Introduction and Hormone Overview

Welcome to this episode of Mold, Mycotoxin, and Chronic Illness Summit. I'm your host, Dr. Ann Shippy. And today we get to speak with Dr. Margaret Christensen.

She's a board certified OBGYN She's on the faculty of the Institute for Functional Medicine, and she's the founder of Carpathia Collaborative in Dallas, Texas.

Today, we're going to dive into how environmental toxins, including mold, affect hormones. Welcome so much. We've been dear friends for such a long time.

Thanks for joining us. Happy to. Happy to be here. Dr. Ann. so let's we're focusing on on environmental impacts, especially mold on on hormones. So I know you give such a beautiful perspective of how we make hormones, what they are.

So if you want to give an overview, you said that what we talk about, actually. That would be great. Yeah. Yeah. So again, when we're when I'm thinking about hormonal imbalances, whatever they are, we, we from a functional perspective, we're thinking about how is that hormone made and where in the body is it made and what are the signals that are telling it to be made?

How is it utilized in the body? That's what we would call the receptors on the cell that that say, oh, yes, I have this hormone or, you know, for example, thyroid hormone sits on a receptor and, you know, helps to turn on the mitochondria in the body and get your energy.

So how is it made? How is it utilized and how is it broken down and processed, you know, through the liver and kidneys or anything else? And how how does your body get it out of you?

So we can see issues with hormonal disturbances anywhere along that pathway. And unfortunately, you know, so many different environmental toxins have major hormonal impacts, even in very tiny quantities.

And mold in particular has definitely has has issues with acting like hormone disruption. So and the other thing that's really important to understand, who is all the different hormones work together.

So when you are you know, when I'm evaluating somebody who's coming in for whatever reason, thinking they have hormonal imbalance, I'm not just looking at, for example, their estrogen, progesterone and testosterone levels.

We're also looking at what are your cortisol levels that your stress hormone levels? Because in fact, when we teach and function medicine, we talk about we have to start with the adrenal glands, we start with the stress hormones because they are impacting everything else.

And there were also wanting to look at insulin and blood sugar levels because insulin has also a profound impact on how hormones are processed and in the body and uterus and also weight gain, things like that.

And and then thyroid hormone, which I already mentioned a little bit. So thyroid hormone is very involved in this whole intricate dance. And for example, if you have very high levels of cortisol, one of the things that does is it impacts your ability to turn the inactive form of thyroid is called T4 into the active form called T3.

So that's one of the things that if you have high cortisol levels and a big mistake that I see in a lot of is is that they're checking free T3 and I'll mentioned that a little bit later, giving people T3 because their T3 levels are low, but they have very high stress hormone levels and and that's like putting, you know, putting to fit to feet on the gas

pedal for some folks.

So you want to be really careful. So when I'm testing I'm looking at all of them and understanding how they all interact with one another and so that's kind of the big picture of.

And then then you can also throw neurotransmitters in there. So they are also they're signaling. So again, things like serotonin and dopamine and norepinephrine and GABA, these are neurotransmitters, but they also can very much affect our hormonal production and metabolism.

And again, so with a lot of anxiety, depression, high stress and different medications. So all of that can impact how hormones are things. So when you're having an hormonal imbalance, you want to you want to look at the big picture of how do they all dance together.

I can imagine when you're doing your work up on your patients that you do a pretty broad sweep then of all these different hormones. So I would love it if you just kind of run down a list or talk about how you like to actually measure them to get that big picture.

Yeah. Okay. Yeah, Yeah. And that and I'll do that in a second.

Hormone Testing and Lab Workup

So let me just kind of kind of talk about some of that, some of the bigger kind of the bigger picture issues. So again, we talked about, you know, production utilization.

We use the in function medicine, we use the PTSD metaphor, which is production, transport sensitivity, that's the cell receptor. And then the elimination, I can't remember the Yeah.

Did is how do you how do you degree degraded or discarded or whatever. I can't remember the D stands for now but so again, remembering that the signals for hormonal production come from the brain and it comes from the hypothalamus, that's a master regulatory center of the brain and it goes down to the pituitary gland and then the signals goes down to the ovaries to say, hey, make some estrogen is time to ovulate, make some progesterone, make some disaster, and or you get a distress signal coming from the pituitary gland, from the hypothalamus to the pituitary to your adrenal glands and say, hey, run, fight or freeze and or make you know, or I'm hungry and I want some, you know, raise my blood sugar.

So so the we were taught the hypothalamic pituitary adrenal axis. The HPA axis is what we were taught in medical school. But what we know from a functional perspective is the hypothalamic pituitary adrenal gut is so important to get, you know, gonadal immune system.

And the immune system is directly tied to our hormonal imbalances that are going on in our body and can be really flared up with that. So so again, so that's that's that's some of the some of the production pieces and then and then how is it again utilize metabolized in the body so you have to have healthy cell membranes and healthy mitochondria that's what produces all the energy in our body and in order for the hormones to signal on the receptors, Hey, I'm here, I'm working.

Knock, knock on thyroid. Let me in. Let me turn on your mitochondria. Give you some energy or Hey, I'm some testosterone, I'm going give you some libido and and help build your muscles.

So that's the receptors on the cell membrane. So if you have damaged cell membranes or damaged mitochondria that are not getting the signals appropriately, that can be a problem.

And then the metabolism or excretion of of the used up hormones in the body first is coming through the liver mostly, and there's specific enzymes that are involved in that.

And so if genetically you need a lot more of a certain nutrient in order to make those enzymes work or, you know,

for example, I'm glucose on gets deficient.

So I, I have some genetics where I need a lot of extra antioxidants in order to get rid of any toxins, including the hormones, kind of hormones are treated along some of the toxic pathways.

And so we have to have everything, all the detoxing mechanisms working correctly in order to get it. And then we go into the gut. And a lot of people don't realize that this is where the major metabolism of hormones is going on.

And so if you have a lot of dysbiosis or unhealthy bacteria or yeast or fungal overgrowth because you've been on a lot of antibiotics or you're eating the standard American diet, all of those things can impact your guts, ability to process the hormones, and you may end up recirculating them and, you know, so something that's already been used up like estrogen gets broken down by bad bacteria, by something called vertical grommets and is recirculated in the body.

So those are those are all the kind of the main ways we, again, produce, metabolize and utilize and get then get rid of the hormones. So anywhere along those pathways you can have hormonal disruption and that.

So a great overview. So that all that interconnectedness is so important for people to realize. Like if you know you've got something going on with your hormones, it's not just mandating the hormones with something like 30, it's super important to actually work on these other areas the cell membranes, the mitochondria, the the gut health, all of these things are so, so important.

So I can't wait to dive into some of these things with you some more. But let's go next to like, what are the symptoms like when people are having these hormone imbalances that are really tipped over by mold and other toxins?

What are all that stir? Sure. Well, again, I think the we can see the entire range of issues and from PCOS symptoms as that's polycystic ovarian syndrome with, you know, really ragged, erratic, irregular periods.

You can have endometriosis, you can have super heavy bleeding, you may have fibroids, you may have endometriosis, you may have really bad mood swings, may be having hot flashes and sweats.

You sleep disturbances is a big one, cause weight gain is a is a big one. And oftentimes a big one with mold, toxic mold, because I know we're going to talk a little bit about on that.

And yeah, so, you know, those are probably the common ones that we see. And then also impacting things like anxiety and depression, also things like brain fog and memory, estrogen and testosterone are really important, actually post-menopausal to help keep our brains working.

And so anything along those lines and if you're a man, then things like erectile dysfunction and blood pressure issues are men tend to have more of the cardiovascular side of things than than we see in women with particularly if we're talking toxic mold.

They also have, you know, a lot of irritability, brain something, but they don't tend to get the same type of things like the chronic fatigue and the autoimmune issues that women do.

They still can. But it they often present a little bit differently in men for a lot of reasons, are a little bit more protected because of their testosterone from some of that from the some side effects that we see, for example, with mold exposures.

So, yeah, go ahead. Oh, this might be a great time to just talk about some of the labs that you think are important. And yeah, and I think so many times people just get the diagnosis, Oh, you have PCOS or you're menopausal and they, you know, now no work is being done to be looking at the whole picture or getting to the root cause.

Because even having menopausal symptoms is not normal. Right. Right.

Mold, Symptoms, and Chronic Infections

And so, yeah, so I get a complete panel that has, you know, kidney and liver function. But we also are always measuring fasting insulin levels, markers for inflammation like C-reactive protein and also ferritin, which is an iron stores level and iron levels.

And I have to say that since COVID, you know, particularly with post vaccine issues as well, we have seen bizarre, bizarre iron studies and and ferritin and inflammation and autoimmunity being re triggered.

And it's a spike protein. It doesn't matter where that spike protein came from, but you're actually more likely to have issues if you were you had the the treatment that was the theoretical prevention that didn't prevent a damn thing.

And and we're seeing I'm so many issues there so I get so we get this school panel and and then I'm getting a complete thyroid panel TSA treaty three free T four authority antibodies reverse t three as part of it and then, you know, estrogen, progesterone, testosterone level sex hormone binding globulin, DHEA, insulin and hemoglobin A-1 C And then I usually have people do an adrenal stress index looking at their cortisol levels.

And then you can also do hormone metabolites. And there's several different companies out there that that do it. So you can see which pathways are they going down.

The good pathways or the not so great pathways. Are important to look at. Do you have a favorite company that. You know, I use humor. We use that. We use zero.

I've used all all those companies. Some are more in less expensive than others. It's not necessary for everybody. I really pretty much reserve most of those for perimenopausal postmenopausal women to figure out which, you know, when I'm getting hormone replacement therapy, which pathways are they going down or if they have concerns.

Yeah, yeah, if they have concerns. Here it's site to get the it. Yeah. Right right Yeah. And you know follow up so you know see how your body how does your body utilize these hormones and and also if you're I mean if you're doing fertility workup they can be useful as well to see what's going on.

So those those are that's just the basics that I do. But then you're we're we're looking for a good history because and then testing from that. So again, how many antibiotics have you been in our lifetime?

How many infections have you had? Because that all can cause yeast and fungal overgrowth and and fungi are in the same category, is the same as the micro, the the molds and and they can produce mycotoxins themselves.

So that's always, you know, the question. We can use stool testing. I do use a lot of organic acid testing things, things like a nutritional or go test because we can see markers for how well how well are your mitochondria doing and do you have markers for yeast or fungal overgrowth or dysbiosis unhealthy bacteria in the gut?

Sometimes we can also use stool testing again to figure out, okay, what's going on? Do you have high levels better grades in your stool? How much leaky gut do you have, etc.?

And so part of this is guided by what's going on with with your symptomatology. I think the two top things that I go after with people who are have environmental toxicity and particularly mold toxicity is are you sleeping and are you pooping?

And I try and fix those two things first, if I can, and then go on to to deal with the rest of things. And then and then of course, then you have to think about chronic infections and I'm sure you have somebody talking about this, but when you have toxic mold exposures, oftentimes the molds, the mycotoxins themselves suppress the immune system.

They suppress our ability to fight off infections. So then you get more sinus infections, bladder infections, you know,

gastrointestinal things, food poisonings, etc..

And then what are you getting for those antibiotics? And what do antibiotics do while they disrupt the gut microbiome and the gut flora? And then that disrupts your ability to metabolize the hormones and so your immune system suppressed.

So then you get another infection. We see this all the time with recurrent sinus infections, recurrent, you know, upper respiratory infections, strep throats, etc..

And so if you have recurrent sinus infections and or is strep throats, if you've got, you know, kids in your house or even, you know, young adults. I have just saw a gal today who's had her tonsils out when she was in college.

I'm like, okay, where was the mold in that moldy dorm room that was giving you so many strep throats that you ended up having a tonsillectomy at, you know, 22.

So, yeah. So that's kind of the big picture of what I look for. And then you want to look at, you know, chronic infections, things like viral infections.

Epstein-Barr virus is just huge. Humongous. Right now we're seeing a lot of reactivated. Epstein-Barr host spike just cause just called spike protein.

With Yang. Syndrome. Okay Yeah and and no matter where that spike protein is from and unfortunately you're much more likely to have gotten much higher doses of it with the poor treatment prevention.

And then having had a natural infection. And we're seeing the fallout from that tremendously. So which other chronic infections are you seeing? Well, and then again, so you know, where there's Lyme, there's mold, you know, so a lot of, you know, folks come they they they come to us and they said, well, you know, I was treated for Lyme infections for, you know, X number of years.

And taking you know, I'd biotics were oral antibiotics, but nobody checked them to see if they had mold first. And so we want to treat mold first before we treat the chronic infections because when you start pulling out the mycotoxins and you improve the quality of your immune system than the others, that oftentimes the infections start taking care of themselves.

Which is such a relief so that you don't have to use the antibiotics. Right. Okay, beautiful. Let's let's come back to these simple things a little bit more.

Yeah. Because they they end up being so critical, so important as far as laying the foundation for the body to heal. So you mentioned sleep and making sure that the bowels are moving.

What are your favorite things for some of those foundational, I guess because so often sleep is impacted? Yeah, well, you know, first of all, just good sleep hygiene, you know, get off all your electronics by, you know, no later than 8 p.m., you know, dark room all of that.

If you have sleep issues and you know have you off of caffeine and alcohol and again an anti-inflammatory diet, all of those things start repairing the gut improving if you can't sleep because your thoughts are racing and you're you know, anxiety is going like crazy, then I will use GABA, I'll use prescription hydrocortisone is a great it's like Benadryl but it's it actually crosses the blood brain barrier and is it's used a lot in psychiatric world for for anxiety but I use it particularly to treat sleep and hopefully you have somebody talking about mast cells and histamine release because that's something we do.

Yeah, that's a huge piece of this. And yeah, so anyway, those are some of things. Of course I'll use melatonin, I'll use, you know, gamma, I use ashwagandha.

All you have, you have something here called cortisol manager by Integrative Therapeutics. Those things are

helpful. Magnesium for everybody. Everybody needs magnesium.

Everybody. Yeah, yeah, everybody needs magnesium. We're all magnesium deficient. Yeah. So for the people listening today, if you're not on magnesium. Yeah. That's the first stuff.

Foundational Support: Sleep, Gut Health, and Sinus Care

Yeah, that's the first step. Yeah. So you know, and the magnesium, you know, both will help you sleep and help you poop. And then depending if you have a history of lots of blue stools or whatever, then there's different forms of magnesium that we'll use with you that are less likely to, to cause loose stools.

If you have a history of constipation, we want you on citrate and oxide and get things moving. Magnesium citrate, magnesium oxide. And so, you know so basically we're we were working with, you know just basic get your gut moving and get yourself sleeping and get, you know, exercise, you know and since you're talking really you're some it's on mold.

So oftentimes it's just very overwhelming the whole the the whole diagnosis. And and we know that the mycotoxins themselves can disrupt sleep and all that.

So sinus rinsing is another really helpful thing that that can that you can do is just taking a shower inside your nose. So if you have a lot of allergies, if you have a history of chronic sinus infections, any history, sinus surgeries, then we have you on just rinsing out your nose, getting out some of the biofilm that's that's in there that is chronically inflaming your prefrontal cortex or your brain is right behind here and chronically and fame that the olfactory nerves, a little tiny nerve which goes from here into the brain, is all inflamed when you get sinus infection.

So just cooling it down, rinsing it off, getting rid of inflammation, all of those things can be really super helpful. Maybe you see a difference for that with just like using a sailing spray versus using a Now I'm at Brandeis or.

Something, you know, I use and you know, we have people use the like the Neil made sinus rinse will have put in a little colloidal silver some oftentimes some bio and drops.

It's a cream. Again people who've had chronic skin infections sinus infections may need some amphotericin, a nasal spray, but mostly we use an EDTA colloidal silver spray to to clean things up in there and then rinse rinse out with some sinus rinse a little bio signed in there.

Super important. Yeah. Yeah I out. Of that because. Yeah yeah yeah that Dr. Brownstein's protocol also using nebulizer saline with a little bit of tiny bit of peroxide in it can also be very helpful for cleaning up the sinuses and also lungs.

And that's just a great anti-inflammatory to use in general for lots of different things, not just toxic mold, but it's actually great with COVID prevention and treatment.

And we've used that a lot. So, yeah, maybe one thing would be helpful if I just talked a little bit about if we're going to talk a little bit about mold, what the how, how do mold mycotoxins impact hormones. Yes.

Yeah. Yeah. How so? There's there's a lot of there's there's different things involved. So I've, I've all the different ways that the mycotoxins can disrupt hormonal function.

And the, the first one I'll start was just what I just mentioned is if you're breathing in all this stuff and you have the, you're, you're smelling nerve, the olfactory nerve, which is one of the shorter nerves in the body that goes right from the back of your sinuses, right directly into the hypothalamus, the master regulatory center of the brain.

And it bypasses the pituitary gland all along the way, which that's the one that's sending the signals down to the rest of the body. So when that gets inflamed and irritated and the mycotoxins themselves almost kind of melt the I can melt the receptors on it right there, that that starts disrupting your axis, your appetite, like pituitary axis.

So that's that's one thing. Now, the mycotoxins themselves can also be an act as if they are hormones. So they the way they look, the body can say, oh, that looks like a little piece of estrogen or that looks like testosterone or but that looks like a, you know, a little piece of thyroid.

So we call that molecular mimicry so they can actually mimic hormones. And for example, one of them that we that we check on on several of these tests that are available is called the Aileron.

And Zella Round has been well known in the animal husbandry for years and years and years as it causes miscarriages in fertility, in in cows and ruminants and pigs and all that.

And the grains are tested for them because of how grains are stored that are fed to animals. Theoretically, they're tested for us humans too. And we, you know, theoretically should have lower concentrations in there.

But but that the molecular mimicry piece also can act as if I'm a hormone and we'll see that a lot. So like heavy bleeding and infertility issues in early early puberty and in young girls who have a lot of zeal around exposures so that we call molecular mimicry.

So you have the access thing, you got the molecular mimicry acts, that piece. And then and then and then if you got this, the hypothalamus and pituitary being inflamed and irritated all the time, that's sending a distress signal to the rest of the body.

And again, it can get you stuck in anxiety loops and inflammation in the brain that can trigger that. And then the mycotoxins themselves, you're breathing, you can be breathing them in.

They go into your lungs from your lung as they get into your bloodstream, from the bloodstream, they dump into the liver and then from the liver into the gut. And and so you can have the mycotoxins are toxic to the gut lining themselves.

Again, they're toxic to those cell membranes. And it can disrupt, can contribute to disrupting gut function and then I did mention to then there is an immune system component that the mycotoxins have. So because they are mitochondrial irritants, they can they damage your mitochondria, can inflame them, the mitochondria and the cells and spill out their contents when they're damaged.

And that's part of what triggers in a whole autoimmune response. So then you get a lot of autoimmune issues that can be triggered with them. And then and then there are also just directly immunosuppressive.

So those are all the different ways that the mycotoxins can disrupt hormonal function. So the production or utilization, you know, some membrane receptor, you know, how how good are the receptors and how well does the body discard them once it once they're using them.

So all of that can be impacted. A great overview. Yeah. After listening to that, you're like, I just don't want any of those mycotoxins coming near. Me, right? Because right.

You know, and not just mycotoxins because it's, it's environmental toxins in general. And if you and I know it's it's our total toxic burden.

How Mold Disrupts Hormones and Thyroid Function

So, you know, for, for some people it doesn't take a lot of mold exposure to to to create a problem. It's because they're toxic. But it is also already really full.

They've been on years of antibiotics. They've been taking, you know, proton pump inhibitors, you know, things like Nexium or Pepcid for years and years, which is terrible for you, terrible for your gut flora.

And yeah, so, you know, again, all these different pieces can impact how well your body is able to deal with

whatever you're being exposed to. And we know that some toxins in particular also disrupt some of the enzymes that are involved in getting it getting out of your body like the glutathione enzymes.

So this is great. Such a wonderful overview. It's really easy to understand at least that it's very complex, and that's for many different aspects of function physiology.

You'd mentioned that you wanted to come back to a little bit more on thyroid. Is this a good time to do that? Yeah. Yeah. You know, again, that so there are, there's a couple of the mycotoxins that can again look like or act like, you know thyroid function or they look like, you know, thyroid hormone.

So but a lot of our colleagues don't even understand that the role of thyroid hormone in the body is actually to tell your mitochondria to make some energy.

And so that's why thyroid hormone is associated with energy production. But if you again, if your mitochondria are damaged and you just start throwing thyroid hormone at somebody, you can actually create more mitochondrial damage.

So it's really important to nourish the thyroid gland and all the things that the thyroid needs selenium, chromium, zinc, all that. If you're and if you've got a lot of gut disruption and you're not absorbing those nutrients and we have people do, you know, electrolyte mineral drinks or, you know, take, you know, extra minerals, Celtic sea salt, things like that. So and then thyroid hormone function is also directly related to your stress level function.

So your cortisol, cortisol and adrenaline are the the two major stress hormones, both which can impact the how well your thyroid is working. And then if you've got autoimmunity against your thyroid, it's Hashimoto's or Inter Graves disease.

So that's where your own body is attacking your thyroid tissue. Then again, that can be problematic and that can be triggered by lots and lots of different environmental toxins.

And we know that the thyroid gland is the most environmentally sensitive. It's the first one to go before everything else. And so so it's important to again nourish the thyroid gland with appropriate nutritional support.

And and then also identifying, okay, where the heavy what heavy metals are we looking at, what environmental toxins and what possible infections. We know that Epstein-Barr virus is very tied to Hashimoto's or autoimmune thyroid issues.

And yeah, so that's why we've had to try and take a big look at the thyroid and yeah, but I don't ever give thyroid hormone replacement without also looking at an adrenal stress index at the same time.

Beautiful. And making sure that the thyroid has what it needs because often if it actually has the nutrients to do its job, it can snap out of it, right?

Yeah. Iron deficiency is really common. And you know, one of the things that that, you know, I don't know, we were taught somewhere along the way I don't know is that you know don't give it down to people who have Hashimoto's And I'm a follower of David, Dr.

David Brownstein and his work and he's like iodine for everybody. And that's what I found. I found, like personally, I took thyroid hormones for 30 years and I got off of them.

That's beautiful. I had a great story. Yeah. Yeah. So? So I had Hashimoto's. Yeah. Awesome. So if you're willing, I know that you've been through your own personal challenges with the world and your family.

And I think one of the important things about this summit is to give hope. Yeah. There, you know, you can get through it. So I'm just wondering if there's anything about your journey that you want to share that will give hope.

Well, if you've heard me talk before, you know. Yeah, I got I got very ill when I was in my obstetrics and gynecology practice that I'd been doing for ten years.

And I'd had four babies and I had six years of sleep deprivation because I was, you know, going through medical school and then residency and then delivering everybody else's babies and having for my own.

So there's nutrient depletion, right? Sleep deprivation. I had been on a lot of antibiotics earlier in life for acne as a kid, and I don't know, I got pneumonia during one of my pregnancies.

So more antibiotics, you know, here and there. I was a little cavalier with them and I had a lot of ideas, type of symptoms as well. So again, not not absorbing anything.

So, you know, now looking back at it, I was, you know, severely nutritionally deficient genetically. I had pathways that were involved in I needed a lot of extra support for my detoxification pathways that I wasn't getting because I was so nutritionally depleted.

I had a pretty high stress job delivering babies in the middle of the night, you know. And so, again, my stress hormone levels were on all the time and it wasn't getting any sleep.

And that worked well for a while until my third baby. And then I went into, you know, full blown Hashimoto's and couldn't figure out what was wrong. But what happened is and I didn't realize, is that we were living in a moldy house at the time and everybody got sick and we were all sick in a different way.

And I had the chronic fatigue, fibromyalgia, the IBS, symptom of brain fog and couldn't think straight. My kids were A-D as a sinus infection or strep throats.

Again, tonsillitis, asthma, allergies and migraines. And you? ET cetera. And again, a lot of mood swings, things like hot flashes and sweats at a young age.

Those are all signs that that there is something environmental or infectious going on in that. So that's what was going on. It took eight years to figure out that that's what it was.

But I had to know. That was back when there was so little information about. Right, right. Yeah, yeah. And you know that. But I was able to turn myself around just by doing basic function analysis and protocols without knowing what I didn't even know what the problem was.

And that was going on a, you know, elimination diet. I was gluten free, dairy free, corn free, you know, you know, super cleaned up and I was on B vitamins and C and D And so, you know, just sort of replace some of my things that I was low in.

And I and I got better until I got re-exposed.

Personal Healing Journey and Hope

And then when I got really exposed eight years later and got really super sick again and had to take another year off, I took two years off the first time, but that's how I got do a bunch of medicine.

Yeah, and. Silver. Platinum. Yeah, yeah, yeah, yeah. And I had super high levels of mycotoxins. I was very privileged to be able to see Dr. William Ray.

Yeah, of the environmental health. That's who I learned about. That toxic mold. Yeah. Yeah, right. Yeah. So long ago. Yeah. Yeah. He's. He's the one who he saw my first real time urine mycotoxins test and said this is the highest level check of the things I've ever seen.

Get out of your office right now. Oh, my gosh. Yeah, I went home that day, shut everything down. Went home and

started working from bed. So, yes. One thing that you found out.

Yeah, but you know. But yeah. So you can't, you can't turn around. It's journey and again start diet and nutrients. I think that mindset is actually is incredibly important whatever it is that you can do to nourish the laughter joy play gratitude in your life is is really important because this is this is hard work.

Just quit watching the news. It's all bad and vacation. Yeah, yeah. And yeah, get off your electronics. Find something positive to do every day and then just know that your body has a really amazing healing mechanisms and we have an inner healer, and when we activate our inner healer, it helps to guide us on what to do.

And then feeling connected to something much bigger than ourselves is also important. So if you are, you know, a person of faith or you have, you know, a feel connected to nature or the universe and whatever word that you want to use, leaning into that is also really critically important.

And then asking yourself the bigger picture questions of what is the meaning and purpose of the suffering that I'm going through and what can I do with it coming out of it.

And that's really what's what I've I've learned with my own journey. And but I didn't mention is two of my four children were also markedly affected by the black mold that was in our house.

And unfortunately, I continue to have issues to this day because by the time I understood and learned what was going on, remember it was eight years. My kids were old enough to say, I'm not interested in what you have to say.

And I didn't get I got zero support from them, from the medical community. And my I have a son who is very severely mentally ill. He's schizophrenic, schizoaffective.

But underlying that before he was ever that that somewhere on the spectrum, the A. D. D. staff got the meds for that you know nutritionally deficient all these toxins in him inflaming his brain and blaming his neuro system, you know creating autoimmune basically an autoimmune encephalitis or pandas post infectious autoimmune neuropsychiatric syndrome after infections.

And so, you know, unfortunately, I didn't know that back then, and it's been a really, really difficult journey since. And so part of part of what I'm trying to do is also just raise awareness in that in that area that when you get these toxins out, when you replenish and re nourish yourself, when you surround yourself with positive people, positive energies and work on some limbic system retraining, because I didn't talk about that, that the limbic system is also involved in that.

We're definitely covering that as well. Okay. Yeah. So again, the limbic system or releasing histamines, I mean, that's where the hypothalamus is part of the limbic system.

So if it's all inflamed and irritated and you're you're chronically stuck in fight or flight, we have to address that. And then trauma plays a whole nother role. And I don't know if you have anybody.

Talking with you or talking about both of. Them. Yeah, the trauma is huge. And then, you know, we've had collective trauma in the last three years, the whole country.

Yeah. And, and it's and it's really, you know, very unfortunate and very unfortunate that we were misled and misinformed by theoretically those who said that they were following the science and they weren't.

And a lot of stuff was stuffed down our throats which were really outright lies at this point. And yeah, so. Now we get to address that too. And yeah, and so we're addressing that as well.

And, but, you know, so here's the basic things that we do for also for any kind of long haul, long haul syndrome and, you know, you and I have been treating long haul syndrome for, you know, 20 some odd years.

You know, we understand that this is, you know, what happened with COVID. It's not so much the virus. It's it's how the immune system responds to it. And so if our immune system is already inflamed because we're on a crappy standard American diet and for genetically foods, lots of pesticides, you've been on a lot of antibiotics, you're taking PPIs or Nexium, something like that.

You're super high stress, you haven't slept your buckets already this fall. And then, you know, this this spike protein comes along and immune system kind of goes crazy.

And then you also got mold on top of that. That's where we're. Seeing I think it's one of the main things that predisposes people to getting the long haul.

Well, yeah, you know, and that's. Big is that there is that they have a mold exposure so if I have people with that we always go right and look at that for Yeah.

And so this kind of the same things that we do for the long haul is already what we're doing with toxic mold, and that is supporting the mitochondria and supporting appropriate blood sugar, metabolism, supporting gut health and and supporting cardiovascular health, the inflammation inside the blood vessels, because that's really what, you know, it's, you know.

Covid It was never a it's never a viral pneumonia. It's it's a it's an artery vasculitis. Yeah, it's an yeah, it's blood vessel inflammation in particular little tiny blood vessels, which toxic mold does as well.

Resources and Closing Remarks

Yeah. So toxic mold already inflames your capillaries. A little tiny blood vessels in your already predisposed to a little blood clot. You know, micro blood clotting.

So then you throw in the covid. On top of that, you've already got damaged blood vessels. That's part of the issues. Well, thank you so much for joining us today.

I love this mission that you're on and the way that you put the puzzle pieces together and, you know, make sense out of it. It's such a gift. Thank you so much for joining us.

Oh, we need to let people know where to reach you. Yeah. So, yeah, I met well, a couple of different things. Molddetoxdiet.com is is a great place to go if you need to know how to start with gut repair and health and just doing stuff for your house is just kind of basic how to do a diet here.

I did that together with Dr. Gail Clayton. She's amazing. So that's for the layperson. We have mold, mast cells and autoimmunity for practitioners that that's very high level informationthat's also available through Molddetoxdiet.com the my practice or our practice here is called Carpathiacollaborative.com Carpathia C A R P A T H I A. It's the ship that's that saved the ship that picked up the survivors of the Titanic the Titanic of western medicine just treating the tip of the iceberg and foundering because of it.

So anyway yeah, Carpathiacollaborative.com and I have, you know practitioners who are well trained, you know, particularly on the hormonal side of things.

Beautiful. Thanks so much for your precious time today and you're bringing your heart to all of. This and can't get much. So welcome.