

Dr Tom O'Bryan Q&A with Dr Mark Menolascino

The #1 Killer of Women: Heart Disease

Link Dr. Mark's Book: "Heart Solution for Women: A Proven Program to Prevent and Reverse Heart Disease"

<https://www.amazon.com/Heart-Solution-Women-Program-Prevent/dp/0062842137>

Dr. Tom: Hello, hello. Welcome. I'm really excited that we got my truly very good friend, Dr. Mark Menolascino here today. Dr. Menolascino shares faculty with me at the Institute for Functional Medicine. He has a new book that is just coming out. When is it launching Dr. Mark?

Dr. Mark: January 29th. It will be fully available. It's on presell right now, Tom.

Dr. Tom: Great, great. That's why we're doing this now, so if it sounds of interest to you everyone out there and you preorder it, the publishers go wow, look at this. There is a demand for this book. That's what happened with You Can Fix Your Brain. We had about 5,000 pre orders before the book was launched. As a result of that, Amazon put us as number one in seven different categories. They did more marketing for it, and it really took off. For Dr. Mark's book, I'm hoping the same thing can happen or even a greater number.

For all of you out there, give me a thumbs up. Let me know that you're here. We're going to get started. I'm looking to see ... I look at my phone Dr. Mark for Facebook and then because their questions come in here. It's not showing yet, but it will show. Let's just get to it.

Dr. Mark: Sounds good.

Dr. Tom: Yeah. I guess my first question to you is how big of a deal is heart disease for women compared to for men?

Dr. Mark: Well, it's a big deal for everyone- both men and women. The problem Tom is we just got it wrong for the women. We thought they present the same way as men, that they should be diagnosed the same way, and they should be treated the same way. But women are different than men in how they show up with heart disease and how we have to treat them.

We've developed a program that uniquely treats women the way they should be treated. Find early heart disease. Prevent it from happening. If it's already started, reverse it before it becomes big trouble.

Dr. Tom: That's the functional medicine principles in general. What is it that is different in the presentations for women with heart disease than for men?

Dr. Mark: Great example Tom was on Grey's Anatomy, the favorite TV show of a lot people where Bailey, the chief surgeon was driving her husband to work, had some chest pain, went to the emergency room, told them she was having a heart attack. The test didn't really show it. Her heart racing wasn't clear, and they started asking about her anxiety and her stress and how hard her life was being chief surgeon as a woman.

They didn't think that she could be actually having a heart attack even though she knew she did. That's a Hollywood movie, but we see that in real life. Women have nausea, heartburn, stomach aches, and dizziness. They don't show up with the elephant on the chest like men do.

It's a different presentation, and it gets missed a lot in healthcare and for women. If it gets missed, then it can turn into one of those scary sudden death heart attacks that happen. In half the people for their first symptom of heart disease is sudden death. They don't get a second shot. We have to be better.

Dr. Tom: Right, right. That's a very good point. We've known that for years for men and women. The very first sign that you've got a heart disease is death, the very first sign. You don't have to be suffering for long-term to validate that you might have a heart condition. You might be having a heart attack. You said nausea, gas, bloating feeling, heartburn... What are some of the other symptoms that a woman should be conscious of?

Dr. Mark: Well, the classic heart symptom is pain in the chest area like there's pressure on the chest going into the left arm, going into the neck, going into the back but again digestive symptoms, anxiousness, dizziness, palpitations and a sense of just not feeling right.

We've seen women that are actually scheduled for surgery for gallbladder removal when it actually was their heart causing the discomfort in their belly not the gallbladder.

Dr. Tom: Yeah. Yeah. I've heard of that happening. Haven't seen it in my patients, but I've heard of that happening where a doc thinks it's a gallbladder problem. It's treating what they think is a gallbladder problem but it turns out to be a cardiovascular problem.

Dr. Mark: Yes. Tom you talked about in the Brain Book and all the great work you've done with the Gluten Summit and really raising awareness of inflammation.

In our functional medicine model, if you address one thing, you're addressing the whole person. The same strategy is to help your heart be safe, also balance your hormones, optimize your gut, reduce inflammation, help your skin glow, help your hair be strong. All of these accessory benefits happen when we're really focusing on preventing the leading killer of women heart disease.

Dr. Tom: You bet. You bet. It's all critically important. We've talked about this with a lot of people. Now, I've got it up on my phone. Facebook is on the phone. Now I can see. How great is that?

Dr. Tom: Dwin says, "I tried to get Biom, and they can't sell in California." Well, that's not true. Dwin, write to info@thedr.com, and they will help you with that.

If we were going to do a test, if we were going to make a recommendation to women to check and see if they have risk factors right now for cardiovascular disease and the potential for a first heart attack, what might that test include? What would you recommend for that test?

Dr. Mark: Well, Tom everybody is at risk- both men and women. We use to make it so much about the family history, but really you can change your destiny of your family history based on the information you bathe over your genes.

Dr. Tom: Excuse me, Dr. Mark. There's a question just came in and this is important right now. This is from Lorna. She says, "What about severe dizziness, temple pain, major weakness? Been fighting today since this morning."

Dr. Mark: Well, again we can't diagnose through Facebook Live. Those are concerning symptoms. It could be a migraine. It could be something else in the headache class. Just as a man and especially as a woman never dismiss the possibility that it could be your heart.

When I ran the emergency room I told everybody that came in you're never wrong if you get checked out. You might be wrong if you don't get checked out. You have to have a good awareness, but there are tests that you can do.

In the book, we talked about all of the tests you need. You have to go beyond what your doctor is doing. You've got to look at the different particle sizes, the inflammatory markers. There's a lipoprotein (a), Lp (a), which is the big killer for women. There's just some additional testing that's not that expensive that you can do to look for some of these other issues that might put you at risk.

Dr. Tom: Let's dial that down. You spoke about lipoprotein fractions and particle size. Let's talk first about particle size. We've got a pretty educated audience. Let's bring them up to speed. Can we start with that one? Can you explain particle size?

Dr. Mark: Yes, Tom. It's a great question because half of the heart attacks happen in people whose cholesterol is less than the magic number of 200. This cholesterol number really is fairly arbitrary. But in your cholesterol, I like to think of small sticky marbles in big bouncy basketballs.

The big bouncy basketballs are protective. It's those small sticky marbles and that lipoprotein (a) is a small sticky marble with a nasty inflammatory tail on it. That's the one that's builds the plaque and makes the plaque irritable that's why it's so dangerous. It's looking at these particle sizes, the small sticky ones, the big bouncy ones and that nasty little one called lipoprotein (a).

Dr. Tom: Right. Then in the inflammatory markers that you referenced, what would you include to be checked in the inflammatory markers?

Dr. Mark: Well, thank goodness you've taught so many people to fix the gut because that's where all inflammation starts, the fire in the gut.

Dr. Tom: Isn't he a sweet guy? Isn't this guy sweet?

Dr. Mark: It's true, Tom. You've taught all of us. But fire in the gut is fire in the heart and as you've taught us too, fire in the brain. It's all related to that same cycle.

There's a C-reactive protein high sensitive or hs-CRP that's your general overall heart inflammation but there are now some new markers; myeloperoxidase, PLAC 2. These are even more specific and sensitive. Tom we think we can identify people at risk in the next six months for a heart attack by their blood tests that might be more sensitive than stress test.

Dr. Tom: That's a really a remarkable statement, and I agree with you. And I think it's really important that everyone ... This is the number one killer in our world today. Who's not at risk? I mean we're all at risk.

We all should be doing this more comprehensive blood test at least once to see, and if there are no problems with it, then you do it every couple of three years just to make sure you're okay, but so many people when I make that recommendation we do the test, we find the sleepers the ones that feel fine.

You've got an elevated Lp (a) Mrs. Patient or you've got an elevated small, dense LDLs or you've got elevated homocysteine. Homocysteine is called the silent killer. Let's deal with this right now.

Dr. Mark: Homocysteine is not very appreciated Tom. I'm glad you brought it up. It's a nasty toxic protein that chews away your blood vessels and makes them more likely to want to rupture and have this plaque.

Dr. Tom: Yeah.

Dr. Mark: We all know the story of Jim Fixx, the marathon runner who died with a cholesterol of 180 while being as fit as anyone can be. Unfortunately, many of us know about that woman who goes yoga everyday has no body fat, has normal cholesterol, looks like she's in great shape and has a heart attack and dies and everybody wonders why. That's where these advanced testing can really find who's the canary in the coalmine? Let's not let this happen to them.

Dr. Tom: I think it's so critical that every adult does a more comprehensive cardiovascular test. In your experience what's the cost to the person when they get a complete cardiovascular profile?

Dr. Mark: Well, there's really a trifecta that you want to do. You want to get the right blood test and go beyond the health fair and the basic insurance exam testing. Get these additional particles and these inflammatory markers. It's a couple of \$100. It's not thousands of dollars.

The other pro for women is a stress test for women where they run on the treadmill is not a very sensitive test. They can add an ultrasound called a stress echocardiogram that markedly increases the sensitivity.

If you're an active woman, don't settle for just a stress test if it's ever ordered. Ask for the stress ultrasound or stress echocardiogram very, very sensitive. No radiation.

Dr. Tom: Yeah, yeah. Really good suggestion. The blood test, I'm just going to stay with this because I want everyone to do this blood test. Everyone needs to do this. It's a couple of \$100 and if you have insurance, many of the labs will bill the insurance and you pay like \$60 and that's all you have to pay. If you're insurance company doesn't pay for it, the lab accepts the \$60 payment as payment in full.

It's not going to require a large investment. It requires you getting in the car, driving to the office, getting your blood drawn and do it fasting. It should be a fasting test.

Dr. Mark: Yes.

Dr. Tom: Let me say hello here to Lynn from South Australia. Sandra is in County Kerry, Ireland. Hello ladies to both of you. Mary is in Mack, Colorado, Donnie is in North Port, Florida, Peruse is in LA. Elizabeth says, "My sister has Prinzmetal angina, takes liquid Hawthorn each as well as she can, clean water, cannot afford nitro. Any suggestions?"

Dr. Mark: Well, Prinzmetal angina is a really sneaky one for women. It's a spasm of the blood vessel of the heart not a blockage. Again, it can look like it's a blockage and feel like a blockage. If you think that's going on, get checked out. It uses these natural products like Hawthorn, arginine, nitric oxide to relax the blood vessels. You want that blood vessels to be nice and pliable. You don't want stiff pipes. That's one thing these supplements really help with.

Dr. Tom: Yup, right. I wanted to take it a little bit further for everyone here, if you've got spasm in your chest, if you have Prinzmetal angina, if you do have that, the question is why do you have a spasm of the muscles of your chest? You don't want to just stay with Hawthorn. You want to ask the question why.

In clinical practice we see so often muscle cramps, spasming, Charlie horses, angina, may be caused by a food sensitivity, it may be. I'll give you a classic example.

When I was in Chicago in my practice but worked really hard. I've started at 7:30 in the morning, go until 7:00 at night. Took a 2-hour lunch break to go out and exercise and train for triathlons and all that, but it was a 10-hour day with patients and I come home and have dinner and after dinner my brain was just done. I just wanted to sit down, and I would sit down and what would I do? Multiple times a week I'd have a pint of Haagen-Dazs, ice cream, a pint.

It's not good for you. You shouldn't do it, but I only did honey vanilla because there's no sugar in honey vanilla. That's how I was thinking. That's the stupid thinking that I was doing. Well, it's only honey vanilla. It's naturally flavored. I was doing that kind of a rationale. I started developing chest pain. It was a pretty strong chest pain.

I went to a friend, a cardiologist and we ran the batteries of test and I scored the highest of anyone had ever scored under stress test because I was a triathlete at that time. He said, "Tom, you're fine. You're fine. I can give you a nitro, but there's no reason. You're fine. Blood vessels are clear. There's no evidence of a problem."

I said, "Well and it comes sporadically. It doesn't come all the time." He said, "Try and keep track of when it comes." Look at your lifestyle." I have to laugh. I had to have a cardiologist tell me to look at my lifestyle or myself.

I did. I was trying to figure it out. The pain came one time, trying to figure it out. Oh, no it can't be that, no. It turns out every time I ate ice cream the next day, I'd have chest pain. I said, "No. Come on." Sure enough I'd stop the Haagen-Dazs. No more pain. A week later I'd have the Haagen-Dazs, chest pain.

Elizabeth for your sister, of course the natural things to help reduce the pain you know are great, but you got to go back up stream and figure out why it's happening. That's a functional medicine approach. She needs to read Dr. Mark's book. She needs to read my two books, so that she gets the big picture of view and starts asking questions and explores where is this coming from.

Dr. Mark: Tom, you've taught me so much about food sensitivities and how important they are and that keeping track of journaling how you feel what you eat so you can correlate these. You also think sometimes these sensitivities will deplete crucial minerals like magnesium in this case?

Dr. Tom: Anytime you have a food sensitivity, you've got inflammation in your gut and with inflammation in the gut, your gut doesn't function properly so you don't absorb your nutrients very well. The result is you may develop nutrient insufficiencies or deficiencies. That's a really good question like magnesium perhaps, which can cause muscle cramps or potassium which can, potassium deficiency could cause muscle cramps, you're right.

Dr. Mark: Even the US government admits that up to 60% of us are low in magnesium. It's not just our good idea, it's something that even the US government realizes is a crucial mineral deficiency causing all those things you're talking about.

Dr. Tom: You bet, you bet. A telltale sign suggestive of magnesium insufficiencies or deficiencies if it is a woman is eating chocolate multiple times per week because chocolate it has the highest source of any food that I know of, of magnesium. It's one of the highest or as I've heard in the past the highest source of magnesium. People are doing chocolate regularly it maybe for many reasons, but it also maybe because your magnesium levels are little low.

Dr. Mark: Yeah.

Dr. Tom: It's extremely safe to take magnesium. A couple questions here. Carol asked, "I've had high cholesterol and had it for years, 340 with my HDL around 90, I will not take a statin. I've had this for years."

Well, Carol, two things. First and I'll ask Dr. Mark for his opinion. First get the blood test that we're talking about to see if you have a high number of the particles that plug up your pipes.

Second, get your pipes checked, right? Get a scan done to see if you have calcification in your coronary arteries. If neither of those are a problem, then the question is why do you have high cholesterol?

As Dr. Mark will elaborate on even more because he's the go-to guy, LDL cholesterol that we have considered to be the bad cholesterol, it's not that bad cholesterol. It's the raw material that your hormones come from; estrogen, progesterone, testosterone, thyroid hormone, insulin, melatonin, serotonin, they all come from cholesterol.

Why is my liver making more cholesterol? Because all that most of the statins shutdown the liver's ability to make cholesterol. That's how they work. The question is why is my liver making cholesterol? It maybe you need more hormones.

The most common hormone that most people need more of thus triggering the need for raw material to make the hormone is the stress hormones, that if there's too much stress in your life and you need the stress hormones, the fight, flight or fright hormones, your liver is going to make more cholesterol, the LDL cholesterol. You guys get this? Give me some thumbs up or something if you get this because this is so important to understand.

Maybe for some people meditation or prayer or mindful walking, something that calms you down will be of great value. Dr. Mark, you want to elaborate on that a little more?

Dr. Mark: Oh, you're so right, Tom. This corners all steel effect of the fight or flight so many of us are in particularly for women working jobs, super moms, taking care of people, really they're the caregivers of our society and that really beats up their adrenals. They have that brain fog hormone imbalance. It's all adrenal-related.

Cholesterol is kind of a myth as far as these numbers. If it's 34, you may have a genetic reason for it to be high, but as Tom says you need it. The data for statins and I do prescribe medications but to very few people that really do need them.

The data for statins show up to 50% of post-menopausal women on a statin get diabetes, over one in two. All comers, it's 1 in 10, but post-menopausal and it doesn't seem like they work very well.

You really have to pick the right person and doing the right test as you say Tom is absolutely the first step, but there is a problem with too low of cholesterol. You can't make your hormones and for women over 65 the lowest cholesterol has the highest dementia. You need cholesterol for the machine to work.

Dr. Tom: Now, let's do that dementia thing for a minute. Now, there are different types of Alzheimer's. Can you elaborate on the different types of Alzheimer's?

Dr. Mark: Yeah. This term dementia in Alzheimer's gets intertwined. That's such a great point, Tom. There are different kinds of dementia. One of the dementia is Alzheimer's. Parkinson's disease can lead to it. Multiple strokes can lead to it. There are other autoimmune illnesses that can lead to it. There are multiple different paths that can end up as this memory or cognitive impairment that we label dementia, and one of the subtypes is Alzheimer's.

We think that there's a relationship to the heart blood vessel health and the brain blood vessel health that are really driven and the interplay between them is inflammation.

Dr. Tom: In your comments a minute ago, you referenced about the hormones and how hormones maybe if you need more hormones, if you're low on hormones you may get dementia. Isn't that one of the categories of Alzheimer's? Aren't there a few different categories one is hormone insufficient?

Dr. Mark: Well, we're lucky to have Dr. Dale Bredesen bring forward this new reversing cognitive decline. He talks about three different subtypes. One is the atrophic that you're mentioning where your hormones are so low that you don't have the hormones support of the brain. Tom, I could think of hormones and cholesterol, cholesterol are two little carbon rings that are put together, and that's the backbone that cholesterol makes up all your hormones. That's also the backbone that makes all your brain tissue.

I'm sorry everybody listening we're all fat heads. We need that fat for our brains. We also need to produce our hormones. There's a real relationship between all of them. Women need that hormone support for a good heart health and a good brain health.

Dr. Tom: Right. Carol, you've got this now. You need the blood test and make sure your pipes are not plugging up and then if that's the case, then you may have a genetic sensitivity to having higher cholesterol or it's a stress response that your body is making more cholesterol because you need more of something, more hormones, more stress hormones, more estrogen, something, but the first step is make sure your pipes are not plugging up. Do the more comprehensive blood tests and then do a calcium score or have your doctor recommend you to a cardiologist just to see if your pipes are plugging up, okay?

Dr. Mark: Tom, there's a new great test that's been up for the last couple of years. It's called the carotid intima-media thickness. A big word we call the CIMT. It's an ultrasound of the neck artery that looks at the lining of the blood vessel. It's no radiation. It's not an expensive test and for our viewer that was talking about this high cholesterol, if you have a normal scan, your high cholesterol is probably not an issue.

If you have a problem with that scan, your high cholesterol is an issue and that's what we're using now to separate who do we worry about based on their numbers.

CIMT, an ultrasound, but it's a specific kind to locate the lining of the blood vessel not just the entire pipe. It's going to change the way we treat women and find those people at risk.

Dr. Tom: That's really a pearl. That's a great pearl, really great pearl. Thank you for that. Misty is in the house and Misty says, "Please asks Dr. Menolascino about any experience he's had with patients diagnosed with pulmonary hypertension especially from scleroderma.

Dr. Mark: Well, what a tough one. Pulmonary hypertension is a tough thing to treat. One of the main reasons people have is sleep apnea. We typically think big, heavy, short people have sleep apnea, but I could have it, Tom. You could have it. Many people have sleep apnea and don't know it. Anyone that's tired that's one of the first things to do, it's the simple inexpensive overnight oxygen test you do at home.

The scleroderma is one of the worse of the autoimmune diseases. It really attacks the body in so many ways and it scars down those blood vessels so they can't be dilated.

One of the other pearls, Tom that I have people calling me say, "Gosh, Mark I had a steak dinner last night and walking to my car I got chest pain." Those are the stiff-piped people like someone with scleroderma would have.

Their blood vessels don't dilate to accommodate that extra fat load of their meal. I really empathize with our friend with the scleroderma. It's a tough thing in medicine. Tom, your tools of looking at autoimmunity, gut health, reducing inflammation, the cross reactivity, that's the approach I would go down. Medicine doesn't have a lot to offer for scleroderma right now.

Dr. Tom: Yeah. I agree, agreed. Annie is here says, "Hello again, from Aussie." Hello Annie. Sharon is here from Indonesia. Paula says, "Alaska is in the house." Debbie says, "Dr. Tom, what's the test called again?" There's a comprehensive ... Let's see ... If you go to Genova Diagnostics, that's just one of the labs that does these tests.

If you go to Genova Diagnostics and look at their cardiovascular profile, that's a nice comparison test. You either do that one or many other labs that offer something very similar with the markers that Mark was talking about earlier.

If you go to, I think it's gdl.org. I think that's the URL gdl.org, Genova and Diagnostics lab and look at their cardiovascular panels and you'll see the one that we've done for so long was the cardiovascular 2.0. I started doing that in 1990 and there are more markers now since then of course that you can add but it gives you a sense of what you want included. I'm sure Dr. Mark, in your book you said that you've got this all outlined in the book?

Dr. Mark: Yes and most people come in with the four basic markers: A total cholesterol, the bad LDL, the good HDL and the triglyceride. Our panel has 27 different markers. It's just a more personalized look at what is going on with you and how do we protect you and find your risk. You just got to look.

Dr. Tom: Is there a lab that put this together for you the 27 markers, and is there a name to that test?

Dr. Mark: There are multiple companies that are doing it. It's called the lipid fractionation test and these advanced inflammatory molecules. My favorite currently is Cleveland HeartLab who's partnered with Quest. There are 4,000 draw sites around the US that every doctor has access to. Every single person can get this test to Cleveland HeartLab through Genova or through the Quest Diagnostics.

Dr. Tom: I agree. I agree. That's an excellent one to use. Excellent. Okay, let's see here. Barbie says, "Text the name of the test." Well, Barbie I can't text you, but just write down what we just said or go back and listen to it again. Barbie is in Austin. Nice. We were in Austin recently doing some talks there. Laurie says, "Hello from smoky Napa." Get an air filtration system in your bedroom. Order it today on Amazon. It will be there in two days. Get an air filtration system in your bedroom. Let me say that differently.

Get an air filtration system in your bedroom, now because you're sucking all that particulate matter. "No, that's fine I can make." No, you're sucking in all this, it's like you're smoking a pack of cigarettes every day or more. Get an air filtration system. Put it in the room where you spend the most time, that's your bedroom and protect yourselves and get a couple of one in your kids' room also.

Dr. Mark: Don't you think everyone could benefit from that, Tom? It's a great idea.

Dr. Tom: Yeah. In *You Can Fix Your Brain*, I talked a lot about because of that one type of Alzheimer's that Dr. Bredesen says, clinically he sees as the most common is inhalation Alzheimer's. It's what we're breathing. It goes right through your lungs or straight up the nose, right into the brain triggering the immune system to fight this particulate matter. Here's comes the inflammation in the brain and then

you get collateral damage and comes all the damaged brain tissue. Your body makes antibodies to get rid of the damaged brain tissue. Now you have an autoimmune mechanism in your brain going on and it's because you're sucking in the fumes.

Dr. Mark: Well Tom, this is an exciting time to live in. Dean Ornish taught us 35 years ago you can reverse heart disease, Dr. Bredesen and yourself for showing us you can reverse brain disease, you can reverse autoimmune disease. I was never taught in medical school you could reverse autoimmune disease, and you showed us the path to do it. How exciting?

Dr. Tom: Yeah, I agree. It's really an exciting time. Lorna says, "What if you have Lyme carditis?"

Dr. Mark: Lyme is one of the biotoxins Tom was just mentioning. We don't really understand Lyme that well. In today's world, it tends to show up with other bugs as co-infections.

Well, Lyme is one of the known causes of what they call third-degree heart block. It poisons the wiring of the heart so that your heart stops beating in a regular way.

It can also cause an inflammation of the heart, but many viruses can do that as well. It's a very scary thing I don't think it's understood, I don't think Lyme is very well understood at all. I think there's way more of it than we think that there is, and the heart is one of the particularly vulnerable parts of the body.

Dr. Tom: One of the things anytime you have a viral infection, one of the questions you ask is why do I have a viral infection and if you ask why do I have a viral infection, why is it my immune system taking care of this virus because almost all of us have Lyme. If you do a blood test, you can find some Lyme in a person's body, why do I have this going on?

When you look from that perspective, you see, "Well, okay, I do eat these foods I shouldn't be eating. I'm only getting 5 hours of sleep at night. Yeah, yeah, all these little things I know I should be doing better but that's got nothing to do with my heart or with Lyme disease. No, it does. It does. Go back upstream and you ask the question, why isn't my immune system doing a better job against Lyme?"

While you are applying protocols to try to get rid of the Lyme, which is a smart thing to do, you also apply the protocols to take the stress off your immune system so you're limited number of soldiers that are there to fight to protect you can concentrate their attention on Lyme, right? Okay.

Dr. Mark: Everything else.

Dr. Tom: Everything else, that's right. Dr. Mark, Karen asks, "What about high dose of vitamin C? Is it really effective for the heart?"

Dr. Mark: Well Linus Pauling was the champion of vitamin C. He's actually a friend of my father's and there is something magic about vitamin C. Most people can't tolerate with their digestive health. It causes a stomach irritation if you take high doses of vitamin C. But vitamin C combined with lysine seems to be a way to lower that nasty lipoprotein (a) we talked about.

Vitamin C may be one of the best vitamins out there but it's got to be used in the right kind, in the right form, in the right amount but there is no single bullet. There's no silver bullet effect but you also don't want to do a shocking approach. You want to use silver buckshot Tom. You want to do what you can do but do it specifically for that person.

Dr. Tom: That's good. That's good. I take about 8000 mg of vitamin C a day. I've been doing that for years it's because our mentor for Dr. Mark and I, one of our mentors is Dr. Jeff Bland, who was the protégé of Linus Pauling. Dr. Jeff gave me a video once of Linus Pauling. He's 84 years old. He's being interviewed. He's got this really cute beret on, this black beret, and he says, "Yes, yes, my wife and I take 10,000 mg of vitamin C every day, and when we get old, we'll take more. He was 84.

Dr. Mark: Yeah.

Dr. Tom: There's a whole protocol, and we'll post it here. Mary Agnes, let's make a note to post it and my team will get it tomorrow. I don't think we can get it tonight and that is the protocol of how do you titrate up on vitamin C so that we don't take too much. It's the vitamin C titration protocol and we'll put it up. If you come back here tomorrow to the Facebook live at theDr.com, the protocol will be there that you can download. For those of you that want to take more vitamin C and I use a powdered vitamin C with ribose.

Dr. Mark: Great choice.

Dr. Tom: It's a great idea. Of course it will include lysine especially if you got that Lp (a). I found it to be effective in the past for that.

Dr. Mark: Well, Tom, ribose really is a secret weapon isn't it? I think more people would benefit if they knew more about ribose.

Dr. Tom: Oh yes, my goodness yes. Deborah is in the house from Ontario, Canada. Hi Deborah and Barbie says, "Ice cream did the same except throbbing with low blood pressure." Got it. Okay. Barbie is off ice cream also. Well, Barbie we share that. High five to you girl. Give me a five there. We don't need that. We don't need that in our lives anymore. Elizabeth says, "Thank you so much. I will tell my sister. Thank you. May God continue to bless your efforts." Thank you.

Dr. Mark: Thank you.

Dr. Tom: That's really nice. Lynn says, "What's the test called?" Lynn, you have to go back and listen to it earlier. We did it twice already. Lipid subfractionation plus inflammatory markers is the categorization of the test.

Carol says, "Thanks. I've had this for about 30 years. I exercise, meditate, eat really well and mine is hereditary but I will get the test. My inflammatory markers are great." Way to go Carol. Good to be safe. Just get the comprehensive cardiovascular profile done just to make sure you aren't missing anything that's not giving you screaming symptoms right now.

Dr. Mark: Tom, let me share with our viewers a lot of doctors have no idea what we're talking about. This isn't something that was taught in medical school unless the doctors done further education listening to my lectures and to your lectures, listening here on the Facebook live, they don't even know that this technology exists or how powerful it is. That's what I love about our consumers out there now they are teaching some of our doctors about all this and that's totally appropriate. Just print out some information, bring it to your doctor and say, "This is maybe something I should do," and you can actually teach your doctor.

Dr. Tom: You know what, I fully agree with you, and I would suggest when you do that, go there with kindness.

Dr. Mark: Yes.

Dr. Tom: Don't be nice. Be kind and what's the difference. Nice is, "Oh, I don't want to make any waitings. I don't want to offend anybody." Kindness is being authentic with compassion.

If you walk into your doctor's office and you say, "There's no way that you can know everything, and I know that. I don't expect you to know everything but would you look into this test for me?" Then hand in him the information. That way, you bring them in as an ally and when you do that ... Then any doctor would be willing to put a little extra time into checking something out for you.

Dr. Mark: Tom, I would tell everyone listening that if your doctor is not open to that, you might need to find another doctor.

Dr. Tom: Yeah at that point, it's time for a new doc unless they're your surgeon and then you use them for surgery and for nothing else.

Dr. Mark: We used to say surgeons either cut straight or are nice but you don't get both. I hope I'm not offending any of them but ...

Dr. Tom: That's good. That's good. Bettina asks, "Please tell us what a good level of cholesterol is for women in menopause?"

Dr. Mark: Well I think anything under 160 is not enough to provide the good brain health and the good additional hormone. You still make hormones after menopause. You just make them in a different way. You still need to building blocks. Anything under 160 it might be is too low.

Dr. Tom: Right, right. I would say 160 is the bottom of it and anywhere up to about 220 or 240, if you do the complete profile and you don't have any of those nasty little LDLs that are sticking to your pipes, as long as you've done the profile and you're clean, you've got good balance, 220, maybe even 240, its' okay, it's okay because there's nothing there that's going to plug your pipes up.

Dr. Mark: If I may Tom, you're talking about the pipes. Now, I love to think about the plumbing. I thought in medical school you had an artery that just filled up, you got one little spot, you ate a Big Mac, you plugged the pipe and you were done. That's not how it works.

You can have a small plaque or a big plaque but once it gets inflamed and irritated, and I described it like it's kind of like a zit popping. When that zit pops, all these inflammatory self comes out and kicks off this cascade that leads the blockage. It's not the artery filling up, it's the artery being hot, on fire, inflamed and then ruptury. It's not a plumbing problem. It's an inflammatory fire problem.

Dr. Tom: Now, talking about menopause from this question it brings up, and I wanted to make sure to bring this up today, I read that the incidence of heart attacks for women is much less than the incidence of heart attacks for men of the same age until a woman goes through menopause. Then, it's the same.

Dr. Mark: Those numbers are true. The problem Tom is a woman is much more likely to die from her heart attack than a man is because of the difference in presentation, the difference in diagnosis, the difference in suspicion by the doctors. It is. It's different with the age and the hormone benefit of heart, there's a benefit of hormones but it depends if you're taking hormones post-menopause what kind of hormones you're taking. The synthetic oral ones seem to actually be dangerous where the bioidenticals may actually be protecting you.

Dr. Tom: Yup and by the way, for anyone who is considering the bioidenticals, you don't shotgun hormones. You identify the imbalance and where you're low and I think everyone should be at the higher end of the normal range because we live such stress lives.

Dr. Mark: I agree.

Dr. Tom: If you're at the lower end of the normal range, it's not enough, right? You do the test to identify if you have a sensitivity, meaning you don't have enough hormones and then you get the hormones and you get the bioidentical ones. That's on the hormone aspect of going through a change of life.

But the other aspect and a few studies were reference for this, this is from Dr. Jonathan Wright, that a few studies reference this that when women menstruate every month, they reduce their risk of heart attacks. When they stop menstruating, the frequency of heart attacks is the same as it is for men.

What does that mean? I took that information and then I looked up a few more studies on this and that men should be donating blood every once in a while. Men don't menstruate, but you do an artificial menstruation. I've never heard of it that way before.

Dr. Mark: I haven't either.

Dr. Tom: Most guys would say, "What, what, what?" But it actually reduces your risk dramatically. It dramatically helps.

Dr. Mark: We're talking about sleep apnea and again if you think you have it, ask your doctor to check. Sleep apnea is a bigger risk factor for sudden death heart in men and women than any cholesterol marker. One of the things it does is reflexively cause the blood to thicken due to these drops of oxygen at night and that thick blood, as you mentioned, Tom, it may be just a good community service and a good personal idea to donate blood periodically.

Dr. Tom: Yes, yes. Sharon says, "This talk is precious, everyone especially those with heart issues. Learn about the truth of cholesterol which in fact we need cholesterol." Thanks for that. Terry is here from Indiana with a couple of hearts. Thanks Terry. Anita says, "High cholesterol may be normal in some families." That's true.

Cheryl O'Bryan is back in the house my somewhere in the past cousin. Actually, our ancestors both were in Maryland and both ancestors came over from Ireland and they went to Maryland. I know we're cousins. Hi Cheryl. "Really, in the esophagus-stomach connection? What do they do to correct this?" Thank you. It's Cheryl's question. I'll say that one again, "Really, in the esophagus-stomach connection? What do they do to correct this?"

Okay, I'm not sure what you're referring to Cheryl. Write the question again a little clearer if you would please. Gabrielle is in the house from Peru. Hello Gabrielle and thank you for being here. It's really great, really great. You guys are throwing this heart stuff. The hearts and the thumbs up and it's so much fun when they're just popping up all the time. Love it. Just love seeing that. Thank you so much. Joan asked about low-dose naltrexone, Dr. Mark.

Dr. Mark: Well Tom, I think this is a really interesting medication, and it is a medication. Naltrexone is what we use to reverse opioid overdose at 500 to 1000 mg. Some crazy doctor realized you do it at 1, 2 or 3, it tricks the immune system, it's a great treatment for chronic pain, fibromyalgia, autoimmune disease. It doesn't work for everybody but when it does work, it works amazingly well, very safe, very inexpensive. I'm a big fan of it.

Dr. Tom: As am I as. When 1, 2 or 3 mg so as Dr. Mark was saying, 500 and more milligrams for opioid addiction but 1 mg or 2 maybe 3 has a dramatic effect on calming down pain, helps with depression, helps with autoimmune diseases, reduces antibodies in autoimmune disease.

I've had the privilege of being on stage at the low-dose naltrexone conference for the last three years, and they're a great group of docs who were doing this. They're considered renegades by most of their peers for what they're doing.

Let's see, Michelle says, "What about Boston Heart Labs?" Great lab, Michelle. Great lab. There's no one lab that we think that you have to use all of the labs that are doing the more comprehensive testing are using very similar panels, one may focus more on TMAO, one makes sure to include homocysteine, another one may not. Working with your doctor, if they're familiar with this, if not, order Dr. Mark's book.

By the way, can we pause here everyone? Could everyone give me a thumbs up who's going to pre-order Dr. Mark's book? Could you give me a thumbs up please? Because this guy has put months and months and months into writing this book, and it's a game changer. He sent me a copy. It's really a game changer.

Dr. Mark: Thank you, Tom.

Dr. Tom: My pleasure, Mark. Let's support him please. Here come the hearts. There they are. There's always a delay on the phone and said, "Where's the hearts? Where's the hearts?"

Dr. Mark: Can I tell you a funny story? When I worked with Dean Ornish 30 years ago, in the doctor's lounge of the hospital where he did his clinical trial to reverse heart disease, he had the doctor's lounge cafeteria food and they had to eat the Dean Ornish's healthy food. When I first met him, I walked in went right to the healthy food bar, he said, "You're the first person I've seen eat off that in two weeks. All the doctors are going to hamburgers, hotdogs, chicken fingers."

In our hospitals, we're serving the wrong food. We're giving the wrong message even in our hospitals. The day after your bypass surgery, the first meal you get is eggs and bacon. Now, if that's not bad but we can do better. We can do better in our schools. We can do better in hospitals.

Dr. Tom: We can do better. Mark, the hearts and thumbs up are still coming. This is great. This is great. Amazon, look out. Here we come. Julianne says, "I had a partial thyroidectomy in 2005, on no meds and had many symptoms of thyroid disease and doctors all say I'm in the normal range. I've been having palpitations lately. Seeing a new doc in December. What should I be asking him to test?"

Dr. Mark: Well Tom, a lot of doctors will think if you have any palpitation, you're getting too high with thyroid. I like to tell my clients these normal ranges are like the Grand Canyon. You can be standing on the south rim or on the north rim, you're still technically in the Grand Canyon, but isn't your view different? Where's your view the best? Where in that normal range do you thrive and get optimal energy and vitality?

You've got to ask your doctor and work with them maybe even challenge them a little bit to find out where on the range your sweet spot is. That's what a true personalized precision approach to thyroid is. So many women have thyroid problems. There are probably millions of women out there untreated or even under treated. It's really an epidemic of thyroid disease.

Dr. Tom: I agree. I agree. I'm going to give a pearl here. One of the things I've never talked about it before and that is protomorphogens. I personally have used them for years and what that means everyone is that if you have a problem with your liver, eat some healthy liver from an organic animal, grass-fed animal.

I have taken the protomorphogens. There's a company called Life Enhancement, life-enhancement.com. I've been taking their ThyroPlex for men and their male for, oh gosh, because I talked to Dr. Wright about it maybe 15 to 20 years ago, that's why I'm 67 and I've got a young wife, it's because my circuits are still working pretty good.

To get your thyroid functioning better, I would suggest you try a couple of bottles of ThyroPlex for women and just try it and follow the dosing on the bottle and look at how you're functioning in three or four weeks and it's ThyroPlex for women has some thyroid tissue in it, some glandular tissue that's New Zealand beef.

There's never been a case of mad cow in New Zealand because the veterinarians there have to write a prescription for any medications including antibiotics.

In this country, ranchers buy 50-pound bags of antibiotics. You can't do that in New Zealand. I would suggest you get some ThyroPlex for women and especially because your hormones are in the normal range, well you maybe at the wrong end of the Grand Canyon. Let's see if we can just up their game a little bit.

Also, I would eat some Brazil nuts. I have four or five Brazil nuts a day. They're the highest source of selenium that I know of and selenium is the mineral that helps your thyroid hormones work better. Just get some organic Brazil nuts and have four or five Brazil nuts every day. Between that, just see if that it doesn't help.

Dr. Mark: That's great advice Tom. As you talked about the food sensitivities earlier, a lot of the thyroid lack of optimal thyroid function is from these food sensitivities kind of gunking up the machinery.

Dr. Tom: Absolutely right.

Dr. Mark: Clean gut, clean thyroid.

Dr. Tom: Absolutely right. Gabriella asks, "What about taking statins and aspirin?"

Dr. Mark: Well, there's a bunch of controversy about aspirin right now and aspirin may not be the benefit. In our practice, we actually test if aspirin works. One in three people aspirin doesn't do anything for them. They're risking the GI bleeds, the stomach bleeds, the ulcers you can get with aspirin for no benefit.

We talked about the piped plugging up and what aspirin does is not let those platelets, the sticky cells that make blood clots, they don't clump together as much when you take an aspirin but aspirin doesn't work for everybody and there are some studies that show if you don't need aspirin, you shouldn't take it. Whereas I was taught in medical school, everybody should be on a baby aspirin. That's not true anymore. You really need a personalized approach to your health.

Dr. Tom: There's a paper that came out just a couple of months ago published American Journal of Cardiology and I don't remember, 40,000, 45,000 subjects and they said aspirin doesn't work. There is no evidence it works at all and this was very startling and this came out in American Journal of Cardiology. That's being reevaluated completely and every time you take like you take one aspirin, you get intestinal permeability.

Dr. Mark: Yes.

Dr. Tom: Studies are really clear on that. It's not that you may get it, you get it. You get leaky gut which is the gateway and the development of autoimmune diseases every time you take an aspirin.

Especially after this study that just came out, I don't recommend aspirin for people anymore and that's blasphemy in the medical world and I know that. But hey, just read the study man. Just read the study. "Well, there's only one study." It's 45,000 people and it's in the American Journal of Cardiology.

Dr. Mark: That was a good study Tom and the only one that should really be taking an aspirin is someone who have known heart disease, that's had a heart attack or has a cardiac stent. Those people do benefit from aspirin but all comers, it's great that you're pointing out. There are these kind of mass assumptions we made in medicine that we're not finding or just plain wrong. We put a lot of people at risk for no benefit and that's just not right.

Dr. Tom: Yeah, agreed, agreed. Lorna asks, "What doctor can I see for this?" That's a really good question Lorna. You can go to functionalmedicine.org, that's the Institute for Functional Medicine that Mark and I are faculty for. You can go there and look for Find a Certified Practitioner and the doctors who are certified, because some doctors will take one weekend course and they marked themselves as a functional medicine doctor.

There are different levels of education. If they're certified, they spend at least three and a half years studying and they passed a very rigorous test. If you can't find someone, you can come to my website, theDr.com and you can use our team. We'll order the test for you or what would be better is fly to Jackson Hole and see Dr. Mark and his team is set up for that.

Because he's on the teaching faculty with Dr. Bredesen, teaching about cognitive decline, he has set up, he's too shy to say this, but he has set up his office for people to come from around the world and they do. They made arrangements with hotels in the area, they got the restaurants. Mark, let's just talk for a minute about this. Patient comes in or they call you and they say, "I've got blockage in my coronary arteries. I don't want surgery. I want to see you." What happens?

Dr. Mark: Well, the first tenet of medicine is do no harm and we have to be sure people are safe and before they fly out to see us, we have to know what they're status is and we have to get some cardiac clearance.

What we're really focusing on is the next generation of people that could develop heart disease. All of the women that are at risk, we want to find who's at risk, help them develop a plan so they're never at risk and like we've mentioned earlier, if we're addressing the risk factors of heart disease, we're reducing the risk factors of hormone imbalance, arthritis, skin issues, joint issues, and brain issues.

It's a 360-degree approach even though someone may come focused on their heart health, we actually help them with all aspects of their health. That's the beauty of this functional medicine model. You fix one aspect, you get the other as well.

A lot of people instead of just going on medications, there are things you can do. It's interesting Tom, we now find that we thought everybody should have angiogram with the balloon and then a stent put it, now we're finding that medical management works just as good as putting a stent in and once the stent is in, it becomes a risk for a heart attack. What I was taught is not really showing to be the best model of medicine and really anybody can reduce their risk and prevent heart disease.

Dr. Tom: I agree. Agreed. Donna says, "Hello from Prince Edward Island Canada with a couple of hearts and a Canadian flag. Lianne Scott in Australia. Hello, Lianne. Lianne says, "It's always about the why. Thank you Dr. Mark and Tom for giving us the tools to become empowered and educated. We are who we've been waiting for."

Way to go Lianne. Agreed, fully agree, fully agree with that one. Maryann says, "Thank you for your time and information." Sabrina says, "Hello everyone." Pay says, "Aloha from Hawaii. Will there be a transcript of this program available later?"

I'm not sure. My staff will answer that question before we end this broadcast but since you asked, yes, I actually just said yes. All right.

Dr. Mark: Thank you.

Dr. Tom: Yes. It will take a day or two, but then we'll post it here so that you got access to it.

Carol says, "Well said Dr. Tom, kindness authenticity and compassion. Love that." Thank you Carol. Candy says, "Just a quick note about air filters. Amazon is not delivering air filters to California right now. Apparently, too many people return them after wildfires. This is really sad since most of the stores are out." Well, that's not good karma to do that.

"Dr. Tom and Dr. Mark, can you recommend chelation and binder advice for dealing with the particulars in chemicals in our California 170 plus air quality index air." Good. Thanks Candy. Thanks for the information and I'll start that one Mark with charcoal, granulated charcoal. It's at my website. It's called GI detox.

Charcoal is not absorbent in the blood stream. When you take it, it acts like a sponge in your gut just sucking up toxins. We recommend charcoal to start with. Mark, are there others you would add to that?

Dr. Mark: No, it's such a great ... Bentonite clay can help in some people as well. Chelation is very interesting. I saw in my treating, I sought the VA Hospital, vets that had heart disease that could walk down the hall get chelation and still could walk down the hall and I saw some that could walk down the hall and they were jogging a month after getting chelation.

For some people it really does work. It's expensive. It's not without risk but even the US government NIH did a trial and showed that chelation has a benefit in heart disease. For the right person, it may be the way to go.

Dr. Tom: Yeah, agreed. My team has said, "Yes, we will do the transcript. We do guest, sending it out on Thanksgiving Day. They have to be on the list." Go to theDr.com/ask to join. Just go there and say, "Send me the transcript."

Dr. Mark: Thank you team.

Dr. Tom: Yes, exactly. Mary Brown says, "My rheumatoid factor blood test came back at 363 way out of the range of 0 to 12. I can't get this inflammatory number down despite being on a good diet. Now, I'm experiencing high blood pressure, palpitations and I had an abnormal EKG last week. I'm scheduled for an echocardiogram stress test in December. Can this level of inflammation damage my heart and how can I reduce it? Please help."

Dr. Mark: Well Tom, we know that if you have positive autoimmune markers, your risk for heart disease is 10 to 15 times higher. There's a real relationship of autoimmune disease and heart disease and the medications they use for autoimmune disease, the monoclonal antibody inhibiting drugs, the very expensive ones that are particularly dangerous in some people.

They actually do reduce your cholesterol and your heart risk. It's just an expensive way to address it. I think looking at my book, Tom's book and all the work that we do together for something like a high rheumatoid factor, you got to pull all the guns out to try to figure out why it's not moving.

Dr. Tom: You bet.

Dr. Mark: It's maybe like a biotoxin illness, Tom.

Dr. Tom: It might be. It may be. I love rheumatoid patients. I love them because I'm right up front with them. I find more than any other patient, Mary, Mary please get the book. You can fix your brain because we talked about this in a lot of detail how to have a balanced overview and by the time you're done with the book, Dr. Mark's book will be out.

If you preorder his book now, it comes out in January. They'll send it to you. You do my book for the big picture concept and his book will dial down on the heart. But here's something about rheumatoids and they don't like to hear it. They really don't like to hear what I'm about to say but I tell you clinically I see this so often and that is that rheumatoids are really pissed off in life. There's something that they're really angry about and that emotional those hormones are causing so much inflammation in their body.

You have to deal with the emotional side of the pyramid of health along with the biochemistry, food allergies, air filtration, breathing bad air, along with the electromagnetic, get the alarm clocks away from your bed, turn the wireless off at night, don't put a cellphone to your head. You use clips.

There's a lot of learn Mary, but you have to identify, because you're on fire. You're highly inflamed right now. The question is, is it gasoline or kerosene? Where is it coming from? Is it emotional or biochemical or electromagnetic or structural or more likely a combination of them?

If you're willing to look, if you're willing to do the deep dive, a functional medicine practitioner should be able to help you with this but be cautious about anymore that says, "Oh, yeah just take this and you'll be fine."

Dr. Mark: Tom, just today I got the lab report from one of my clients that was diagnosed with rheumatoid arthritis five years ago. She came to see me, but she wasn't ready to get better.

She went to many different doctors, many different world famous clinics, many rheumatologists and nothing worked for her; we put her through the program you and I do together. Her rheumatoid factor is gone.

She also had Hashimoto's. Her antibodies are almost normal as well. She had never felt this good. She is off all of her medicines. She had started when we first did but people come when they're ready and you got to be ready to do the self-care that it takes to really get better.

Dr. Tom: Exactly. Monica says, "I love your show." Thank you. Thank you. I guess this is a show. I've got a show now. What do you know? I've got a show. It's been an hour and Sabrina is here. Hello Sabrina. Laughing out loud. Thank you, Sabrina.

A couple of things, we will do the transcripts of this one. My team will send it out to you. If you go to theDr.com/ask and just ask. They'll be happy to send it to you on Thanksgiving Day.

Dr. Mark's book comes out in January. Please pre-order it now. It will validate that this guy knows what he's talking about as more people are preordering it and the result will be Amazon will put more attention on it so more people get to hear this information. Mark, my last question for you.

Dr. Mark: Please.

Dr. Tom: You got a picture of the moose from your backyard?

Dr. Mark: Well, we're lucky Tom that we have so many wild animals here. A mom moose and her two babies come to our house every year and sleep in our backyard.

Dr. Tom: Yeah, yeah. It's a great picture right back off your head on that and I thought that's what that was. Well everyone, it's been wonderful to be with you. Happy Thanksgiving to everyone. If you found this of value, please share it with at least one other person that you care about. Send them the link for

this and of course like us and order Dr. Mark's book. Everyone, thank you very much and we'll see you next week.

Dr. Mark: Thank you so much. Bye now.