



Toxin, Thyroid, and Female Hormone Connection

Guest: Dr. Bridgit Danner

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Dr. Justin Marchegiani: Hey, there! It's Dr. Justin Marchegiani. Welcome back to the Thyroid Reset Summit. We have Dr. Bridgit Danner on the summit today. Really excited to interview her. She's a toxin expert as well as a female hormone expert. Really excited!

Bridgit had a thriving practice over in Portland, Oregon, and moved down to Arizona just last year. And we've got some phenomenal topics on the thyroid summit we're going to address today. Bridgit, welcome to the summit!

Bridgit Danner: Hi, Justin. Thanks so much for having me.

Dr. Marchegiani: Well, thanks for being here. I really appreciate you stopping by and dropping all this great knowledge. I know before the show we talked about toxins and how toxins affect the thyroid. And I know you're also a female hormone expert. So we're going to dive in deeply to some of these topics.

So first off, what are some of the big toxins that you saw in your practice that were clinically affecting patients that you were seeing that had thyroid issues?

Bridgit: Yes, I'm going to go through a list. And you don't have to memorize. We'll get more practical later about what products these are actually in. But we'll just get a little technical.

So benzenes are a compound that's in a lot of common products. It's a petrochemical. And that can affect your thyroid.

Pesticides which are omnipresent and include herbicides, insecticides, a whole class, are on our food even if we buy organic because food is traveling and being exposed to things. Those can affect your thyroid.

Radiation can affect your thyroid. If you live near the Chernobyl accident.

Dr. Marchegiani: Totally.

Bridgit: Uranium really affects your thyroid. Mold very affects. I see mold and Hashimoto's go together like hand in glove. I did a mold summit last fall.

Dr. Marchegiani: Awesome.

Bridgit: And everybody who was typing in about questions, they all were saying, "I have Hashimoto's. And here's my question." So mold is a huge dysregulator of the immune system. It's very inflammatory. It creates leaky gut. It always hangs out with Candida. So that one is, I think, a big unknown factor in thyroid disorders for many women and men.

We talked a little bit about pesticides. But glyphosate in particular is a real troublemaker for leaky gut. It can lead to thyroid disorders.

Things like synthetic latex in mattresses and toppers, flame retardants that can be in mattresses and couches and camping.

Dr. Marchegiani: Yup, PPDs, yeah.

Bridgit: And then I would say for women especially, we use a lot of beauty products, things to make our houses smell good. And many of those are xenoestrogens. They're often many of them obesogens, too. I don't know if that word has come up. But a lot of people with thyroid disorders are dealing with they can't lose weight. And many of these compounds actually modulate the way that you gain weight or how your appetite behaves.

So things like fragrances—that's probably the biggest one—in cleaning products, in air fresheners, in your shampoo, in your deodorant. That's just a word you always want to avoid, Justin.

Dr. Marchegiani: Totally.

Bridgit: Because it's an endocrine disruptor and very much related to thyroid. So I have a few more. But I'll give you a breather here.

Dr. Marchegiani: Yeah. That's good. You're giving us great intel. So off the bat, when you're doing a workup with a patient—someone comes in. And maybe you don't know they have a thyroid issue yet. Maybe they just have fatigue, cold hands, cold feet, hair thinning, outer third eyebrow, maybe depression, mood issues, motility issues. These are all common low thyroid symptoms. What are the first couple of things you're looking deep at from a diet and lifestyle perspective, things that you can do there to help reduce some of those toxic loads you just mentioned?

Bridgit: Yeah, so for diet, I would really eat organic as much as possible. And if you're seeing organic on the label, at least see non GMO on the label. But organic as much as possible. Also, local. I talked about things in transit get dirtier. So eating local. Using your CSA locally. Going to farmers' markets is a really great idea.

Eating at home a lot because when you go out, now you're getting canola oil and GMO foods. So that's the food category. I'll also say in the food category, tuna is one I would pick on. If you're having cans of tuna, switch to cans or packets of salmon. It tastes the same if you make a salad thing. So that's a big one.

And then lifestyle. Yeah, I would say around the home for fragrances and then around the home for plastics. So I think we know. Probably our listeners and viewers are pretty knowledgeable. We know about plastics. But they're still hiding in places that we don't fully think about.

If you buy a frozen meal or you eat out with French fries, all that stuff is coated. Even your Starbucks cup is coated. And where I live now, I don't see people bring in their own cup as much. And they're drinking out of a coated cup with a plastic lid. And they're getting exposed to that.

And then you add heat. So heat makes plastic move. And heat has endocrine disruptors that can affect your thyroid. So I think plastic is everywhere.

Something I just learned recently, Justin—we're always just learning—is even just, say you buy some dried beans or whatever in a plastic bag in the bulk. Just sitting in that plastic bag, they're still leaching. So heat abrasion and oil will make it go faster.

Dr. Marchegiani: Totally.

Bridgit: But just anything sitting in plastic is a problem. So as you make a shopping choice, just pause and think about, could it be a better choice? The store close to me doesn't have ketchup in glass. I have to go somewhere else farther to get it that way. But I really try to buy everything in glass as well.

Dr. Marchegiani: Totally. That makes a lot of sense. So we talked about some of the big vectors. You've talked about plastics. You talked about pesticides and eating organic. I think you may have talked about the water and the fluoride. Was that also addressed, too?

Bridgit: I didn't talk about it yet. But let's do that if you like.

Dr. Marchegiani: Okay. Yeah, we can go into that. There's a big UK study a few years back where they looked at various populations over in the UK. And they found the people that consumed the most fluoride water content per capita had the highest level of hypothyroidism. And there are some mechanisms in there with the halide fluoride pinch hitting for that iodine molecule, which goes into that iodination process. Can we talk more about that?

Bridgit: Yeah, so fluoride, chlorine (or chloride), and bromide are halogen—they look like iodine to the body. An iodine molecule is very much needed for your thyroid gland. Most people have heard about estrogen mimickers as being plastics. But these are like iodine mimickers.

So I was actually hoping to talk to you, Justin, because I know you promote a water system you use. I actually just got my water tested here in Phoenix because I'm in a new home. And I'm trying to make that decision. And I'd love to find a system that is just local. So I'd love to hear your experience.

Dr. Marchegiani: Yeah, there are a couple that are out there that are good. I use one by a brand called Aquasana. So if you're listening, JustinHealth.com/Water. I use their whole house system. That's a carbon-based system which is good. And then I combine that at the source with a reverse osmosis which has the bone char in there which filters out all the additional fluoride. So I filter it twice.

It does add some extra minerals to it, the calcium, magnesium, those things. But I do have a trace mineral support supplement right at the source there. So when I put a huge glass of water, I put a couple of drops of minerals in there.

Bridgit: Nice.

Dr. Marchegiani: That way you don't go totally devoid. I'd rather have the water cleaner and add some of the minerals back than not do a good job cleaning it, and then there are some minerals but extra toxins in there, too.

Bridgit: Yeah, so you're getting carbon filter for the whole house and then reverse osmosis for your drinking water, more or less?

Dr. Marchegiani: Yeah, at the tap.

Bridgit: Okay. Okay, so that's interesting.

And then I have a couple of trace mineral. I use a real salt, which is Redmond's Real Salt, which is great. And then I use a trace mineral support from Trace Minerals Research that's really good.

Bridgit: Okay. Yeah, yeah. I think this is an important conversation about water. And I know it's one of the bigger, more confusing issues. But generally speaking, your tap water or even your well water (or could be especially your well water because of the minerals it picks up out of the soil) can be contaminated.

So I just got mine tested. And I'm looking, still exploring. I got mine tested by Doctor's Data. But I'm still exploring the best test. It just tested for minerals.

Dr. Marchegiani: The metals, right?

Bridgit: The metals. Yeah, so I don't know if there is a test that also finds—there can be pharmaceutical residue in your water, antibiotic residue, all sorts of things in your water.

Dr. Marchegiani: That's the hard part. That's the hard part. I'm concerned about pesticide residue, glyphosate residue. Just the birth control pills, the antidepressants, the statins. Those are all shown to be in there. I'm not sure of a commercial test that can pick all those things up. So I'm really concerned. And that's why I double up on it just to be on the safe side.

Bridgit: Yeah. Well, I'll let you know if I find one. My drinking water came back with moderate amounts, be cautious level, of arsenic—

Dr. Marchegiani: Ooh.

Bridgit: Uranium, and aluminum. Those were my biggies.

Dr. Marchegiani: And you don't have a filter yet, though, right?

Bridgit: I have a carbon filter right now. The water I tested was not filtered. So I wanted to see the nastiest. But I have a carbon filter. But I know, for example, arsenic is not removed by a carbon filter, only by reverse osmosis.

Dr. Marchegiani: That's why I combine them.

Bridgit: Yeah, so I definitely want to get a better system. But to RO your whole house, I think, is quite a feat. It takes a huge tank.

Dr. Marchegiani: Yeah, I don't do that. Too much.

Bridgit: Yeah, so I like your combination. I wanted to hear because I'm just exploring. I'm also going slow to figure it out. If you're renting, you probably just want to get a unit that you can move. I do like the Berkey filter. But it's not going to get out arsenic because it's carbon. But you can get a fluoride attachment to get the fluoride out.

Dr. Marchegiani: The Alexa Pro Pure was the one I had before that with the additional fluoride one on there.

Bridgit: Okay. Okay, good to know.

Dr. Marchegiani: So the one is a couple hundred bucks. It's portable. I think the countertop one is still really good. It's faster. It's got a reservoir in the bottom. It's always storing a gallon and a half where you constantly had to—I remember it was like if you didn't go the night before you went to bed and fill it up, then in the morning you didn't have that water. So I was just tired of that. And I made the investment. So I think that's really important on the water side. That's great.

Bridgit: Yeah, we can talk a little bit more about arsenic which is common in the water in Arizona. And I think there are several areas it's common in. So arsenic does a few naughty things. It activates Epstein-Barr virus which is often related to—

Dr. Marchegiani: Thyroid.

Bridgit: Thyroid, yeah. And then I have some notes on a couple other things with this.

Dr. Marchegiani: And that's important because a lot of autoimmune—there's a lot of infection connections with autoimmunity. So if you're saying can reactivate that Epstein-Barr, that may increase thyroid antibodies and that thyroid antibody attack on the gland.

Bridgit: Yes. Yeah, also arsenic disrupts thyroid hormone receptor sites. So you're not getting the signal. And that's one of the many ways that—we can talk more about that—but that's one of the many ways that toxins confuse the body. They can block receptor sites or, like we talked about, mimickers. Some of these heavy metals will bind where you should be getting your good minerals. They compete for the same receptor sites.

They're inflammatory. So the signaling goes off from that way. They can affect the mitochondria of the cell. If we're already tired, we don't want weak mitochondria. And we need our cells working at full speed to help heal ourselves of our thyroid disorders.

So I really think that toxins are a huge part of many thyroid cases. And I don't think they're getting enough credit frankly, Justin.

Dr. Marchegiani: I think you're right. So you talked about, number one is avoidance. We talked about fluoride filter, reverse osmosis. Maybe combining with a carbon filter we talked about. Or eating organic.

Bridgit: Plastics.

Dr. Marchegiani: We talked about the plastics. Did you also talk about cosmetics yet?

Bridgit: We haven't as much. So yeah, let's get into that. So we talked a bit about fragrance. Most every cosmetic is fragranced.

Dr. Marchegiani: Yes, they use fragrance, yeah.

Bridgit: So even if you're thinking about makeup, it's still fragranced. I was looking for—you won't know about this because you're a guy. But you can buy these blotting papers for your face to blot the oil. I had trouble finding some that didn't have fragrance. So really look for that even where you don't think about.

And then heavy metals. Heavy metals can be in lipstick and anything with color. They use minerals to color things. And there are very few companies that care about that, frankly, that will test for heavy metals.

Dr. Marchegiani: Are there a couple of companies you like?

Bridgit: Yeah, I like Beauty Counter. And that's why I started promoting them because they third party test for heavy metals which is really important. They ban 1500 different ingredients, including the ones we know about like phthalates and parabens. But then a lot of other questionable ones, they just ban it. So I really appreciate that.

If you go to the FDA site, they'll say, "Oh, yeah. People are concerned about heavy metals. And we tested. And we didn't find any." But then if you go to other sites like in Canada or other bodies, they are finding it. So I just don't think—again, the FDA isn't protecting us very well. So you really have to be a savvy consumer.

Izabella Wentz in her book has a great story about how she was in remission. And then she started using a new lip gloss. And it took her a long time to realize why she had become reactivated and symptomatic again. But her lip gloss contained arsenic.

Dr. Marchegiani: Oh wow!

Bridgit: Yeah! She was poisoned by lip gloss.

Dr. Marchegiani: So what site do you like to evaluate—is the Beauty Counter the site you use to evaluate?

Bridgit: That's just a company. That's a cosmetic beauty company. In her book, she lists a study done in Canada with the heavy metals. And a bunch of very popular brands like Lancome and MAC were all found to have heavy metals. It probably depends on the batch really. It's just a contaminant. I don't think they're trying to put it in. It's just a contaminant. Environmental Working Group is well known to be a good source.

Dr. Marchegiani: Yep, they're great.

Bridgit: And they're starting to make a label, which is interesting. I don't know if you heard about this.

Dr. Marchegiani: Cool.

Bridgit: But they're starting to make a stamp. You can be stamped on your label, certified or as approved by Environmental Working Group.

Dr. Marchegiani: Oh, yeah. They have that for the Non GMO Project. They have one in Whole Foods for that, too. So it's kind of like that.

Bridgit: Yeah. Yeah, it's a new standard, which I think is a great idea. I know there are downsides to those things because maybe there's an expense to it for a small company. But especially if you're dealing with a chronic thyroid issue, I think you want to know that you're safe.

Dr. Marchegiani: Yeah, for me, a lot of people are trying to lobby the government to put all these labels on there. The problem is, anytime you go to the government, it's slow. For me, I'd rather spend a little bit extra, knowing that, okay, this has been tested. I feel good about it because look at Izabella Wentz's story with the lip gloss. Who wants to go through that? It's not worth it.

Bridgit: Yeah, I always look for that non GMO sticker. It's so easy to look for that.

Dr. Marchegiani: It's easy.

Bridgit: So why not make it easy on yourself?

Dr. Marchegiani: Absolutely. And it's probably cheaper than all the government regulations and red tape that something like that would pass, too. So yeah, I totally get that. Very cool.

Now, regarding something like the methods of detoxification, do you have a couple favorite ways that you like to push or enhance detoxification pathways so our bodies can rid themselves of these toxins?

Bridgit: Yeah, I have a long list. So maybe I'll hit some of the more unusual ones or big ones.

Dr. Marchegiani: Cool!

Bridgit: So I make a green drink that has cilantro, which is the key star of it. And then I put in a whole lemon, alkalizing. I put in a little honey. And I put in

whatever greens I have around. And that's a very easy, light drink. It's not like a big, thick smoothie. But I really like that. And I can feel it energize me. A quicker, cheating way is to just get a liquid chlorophyll from the store. And it just helps oxygenate your cells. (I can never say that word.) So those are a couple green things I think are good.

Binders I think are so lovely. There are so many different ones. If people haven't heard of those before, they're basically a substance that either structurally or electrically binds toxins in your body and helps them move out. So some are activated charcoal. There are several clays. There's zeolite. There's citrus pectin. They're really all good in different ways. So you can rotate them or just try to see which ones you like. Or you can research more and see which one is for your particular toxicity, so to speak. So I think those are important.

One that not a lot of people do but I'm a big fan of is the coffee enema. It really works. So it helps your body make glutathione which is really important for detoxification. I also eventually found some good liquid glutathiones that I like. But they're not as strong as a coffee enema. Nothing.

Dr. Marchegiani: I love it. I get this thing. In doctorate school, Dr. Robert Rakowski, every time he'd talk about the topic of coffee enemas, he always would—remember the old fashioned Folgers commercials. He would also sing it, “The best part of waking up is Folgers in your butt.” And I just like, “No.” I could never get that out of my head.

Bridgit: You've been traumatized.

Dr. Marchegiani: Everyone here, you've been scarred, just like me.

Bridgit: Yeah, I always just say, if I'm making coffee in the morning, “That's my coffee for the butt. That's my coffee. Stay away from that coffee.”

Dr. Marchegiani: Yeah, totally. And coffee like that is good because, number one, it gets the glutathione up. But it also gets the liver running their enzymatic pathways faster. And then it dumps it all into the coffee. So then when you get up from that fetal position, 10, 15 minutes, then it all just comes out faster.

Bridgit: Yes. Yeah. Yeah, it sounds so weird and whatever. But it's really not that hard. The first time you do it—Jay Davidson, I learned from his book. And I just followed his recipe. And I still do it. If you're sick enough—like, I

was so sick for mold, I was so sick. Hopefully, you'll try anything if you're that sick.

Dr. Marchegiani: It's a fast way of dumping toxins. I recommend it for all cancer patients. Anyone that wants to get toxins out fast, of course that. And if you can combine an infrared sauna, I find that you can really push things out this way and then push things out that way.

Bridgit: Yeah, I own a sauna, too. For a while, we were very financially traumatized by mold. I was just using the one in the gym. It still works. But eventually, I was able to buy an infrared sauna. And I do like it.

I'll tell you another advanced move that you can do, too. I'll tell you some [inaudible]. But also to see a practitioner who can do intravenous ozone and UV. I think that that's very powerful because I find even in my own case, I have a sauna. I have coffee enema. I do all this stuff. And it just wasn't working strongly enough to push out the level of toxins I have. And I could talk more about testing and what toxins I have.

So I had a couple experiences with it with also a chelator. And it was too intense for me. And I was getting that detox reaction too much. But I found a new person to do it who's just doing the plain ozone and UV. And I just had it a few days ago. And it was like a switch just flipped and just some of that deep fatigue starting to really shift for me. My brain is working better. So if you can get access to that. If you're very toxic and you can tell because you're tired all the time, because you're not getting better, because you've run some of these tests that we can talk about, I think that's a good technique to look into, just in addition to that self-care that you can do.

Dr. Marchegiani: Totally. So you said intravenous ozone?

Bridgit: Yes. So they pull out some of your blood.

Dr. Marchegiani: And what was the other thing?

Bridgit: UV. UV light. They expose your blood to UV light.

Dr. Marchegiani: So does the blood actually come out, then it gets exposed to UV light, and then goes back in?

Bridgit: Yes, yeah.

Dr. Marchegiani: Okay. Okay.

Bridgit: They take it out. They shove in the ozone which is O3.

Dr. Marchegiani: Yeah, [inaudible] oxygen.

Bridgit: And then they expose it to UV as it goes through a tube. And then they repeat that a few times. So it's not much of your blood that they're taking out and putting back in.

Dr. Marchegiani: Not all of it. It's not all 8 liters or whatever.

Bridgit: No. My husband was like, "Oh, they're only doing a little."

I'm like, "Well, if they did your whole blood, you'd probably just die of toxic shock." You think you can do it all at once.

Dr. Marchegiani: And what kind of effect does the UV have on the white blood cells? Does it damage or hurt the white blood cells at all?

Bridgit: Not in my understanding, no. It's supposed to be very—I need to look up the UV a little more. But it benefits the hemoglobin. It likes the light somehow. I don't really understand.

Dr. Marchegiani: Yeah, hemoglobin has these kryptopyrroles that will store light energy. I know it also probably has the antibacterial, antiviral effects, too, right?

Bridgit: Yeah, the combo—and I'm not sure which does which. But the combo just kills stuff. Kills pathogens and helps your cells work better. So I think for complex cases like mine became, I think it's a good thing to add. But I can also talk about some do-it-yourself stuff.

Dr. Marchegiani: Cool. Let me just hit in reverse for one sec. So with the coffee enema, what are some of the do's and don't's with that? Is there a certain coffee you like? Is there a certain system that you like? Frequency?

Bridgit: Oh, sure. I love to talk about coffee enemas. Thank you. I also have a YouTube video on my channel. It has actually become one of my most popular videos because nobody apparently wants to do a video on coffee enemas. Yeah, so you want to use a clean coffee, an organic coffee. Just from a moral perspective, a fair trade coffee. I would say also a mold-free coffee is like the

crème de la crème. But I don't always make sure it's a mold-free coffee to be honest. But at least I make sure it's an organic coffee. And it needs to be light roast. So that has a higher caffeine content.

Dr. Marchegiani: Light roast. Higher caffeine.

Bridgit: Yeah, so you're not exactly absorbing the caffeine, per se. But the caffeine content and just some of those oils being in there as fresh as possible are what makes the magic happen with making the glutathione in your liver. Yeah, do you want me to say the whole recipe?

Dr. Marchegiani: Yeah, let's go through it. I know coffee has a high pesticide residue. So the organic aspect is really important. The light has, what? More caffeine to stimulate the glutathione.

Bridgit: Yeah. You always want to do light right. It's available at your local store. And I keep it in the freezer. And I don't grind it until it's time to use it which is always how you should do with coffee.

Dr. Marchegiani: Right, so it's fresh.

Bridgit: Again, I'll give Jay Davidson credit for this recipe. So he says 4 tablespoons of ground coffee in 2.5 cups of boiled water. And then you leave it sit for 15 minutes. Then you add 2 cups of regular water, filtered water as we talked about. So maybe it's still a little warm.

And then you need an enema bag. So if you're just trying this out, get a disposable because you're not sure if you're into this forever. But now I have a reusable one. And I clean it with hydrogen peroxide.

Dr. Marchegiani: And is it a stainless steel kind of thing? Or does it have to be plastic? And are you worried about the plastic at all?

Bridgit: Yeah, it's not very hot when I put it in. But it's probably a good point. I think all of them will have some plastic because the tubing has to be plastic. But some of them do have a stainless steel bucket. So I don't have a bucket. I have more of bladder thing, like a water bottle. It looks like a water bottle.

Dr. Marchegiani: Yeah, and it's not sitting there long. And you're not putting it in boiling. You're letting it get to almost—

Bridgit: Room temperature.

Dr. Marchegiani: Room temperature-ish. You don't want too cold where you shiver when it goes inside of you, but not hot where it burns you. So it's body temperature. So it's not going to be at a super high heat that would cause a lot of those toxins to liberate. And it's not sitting there that long.

Bridgit: No. No. Yeah.

Dr. Marchegiani: That makes sense.

Bridgit: Yeah, and then you can actually first do it with just water to just let your body get used to this.

Dr. Marchegiani: The feeling, yeah.

Bridgit: But it's just an extra step. So I don't usually do that. And then you want to insert this in your butt. This is a little bit, just the tip of it. It's not that gross or anything. And then there's a valve.

Dr. Marchegiani: So you just go this far into the anus.

Bridgit: Yeah, an inch or two. And then there's a valve. So you just let out the coffee slowly. So you don't want to have the coffee—I don't say sky high, like hanging from your shower because it's going to come out fast. So have it lower, like on your tub. And then you just let it come out slowly with the valve, especially when you're just starting because it's a new sensation. And it's just stimulating your large intestine. So our natural instinct is for things to go out, not in. So you just have to let it in slowly.

But ideally, according to his recipe, try to get in 2 cups and then hold that for 15 minutes. And then you go to the bathroom. And then you do it again. But sometimes I don't do 2 cups because I don't want to do so much that it's irritating me. So I'll just do what's comfortable. And then as you go through two or three rounds, it gets more comfortable.

Dr. Marchegiani: So about half a liter?

Bridgit: I don't know.

Dr. Marchegiani: Right. 2 cups, 16 ounces-ish.

Bridgit: Yeah, so sometimes I think I'm only getting 10 ounces. That's okay though.

Dr. Marchegiani: And then when it's inside your intestines, it's there 15 minutes. So it's working its way up into the small intestines and then back up to the—

Bridgit: It actually doesn't go that far.

Dr. Marchegiani: Doesn't go that far?

Bridgit: It goes just to the lower part of the large intestine. It doesn't clean out everything. But it goes to—what is it called? The hepatic vein or the hepatic portal or something. So the important part is that it goes to the liver. And then it's in. You want the liver. So that's the most important part.

Dr. Marchegiani: Got it. So then you're sitting there. And what do you—ball up into a fetal position for 15 minutes or so?

Bridgit: I think that a lot of people say to lie on your right side because of the liver. But I don't really do that. I read. I'm very comfortable now. I'll just read. I'll be writing in my planner.

Dr. Marchegiani: So are you lying flat on the ground reading? Or are you upright now? You can't be upright. You have to be lying down, right?

Bridgit: I'm either lying down or lounging. But I'm not as strict anymore, about being in the right position because I find it works. It's working no matter what I'm doing. And it gets boring to lie in the fetal position for half an hour. So I'll be in little bit different positions. And it's fine.

Dr. Marchegiani: So about 15 to 30 minutes-ish?

Bridgit: So yeah, each round should be 15 minutes. So it's a process. Start to finish, this whole thing is probably an hour to make it and do it and clean up. But I don't know. I look forward to it now. I feel very good afterward. I feel very energized. And it's just my alone time.

Dr. Marchegiani: Yeah. Hey, it's the best part of waking up, right?

Bridgit: It is. Yeah, I don't do it every day because it's time consuming. But I do think that if you're very toxic, it's a really nice shortcut to feeling better quickly and knowing your body is really doing some processing there.

Dr. Marchegiani: Totally. Good! That's awesome. So we went through the

process of the coffee enema. We talked about sauna a little bit. We talked about some of the binders. There was one thing you talked about before the binders. What was that again?

Bridgit: Chlorophyll maybe?

Dr. Marchegiani: Chlorophyll, yep. So a good blood cleanser.

Bridgit: Chlorophyll, yeah.

Dr. Marchegiani: With magnesium, plant based, [inaudible] thing.

Bridgit: And magnesium in general I like.

Dr. Marchegiani: Magnesium.

Bridgit: Magnesium chelate. Magnesium displaces heavy metals which is pretty amazing.

Dr. Marchegiani: Yeah, love it!

Bridgit: It's antioxidant. So I think it gets more excitement for anxiety or cramps or constipation. But it's also a great detoxifier. So I think that that's a good one.

A supplement I've used a bit is humic acid.

Dr. Marchegiani: Ooh, yes.

Bridgit: Yeah, and I've used it a bit and not fully known what it was. But I found recently it's actually good for moving glyphosate. So that's pretty cool.

Dr. Marchegiani: Humic acid. And what kind of dose? And what brand do you like for that?

Bridgit: I like the one by the Green Smoothie Girl, Robyn Openshaw.

Dr. Marchegiani: Oh, cool.

Bridgit: And she has a dosing on the bottle. I think it's a dropper. You don't need a lot. Hers is very concentrated.

Dr. Marchegiani: And then do you have any brands that you like for the pectasol or for the chlorella or for the bentonite clay or activated charcoal at all?

Bridgit: Yeah, so I like the pectasol-c. You probably—

Dr. Marchegiani: Yep.

Bridgit: Yeah, I don't know who makes that.

Dr. Marchegiani: I know that. Pectasol-c, yep. I know that.

Bridgit: Yeah, the GI Detox is one brand I like. It's a mix of clay and charcoal.

Dr. Marchegiani: Yep, that's by Biocidin, right?

Bridgit: Yeah. And there's just a simple one. Integrative Therapeutics has a cheap activated charcoal.

Dr. Marchegiani: Activated charcoal, yeah.

Bridgit: That one's fine. There's a brand out of Oregon called Healthy Clay that is one I like. And I can't remember what type of clay it is. Pyrophyllite clay or something. But that's a good brand. So yeah, those are a few.

And let's see what else. Some simple things are dry brushing your skin. Part of moving toxins is just—

Dr. Marchegiani: Lymphatic stuff, yeah.

Bridgit: Yeah, just mobilizing. Getting a little exercise, even if you're pretty worn out and toxic, moving somewhat in the morning. I encourage people to just do squats or do arm circles. Just wake things up and get things moving.

Dr. Marchegiani: Excellent.

Bridgit: Yeah, so those are a few tips.

Dr. Marchegiani: And then any experience using things like liposomal glutathione at all?

Bridgit: Yeah, I'm using that more recently. I did more NAC previously.

Dr. Marchegiani: So precursors for amino acids for glutathione.

Bridgit: I guess it works. I think when I was first very sick with mold, I couldn't really feel it. I couldn't really tell. But I think probably there has been testing that says it works. And it is a precursor for glutathione. But when you're very sick, I think you need a really high dose of things and a big, combined approach. You're not going to feel better from taking two NAC a day. You need a lot of stuff.

Dr. Marchegiani: Yeah, definitely binders, too, because a lot of people start pushing stuff. They mobilize stuff. But then they can't quite get it out. So a lot of times, they can feel worse with some of these things. So I find having some kind of a binder in there as you push those systems really helps. Do you notice that, too?

Bridgit: Yeah, I think the binders are really important. And if you feel like you're going through an inflammatory phase—I still go through that a lot as I'm trying to moving things out—just bind that up. Get some binders in there. So they're a really important thing to have around the house if you have food poisoning. They're very handy. Even a hangover, you can use a binder.

Dr. Marchegiani: Oh, I use it all the time. Anytime I have any alcoholic beverage, an adult libation, I'm throwing an activated charcoal in there, too, for sure.

Bridgit: Yeah, that's a good thing that people don't know about to have around. So yeah.

Dr. Marchegiani: Absolutely. So cool. Is there anything else that's more nuanced out there that people may not know about for helping to detoxify these thyroid-disrupting chemicals?

Bridgit: Well, especially for women's health, I think just lots of fats. I find doing a spoonful of fish oil a few times a day, even while I'm feeling very toxic, is really good. I also like the other fats like sunflower oil and flax oil and hemp oil. I think that these things really calm inflammation which is benefitting your immune system if you have autoimmune conditions and just any symptoms that are coming up.

So we can look at root causes. But also there's just like the symptoms that you're dealing with as you go through treatment and not being able to sleep well. So use the fats and the magnesium.

I don't think we talked yet about essential oils. And I wanted to talk a bit about those.

Dr. Marchegiani: Oh, yeah. Let's do that.

Bridgit: Yeah, because, again, for symptoms, they're so nice. Some of them directly lower cortisol, like cedar wood or lavender. So rather than turn to synthetic things to sleep, which is more toxins, use essential oils. You can use them to clean your home. We talked about replacing toxins there. So you can use things like orange oil or thyme oil or lemon.

You can even use lemon to clean a stainless steel fridge. So that's another hidden source. Some people would be like, "Oh, I'm pretty clean. But, oh. Well, I have to use a stainless steel cleaner on my fridge. What else would I use?" Well, you can actually do lemon oil and water to clean stainless steel. So those are a couple ideas. For digestion.

Dr. Marchegiani: That's awesome.

Bridgit: Yeah, essential oils are just a great replacement around the home. So I'll make sure that's live on my website when this airs. I'll have some "essential oils for thyroid" resources.

Dr. Marchegiani: Oh, great! Excellent.

Bridgit: We didn't give that a ton. But I think that there are a lot of uses there to detoxify your body, detoxify your home and just replace synthetic, over-the-counter medications you're using.

Dr. Marchegiani: That's awesome! And regarding some of these toxins, what are they actually doing to the thyroid that's so bad? What's the mechanism of injury? What's going on with the thyroid at the cellular level when these toxins get into our systems.

Bridgit: Yeah, I have a whole long list here. So many toxins lower enzyme levels. So enzymes are doing things all over. But some of the enzymes are lowering our enzymes that support detoxification. So that's no good. We talked about they displace beneficial minerals. And we need minerals for every process in our bodies, including thyroid function.

Let's see. We talked about blocking receptor sites to where the thyroid hormone needs to get in. Certainly if your liver is burdened and your gut is

burdened, those are sites of thyroid conversion, right?

Dr. Marchegiani: Correct.

Bridgit: So when those organs are burdened, they're not going to get as good conversion. I see that a lot, Justin, in our clients, that poor conversion. Do you see that a lot, too?

Dr. Marchegiani: Oh, yeah. I see a lot of poor conversion. And we know the liver is responsible for upwards of 60% of thyroid conversion. And those enzymes. Those deiodinase enzymes are made—you talked about enzymes—are made from the liver, too.

Bridgit: Yeah, that's a good point. And another thing I read is just that overall toxic load depletes glutathione in general. And then you can go into a state of what they call TILT (toxicant-induced loss of tolerance).

Dr. Marchegiani: Loss of tolerance, yeah.

Bridgit: Where you're just sensitive to everything.

Dr. Marchegiani: Everything.

Bridgit: A lot of people feel that way. And that stimulates the immune system in a way that can lead to autoimmunity. And that can be a tough seat to get out of because when the body becomes so sensitized, it really is reacting to everything. So that's just a process of really doing some of the detox things we mentioned, doing the avoidance to eventually get out of that state.

Dr. Marchegiani: Yeah, totally makes sense. Now, let's connect the dots here because a lot of these toxins are also estrogen mimickers. So I find that a lot of people that have toxicity issues are going to have thyroid issues. But a lot of them—especially if they're women because women are five times more likely to have a thyroid issue than a male. And then also 60% of people who have thyroid issues are undiagnosed which is crazy because we have all these hormone mimickers.

We also, if we have a thyroid issue when we're female, we probably have female hormone symptoms, whether it's endometriosis or fibroids or just really bad PMS or really bad mood issues or skin issues. Being a female hormone expert too, what do you see on that side of the fence with patients that have thyroid issues?

Bridgit: Yeah, it seems like a bit of a chicken and an egg. Having high estrogen can throw off your thyroid. And then having a thyroid disorder can let you clear estrogen less efficiently. And maybe you can speak to some of that, too, Justin. But I have an article I had written about—I learned actually most thyroid disorders are diagnosed around menopause. And I was surprised to hear that because I think so many bloggers are young. And so I think, “Oh, everyone’s getting Hashimoto's when they’re 25.” You can. You can with pregnancy. You can at any time.

But the most common time is at perimenopause and menopause. And what hormone state are you in then? You’re in estrogen dominance because you aren’t ovulating as much anymore. You naturally go into estrogen dominance which alters your immune system. It can stimulate the TH2 more than TH1 and just shift the way your immune system is working. So that can be a key time—

Dr. Marchegiani: Do you find more Hashimoto's is more TH2 dominance?

Bridgit: I don’t know. What do you think? I don’t have an opinion on that.

Dr. Marchegiani: Yeah, I think a lot of people myopically focus on that. And I think it’s the toxins that may throw the immune system off, or the infection that may. So I don’t think it necessarily matters, per se, unless you’re giving a TH2 nutrient or TH1 nutrient that’s causing you to feel worse.

I think if you get rid of the stress, a lot of times the immune system naturally takes care of itself. And a lot of things like you mentioned—like glutathione is a natural immune system balancer. Vitamin D is a natural immune system balancer. So I think a lot of times you don’t really have to worry about it as much.

But I’ve seen people say TH1. I think the Kharrazian book I have over here says TH1 80%. Some say TH2. So I just wanted to get your take on that.

Bridgit: I agree. I think if you take off the stressors on the immune system and then just feed it things it likes like the fish oil and the vitamin D, it helps. And then you can maybe help me on this. But I think that the sex hormone binding globulin reduces instance of thyroid disorders.

Dr. Marchegiani: Yeah, you’re correct. So basically, you’re getting more of those binding proteins up. Sex hormone binding globulin. I think there’s a direct correlation with that and thyroid binding globulin. So the more binding

proteins you have, you're going to decrease your free fraction hormone. And that's also going to decrease your thyroid uptake. So you have less hormone available to bind to the receptor site. Hormone is a lock. Receptor site is a key. It has to go like this and turn to work. Most people, their key is stuck in their purse or their pocket. And they can't get to it. That's what happens when it's protein bound.

Bridgit: Okay, yeah. So that makes me think. Just the more that you do to balance your estrogen and progesterone, it seems like the better. And most women have to work on that. Most women we run into are estrogen dominant. And even the ones who are trying to do a good job about avoiding toxins, just because of stress, they're progesterone deficient. So things that help are getting your sleep and relaxing. The magnesium, I think, is very helpful. Seed cycling is helpful.

Dr. Marchegiani: Oh, let's talk about that.

Bridgit: Yeah, so you can do flax and pumpkin seed ground—fresh, raw, ground. You can put it in smoothies. Or you can make a porridge. I have some YouTube videos on that as well.

Dr. Marchegiani: Don't you time it up, though? Isn't like flax the first half of the month, pumpkin the second half?

Bridgit: So flax and pumpkin are the first half. And the second half is sesame and sunflower.

Dr. Marchegiani: Okay, so sesame and sunflower (SS) for second. Flax for first. Pumpkin...

Bridgit: Very good.

Dr. Marchegiani: Good. That's how you remember.

Bridgit: I was actually on Izabella's documentary. And I'm like, "Uh, which one's which?" It was bad timing.

So yeah, you can do the ground seed. But I will admit I also really like oil, just straight up oil. I like hemp oil. There's an oil I started using recently called five-seed blend. And it has all four of those. Have you heard of that one?

Dr. Marchegiani: I have heard of that one.

Bridgit: Okay. So that one isn't divided part of the month/part of the month. But it's just all of them.

Dr. Marchegiani: It's altogether.

Bridgit: But I think it's really nice. I think obviously getting from a fresh nut, you're getting micronutrients and fibers. So that's great. But I think there's a little extra bang for your buck to do the whole oil.

Dr. Marchegiani: Oh, I like that. So we have flax and pumpkin the first half of the month, the F in flax for first. And then the two S's in sesame and—

Bridgit: Sunflower.

Dr. Marchegiani: Sunflower. Double S for second half of the month.

Bridgit: You can buy all those actually in fresh oils.

Dr. Marchegiani: Great!

Bridgit: But be discriminating because quality matters.

Dr. Marchegiani: Because they can oxidate because they're more unsaturated fats.

Bridgit: Yeah, so just get a good brand. And don't store them for two years and then try to eat them. Keep them in the fridge. Always keep your nuts in those kinds of oils in the fridge and use them quickly. But yeah, you can use them for—I'll put sesame oil on top of my food. It's really delicious. So I like those to feed the hormones good things.

Dr. Marchegiani: Awesome! And then what's the mechanism there? Is it that there are some binding qualities within these seeds or nuts that are binding up some of this hormone metabolite that's a stressor? Is that what's happening?

Bridgit: So supposedly—I probably should find out more science on this. But certain fats feeds prostaglandins which could be pro-inflammatory substances or anti-inflammatory substances.

Dr. Marchegiani: Yeah, like the one and three pathways, I think, are the anti-inflammatory.

Bridgit: Yeah, I think you know a lot about this stuff. So feel free. So yeah, they can feed some of the anti-inflammatory prostaglandins and supposedly feed production of progesterone and keep estrogen in balance. I think the estrogen gets a bad rap that we always need to lower it. But we just need to keep it in balance. A lot of women are low on both hormones.

Dr. Marchegiani: I see a lot of women low on both.

Bridgit: Yes. Yes, so sometimes you do need to build both actually.

Dr. Marchegiani: I do agree. The good fats are really important. So we're feeding it, number one, with these nuts and seeds here with the good fats, the good prostaglandin one and three. Two is the more inflammatory. That's going to be more like the refined vegetable junky oils like canola and safflower and stuff and then also corn oil and soybean oil. And then maybe processed meats may be in that category. [inaudible] more of the anti-inflammatory. And there's also some detoxification aspects of it because they're binding things up, too. And I wouldn't be surprised. Pumpkin is also anti-parasitic. I wouldn't be [surprised] if there's some antimicrobial aspects with the pumpkin seed.

Bridgit: Yeah, there could be. Also papaya seed is something I take for parasites. Yeah. When I'm feeling PMS or menstrual headache, I just take magnesium and these oils. That's all I do. And it really knocks it out. So I find when women are bemoaning their periods, it's like, "Are you doing these things?"

"Oh, no. I didn't..." It's so simple.

Dr. Marchegiani: Simple strategies, yeah. Again, do the low-hanging fruit and then see a good functional medicine practitioner for the more intricate stuff. That's great.

And then what about progesterone? I see a lot of women, like you mentioned. Most are estrogen dominant. But some are just low across the board. How many women that you're seeing have very low hormone levels across the board or very low progesterone levels where when you start working on those things we start to see a lot of thyroid symptoms or markers improve?

Bridgit: That's a great question.

Dr. Marchegiani: Because you have a lot of experience working with fertility cases, too, right?

Bridgit: Yeah, everyone we test has something wrong with their female hormones.

Dr. Marchegiani: Totally, yeah.

Bridgit: And then most of them have a thyroid issue as well. And some of it's subclinical. It's not looking that off with the thyroid. But the female hormones we see a lot going on. We do see also with the DUTCH test that we run some detoxification issues that are on that test as well.

Dr. Marchegiani: So on that test where you look in the bottom left hand corner of that detox page, that 2-methoxy, that meter, you're seeing it low a lot of time for methylation?

Bridgit: Yes, we see that a lot. We see people making the wrong type of ratios of estrogen, the wrong ratios of testosterone. We see that a lot.

But I would say the percentage of people who are overall low—most of them. I would say 80% probably. And then most everybody, probably more like 90%, are estrogen dominant. So those are very common.

Dr. Marchegiani: Because of course, we can't go into everything every time. But there are certain givens. Outside the diet, the lifestyle, the water, the toxins, we're already doing all that blood sugar, sleep. That's done. Outside of that stuff, are you giving any specific herbs to help modulate hormones? Are you giving any specific bioidentical progesterone at all? I know you already mentioned the seed stuff which we already addressed. On the hormone or herb side, what are you doing to help support that? And then do you notice the thyroid come back or respond to some of those things, too?

Bridgit: Yeah, I think we do. Vitex and maca are a couple that I think you use that are pretty safe to use.

Dr. Marchegiani: Yep, I like those.

Bridgit: So I would use more Vitex in a younger, cycling woman. For an older woman, I would probably do more just adrenal herbs and that kind of thing. I'm 43. And when I mess around with my hormones, I'm not really wanting them to kick back in full force or anything. I just want them to not bother me. So I don't think that some of the ones for younger women are still a fit for older women unless you are trying to still get pregnant at an older age. Then

you do want your hormones to really kick in full force. But I just want mine to just behave.

Yeah, we do some progesterone. I don't do much of DHEA or any of that stuff just because in my own body I don't react to it very well. So I just don't have the confidence to give it out all over the place. But I do use some on myself, some progesterone. I don't find, sometimes, that the topical is enough for me even still. But some women like it a lot. So that's an option for sure to do.

Let me think of anything else we do. The coach who works for us is a big herbalist. So she'll send people a custom blend of loose herbs even. And yeah, I think it can have an effect.

People don't always do their retest with us, to be frank. But just to see symptoms go away, having more energy. There was a client we had recently who was sometimes, some months having an entire month of PMS, she said. Like start to finish PMS month.

Dr. Marchegiani: Totally.

Bridgit: So she hasn't had that in a while.

Dr. Marchegiani: That's great.

Bridgit: And she's just feeling more relaxed and more energy. So yeah, you said something so wise to me earlier. We want to move the needle on some of the things, whatever things we can get moving on, whether it's having a little more sex drive, having a little more energy, feeling in a little better mood. So your hormones don't have to be perfect to just start shifting them in the right direction and start getting some relief.

Dr. Marchegiani: Totally. I do find that women who do have very low progesterone—we'll do all the foundational things. We'll use adrenal support. But we'll give them a little bit of progesterone and gradually taper it up, maybe put them on a cyclical augmentation protocol where we change their progesterone throughout the month. And I do find that—we'll measure body temperatures and such. And we'll see their metabolism go up. We'll see their body temperature and energy also go up as well. So that's something that I've noticed.

And just curious. With a lot of your fertility patients, how many of them already have a diagnosed thyroid issue or Hashimoto issue when you see them

and they have fertility issues?

Bridgit: Definitely not all of them.

Dr. Marchegiani: But a significant percentage, would you say? Like 20, 30% or something?

Bridgit: Yeah, maybe higher. Let me think about that. I think at least half of them have some thyroid, even subclinical. We're a little suspicious. And then maybe 25% Hashimoto's.

Dr. Marchegiani: That's a lot. I see similar.

Bridgit: Yeah, but you're right. You can see the temperatures go up. I used to do that more. When I owned my clinic, I used to have people take their temperatures and bring them in. And we would really keep an eye on those. It was pretty awesome. It was pretty cool to see. I think that's another one of those very affordable things that you can do.

But I will say, again, you don't have to be perfect. There was a month a client came in. And she was one of these low-thyroid-type people, always cold. Always wearing her ski jacket through her appointment and stuff. And she had one month. And her temperatures were still so low, under 97. And I was like, "There's no way she's getting pregnant this month." And she got pregnant that month. That one.

Dr. Marchegiani: Oh, wow!

Bridgit: So you don't know for sure. We're not our test results and our charts.

Dr. Marchegiani: Exactly.

Bridgit: So the body is working. The body is trying to make us fertile, trying to keep us in balance. So she wasn't still looking perfect on paper. But she got her baby that month.

Dr. Marchegiani: That's good. Yeah, that's good. Excellent! Very cool. Well, you've dropped some really awesome knowledge bombs here regarding toxicity exposure, which I think is great; how to eliminate it using a couple different techniques, especially our favorite with the coffee enemas; and then also tying in some of the female hormones. This, I think, was the first summit interview we really tied in that female hormone connection which I think is important.

We did a couple other interviews where other people talked about various toxin connections. But I think we really rounded it up, connecting the hormones here. So I think you did a really good job addressing that, Bridgit.

Was there anything else you wanted to highlight or address that could help improve our listeners' thyroids here?

Bridgit: Well, yeah. Just because at the end here we started to talk about fertility. And I want to give people a little more. I love Dana Trentini's book. I can't remember the name right now. But it's like *Thyroid for Pregnancy* or something like that. It's so important because so many babies are lost that first trimester because of a thyroid issue.

So if you have a known thyroid condition and you're trying to get pregnant, remember that your end goal isn't just to get pregnant. You've got to make it through that pregnancy. And the baby is going to suck up all your thyroid hormone, especially that first trimester before the baby can make its own. So you really have to know how to manage it. You may have to manage your medication very quickly. And her book is excellent. Did you find it there online?

Dr. Marchegiani: I have it right here. I pulled it up.

Bridgit: Okay. Okay, what's it called?

Dr. Marchegiani: It's called *Your Healthy Pregnancy with Thyroid Disease*.

Bridgit: Okay. So I would definitely say to have that if you are trying to conceive and you know you have a thyroid disorder because it's so heartbreaking. I've seen a lot of women miscarry. And it's just a very difficult thing to go through.

Dr. Marchegiani: A couple very easy ways to prevent miscarriage is, number one, make sure you're progesterone is adequate. Number two, if you do have thyroid disease, I recommend every month to two months, especially I'd say every month in the first trimester, you should at least be managing your TSH and your thyroid hormones. I think a lot of doctors make the mistake of just looking at the TSH. And if the TSH looks pretty, meaning maybe below 4.5 or closer to 2 or 3 or 1. It depends. The ideal range is 1. But maybe they say 2 or 3 is fine. You also have to look at the actual thyroid numbers downstream because some people just have very low T3.

And then also, people who have thyroid issues, low iodine. And you've got to be careful. If you're in the Rust Belt or the Bible Belt area, or they call it the goiter belt where there's low iodine in the soil, one of the common forms of preventative retardation called cretinism which is basically caused by an iodine deficiency. So we always want to at least rule out.

If you do have a thyroid issue, make sure iodine is at least addressed. Again, you don't have to go super high. But maybe 500 mcg to 1 mg iodine, I think, is good. And there have been studies to show that getting it up to that level while you're pregnant can increase IQ points up to 7.

Bridgit: Oh, wow! Yeah. And just generally having low thyroid hormone to your baby in those first few months, yeah, again can decrease IQ. So this is one area where prevention is worth gold because you don't want to go through feeling like you're going to lose your baby or losing your baby. Your baby is born with some deficiencies that you didn't expect. So definitely get knowledgeable.

Dr. Marchegiani: Yeah, I recommend doing a SpectraCell or some kind of a micronutrient evaluation in the first trimester. And then make sure your diet is rock solid while you're pregnant as well. And if you need progesterone because you're at a miscarriage risk, make sure you're monitoring that with your OB or your reproductive endo to make sure you have enough progesterone.

Bridgit: Nice. Great tips, Justin.

Dr. Marchegiani: Anything else? Is there anything else? I'm going to get that book, by the way. I haven't seen that book yet. That's great.

Bridgit: Yeah, it's so good. Eric Osansky just came out with a nice Hashimoto's book. Izabella Wentz has a good book. You're coming out with a book, I know. I don't know when that's coming out. So there's a lot of good reading to do. Joseph Pizzorno has a nice book on toxins. What's his name? Walter Crinnion has a good book on toxins and your weight, which you might be interested in. So these are some of the resources I used for this talk.

So I just want to give them credit and also just say if you want to learn more, you can learn on this summit certainly. But if you're a person who likes to have a book and highlight it and whatnot, there are more great resources. So yeah, just do some learning.

Dr. Marchegiani: Great. And your website is BridgitDanner.com (B-R-I-D-G-I-T-D-A-N-N-E-R.com). We'll put the link up.

Bridgit: Yeah, I have a new website, too, called Hormone Detox Shop, so where we're selling some of our products. So that probably will eventually become our primary site. But either site will get your going right now.

Dr. Marchegiani: Hormone Detox Shop. And again, I think we adequately connected how these toxins can affect your female hormones, even male hormones. Males are even more susceptible because estrogen antagonizes testosterone. And then how all that connects with thyroid. So I think you did a great job drawing that connection. Was there anything else you wanted to add, Bridgit?

Bridgit: No, just a big thanks to you, Justin. Thyroid issues are so common nowadays in our modern. And I just appreciate you getting people empowered. And I appreciate, for our earth. As we learn about detox, we're protecting our earth, too. I think it's an important thing to mention as the last note here. It's not just about us. It's about our whole planet. And when we make these decisions, there's a lot of important trickledown that happens.

Dr. Marchegiani: Well, we use 2 billion pounds of pesticides a year. So if we can drop that a bit, I think the earth will be a lot safer for sure.

Awesome, Bridgit. Thank you so much for all your information.

Bridgit: Thanks again.

Dr. Marchegiani: Take care.