She teaches at the Functional Medicine conferences all the time. So, I always encourage everyone to look up Terry Wahls, specifically for multiple sclerosis. So, it is reversible by many of the things that you've heard about in this documentary. So, I'd encourage you to start implementing some of those things as quickly as you can. Take it aggressively, because the downside to multiple sclerosis is that it is an autoimmune condition towards the brain. The brain is not something that recovers and repairs as quickly as, say, a foot or an arm or muscle tissue. So once you reverse the autoimmune disease your brain has to recover and recreate those cells and that takes a little longer but it is still doable. Now I don't want to give you the promise that you're going to cure yourself and have no symptoms whatsoever, but you can definitely try to get off of some of your medications over time as you reverse your autoimmune disease. But you sound fairly advanced and it sounds like you're going to need to work with a knowledgeable practitioner in regards to functional medicine. So best of luck, Vera, to reversing your autoimmunity. Don't give up.

Britney Jenkins. Hey Britney, this is a good question. "Several experts are claiming the diet should be high and healthy fats, vegetables and protein while other experts are claiming half should be vegetables, quarter fruits and quarter protein. The second version leaves very little for fats other than those occurring in the protein. Which is the best plan for overall health?"

[01:31:00] [01:31:30] Britney, if I had the best plan for overall health, I'd be a billionaire by now. The food discussion will go on for eternity and eternity. The truth in my opinion is that not every diet works for every person. So Britney, you need to experiment with food plans that work for you. For me, I'm not a good vegan. I cannot be vegan. It does not work for me both from a food preparation standpoint and just a taste standpoint. That doesn't mean I don't eat vegetables. I eat as many vegetables as I can but that food plan doesn't work for me. Vice versa I have some patients that just can't do ketogenic. It doesn't work for them. They don't like it. They don't feel good. Their markers get worse so it's important to know that there are different food plans out there and you need to find the one that works best for you.

And the only way to know which one works best for you is to get your labs tested, watch your mood, your inflammation, your pain, your symptoms and see how it does. But don't plan on doing a food plan for a couple of days and seeing if it works for you. If you're really going to enact a food plan, then do it right and do it for at least a month because many symptoms and things can linger and change over time and they are not necessarily visible immediately.

[01:32:00] [01:32:30] For example, when you switch to a ketogenic diet typically the first three to five days you feel kind of worse. We call it the keto flu. When your body is switching from a carbohydrate metabolism or sugar metabolism to a fat metabolism it uses different DNA and so you go through this slump while you're switching into ketogenesis and then on day five, six and seven you start feeling glorious for most people and you have this brain clarity and all this stuff. So if you don't stick to a food plan long enough then you don't know if it's working for you. Also if you're not doing your lab work and watching what happens to inflammation and what happens to cholesterol and blood sugar and all that, then you're not finding the diet that works best for you.

[01:33:00] So there's plenty of food studies out there but they're all kind of conflicting because there's people that have interest in food and money, financial interest in food, so that clouds some of the judgment. I will say there's two big proponents out there right now. I like to think it's Mark Hyman versus Dean Ornish. I think both plans are good. You just got to find the plan that works best for you. So Dean Ornish is a very low fat, high vegetable food plan, pretty much vegan and it works to reverse atherosclerosis. He's proved it. He's been doing it, I think, since the 1980s, and he's doing a good job. People are getting healthier. Bill Clinton did it. He had several heart attacks and stents and he finally got on the Ornish plan and he reversed his ... well you can't reverse old heart attacks but he stopped having new heart attacks after he got on the Ornish plan and that's working for him. So Ornish has plenty of data but not everyone can do it.

[01:33:30] And on the other side of the coin is Dr. Mark Hyman who's promoting an Ornish-style diet but with high fat so you still want plenty of vegetables, plenty of good fats but also a high fat diet. For most people high fat diets are easier to stay on because fat is filling and fat makes us not hungry. It powers our metabolism so if you're going to be vegan it just requires a lot of food prep, a lot of eating, a lot of chewing and that doesn't really work for a lot of busy Americans, whereas, a high fat diet is easier to get away with less vegetables and more sustaining energy.

[01:34:00] So I would say that the best food plan is the one that works best for you. The third food plan that I should mention is the Mediterranean food plan and when I say Mediterranean, I mean the actual Mediterranean version, not the American Mediterranean version that we have which has a lot of pasta and bread for some reason. The Mediterranean diet is high in olive oil and healthy Omega 3 oils and lower on the carb but not really ketogenic low carb. The Mediterranean diet is by far the most studied and proven diet so that's a good plan for overall health, not necessarily for autoimmune reversal or anything, just for overall health. So I hope that answers your question, Britney.

[01:34:30] [01:35:00] [01:35:30] Cindy Monsour, good question. "Thank you so much for all the great information." You're welcome. "Can we also talk about the eyes and how so many have declining eyesight and doctors say there's nothing we can do???" Absolutely, Cindy. So I'd say we're just touching the iceberg on everything on the eyesight. I've got a few things to say about the eyeballs. So the eyeballs have their own microbiome which is kind of a new deal as of 2017 as far as I know. That's the first I've heard or even thought of, the ocular microbiome. And so our eyes have a microbiome. Basically, anything that's wet and moist has a microbiome whether it's a mouth, a vagina, a nose, an ear, the anus, the intestines. All those places have their own microbiome and different bacteria like those different areas. So with ... it's common in my opinion that if you're eating a lot of sugar and you've got a bad gut microbiome and you've taken multiple antibiotics, you've probably disrupted your ocular microbiome and that ocular microbiome most likely has huge effects on the eye.

[01:36:00] I'm going to take it a step further and say the most powerful thing that is affecting the eyes is sugar. Sugar diabetes, carbohydrates, your eye has the tiniest blood vessels and the most sensitive area of your entire body is probably the retina, the eyeball and so any amount of sugar starts damaging the eyes. In fact if you talk to ophthalmologists, the MD not the optometrist, not the eye glasses, the MD doctors for the eye, they can see damage in the eye before you can see and feel damage anywhere else from diabetes so they use that as diabetes markers.

[01:36:30] But yes, diabetics damage their eyes but that means even if you're not diabetic but you've got too much sugar and too much insulin in your blood stream, then you're damaging your eyesight. So diabetes is one of the leading causes of blindness if not the leading cause of blindness in the United States. Glaucoma's probably not far behind it. I don't know the data on this, but glaucoma is mainly an inflammatory condition that's raising the blood pressure on the eye ... Sorry, not the blood pressure. Raising the pressure in the eyes and that's from inflammation.

[01:37:00] So yes, we should be talking more about the eyes, but really if you're taking care of your overall health, you are improving your eyesight. It's just important to know how delicate the retina is. Most people don't know that the retina, the thing that's in the back of our eyes that receives the light and communicates to the brain, what we're actually looking at, actually doesn't have any blood supply. The retina is a single layer of cells that comes down and there's blood supply right beneath it but they have to get their blood supply from underneath and this blood supply has to slowly dissolve into the retina in order to feed it. That's a delicate system.

[01:37:30] And so if the blood supply is damaged at all then the retina just isn't going to get blood at all and then the retina slowly dies and that's of course what leads to blindness. Now, most people have at least heard of a retinal detachment or retinal hemorrhage or something. The reason why a retinal detachment is so bad is because the retina doesn't have its own blood supply so as soon as it detaches, it completely loses access to blood supply

so it has to be reattached with lasers, whatever they're doing nowadays to reattach it. You're probably not worried about retinal detachment necessarily. You're worried about chronic eye disease or damage that's causing blindness and so I will say that sugar and carbs are the biggest threats but inflammation in general.

[01:38:00] Now everyone has different weakness when they have inflammation. Some people have joint pain. Some people have brain fog. Some people have gut issues. But if your eyes are one of your weaknesses, then you're going to get more eye damage and more likely to have blindness than someone else. So definitely take care of your eyes. We should talk more about eyes but there's really not autoimmune conditions in the eyes so that's probably why we didn't talk much about the eyes in the documentary.

[01:38:30] Teen Vandermier. This is another great comment and question. "A friend of mine has frontotemporal dementia. Is there any help for such?" Yes. "She has no shame as her niece says. Her memory is good but her emotions are not. She is very anxious. Lately she has gotten problems with walking, has a walker to keep her balance. I'd love to be able to help her."

[01:39:00] Well Teen, there are many people out there with dementia, and their loved ones are all struggling for things to do, and conventional medicine is telling you that it's not reversible, it's something that will just decline with time, and I will tell you that we now know in 2017 that dementia, including frontotemporal dementia, is reversible. It is not easy and it takes a lot of work and by the time you have dementia you've already been accumulating damage for likely two decades or more. So reversing dementia is not easy but it is possible. I'll refer you to Dr. Dale Bredesen's book. He's an MD. Dale Bredesen, and his book is called *The End of Alzheimer's*. Now it's mainly written and geared towards Alzheimer's because that's one of the biggest dementias that's affecting America right now and really going to bankrupt our health care industry if we don't do something.

[01:39:30] [01:40:00] But his principles apply to all neurodegenerative diseases including frontotemporal dementia, Pick's disease. So what I'll say is pick up his book, start reading and start implementing some of those processes. There's all kinds of offices, functional medicine clinics that are gearing towards neurodegenerative diseases using Dr. Bredesen's ReCODE program that he's created. Dr. Bredesen is an amazing speaker and amazing person. He was actually a conventional medicine researcher for years and years and years in the Alzheimer's world and his wife was a functional medicine doctor and she told him that whenever you find out on how to fix Alzheimer's, it's going to be related to food, and he refused to believe it, which is pretty funny because now he's promoting food and functional medicine and supplements and all that stuff.

So it's a powerful book. It's a great way to reverse dementia, including frontotemporal, but it's a lot of work, and many times, by the time someone's demented it's hard to implement some of those changes. So you certainly want to take those principles in for yourself since there is a genetic component. But look up ReCODE, R-E-C-O-D-E. There's ReCODE practitioners coming out, and I think Dr. Bredesen even has, like, a certification he does for practitioners so you can get help. Okay?

[01:40:30] [01:41:00] Sharmisa Knapp. I like this question. "Thanks. Lovely episode." Great, glad you like it. "I have two queries. One, does microwave cooking contribute to autoimmune disease?" Ooh, I don't think we have any proof as to whether microwave cooking contributes to autoimmune disease. But what we will say, or I will say, is that we know that microwaving heats food in certain parts of it to much higher temperatures in order to get the whole food to a higher temperature. Maybe that's too much detail, and I should basically say that microwaving food destroys the nutrients in it.

So if you take broccoli and you steam it you get a lot of nutrients. If you take broccoli and microwave it in order to steam it, so the steamer bags and stuff, then you're destroying a lot of the nutrients in the broccoli because of the

way the microwave heats the vegetables. So I always tell people to cook, whether it be roasting or flash stir fry and what not, but not microwaving their vegetables as much as possible.

[01:41:30] [01:42:00] Now microwaving vegetables is way healthier than eating fast food, okay? So I don't want you to think that vegetables cause autoimmune disease when they're microwaved or vegetables are dangerous when they're microwaved. We don't have that data or at least I haven't seen that data right now. Because if you're not eating microwaved vegetables what else are you going to be eating is the real question. So, of course, if you have time to cook the vegetables, please do. And always try to eat some raw vegetables as well. You get different nutrients based on how the food is cooked whether it's fried, roasted, steamed, boiled, you can get different nutrients. So you want to eat some food raw so that you can get the nutrients that are only available in the raw foods.

[01:42:30] Your second question was, "Cerebral stroke and post-stroke depression and paralysis, how to come out of it?" That's tough, Sharmisa. When someone has had a stroke, those nerve cells are dead and the blood supply is kind of scarred in the area so we ... Dr. Bredesen does a lot with Alzheimer's reversal. He created the ReCODE program, but after a stroke those cells are dead. It's pretty hard to regenerate an area that's already dead when you've got scarring in the area. So of course you can put together a good ReCODE program like Dr. Bredesen's and try to get some of the stroke symptoms reversed but I will be honest and say that much of it is going to be irreversible, unfortunately.

[01:43:00] [01:43:30] Frances Schindler. You've got a lot of questions. So let's start off. "You discussed metal toxins that are bad for us. What exactly are the metal toxins? My car keys? My vacuum? My phone? My computer?" So, yes, there are dangerous heavy metals out there like mercury and lead and antimony and cesium and all kinds of heavy metals out there. There's also lots of beneficial metals like magnesium and iron and zinc and selenium. Those are all healthy metals and required metals. So, yes, there's lots of metals out there. You should not be getting heavy metals from things like car keys and your phone and your computer and stuff unless you're soldering with lead or designing a phone or something, you're not really exposed to toxic metals. But there are toxic metals all over the place that you are being exposed to—in your water, in your food. For example, arsenic is given to chickens because it makes them grow bigger faster and it kills bacteria and fungus. It also kills humans in large doses.

[01:44:00] So why we're giving arsenic to our food supply is baffling to me, but arsenic is frequently found in foods that are farm raised. And then of course, mercury is naturally found in nature. It's much higher in coal-burning areas and farm-raised fish and stuff like that. But mercury is naturally found in the environment, so eating fish gets you some mercury. Now I never like telling people to avoid fish because of the mercury. You want to avoid the high mercury fish, and that's usually the predator fish like sharks. Tuna, technically, is kind of a medium mercury fish.

[01:44:30] But if you've got good detox pathways, if you're working on your glutathione production, your methylation cycle, then you should be able to clear the heavy metals that you're eating from healthy fish like wild caught fish. But if you're consuming too many heavy metals in water and in canned tuna and all kinds of stuff, then you can build up the heavy metals. The dental amalgams, the metal in people's teeth are heavy metals usually 50% mercury by weight. So there's heavy metals all over the place, and they can be quite difficult to remove.

[01:45:00] I can talk a lot about heavy metals but I usually tell people that we work on gut restoration and improving detox pathways before we go down the chelation pathway because many people that already have heavy metals accumulated don't have good detox pathways and good gut function. So the first steps are always to restore those before you try to chelate out heavy metals.

[01:45:30] You have more questions, Frances. "It was also discussed to have many fruits and vegetables. Are there any fruits not good for you?" Not really, necessarily, but there are fruits that are higher in sugar, and basically any fruit that you can binge eat probably isn't a good idea. I always try to think back to caveman days. If you were going

to binge eat a fruit, how much work would it take to get that fruit in order to binge it? So for example, mangoes. If you wanted to binge eat mangoes it would take a lot of work of climbing trees and getting all the mangoes out. And so mangoes, pineapples, watermelon are high sugar fruits that don't really have a ton of nutrition. They're not unhealthy by any means but they're binge-eatable so always watch how much sugar you're consuming in your fruits. Fruits are good. They've got polyphenols and different phytonutrients so they're good, just don't eat too much fruit. They are sugar.

[01:46:00] [01:46:30] "Also potatoes are a vegetable. Are they bad or good for you?" Potatoes really don't have that much nutrition. They have a lot of carbohydrates and a lot of calories, but they don't really have a lot of nutritional properties, so I won't say potatoes are bad for you unless you're diabetic and you should go ketogenic. But for the most part, potatoes aren't that dangerous. They're just not really good for you. I usually tell people that you want to try to get as many colored potatoes as you can and that way you're at least getting some phytonutrients with it. A blank white Yukon Gold potato pretty much is just carbs. It does not have any phytonutrients].

[01:47:00] The darker the sweet potato the "healthier" it gets so a sweet potato is a little more healthier. It's got a little more prebiotic fiber in it and a little bit more phytonutrients but not really a ton. There's a purple sweet potato, I believe it's a Japanese sweet potato it's called or something like that. But there's a purple or indigo colored sweet potato. Now that's a sweet potato with some impressive phytonutrients. It's purple almost like a blackberry or, sorry, like a blueberry and they are quite delicious. The taste is hardly any different than a regular sweet potato but loaded with phytonutrients. Now they're still carbs so if you're trying to do ketogenic or you're diabetic you probably shouldn't be eating purple sweet potatoes either until you reverse diabetes, but that's a good way to get another color into your diet and improve the phytonutrient makeup of your plate.

[01:47:30] [01:48:00] "What exactly is a healthy diet?" Boy, that's a loaded question. I normally tell people the simplest way to say this is to eat lots of vegetables. Eat less meat. In general, in America, and I'm not sure where you're from Frances, but in America and most developed countries we eat a ton of meat because it tastes good, it's filling, but plants are our antidote, is usually what I tell people. So eat as many plants as you can. When you look down at your plate, 70% of your plate should be vegetables and the remaining 30% can be other things. I always try to encourage people to eat as many vegan meals as you can. You don't necessarily need to be vegan, but don't be afraid to have a meal without a meat or an animal protein. But nobody knows what the exactly healthy diet is.

"Do you have a list of foods to eat, say, like for inflammation?" Oh, there's tons of foods out there that are inflammatory including potatoes and mostly sugars and carbs, processed food, dangerous oils like margarine and trans fats. So I would say look up an inflammatory diet or an anti-inflammatory diet and eat those foods and of course if a food is not on the anti-inflammatory diet then you can assume that it's an inflammatory food.

Questions & Answers 3

Dr. Daniel Nuzum

Hello. I'm Dr. Daniel Nuzum. I am a naturopathic physician, an osteopath, and a doctor of Oriental medicine. These videos are in response to the barrage of questions we've had from either the Bible health secret series or the autoimmune health secrets series that Mr. Otto has produced.

Just jumping right into this. To answer some of the questions ... many of the questions we've had ... We've had questions about scleroderma in children. We've had questions about vitiligo in the skin, discoloration or dis-

pigmentation of the skin. We've had questions about rheumatoid arthritis. We've had questions about leaky gut and allergies and things like that.

Just to bring it, make it as simple as it possibly can be. Autoimmune disorders are unchecked, runaway, inflammatory conditions. All of them. It doesn't matter if the body is swollen or not. There's an inflammatory process happening in the tissues that are causing the symptoms. Now that being said, everyone likes to start with inflammation. Well, inflammation is the cause, is the cause of the symptoms but it's ... You can treat inflammation and treat inflammation over and over and over again. If you don't treat what's causing the inflammation, you will always be treating the inflammation. Okay?

Same with chronic infections. If you don't treat what's causing the inflammation leading to the chronic infections, you'll always treat an infection. You'll always be infected with something. An inflamed body is a breeding ground for infection. In the case of an autoimmune disorder, the inflammation that's going on in the body is causing the body, the immune system to lose its ability to differentiate between whose friend and whose foe. What is toxic and what's nutrient. What is good and what's bad. The immune system loses that ability because of either the local or the systemic inflammation. In a lot of cases, you have both local and systemic inflammation.

The thing about it is inflammation is also just a symptom. Inflammation is the body's response to being irritated. So if the body is being irritated, it will naturally become inflamed. And until it is not being irritated anymore, it will stay inflamed. It will continually be inflamed. You have to remove the irritation in order to stop the inflammation.

All that being said, to answer everyone's question basically there's two things that have to happen in order to correct a autoimmune disorder from a natural medical standpoint. Number one is detoxification. You must detoxify. You must eliminate as much of the irritation in your body as possible. You have to get the toxic waste out. You got to get anything that's causing irritation in your system to leave.

Detoxification is the first step that anybody dealing with a autoimmune disorder ... if they're going to ever get better, they must detoxify first. Elimination of accumulated waste. Elimination of heavy metals. Elimination of chronic infections. All of those things have to happen in order for someone with an autoimmune disorder to get well. Until those things happen, the stage for them to get well is not set. Okay? In order to set the stage for them to actually heal and get over the autoimmune issue that they're dealing with, they have to detoxify.

Let me give you an example. Say you have a sliver in the bottom of your foot. Okay? You go to the doctor, and they fit you with an orthotic so you can walk without putting pressure on that place where you have the sliver in your foot. Well, that causes your gait to be off. Then with time now you have to wear a back brace because your back's out all the time because your gaits off because you're wearing an orthotic on your foot because there's a sliver in your foot. Right? Now we go a little farther, and now you're having headaches because your neck is out of alignment because of these things.

Instead of treating the symptom of your foot hurting, why don't we go back and take the sliver out of your foot? Doesn't that make more sense? Okay. In this case, the person is in that situation. They've got orthotic in their shoe. They got special shoes. They're wearing support stocking on their leg to keep the swelling down. They're using a cane to walk around. All these things are happening because they have a sliver in their foot. I don't want it to sound too simple, but in reality, it is that simple. We have to go back and remove the toxic irritations in the system in order for the system to heal.

Autoimmune disorders are chronic inflammatory conditions. Unless you reduce the inflammation, the condition won't change. Matter of fact it will get worse. The fastest way to correct inflammatory conditions is to detoxify. Fastest way to heal that foot with a sliver in the bottom of it is to pull the sliver out. Will the foot ever heal if the sliver's still in it? No. It's not going to heal. You're going to go through inflammation then infection then back

to inflammation then it's going to settle down. Then it will be inflammation again and infection and back to inflammation and settle down again. It will go like that over and over and over and over again.

Everyone that is dealing with an autoimmune disorder is in that same cycle. They have inflammation. Things get inflamed. They go into more degenerative process where there's some infection involved. That gets resolved by the immune system. They go back into an inflammatory state. That starts to settle down. Then they get inflamed again. So they have good days, and they have bad days. That's the cycle. It's called irritation, inflammation, infection. Okay? I call them the three I's. They're like steps in a ladder. You start with irritation. It progresses into inflammation. Once inflammation sets in you have the door open for infection. It's like that. Okay?

Everyone dealing with any type of autoimmune disorder is in that cycle. It really doesn't matter if it's MS, if it's Crohn's if it's ... could be anything. You name it. You name it. The label doesn't matter. If it's a chronic inflammatory condition, this is the cycle people are in. This irritation causing inflammation, inflammation opening the door to infection. That is what the process people are in. The only way to break that is to detoxify. That's the fastest. It's the cheapest. It's the most effective way to break that cycle.

You can't detoxify for forever, but you have to detoxify and then fortify and detoxify and fortify. You got to clean house and rebuild, and clean house and rebuild. Clean house and rebuild. That's how you can save yourself from this autoimmune condition that you may have. Okay? That's number one, detoxification. Detoxification is number one.

All right. Our second step in this process of correcting chronic inflammatory conditions in the body is proper treatment and cultivation of the microbiome. In particular, the gut microbiome. All right? Something that a lot of you may understand what the gut microbiome is. For those you that don't, the gut microbiome is the layer of microbes that line our digestive system. Okay? This lining of ... This multiple layers of microbes that of this multiple layers of microbes that line our digestive tract are responsible for both a majority of our immune response, up to 80% of our immune response is trained into quote unquote our immunologic cells by our gut microbiome. So I'll come back to that in just a minute. Another thing is our neurotransmitters, in particular dopamine and serotonin in our body, the neurotransmitters, the chemicals that carry messages in our nervous system. 85-90% of the serotonin and dopamine in our body is produced in our gut. So, we have neurologic, we have emotional, we have all kinds of different things that our microbiome plays massive roles in.

The one we're going to talk about here, though, is our immunologic function, okay? Our immune system, if our gut microbiome is out of balance, we call that dysbiosis, look that up, dysbiosis is where the ecology or the environment of our microbiome is all out of balance. You can get there real easily by eating the standard American diet. It is truly sad. You can get there by consuming chemicals. They can be pharmaceutical chemicals. They can be pesticides and herbicides in the food that you're eating if you're eating non-organic food. They can be preservatives and things like that in your food. You know preservatives are either antifungal or antibiotics, and so if you're eating a lot of food with preservatives in it, you're taking small amounts of antifungals and antibiotics every day that you eat that food. This kills some of the fungal and bacterial forms in your gut, causing an imbalance. All right, now say if you've had injury or, you know, major stresses in your life, those also stress and disrupt our microbiome, okay?

Now here's another thing that isn't talked about very often is that your eyes, your ears, your nose, your mouth, your throat, your upper respiratory tract all have a microbiome also. Your urinary tract also has, your urinary and reproductive tract both have a microbiome. Your skin has a microbiome, and so let's say you have allergies and you're having sinus issues. The reason the microbiome in your sinuses is allowing for inflammation to occur so easily is because the microbiome in your gut is imbalanced, okay? If the gut microbiome is unbalanced, so will the sinus microbiome, so will the ear, nose, and throat microbiome, so will the respiratory microbiome, so will the urinary tract,

reproductive microbiome. You have problems with your skin? It's because your gut microbiome is imbalanced. Until that gets fixed, you'll always have those problems. It has to start in the gut.

You'll hear natural medicine people over and over and over again tell you that chronic disease all starts in the gut. Most of them won't be able to tell you why, they'll say just 'cause things are toxic and so on and so forth, but the bottom line of it is the imbalance in the microbiome that causes the immunologic dysfunction leads us to chronic inflammatory disorders, okay? Disruption of the microbiome causes leaky gut. Leaky gut in turn causes a constant irritation to our immune system causing inflammation throughout our entire body, causing our immune system to lose the ability to differentiate between what's a nutrient, what's a toxin, what's a helpful enzyme, what's a toxin, what's healthy tissue, what's not, what's heavy metals, and what's not, okay? The immune system loses that capacity to differentiate the more inflamed the body becomes.

So if we want to stop inflammation, we don't take an anti-inflammatory. That's only going to work for so much time. We're going to have a temporary fix, even if we're using natural anti-inflammatories. Okay, the fact of the matter is, in order to shut down these inflammatory processes that are causing the creation of these chronic autoimmune disorders, we have to go back to the microbiome. We have to fix the microbiome. How do you fix the microbiome? First off, you have to detoxify it, okay?

Think of, say we lived in the city, there's an empty lot between a couple houses, and we go and we buy that empty lot and we want to put a garden in there, but there's every kind of weed you can imagine growing in there. It's been for the last 20 years the neighborhood dump, and so there's garbage and all kinds of waste deposited in that lot. Do you just take and start planting stuff in that? Of course not, no. You go and you have to clean it out. You have to scrub that lot. Get all the waste out of there, you've gotta get the weeds out of there, okay? In our microbiome we've gotta remove the waste. Any accumulated waste in the microbiome has to go. Accumulated waste is the breeding ground for parasites, for fungus, for bad bacteria, okay? All of those things will grow in the accumulated waste in our gut because they're there to break that accumulated waste down. So the more accumulated waste you have, the more of them are going to be present. You want to get rid of them? Remove the waste. Take their food supply away. It's almost too simple.

So detoxification of the microbiome has to be our first step. Once that has happened, we have to begin with natural anti-inflammatory. We have to start consuming natural anti-inflammatories. A lot of your natural anti-inflammatories, you'll notice, are spices, okay? Turmeric, ginger, boswellia, frankincense, okay? These are all powerful, natural anti-inflammatories but if you were to consume them in your mouth they'd be pretty spicy, right? Interesting thing about that is all these spices carry molecular oxygen. Okay, that is something very few people, you'll probably never hear anybody else say this, but spices carry large amounts of molecular oxygen. The more spicy the substance, the more molecular oxygen it carries. Molecular oxygen from spices gets imparted to our body so our body can heal itself.

Everything in our body heals in the presence of oxygen. By volume and weight your body is 65% oxygen, okay? We're more air than we are anything else. We are 65% oxygen, 11% hydrogen, and 18% carbon. That is the human body. So of those we are 76% gas or 76% water. The rest of the other 24% are all the other elements, and the biggest portion of those other elements is carbon, so when we add oxygen to the body, it starts to heal. Inflammation starts to go down. Okay, so things like turmeric, cayenne, as long as you're not sensitive to the nightshade component of that, ginger, boswellia, basil, okay, all of these things are natural anti-inflammatories and they're excellent.

You won't get a whole lot of long-term benefit unless you detoxify before you start taking them, okay? I'm all about getting results. I don't want you to spend thousands and thousands of dollars and never get anywhere, okay?

You just spend thousands and thousands of dollars and never get anywhere, okay? So with my patients, what I've always done is take them from point A to point B, in the least expensive and most direct path that we could find. And I'm telling you, detoxification is first. You have to flush the toxins and waste out of the body before it can heal.

Once you've done that, that is when natural anti-inflammatories and antioxidants are super, super ... they're the most important things to start taking after you've detoxified. After a short period on those natural anti-inflammatories, you need to start introducing probiotics, and you probably would do really well with using digestive enzymes, even while you're detoxifying.

Digestive enzymes break down the food that you're consuming, okay? And that keeps it from becoming too large a particles, if you have leaky gut, okay? The particles are already broken down so small that it causes way less irritation. Many people can actually consume foods that they're allergic to, if they consume it with enough digestive enzymes. And have no major response, no major allergic response to that. That's because the digestive enzymes break down the food to a point that it doesn't cause such irritation.

So those in general, for all of the folks asking questions about how to correct autoimmune disorders, it comes down to this. Detoxification and correct the microbiome. Those are the two things that you have to achieve. You achieve those things and your body will heal itself. I tell all my patients, you heal your microbiome, your microbiome will heal you. It's the truth.

Thank you very much.

Well, hi there, Dr. Dan Nuzum here, and today we're talking my basic clinical protocol. My basic clinical protocol is something that we would do typically after someone's done our two-week or our 21 day detox program. In some cases even after they've done our beginners detox program. If the detox didn't seem to really resolve their issues, we put them on this protocol, and they're on it for an extended amount of time. This can go up to nine months, this protocol, so it's a pretty long protocol.

But what this protocol focuses on is correction of the microbiome. Now you have your gut microbiome, is the microbial lining of your digestive tract. In your digestive tract, actually you start up higher in the GI tract, you'll have fewer microbes and the lower you go, you'll have more microbes. And it starts out more fungal form microbes into more bacterial form microbes. And when that switches in the microbiome and you have more bacterial forms in the upper part of the GI tract and more fungal forms in the lower part of the GI tract, we have all kinds of immunologic problems. Our immune system goes haywire with that. Because it's backwards, all right?

How many people have you ever heard of had H. pylori? H. pylori is a bacteria in the stomach that shouldn't be there. That's not the normal place for it to grow, if it is in the gut, it is supposed to grow farther down in the gut. It has a different job, farther down in the gut. In the stomach, it just puts holes in the stomach, it starts the process of developing ulcers. Candida is another microbe, which is a fungal form microbe. And that fungus should grow in the duodenum, just past the stomach. It shouldn't grow in very large amounts down farther in the gut, all right? It needs to be in the duodenum, it has a specific job that it plays in the digestive tract and the digestive process, just after the stomach contents leaves the stomach.

When you get more bacteria growing in the upper part of the GI tract and more fungus growing in the lower part of the GI tract, you get all kinds of problems. If you can switch that and get the fungal forms to grow higher and the bacterial forms to grow lower, you level out the microbiome. That might just sound real simple and it's a process, it's kind of like a process of going to the gym and getting in shape. The more out of shape you are, the more work and time it will take to get in shape.

So the worse off your microbiome is, the more time it will take to correct it. If your gut microbiome is imbalanced, your upper respiratory and ear, nose and throat microbiome will also be imbalanced. You'll have recurring allergies and sinus infections, upper respiratory infections, those types of things will all ... asthma even. You'll be prone to a whole lot more issues in your upper respiratory tract, if your gut microbiome is imbalanced. Because when the gut microbiome is imbalanced, so will be the upper respiratory microbiome. In your ear nose and throat microbiome. Your dental microbiome.

As will be your reproductive and urinary tract microbiome. Ladies that have recurrent urinary tract infections, those will continue to be recurrent until you fix the gut microbiome. When the gut microbiome is fixed, it will correct the urinary tract microbiome and when the urinary tract microbiome is correct, you won't get urinary tract infections anymore.

If you have problems with your skin, you got acne or you got psoriasis or rosacea or anything like that, the skin microbiome is involved in those inflammatory processes. If the skin microbiome is allowing for those inflammatory processes to occur in your skin, it's because the gut microbiome is imbalanced. It's all, you know? It's flipped even, all right? If that's the case, you can't fix the skin until you fix the gut. And this protocol focuses on fixing the gut.

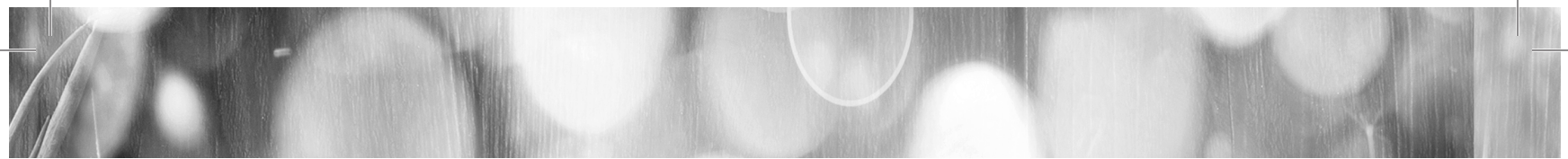
So we start off with our GI tract protocol. GI tract is ... this protocol is predominantly for correcting the pH in our gut. Understand, your stomach has a resting pH of four on the pH scale. When you consume food, the pH goes up and the stomach has to bring that pH down to between two and three on the pH scale, in order for the stomach to empty. If your stomach doesn't produce enough acid, that takes a very long period of time. By the time the stomach contents empty into the small intestine, normally the food's already gone bad and you can't hardly absorb nutrition out of that.

And a matter of fact, that spoiled food then becomes toxic. You start developing food allergies from this. So correcting the stomach pH is super important for correcting the rest of the digestive processes. The stomach pH needs to be low, the small intestine pH needs to be a little higher, the colon pH then has to be low again. And if that pH balance isn't met, we can't fix the microbiome. Certain microbes grow better in certain pHs, and those microbes that grow in those pHs, those pH ranges, we have to set the gut environment at those pHs, in order to get those pH ranges, in order to get the right microbes to grow in there.

So our GI tract protocol starts with that. Then we move on into our inflammation protocol. Our inflammation protocol is both to help resolve inflammation throughout the body, but it's to teach the microbiome how to maintain and manage inflammation in the body. The inflammation protocol is for teaching the microbiome how to manage inflammation in the body. And so we use a lot of anti-inflammatory type botanicals, herbs and things like that, but those are used in this process for training the microbiome to keep the inflammation down.

So once we've done that, we've got inflammation down, we move into our immunity protocol, and in our immunity protocol, that's where we're getting correction from either an under active immune response, where you just get sick from everything all the time, or I call it indiscriminate immune response, where the immune system just doesn't discriminate. It just lashes out against whoever steps on its toes, or whoever it seems to bump into. And so we call that autoimmune disorders.

So you have the immunodeficiency and then you have the immuno-disregulation or indiscrepancy, where the immune system has lost the ability to differentiate. So it lashes out against anything. In the middle portion of our protocol here, the immunity protocol helps to regulate the immune response. So if someone has a ... doesn't have a strong enough immune response, it helps to raise their immunity. If they have an indiscriminate immune response and they're just lashing out against everything, it helps to calm that down and bring it back to balance. This is the third leg of our protocol.



After that, we go into my microbiome protocol. The microbiome protocol is predominantly a probiotic and a prebiotic protocol. What we're doing in this protocol, this leg of the protocol, is we're reinforcing the good microbes in the body. We got to reinforce the microbiome. So we're fortifying the microbiome, giving all the right microbes, giving more microbes to the microbiome. So the microbiome can heal itself.

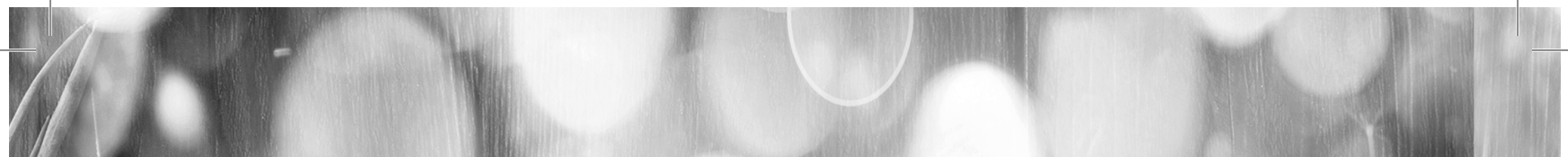
So first we kind of condition the environment through the GI protocols, inflammation protocols, the immunity protocols, but then we start rebuilding and building out the proper environment with the microbiome protocol. Then finally, once we get past the microbiome protocol, we move into my energy protocol. My energy protocol is, one, it's for enhancing the microbiome and enabling the microbiome to operate better, number one, because we've already conditioned it and we've added reinforcements, now we have to train it to operate properly. The energy protocol also enhances hormonal functions.

So you get better communication in the hormonal system, better communication and the nervous system, better communication in the microbiome, also. So the microbiome settles down, it's not so pro-inflammatory, so a lot of things that you may have been allergic to or sensitive to before, you become less and less sensitive to, as you go through the energy portion of our microbiome. It's actually when you get into the immunity, then the microbiome and the energy component of our protocol. The microbiome itself becomes less cranky, if you will. It actually becomes a lot more stable and it will handle stressors much better. And when that happens, it enables your immune system to do the same thing.

So we have our GI tract protocol, followed by our inflammation protocol, followed by our immunity protocol, then our microbiome protocol and then finally our energy protocol. That's the sequence, if you're interested in following my protocol, that's the sequence that I've had my patients go through over the years. And that's what I've had the most success with, with my patients. We put them on that program. It almost doesn't matter what they have, their body, this program enables the body to heal itself. It's just facilitating the body to do what it's designed to do. The body's designed to fix itself and this facilitates the body to do that. So thank you for tuning in and I hope you enjoy the protocol and happy healing.



AUTOIMMUNE SECRETS GUIDEBOOK



Episode 1:

AUTOIMMUNE DISEASE REVEALED

1. What are the true causes of autoimmune disease?

- *Pathogens: Lyme disease and coinfections*
- *Mold*
- *Toxins: heavy metal toxicity*
- *Parasites*
- *Mental, mind, and emotional stressors*

2. What are the triggers?

- *Environmental*
- *Genes or genetics*
- *Leaky gut*
- *Inflammation*

3. What are its true solutions? If pharmaceutical drugs are not the solution, then what is?

- *Determine the sources of the causes and get rid of those*
 - ◊ *Food sources like gluten*
 - ◊ *Allergens*
 - ◊ *Nutritional deficiencies*
- *Balance out the two arms of the immune system—TH1 and TH2—with immune modulators. In autoimmune disease, one will become more dominant than the other. Tests can determine this.*
 - ◊ *Vitamin D3*
 - ◊ *Colostrum*
 - ◊ *Vitamin A*
 - ◊ *Vitamin E*
 - ◊ *Glutathione*
 - ◊ *Superoxide dismutase*
 - ◊ *And others*
- *Peel back additional layers of the causes*

Corruption (secret organized crime) exists at many different levels and as far back as the early 1900s when Rockefeller donated a lot of money to the medical schools, but in agreement, wanted to influence the curriculum to shift from natural healing substances and methods to synthetic chemicals and ingredients. Also, many medical interventions in the birthing process were developed that increases the risk of the baby developing autism and other autoimmune diseases.

One example of the corruption is to reverse engineer the birth process to cause harm to child and mother so now they have patients for life to give drugs to to manage symptoms, but never treat the underlying cause, so they will stay in the system. They interfere with the natural birthing process in multiple ways, and they inject vaccines like



the flu shot and RhoGAM with mercury, aluminum, and other toxins into the mother even before the baby is born, and then they give multiple vaccines full of toxins to the baby within hours or days of birth. They make money on sickness, not on health.

The mainstream medical world is systematically trying to abolish homeopathy. They are trying to remove treatments like acupuncture, chiropractic, and anything that's natural that doesn't fit into the pharmaceutical treatment realm, because they don't profit if it's natural. In addition, the medical community has developed into a system of finding a way to spend the least amount of time with a patient while deriving the most amount of money from the encounter.

Your gut is your number one life support. If your gut is not healthy, if you don't have the right balance of bacteria, yeast, digestive properties, nutrition, etc., then you're predisposed to autoimmunity and anything else.

By having the proper test done, you can determine if you're at risk for developing an autoimmune disorder and you can take the steps that you need toward prevention. If it is possible to prevent yourself from developing difficult health challenges down the road, would you want to take the best steps possible to be in your optimum health?

Dedication and commitment are really a plus when fighting autoimmune disorders with functional medicine. You can't just do it halfway and expect to see results. The more committed you are, the more determined your efforts, the more positive your mindset, the better your body will respond to the protocols. So here are some steps to help you begin the process of fighting autoimmune disease.

List some of the foods that you think you may be sensitive to, then leave those out of your diet completely for at least six weeks to see if that helps.

Have you been exposed to mold or toxins, such as heavy metals? List steps you may take to eliminate the exposures and to detox, such as tests to determine your exposure, detox methods you may use, etc.

List other steps you may take to keep/regain your health, such as seeing a functional medicine practitioner, eating organic foods, taking nutritional supplements, etc.

Episode 2:

WHEN YOUR BODY ATTACKS: HOW TO WIN THE WAR ON LUPUS, ARTHRITIS & THYROID DISEASE

This episode looked into more specific issues such as lupus, arthritis and thyroid conditions, which often appear simultaneously, one contributing to the other.

How do you know if you have a thyroid disease or a thyroid condition? There are signs and symptoms and you can get tested for it. In the tests, you want to look at TSH, total and free T4 and T3, and reverse T3. You also want to look at antibodies like TG, TPO antibodies. If the antibodies are high, then that usually signals autoimmunity.

Educating yourself on autoimmune disease in general, as well as your specific condition helps you to become a more savvy, informed patient who can best advocate for yourself during a healthcare appointment. This is incredibly important as it helps you to be proactive and guide the medical side of treating your autoimmune disease.

Adrenal dysfunction, which is often caused by stress, causes our cortisol levels to be high. When cortisol levels are high, the liver makes more sugar, and it causes the brain to even crave more sugar. By kicking the body into ketogenesis with a ketogenic diet, symptoms get better almost immediately. It still takes months for the true adrenal dysfunction to reset, but with symptom improvement, you'll find it easier to keep making the change.

Nutritional deficiencies can cause or trigger autoimmune disease or make existing autoimmune disease worse. It's something that absolutely needs to be evaluated. Glyphosate, before it was a pesticide, was used as a chelating agent to strip metal. It strips good metals from the human body, such as selenium.

Half of selenium's function is in the thyroid. So stripping the body of selenium can actually cause hypothyroid. Often the medical community deals with thyroid issues by removing the thyroid, which causes the patient to have to be on constant hormone replacement therapy for life with synthetic drugs that can cause other health issues. Functional medicine doctors and many holistic professionals have been able to help many patients with thyroid conditions reverse their abnormalities and live healthy lives with little to no medication.

Allergies are often associated with autoimmune conditions. Gluten is a major trigger for celiac disease and Hashimoto's, so it is critical that this person become absolutely diligent about avoiding gluten. In fact, a single

gluten exposure can have an immune response that can last up to six months. Dairy is a major allergen that can trigger Type 1 diabetes by causing the immune system to attack the pancreas.

Hormones all function within a complex, subtle web of interconnectedness. Many hormones have an effect on the immune system, disease, and each other. Hormone imbalance can exacerbate or even induce relapses of dormant autoimmune disease. If you're deficient of estrogen or progesterone, you can just not feel well and may even have trouble getting pregnant. A dried urine test or a 24-hour urine test is more comprehensive than just the standard blood work. Precision Analytical has a test called the DUTCH that you can do at home, and it will look at the whole chart of hormones, such as pregnenolone, progesterone, cholesterol, DHEA, testosterone and how it's breaking down, and estrogen metabolites and how it's breaking down methylation. High insulin states always lead to high estrogen states in females. High estrogen states are very irritating to the brain. They're inflammatory to the brain, and people are more likely to get migraines, have mood irritation, anxiety, heavy periods or PMS.

For those who are having trouble with fertility, when the body is healthy, it is ready to procreate, and fertility issues will diminish. Triggers that cause infertility include toxicity, pathogens like Lyme, coinfections, and parasites, and EMR (electromagnetic radiation) from cell phones, WiFi, Bluetooth, etc.

List some changes that you can make today to start you on the road to a healthy body.

Episode 3:

MISSING PUZZLE PIECES: CAN YOUR MIND BE RESTORED? THE TRUTH ABOUT ALZHEIMER'S & DEMENTIA

In episode 3, we looked at a group of diseases that have a dramatic impact on our society because of their high incidence, mortality, and severe debilitating character. Neurodegenerative diseases haven't always been known as autoimmune diseases.

We don't know yet the cause and effect of Alzheimer's, but what we've got to do is keep all the neuron connections, because each nerve fiber has a lot of different connections and cross connections, synapses, and when we lose those synapses, that's when we start to lose memory. Heavy metals, toxins, and inflammation can all be involved because it's a multifactorial disease. High glucose levels from sugars and starches could also be a cause because another name for Alzheimer's is diabetes Type 3.

Alzheimer's is preventable and reversible up to stage five of seven stages. Even at stage six, we can prevent progression.

Diet and preventing sugar spikes is critical. A sugar spike is when we eat a certain substance, and it spikes the blood sugar more than 20 points. A blood sugar meter can check for that. Check your blood sugar before eating a food, and then 20 minutes after, check your blood sugar again. If it went up over 20 points, that's causing a sugar spike, and you should avoid that food. Sugar spikes cause damage throughout the body and is one of the unhealthiest things that we can do.

Fasting is also an extremely healthy practice. Fasting allows your body to purge itself of some of the old immune cells, and then your immune system can create new vibrant stem cells that haven't identified new invaders yet, and now they're looking for and can react to them. We should be fasting daily for 16 to 18 hours without food, and on a monthly basis, a three-day fast, 48–72 hours, water only. Anyone can do it, including diabetics.

Diet, exercise, sleep, and stress management are critical. Diet should be fresh, organic food, and absolutely no GMOs. If you can't afford organic, at least wash it off in the sink in hydrogen peroxide to decontaminate the pesticides and chemical residue. Healthy water hydration is critical. Healthy fats, like EPA and DHA, avocados, extra virgin olive oil and extra virgin coconut oil. One half of the plate has to be vegetables, one fourth protein and one fourth fruit.

What steps will you take to prevent or reverse poor brain function?

Episode 4:

LEARNING TO THRIVE INSTEAD OF JUST SURVIVE: THE TRUTH ABOUT LYME AND THE EFFECT OF TOXINS & PARASITES

Lyme disease, toxins, and parasites can have dramatic negative impacts on our health, but it can be turned around.

Lyme Disease comes in many different forms. It's a spirochete, but when it gets stressed, it can morph into a cyst or round body form that is many more times protective against antibiotics. It's also got a stealth form where it will go inside of our cells and cause autoimmunity. Another form is called the biofilm.

If you're not well, you're going to exhibit symptoms, and Lyme can thrive, but when you have a healthy body, your body should be able to fight it off to a good degree and not be affected.

The best tests for Lyme are IGeneX, DNA Connections, and Pharmasan Labs' iSpotLyme.

There are over 150 different symptoms. But treating the “bug” inside of us is not the answer to getting rid of Lyme because it can hide in its biofilm, in our cells, and in parasites in the body. The first thing to do is open up the drainage pathways, then if heavy metal or mold toxicity or parasites are present, detoxify the heavy metals and mold and cleanse from the parasites.

Antibiotics, poor diet, chemicals in our environment, including cleaning and personal products, and infections can add things to our bodies that allow Lyme to thrive. So we need to clean up or stimulate or modulate our immune system in a way that it doesn't react instantly to something.

Supplements that help include anti-inflammatory herbs, such as curcumin, frankincense, adaptogens that help modulate the immune system and help with hormone balance in the body, vitamin C, and nutrient dense foods.

If you have Lyme disease, what steps will you take to fight it?

Episode 5:

YOU ARE WHAT YOU EAT: THE CONNECTION BETWEEN YOUR GUT & YOUR BRAIN

Many gastrointestinal illnesses actually have their origin in the mind, and a healthy gut can help produce a healthy brain. Gut bacteria is one facet of gut health, so as we change the diet, we can get our gut to do a lot of good things for us.

The link between a healthy immune system and autoimmunity is when the immune system has been overly stimulated. It's constantly on and attacking all of these substances that we're consuming that are foreign substances, not recognized as a natural substance or part of us, and the immune system then starts to become confused and the immune system starts to attack our own body tissues.

In a process similar to leaky gut, the blood-brain barrier can become inflamed and damaged, becoming hyper-permeable. We call this leaky brain. Leaky gut and leaky brain go hand in hand.

So there's prevention before an autoimmune condition manifests, then after an autoimmune condition manifests, there would be management of that autoimmune condition, trying to minimize the damage, and then there's actual healing and reversal of autoimmune.

Once someone has developed an autoimmune condition, then the goal is to let your immune system function as a healthy immune system. So, this is about stress management, this is about avoiding toxins as best one can, providing the nutrients that the immune system needs in order to do its job properly. And all of these things combined will help to restore the discernment of self versus non-self by the immune system.

Avoiding allergens, using antimicrobial herbs, consuming fermented foods, taking probiotics, and dealing with parasites and toxins, and the emotions of Adverse Childhood Experiences all help in reversing autoimmune disease of the gut and even depression, brain fog, and digestive problems.

What substances will you avoid and which ones will you consume to prevent and reverse autoimmune disease?

Episode 6:

IS AUTOIMMUNE JUST THE BEGINNING? THE CONNECTION BETWEEN AUTOIMMUNE, OBESITY, DIABETES, AND CANCER

Gut problems can also contribute to weight gain, diabetes, and cancer. Yeast overgrowth and autoimmune disease often go hand in hand to exacerbate each other. Many people are struggling with brain fog, digestive issues, fatigue and sugar cravings, may actually be struggling with yeast infection.

Cortisols are a major stress hormone made in our adrenal glands. Stressors can be lifestyle, like what you eat, lack of sleep or exercise, and relationships.

Chemicals or toxins can damage insulin receptors, which can lead to various types of diabetes, and inflammation can impact eating habits. The things that cause autoimmunity will also trigger weight gain. Often times, you need to start with drainage to make sure your pathways are open then detox.

Detoxification begins by limiting how much you're exposed to because you can't clear out what's built up in your body if you're constantly being exposed to things. Then work on detoxification with things like glutathione,

different foods, chelators, like ALA, DMSA, EDTA, DMPS. to remove heavy metals, humic acid, and fulvic acid, bioactive carbons, maybe azealite or a hydrolyzed clinoptilolite fragment.

So there's a lot of tools in detoxification, but glutathione is a great place to start. The bioactive carbons are a great place to start. And then you can start removing things. Just don't do too intense, off the bat. Right? We want to make sure the body can handle it. And then you can just slowly increase. And as you want to dig deeper and go layers, we always recommend finding a practitioner that can help guide you, because detox, especially of heavy metals, can be a little complex. And then if something comes up, you want to know exactly what to do and how, and it can be a little scary when you're doing it on your own sometimes, too.

The ketogenic diet is a special diet which is used to put your body into ketosis, producing ketones, which causes it to purge fat and get rid of toxins. So they reduce inflammation and oxidative stress, so we can reverse weight-related conditions like diabetes, heart disease, and cancer risk.

So your job now is to identify what's holding you or your loved one back, and how can you start naturally removing that and going after it to let the body heal? Write your thoughts below.

Episode 7:

HEALING & THRIVING: LEARNING HOW TO HEAL, ESSENTIAL OILS, INNOVATIVE DIET & LIFESTYLE APPROACHES TO AUTOIMMUNITY

In this episode, you learned what a healthy anti-inflammatory diet looks like and the most useful herbal remedies, essential oils, and supplements for safely reversing autoimmune disease.

Antibiotics, steroids, and immune suppressing medications can be detrimental and have side effects. The obvious thing to do is to start with diet. You've got to be eating real, uncontaminated, whole foods in the manner in which nature intended you to do so. 65% of autoimmune conditions is diet, not genetics. Go grain free, dairy free, soy free, corn free, rice free, and sugar free, and change our perspective to hang out with people for fun, not for what we're going to be eating.

The top allergens are nuts, corn, soy, dairy, wheat. Pull those out to start with and see how you do. Also avoid processed food and various forms of sugar. Vegetables, meat, but not pork or bottom dwellers, Paleo, Ketogenic are good, but look at your genetics to see if you can handle lamb or beef. Also take probiotics and a significant amount of digestive enzymes. Eat something different every meal and every day, and eat natural herbal anti-

Remove stressors by getting to sleep on time, go for walks and spend more time out in nature, mindfulness, meditation, and practicing loving kindness in our relationships with others. Decide to make the commitment to follow through.

What diet and lifestyle approaches will you commit to to reverse disease?

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