## Introduction and Guest Background

Welcome to this episode of the Mycotoxins and Chronic Illness Summit. I'm so happy to have with me today, Doctor Wendy Tubo. We're going to talk about something that's very dear to both of our hearts.

We both focus on patients who have chronic illness, but also a high environmental toxicant load that goes with that. So not only mycotoxins illness, but the illnesses that that come from a plethora of environmental toxins.

And we're going to dive deep into that. But today, Wendy, I have you start by introducing yourself to our audience. Sounds good. Thanks, Nafisa. It's great to be here.

My name is Doctor Wendy Tubo, and I am a functional medicine gynecologist. I am the president and co-owner of Five Journeys, which is a functional medicine practice in the Boston area.

So we're on the East Coast, and we just published our book, Dirty Girl. Ditch the toxins look great and feel freaking amazing because I think you and I have similar stories.

We both had high levels of toxins and it was wreaking havoc on our health. One of which was mycotoxins. So that's I'm just delighted to be here to talk about that.

Great. Thank you. Thank you very much. I'm excited about your book. It's been three months now, right? Yeah. This week I think it last week. Yeah. Last week. Yeah. Very exciting.

So let's talk about environmental toxicants and how they affect our health in general. And then we'll dive down to our main system. So this is a huge topic right.

So huge. Yeah. So whenever we're talking about environmental toxins or toxicants I use the words interchangeably even though they're not technically the same.

But basically anything in the environment goes into a number of categories. One is the heavy metals. And the ones we're typically paying closer attention to are lead, mercury, and cadmium.

Those are the three biggies. Then there's and feel free to interrupt me at any time. If I skip something, or if it's not clear. I can also get into what are the sources of each.

I'm sure we'll get to that. And then the next category of toxicants is mycotoxins. And there's a whole long list of those. And those are the toxins put out by by molds that end up in your body.

They become toxins for you. And then there's the chemicals. That's plastics, VOCs, construction materials, paint, gasoline fumes. There's there's really almost styrene.

There's like, I could go on and on a lot of beauty products, phthalates. It's a huge category. And those are things that either we're putting on our body or around us.

## Types of Environmental Toxicants

And then there's the last category, which is the herbicides, pesticides, insecticides, and the one that people know the most is glyphosate, which is otherwise known as roundup.

That's the most commonly used herbicide in the world. And it's responsible for a whole host of issues, including being pro cancer, causing for a number of cancers, and also for disrupting the microbiome, which makes it difficult

to just get through the day when they got doesn't work right.

Absolutely. So we're looking at the same kinds of toxicants. So with respect to metals here in California, I'm seeing a lot more arsenic and aluminum than I was ever before.

So I would add that to the list. And I think the reason for seeing that more here is due to the fires here on the West Coast. Yes. Yes. That's been released.

Right, right. And and same with with the VOCs, of course, and the phthalates. So it's all it's all there. And also in California after the fires, all the water.

Right. That that has been been used to treat that the houses. Now people have more mold. Yep. So, so we're dealing with this, this whole constellation of toxins.

More, on the West Coast, I'm sure. Over there on the East coast, too. Wendy, even though there have been fires. But it's just it just is. There's there's a damp environment down there, more so than in California.

And industrial. Yeah. We've really I think my husband always says we've really sort of trashed the earth. And I was listening to a report, you know, these things that you just sort of don't even come on your radar, but, I love our local fire department.

I don't know why. It's right down the street from my house. I just really think that people who are firefighters and public servants, they do so much work, and it's so often missed.

And so they did this report on how firefighters were being exposed to harmful levels of endocrine disruptors through the flame retardants. And I was like, I never thought about that.

Right. But but so we're exposed to all these toxicants in ways. And it's not it's almost, almost sometimes invisible. And then sort of take a step back and go, oh, that's not the healthiest thing for me.

So I think it's great to dive into what are the ways that we can be exposed. And and it's really is everywhere because of what the state of the earth.

Exactly. It is. And so I have patients that come from all over the country like I think you do too. And so I'm measuring their loads, their toxin loads, whether they're from Florida or New York or California, Washington across the board, I'm seeing these high levels, though, again, in California, more I'm seeing metals, than than in other states right now.

Yeah. So that's I mean, given what's been released as the houses and the trees burn, that that's understandable. Yeah. Fortunate but understandable. Right? Right. So what kind of, what kind of health issues are you seeing as a result of toxicants in your practice room?

So it's kind of a let me count the ways. So. Right. So for myself, this is one reason we wrote the book Dirty Girl, because I had such a struggle. And I would say you and I are very similar, that we eat well, we live well, we take care of ourselves.

And yeah, all these toxins had essentially found us, found a friendly home in me and we're hanging out. And so when you really look at how humans respond, humans respond with inflammation.

So inflammation can take any pathway. And essentially inflammation goes into what your I'll call it your Achilles heel is. So my Achilles heel is my gut.

Whenever I go off the rails, I notice it first in my gut. But people can notice things head to toe. So let's go. Really broad and say, okay, hair loss, brittle hair, hair thinning, brain fog, confusion, memory loss, difficulty remembering things, anxiety, depression, any endocrine disorder including thyroid dysfunction, autoimmune.

And then when I say autoimmune Hashimoto's I'm also talking about any autoimmune disease. So anything you can name I would say okay that could be an issue with toxins, gut dysfunction, cardiovascular health, hypertension, high cholesterol.

Or you can have gut issues up down and backward. So difficulty processing, absorbing nutrients, constipation, diarrhea, irritability, reflux Gerd, weight issues.

I think for for particularly for women, weight is the thing that gets them. And what will happen is, you know, you know these patients, they say I eat right, I get enough sleep.

I'm not a stress ball. I don't eat too little. I don't eat too much. I don't lose a pound.

## Health Effects and Immune Dysregulation

Anyone who has a resistant weight loss is someone who I say, well, you probably have a toxins issue because they're stored in your fat, your bones and your organs.

And so if you aren't excreting them properly, you're storing them in the body knows it should not get rid of that fat because you'll be toxic. It can't deal with that toxic burden. Right.

So anyone with weight issues is huge. Yeah, it's a huge one. And people don't know that. They try all kinds of diets, although try intermittent fasting or keto.

And I mean, that's supposed to work, right. But it doesn't. And the toxin piece is a big overlooked piece with respect to weight loss. And and as well hormone dysregulation and and immune dysfunction.

So I want to talk a little bit about the the immune system actually. So what I'm seeing in my patients is this hyperactive immune system. And at the same time a weakened immune system.

And so hyperactive meaning there's mast cell activation syndrome. So they're hypersensitive to everything, hypersensitive to all kinds of foods, to smells, to chemicals.

They have autoimmune conditions. That's hyperactive and and at the same time, but able to mount an appropriate immune response to kill common infections like mold or, tick borne diseases.

These infections, but that we live side by side with since the beginning of humanity. We're not able to to handle them, not able to deal with them. And I think a lot of that has to do with the immune system dysregulation as a result of environmental toxins.

I think that really does does absolutely deserve a little bit of a deeper dive, because when I, when I was mentioning that these toxins cause an inflammatory state, right.

When you're talking about the dysregulation, the autoimmune issues, the I mean, pretty much everything you named is a sign of a system being inflamed.

And simultaneously, a system that's out of balance will not mount appropriate immune responses. So you can have immune dysregulation. And that either means you're always sick or you don't mount appropriate responses to things that you're exposed to.

But then there's another nuance in there that I think we should highlight, which is that the system, which is your body can only handle so much. And so you think of it like the best way to think of it as a rain barrel.

And over the course of your life and how you live and eat and think and sleep and what you're exposed to, those are all things that fill up your rain barrel and you start hopefully empty.

Although some people come into this world already somewhat sick. And so as you live, you add more exposures to stressors, toxins and and your rain barrel gets filled.

And at some point you're going to overflow your rain barrel and that system cannot handle anymore. So then when you layer on top of it and exposure like you had a leak in your home that wasn't addressed properly, or you had a flood in your basement that wasn't mitigated right away, or you're living in a home and you do construction on it and happened to release led this into the air.

Or you get bitten by a tick, or you had that tick borne illness and your immune system is now so dysfunctional it cannot keep it at bay. Then you start having symptoms of whatever that thing is.

It's like the that one last drop breaks the surface tension and your system overflows. Right. And it doesn't matter what that is. People say, well, I got in a car accident and all of a sudden I couldn't recover.

And I'm like, well, that was the that was that one thing that had you unable to compensate any longer. Right. So it's all about elasticity. Yeah. I tell my patients the same thing.

It's, it's this is a really, really important point because all of a sudden somebody can be walking around with chronic Lyme and they, they had a tick bite 20 years ago.

That is that the immune system was able to handle these things. And we were designed to be able to handle a lot or more. But for some reason we're not able to.

And it is that that I call it layering like a layering of a cake event. There's there's the stress of maybe somebody's marriage or underneath that, a childhood trauma.

A lot of my patients have had that kind of trauma. And we know that stress causes immune dysregulation. And, maybe people didn't eat well when they were younger.

It's just how they were brought up from the standard American diet. Child of the 70s, right. And then but now they're older and they say, my diet's pristine.

And I have these meditation techniques and, I'm doing everything right. I don't understand. Yeah. Why am I sick? I love that you bring in house renovations because I've had patients who, you know, they've lived in their house while it was being renovated is a really important point.

Or they themselves have renovated houses and all of a sudden they're in a state of chronic illness and sudden chronic illness. Like they even bypass the acute phase.

And it has everything to do with like that rain barrel that you've, that you discuss. Yeah. Okay. You asked too much from the system and it can no longer compensate.

Like stretching that rubber band way too far and it snaps. Right. And that's the point where you start to have symptoms. Right. And they're the symptoms of a of a person who's been ill for a long time, even though it could be sudden.

Quite sudden. It's a it's a pretty market crash. I mean people are like I was fully functional now what happened. What happened to me. And just like that the culmination of all these things.

This is a very important point. Yeah. Yeah, yeah I think it's important. If you said to say at this moment there's hope, right? It's fixable. I don't think we should get to the end and say there's hope, I think.

So it's really critical to say if you're if you've if you've been either really great and all of a sudden aren't great or you've been terrible and you really want to stop feeling terrible, either of those scenarios, they're fixable.

And what it requires is a really deep attention to what are those underlying factors. And I always say to people, you cannot do any sort of detox until you've handled the foundational behaviors.

Like you said, you need to have pristine food. Nobody's perfect, but as good as you can minimally processed, low sugar, pretty much no alcohol or low alcohol.

Enough sleep. Move your body regularly, fix the gut, fix the adrenals. And those are the foundational things. I'm so happy you say this because a lot of times people jump into detox, know or can't.

Maybe at the at the yoga studio or the quality studio, there's this awesome detox program, right? Or, even through the grocery co-op, I've seen people do this.

They go in, they do this detox, and they crash really, really hard. And it's because they didn't prepare for the detox. So. So when you're detoxing, we're having suddenly mobilizing the toxins that were stored in the fat cells or in the cells of the organ or in the endocrine tissues, that's where they get stored.

The metals get stored in, in the organs. And if you haven't fixed your gut and your adrenals, you won't be able to excrete it. But let's just distinguish that tune.

If you said, because I'm a huge fan of so for, I don't think that anyone should be doing detox alone. No person is an island. Do it with a functional medicine provider.

And then the other part to that is that doing a detox is something you need to be doing supervised. Get the data, understand how things shift with interventions.

Doing a cleanse is something that you can do on your own, but it's not meant to be a detox. It's meant to reset you. So that's like you do a juice cleanse, you'll have a reaction, but you shouldn't crash, you know?

And it's a 24 hours. Do it one day a week. It's not meant to be the detoxing event. It's really meant to reset you to get you refocused, reset your taste buds, reset your sort of go, okay, clap.

Now we're going to reset. It's like that extensively. And then if you do crash and some people do crash, even on that, that gives us so much insight. If you do crash, come to come to your functional medicine doctor and find out the reasons why you didn't crash for no reason.

People think, oh, I just got tired. No, there's something underneath that. And we have to discover what that is. It's often a combination of infections and toxins.

But but yes, the reset is very, very different than the detox. And so when you're doing detox with your functional medicine doctor, your doctor is going to be looking at all kinds of data, what your environmental toxicant load is.

They'll be looking at metals, all the toxins that that when you brought up at the beginning of our conversation, mycotoxins probably they'll look at infections.

They're going to cast a wide net. Yeah.

## Rain Barrel Model and Root Causes

So now in medical school we're taught don't over test because if you're over test you're going to find all kinds of information you don't need, right.

Yes and no. But when in the acute model of course we don't need to overdose. But in the complex chronic illness model, we do want to cast a wide net of using functional medicine testing.

Yeah. It's a very different I mean, I think that we want to distinguish that when you have something like, an

appendix that's on its way to rupturing, that's a very different interaction than I've been chronically ill for X period of time.

I'm no longer able to function properly. As a result, I've had impairments in my relationships, my work life, and now I'm getting some type of emotional imbalance, either anxiety, depression, OCD, whatever that that these have sort of domino effects and that it's it's really less the traditional approaches excellent for a surgical issue.

And then the wide net is appropriate for those people who have visited a million doctors and the, you know, the doctor see them. There's nothing wrong with you.

You're just depressed with a patient in a wheelchair. She was in a wheelchair and she said she saw him and my husband and, he said, why, you're in a wheelchair.

And she said, well, I was told I was depressed. He said, well, you probably are depressed at this point, but being depressed doesn't cause you to need a wheelchair.

Exactly. And she ended up having multiple strains of Lyme in the co-infections and is now walking. So it's that refusal to accept, oh, I'm just depressed exactly in this, that people are not chronically ill because there's a lack of antidepressants or because they don't have enough antidepressants on board in their own protocol.

Right, right, right, right. Often they're still depressed, even with the antidepressants. And that's when we have to dig deeper. That's when we have to cast that wide net of diagnostics and then treat appropriate treatment.

Yeah. And and I think it's important to point out that, you know, people think of detox as like, oh, I like a weekend warrior. I did it for the weekend.

And I'm like, well, it's not a sprint and it's not a marathon. It's more like a round the world trip. It's it's going to take a while. Yes. It's a whole overhaul here.

So, so really to focus on how do you make it a sustainable, be workable and see not not just devastate you because you can do detox too quickly and have symptoms and have the timer reactions and be worse actually.

And we don't want that. That's not know or the goal is that it that it that yes you'll have some fatigue. You might have some gut irritability. You might have a little bit of brain fog.

But generally you should be functional while you're doing this. You a lot of patients come in and they'll say, well, if I'm crashing, isn't that a good thing?

Because it means I'm getting all the toxins out? No, we're not looking for that. No, we're going too fast. Let's back down. Exactly, exactly. Because if we're going too fast, we can cause further immune dysregulation.

We can. We can increase our our inflammation and speaking of inflammation, patients get stuck in the loop of inflammation. And inflammation is part of the normal healing cycle.

It should be transient. But when there's a lot of environmental toxins onboard, when there's a lot of infections on board, when there's a lot of stress in our lives, then we get stuck in this loop of immune dysregulation in this loop of inflammation, and the patient just can't get out of it.

So part of our job is understanding where to cut that loop, how to stop that process even before we begin treatment. Well, yeah, I think we're highlighting that.

I always say to people, detoxifying your body from all of the things in it is a behavior that your body undertakes when it's no longer in fight, flight or freeze.

If you're still in the fight, flight or freeze pathway, you are not going to effectively do detox. So we need to take care

of the foundational behaviors.

Fix your gut, fix your adrenals, get you on a good eating plan. And notice I don't say diet because it's not a temporary state. It's really something that you can maintain over time.

You know, get your sleeping, fix the relationship with yourself, fix your relationship with others, fix your thought process. Those are the foundational behaviors.

And then and only then when you've handled that, can you move on to what I call higher order level behavior, which is to get rid of the toxins so that you don't overwhelm the system, stress the system, and then backslide.

So detox removing toxins is often not the first thing that I go to, even though I'm a detox doc, right? I have to fix the foundations. Exactly. We have to prepare the person for detox and it can take time.

But then patients actually begin to get excited about it because they see their whole life changing before them. They they're they're able to sleep. If you're not sleeping, you're not going to detox.

In fact, our brains, our brain detoxifies when we're sleeping. So and if you're unhappy a lot, if you don't make those unhappy a lot. I mean, maybe due to a poor relationship or or due to, just lifestyle habits that need to be changed, then.

You're too inflamed to detox appropriately. So then people get excited when they when they make that commitment to to changing the course of their lives.

And what an honor it is to work with people when they're doing that. Yeah. I mean, transformation occurs in the I thought I thought transformation occurs immediately and then transition occurs over time.

And so when that person gets that, that moment of saying, oh, yeah, I had a patient sitting in my office yesterday and I said to her, I said, I rarely ever see this, but you're you're going to be that person on those two fingers and you're one of them.

Where I'm not sure what difference I can make until you either transform your marriage or get out of it because it is that toxic for you. So and she said she was like, yeah, I kind of know that.

I said, have you done everything you can to fix your marriage? She said, I've done everything I can. I said that my recommendation clinically is that you get out because it's toxic for you and we can't get to start.

We can't get started on taking care of you and your weight loss until that toxic thing that's messing up your gut, your adrenals, your sleep, your mood, your hormones, we need we need to resolve that root cause issue.

So that's relationship to self and relationship to others is is a core part of that foundational approach. Right. And speaking of of a poor relationship, right.

That does affect our sleep. Of course, people people stay up at night miserable when they're in a bad relationship. Yeah. So then that affects the adrenals in turn.

It affects the organs. Then it causes more inflammation. So 1111 difficult place in our life and causes broad spectrum range of, of of dysregulation in our system.

## Detox Foundations and Safe Detoxing

Yeah. From, from mental and spiritual to, to biochemical. And so making that one change, like fixing a bad relationship in whatever way you feel is right, it's huge.

I think it's also really important here to to make a plug for managing our thoughts too, because the thoughts that we

have will either send us into a pathway of restoration and repair, or it can send us down the fight flight freeze, pathway.

And so just the thoughts we have influence what happens in our adrenals. So because our technology has advanced much more rapidly than our bodies have evolved.

So typically it takes, you know, thousands of years to evolve. And in the span of a couple hundred years, we've gone from being peasants to, you know, famine to now we have electric, electric devices at our fingertips.

And so that transition has been so rapid. But our adrenals are still very primitive. And so when we have a stressful thought, the same pathway happens with a thought about, hey, my boss is a jerk, or my boss is calling me as the pathway of there's a bus or a lion about to eat me, or a bus about to hit me.

It's the same pathway. It will shut down your digestion, shut down liver detoxification, focus on getting glucose to your big muscles so you can run from the lion.

We're still very primitive, and so it's critical to make sure that our thoughts don't send us down that rabbit hole. Because that rabbit hole, it's like a dead end and there's a fox behind us.

So it's never a good one. And so the thing I always talk with my patients about, one of my favorite examples, is a patient said to me she was going away for the weekend, and, she's two autistic kids.

And she said to me, what if my and her kids are old enough to stay alone? And she said to me, what if they burn the house down? House like that is just so not the question I'd be asking is. So any any question that starts with what if is a question that you're going to want to fire?

Okay, those questions endlessly send you into disempowerment and anxiety. What if the house burns down? What if they die? What if someone murdered? I mean, it's never good, right?

And my fifth grade teacher used to say, what if a big pink elephant sits on you? And I was like, okay. So he sort of highlighted how ridiculous whatever is.

And so I always say to my patients, let's work with that question. And any time you have a what if you're going to want to convert it into an action that you're or a question that your brain can work on.

So, for example, instead of asking what if they burn the house down, there's really two pathways. One pathway is what do I need to do to ensure that my kids are safe while I'm away?

And what would I do if, in the event something bad happened? What safeguards and backup plans do I have set in place so that they're safe? Same kind of questions, except that those two avenues give you your brain the opportunity to come up with answers.

What if questions leave you down in a dead end rabbit hole and don't allow you to be empowered? So training the brain is critical because that impacts how your adrenals respond, right?

So when I asked her that, she said, oh, well, I would do this and I would do that. I'll have my neighbor on call. I know one of my other children will be checking in on them.

I'll make sure that they understand, you know. So she really could dive into the action items needed to make sure that her kids were safe, because that's really the question she was asking is, how do I keep my kids safe while I'm not with them?

Right. And I think you bring up a really important point here, because people will have a way that their minds will loop, just like the, the, the, the information gets stuck in a loop.

The mind can get stuck in a loop. Now, it could be that it's just mental patterning, and it's the way that that the mind has been trained that that we have trained our minds right to, to think a certain certain thought.

Maybe it even gives us comfort in some way to think these thoughts. So so I work on patients to help calm their minds as well. I might give them cranial psychotherapy or teach them meditation techniques, grounding techniques.

But another thing that's important is that a lot of patients might have OCD or anxiety or depression as a result of infections and toxins. Yeah. So sometimes we're not able to get the mind under appropriate control until we treat the infections and the toxins.

And so what do we do for that person. We we just give them a lot a lot of treatments to calm them down. It might be certain IVs might be certain supplements, maybe bodywork or acupuncture.

Yeah. And and just calm the system down. And of course, those thoughts, the OCD, the anxiety they'll pop up it it it'll happen. But we notice it coming back down again.

Treat. And then that helps change the patterning. It's such a great point because I always say to people, you know, 80% of the time, if we're on the right track, you're going to start getting better.

And it's those times that you don't respond that indicate that there's probably a toxin or infection that we've not yet addressed or covered. And so the typical a lot of people will respond to fixing the gut, fix the adrenals.

But if you don't, that's the time you go, oh, oh, I probably have a toxin, probably have multiple toxins because like it's smoke and fire, you know, where where there's one there's often others because the innate issue with detoxification is often genetic and liver function.

And so if you can't get rid of metals, you probably also have a hard time with, with other toxins like the micro toxins or the environmental. So it all or the chemicals, it all kind of starts to make sense.

Right? I like to look at their genes of detoxification and yeah. And match that with with their toxin load and, and very, very often I'm going to see that they have a high load of toxins and, and they have a lot of mutations in their genes of detoxification.

They're just not able. Right to detox. Yeah. Yeah. I would say to my patients we're in this together. I'm loyal to my toxins. Do right. Like I've sort of rolled out the welcome mat and made them nice and comfy and, you know, want to leave.

Exactly. I want to leave. So we have to let them off very, very gently, very slowly. Some people it's a much slower process. Some people, some people it can be a more regular pace.

But a lot of my patients, not at the beginning. It's got to be slow. Sometimes we have to calm the nervous system first. Yeah. Work on the thought patterns first and then work on the cells.

Work on inflammation more, maybe give some peptides and then we detox. Then we kill infections. And and I'm never going to kill infections until I've begun detox first.

Because as we're killing infections, they release toxins, they release bio toxins and mycotoxins and, parasites hang on to our, our metals. So then we kill parasites if they're going to release metal.

So now imagine, you know, patients like, I want to start killing the infection now. And I say, wait a second.

## Testing for Toxins and Metals

You've got too much, too many toxins in your system. I'm going to make you more toxic and more inflamed. If I start killing now, not now or later, you know.

You know, so. But it's so impactful to deal with the toxins and toxic. It's so impactful. So people start to feel better. Right. Which is great because. Yeah.

And they're more they're more able to to handle killing off infections a lot of times if we try to kill infections before we've appropriately detoxed, it doesn't work or it backfires, people become worse.

So there's an appropriate order to follow. Yeah, yeah. Totally agree. Yeah, yeah. So so the link between persistent infections and environmental toxicants.

Tell me more about what you see, Wendy and I, I mean, I think it's so clear. So what happens in that state of inflammation that we talked about where the there's the inflammation, the immune system is compromised and then the body essentially doesn't go down the right path or it goes the it doesn't understand where it's supposed to go and how it's supposed to work.

So often what we're seeing is patients with micro toxins, metals, chemicals, herbicides, pesticides, insecticides. This creates such a state for people that they can't then fight off the, typical cold.

And so I can't I'm always sick. I'm always saying, you know, if someone eat streets away, get sick, guess what? I get it too. And I'm like, oh, well, we got to fix that, right?

And again, we're going to fix the adrenals, fix the gut, make sure the minerals, nutrients, the mitochondria really, really sort of love, love and coddle the system.

Right. TLC for the body. Yes. The inner workings and and then start to peel away. And I think it's important to note that there's a lot of ways to remove toxins from your body.

And it doesn't have to be all done at once. It's actually very meaningful to I've found it very meaningful to pick one thing and do it well. Because it can look like you're at the foot of a 50,000, 50,000ft mountain.

That's sheer in terms of its ability to scale. It can't do that. And so it's very meaningful to pick the pick something. And now this is where it gets into what is your clinical what's happening.

You know, if you've lost all the hair in your body then I'm going to go more for metals. But if you've got a really reactive reactive body, you have asthma or you have mass cell activation or you have lots of rashes, I'm going to lean towards the mycotoxins.

If they're both present. And so it's it's prioritizing based on what your body's telling us. But it's often very impactful and very meaningful to work on just one thing and do it well, as opposed to trying to spread the resources and attention over.

We have to do everything at once because not everyone can have the resources, time, energy and focus to be able to address multiple paths of toxins and toxicants at the same time.

Right. Or it's okay. Right? Yeah. Or I might rotate. So we'll do, you know, a month of micro toxins and then a month of metals. The good thing with mycotoxins and other chemicals, it's kind of like a two for one and a lot of the times what we're pulling out the micro.

Yeah. Oh we're detoxing. Mycotoxins also also helps the detox. Yeah I think they synergize. They say do they love each other? They synergize. Yes they do. Yeah.

And we say to people all detox is good detox in the sense that everything helps. So if someone says to me, all I can do is a quarter tub of chlorella, is that okay?

I'm like, yes, you know, and people have it in their mind. I say to them, look, the dosing that we're creating is, is the standard dosing, but you're a hypersensitive person, so for you you're going to react at a much lower dose.

And it's working. Exactly. Remember it's for you. Yeah. Right. Yeah. Because a lot of times if we give somebody a standard dose it just overwhelms their system. Yes.

So it's a guidepost. The standard dose is a guidepost but it's not the holy grail. And so we really do then need to say okay what's working for you. And if you're reacting it means it's working.

Right. So this is good. You don't have to get to the standard dose. You're good. You know exactly for you. Right. Let's talk a bit about testing. But testing do you like to use I love this question.

Brand names. Okay. Absolutely. So it depends whether you have Medicare or not. If you have Medicare for mycotoxins, we do the real time labs, which is otherwise it's 799, which a lot of people don't want to pay if they don't have Medicare.

But Medicare covers that. And then for people who have standard insurance, we're using Great Plains Laboratory. And on the Great Plains testing, we're doing the mycotoxins, the GPL talks, which is what I'll call other.

That's the plastics styrene, the VOCs, the beauty products, the phthalates, all of that, as well as the glyphosate and insecticides, herbicides. So that's great because both the real time and the great plane, our urine tests.

And so you can get a lot of data off of one tiny little tube of urine. It's like 15 mils, right? It's not the same test I use as well. Although for the Great Plains test I'm also using the organic acid test.

Yeah, we're doing that on a separate test. But you can you can use that same urine sample. So I just say, all right, just collect your urine for all of them.

So that's great. And then for the metals we're using doctor's data. I mean, how we approach it is, unless someone's already had a baseline test done or has a history of metals, what we're doing is a baseline test, which is just get up and pee.

And then it's sort of timing wise, it works. You've emptied your bladder, so you take some DMC for provocation and then collect your urine for the next six hours.

And that whole thing with the DMC tabs and the two tests is, I think, 174. So that's not crazy expensive, right? So that's those are my favorite. And then one nuanced test that I don't use that often, but I probably should more depending on whether people have fillings is the quicksilver try try test.

Right right. And all I always say doctors are terrible patients and this our book came about because of my journey. And I looking back, I totally should have done the try test on myself because I have mercury fillings.

It would have been impactful to know almost three years ago that, oh yeah, those are actually making a difference. And so I've, I've gotten to that information by backing into it because I can't get rid of my mercury.

And I have these fillings and they are continuing to off gas. Do you have a dentist that you're working with? I do, yeah I love her to pieces. She she's I didn't want to get them out because I didn't want to crack the teeth.

And I was reluctant, you know, I had all this noise. I'm human. I had noise in my brain. About course you're human. Yeah. No, it's going to be traumatic.

They're going to release the mercury. I'm not really having that much anyway. There was a lot of things I said to myself. And then she said to me, you're completely wrong.

She's awesome. Her name is Yuko and she's amazing, and she's in Boston. And she said to me, it's really your thought process is not accurate. And those need to come out.

I was like, okay, see great doc. Well, of how we are our own worst patients and doctors are terrible Bayesians. So

yeah, don't try that. Don't try this at home.

Don't do it. I did you yeah. You want to get them removed? I took a long time to get mine removed as well. I had mine removed by a dear friend of mine who's a biological dentist here named Doctor Mary Ellen Chalmers.

And actually we have, an oral surgeon joining our clinic. His name is Doctor Ali Pennebaker. It's going to be amazing because he's so jealous. Yeah. You can send your patients to him over here.

He sees patients from all over the country. Because to me, there's there's, infections underneath root canals or where wisdom teeth have been pulled. And that causes more inflammation. So the dental piece is very important.

Yeah. Yeah. So I also like to measure people's metals unprovoked as well. So just through lab core, you know, just straight up urine and blood just to see what the acute exposure levels look like as well.

## Treatment Approach and Hope for Recovery

And then, I've never had a patient with an acute exposure, in terms of, like, that was timely enough to measure, you know, but I'm always curious about what happens before you take out the mercury fillings and in the blood, what happens after.

I think that's a great study. I don't have the data on that, but. Yeah. I'm seeing a lot. I'm seeing a lot of mercury, land, arsenic and aluminum just in people's blood and in their urine.

Just straight up from lab core. Yeah, yeah. And I think the, Genova has a great test that will look at toxin exposure and mitochondrial function and the new travel test will also give an insight into is there all is there presence of any or all of those metals in the blood also?

So that's another nice way the you know, there's you can do it with a lab core and then you can also do it. The Genova test will do that. Yeah that's great.

Yeah I like to test unprovoked and unprovoked. I'm just and it also has a a water contaminant test and the patient just orders it themselves. It gives so much insight into into that because patients are like I, I have high mercury but I'm not eating fish.

I have high arsenic. Why? Well, let's check your drinking water. Yeah. So yeah, always. But it's everywhere. It's ubiquitous. And so there's hope. There's hope.

We can we've been telling our listeners all about, the issue. Right. But but I think it's really important that they hear from us about about treatment.

And, you know, we've been talking about treatment as well in the middle of this. But I just want everybody listening here to know that, that we've been talking about diagnostics.

We've been talking about what we've been finding and how it affects your health in general, your immune system, your hormonal system. And so why why we want to pull this out.

We understand, but just know that we have methods to pull these out. And when do you and I should do a whole nother seminar on that? On on how we detox.

Because that doesn't that deserves outreach. Huge. I mean, you people, like, summarize your detox was like, there's a lot there's a lot there. And and the more we do the more we find like, oh, we like that product and let's use that.

And there's some crossover. I mean, there's just so many options for products. So it's fantastic because we're really I would say we're really privileged to be doing this now as opposed to even ten years ago.

I think that the technology and the approach wasn't as refined and as savvy. It just wasn't as good. It's true, it's true. So we have all this technology to test you and and technology to treat you.

Yeah, yeah, yeah. But just know we're going to be supporting your organs of elimination. We're going to be supporting your cofactors for detoxification.

We're going to be giving you binders to help bind the toxins. That's just like a five second overview of how detox you. But there's many, many ways by which to do it.

And it's all personal. Yeah, it really is. It's it's personalized to what your body needs. Yeah, exactly. Well, thank you so much, Wendy. Is there anything else that you want to share?

Oh my goodness. So much innovation. Right. This has been great. I would say that, what would I say? I would say, you know, don't give up. Your symptoms are not because you're depressed.

You're probably depressed because of your symptoms. Exactly. And don't give up. Work with a functional medicine provider and we're I see someone said to me, is this normal?

I said, no, I refuse to accept that we're meant to just fail. Over time, I reject that exactly. So I invite you to reject the conventional wisdom that says that you're meant to get worse and worse over the next ten years.

I reject that, yes, I reject that too. And also that you're just aging, right? Oh, I'm just getting old. No, no no no, there's a way to turn all of this around and that's what we're here to help you with.

Yeah, yeah. And don't go it alone. There are tons of communities that you can belong to, so you don't have to do it yourself. Feel like you're alone in this and you feel like you're just sort of floundering.

Join the Facebook groups. Join. Join the online communities and work with a provider. It's it's absolutely fixable. Absolutely. It is. Yes. Thank you again.

I look forward to you. Wendy. Yes, totally in the face I thank you. Take care. Bye bye. Also, before we say goodbye, Wendy, I understand you have a gift that you want to give the audience.

Do tell them that we do. So I know how it feels to be standing at the foot of that 50,000ft mountain. That's a sheer cliff on. How do you detox your life?

And so, because of that process that I've gone through, me and my team have spent many hours putting together a guide for how do you start to level up around mostly environmental toxins to get them out of your environment?

That's your beauty products. That's your the pans that you use, the furniture you're using, your the bed you're sleeping on, where do you go if you need a new one?

So we've put together a full guide, and it's meant to be a companion to our book. So the book is Dirty Girl. Ditch the toxins, look great and feel freaking amazing.

And the guide? You can get it on our website. It's free. It's at five journeys.com/promo and the Five of Swords five. Jo you are now asked com forward slash promo and that'll get you.

Just put your email in and then you'll get the guide. We normally sell it but we give it away for you guys. Thank you Wendy. They're going to love that. Yeah.

Thank you again. My pleasure. Really great to be here. It's such it's such a contribution for people. So thank you. Thank you for being here. We'll talk soon. Yes. Bye.