Introduction to Mold and Immune Dysfunction

They're very tricky. So there's three different ways they can impact the immune system. They can actually impair the genetics of your immune system so that you stop making smart antibodies.

And what we see a lot with like Epstein-Barr virus, the whole herpes family, it's very common to have those be chronic and recurrent in people who are exposed to mold because they are.

And a lot like Lyme, too. They are particular microbes that rely on the immune system. Remembering so that when season it's like, oh, right, I know about you.

And here's how we take care of you. Lyme is very important that way. You know that you don't have you don't like cure Lyme out of a body based body puts it in a jail.

Isn't that a good way to think of it? So any infections like that where we have to keep it in jail in our body mold will change your immunity. This is doctor Talks, real talk from real doctors on the issues that matter to you most.

Today on line bites. I'm honored to welcome not just an expert, but a dear friend, doctor Jill Cresta, a leading naturopathic doctor, educator and author who's helped thousands unravel the mystery of micro toxin illness.

Her work has truly changed the game when it comes to identifying and healing from mold related conditions. And I can say that personally, having completed her mold certification course, which was absolutely brilliant and packed with clinical insight.

How Doctor Krista Entered Mold Treatment

And this episode of Lyme Bites, Doctor Krista breaks down how mold and mycotoxins disrupt the immune system, hijack our health, and mimic or amplify complex chronic illnesses.

And more importantly, how to find your way back to health. If you've been sick without answers, this conversation could be a breakthrough. Get ready to challenge old models.

Embrace a functional root cause medicine perspective, and uncover real hope for healing. This is Lyme bites. Let's dive in. Welcome, doctor. Krista, thank you so much for joining us today.

Let our audience know a little bit of how you chose to specialize in treating mycotoxins illness. It shows me that I was working with chronic Lyme patients.

And acute, of course, but, that was that's how I started with the Lyme world was, you know, an acute Lyme case. And then I didn't know how to treat it. Right.

So then it became a chronic Lyme case, and then it was like, oh, I wonder if these other people, it's actually Lyme. And then, you know, away we went.

And when I went to the islands physician training, I got really comfortable with a bigger toolbox, you know, getting more comfortable with antibiotics and that kind of thing.

And it's amazing, like when you find and treat the cause, people tend to get better. It's kind of a novel concept. Yeah. Wow. Yeah. And so here I was finally having the success, you know, at this thing that I had missed before because as we know, Lyme is the great imitator.

But then there is a subset of people that still weren't getting better. And in one of those patients, they found toxic black mold during a remodel. And that was the Pandora's box opening for me, was like, oh, I don't think I understand all the things mold can do.

And I just hit hit the books, you know, hit the research, and there's a ton of animal research and, and realized that, like, where's all the human research and realizes I'm reading these, like, mycotoxins that are made from mold can cause birth defects.

They can cause cancer, they rewire the immune system. And that's when I realized we're never going to have those studies. Because you can't. Medical ethics, thankfully, dictates that we can't say, hey, who wants to sign up for a study where we're going to poison you, and then we're going to give you milk? This on it should be okay.

It should work. And we'll see. It works in animals, but we don't know. Yeah. You know, it was kind of like we're never going to get those studies. So I just took the, you know, took the reins.

I was like, well, I'm not going to wait for a randomized clinical control trial. I'm a naturopathic doctor. I have a lot of comfort with these things like milk, this all turmeric.

You know, all of these things are giving you animals. Yeah. Kind of know the human doses. Let's try it. And people started to get better. And so that's where.

And then, you know in the Lyme community somebody gets better. They tell people on Facebook and you know this is even pre Facebook, you know, in the communities of like go see this lady.

So then I had the, the situation of people flying in from all over, even Ecuador to see, you know, get treated for mold. And then, you know, you tend to get a, repetition success.

You know, there's just the when you see enough patients, you see the trends of what's working, what's not working. And I knew the things that I could throw away that I thought were going to be good, but ended up not being good.

And then kept hitting the books to find new things, you know, like, who knew grape seed extract would be good for mold? Like I, I wouldn't have known that, till I found an animal study.

And I was like, well, let me try it. And lo and behold, their mycotoxins started dumping out of their kidneys faster. So like, okay, you know, like, I'm just I was just trying stuff.

And that's how how. We got here. How long ago did you start treating mycotoxins? Illness. 2000.

What Mycotoxins Are and How Mold Harms the Body

The the remodel, I think was in 2007. That was the big. Like, okay. Oh. You know, to 6 or 7, something like that. Yeah. It's about 20. Years. So for those who are new to this topic.

Yeah. Can you explain what mycotoxins are and how they differ from molds or just a mold exposure or a mold allergy. Yeah. So mold can make us sick with with a few different ways.

So the spores themselves and those are what a lot of people have allergy symptoms to. And then the fragments. So the fragments are when a spore dies or breaks apart and one spore can cause 300 to 500 fragments.

So if we think about mold, a one inch square of mold is a million spores. And so if you go in and you're like, oh, we have Molnar carpet and you try to tear it out without containing it and everything, you've just released many, many more fragments.

And those are really hard on the lungs. They're kind of like asbestos that they can kind of lodge into the lung tissue and permanently irritate them. So we have spores, spore fragments, and then living mold spits out all of these

chemicals.

So that can be anything from, VOC. A lot of people think of VOCs from new materials, but microbes make them too. And that can also be alcohol. So some people can actually get kind of buzzed feeling when they're in.

There's, an environment where there's actively living mold because they're spitting out this alcohol and you're taking it in into your body so you can feel maybe a little bit drunk from breathing this moldy air.

But then there's this other fourth thing that is the mycotoxins. And those are made by mold on purpose, not all the time to compete with other microbes in the area.

So if they are starting to sense that another microbe wants to come in and enjoy its humid spot, I kind of joke that it's lakefront property for mold.

You know, it's like humidity. This is my favorite, you know, and it's very, very little bit of humidity. Mull can grow it over 50% humidity. So you know, in mold like New England where I am in the Midwest, like Pacific Northwest, Florida coastal zones, you're dealing with way more than 50% humidity.

But so it really helps mold if we water it and we keep our indoor environment humid. So it'll move into a humid environment. And if it knows there's another mold spore there, it'll start making this chemical to kill the other microbe.

And that means they're super lethal. And that's exactly what happens to us as well. We're not the target, but by being in that environment, it has all the same biological harm to our bodies as it does to that other spore.

So it's mold spores, mold spore fragments, mold chemicals when it's growing and then mycotoxins when it's feeling competitive. So, you know, if there's a mycotoxins in the area, there's another mycotoxins because the spores are going to be competing.

Yeah. So there's often more than one species of mold present that are making the different types of mycotoxins. Yeah. And that's the trick. And so in my patient population, even before I was, you know, the mold lady say, just like chronic Lyme, mold allergy accounted for anywhere from 5 to 15%, usually around 10% of the symptoms.

And that's going to be your spore reactions. Spores induce mast cells and histamine like nobody's business. They're very, very good at that. So that's going to be respiratory stuff.

And this is what the CDC recognizes is mold illness. And then if you're really immune depleted it goes all the way to the other side of aspergillosis.

So that's when the fungus is actually coming in. It's invading. It's infecting. But in my patient population there were 80 to 90% of symptoms that are not accounted for from the spores.

Right. And that's the mycotoxins. And that's going to be things more in the range of toxin based symptoms versus allergy. And I can go through the kind of the typical cluster if that's helpful.

Yeah, I think that would be great. And something that I also want you to address, because I know that this is the most baffling piece and almost makes the diagnosis feel dis believable to family members, is why you can have a family of, say, four and you have a mother who is completely neurologically impaired and the father has no symptoms, and maybe one child has a cough and then the other child is is pretty much fine.

And so it's like this disbelief that one person can be so impaired by something that they cannot see, smell or taste, you know. Right. Right. Cannot sense its presence.

What so ever. And one person is debilitated while other family members have hardly any symptoms. Are you ready to revolutionize your approach to diagnosing and healing complex, chronic inflammatory illnesses in both adults

and children?

The Line Bite Symposium is your gateway to cutting edge education, groundbreaking research, and innovative therapeutic solutions. Join us at the 2025 Lyme Bite Symposium November 14th and 15 at the Fort Lauderdale Marriott Pompano Beach Resort and Spa.

Lyme Bites is the premier functional medicine conference on complex, chronic infection driven inflammatory illnesses. This year's meeting is jam packed with leading industry experts discussing long Covid mycotoxins, illness pans, pandas as well as Lyme and other vector borne diseases.

This conference will arm you with the knowledge, clinical pearls and practical solutions that you can implement immediately into your practice Monday morning that will literally change your patients lives and get them on their path to true healing.

So join us at Pompano Beach or virtually from anywhere. Register now at Lime bites.com. That's alchemy bites.com. Yes, and that is more normal than it is.

The exception that that tends to be the rule, not the exception. Everyone reacts differently. And this has to do with a lot of factors. So I have identical twins.

So same genetics same house same diet. I was making all the food and their symptoms were different. So it's not even just a genetic thing right. So it is genetics for sure that some people are pretty crappy detox sapphires.

You know, they're not good at getting toxins out. From my perspective, it's much less about the HLA expression, which we hear a lot about. You know, the 25% of people have this.

You know, this gene for my practice, it's much more related to how good are you at detoxing and then how toxic are you already coming into this exposure?

Why Mold Affects Family Members Differently

So if you have already amassed a lot of toxicity, you're going to be more sensitive. And we learned this from animal studies to people who are higher in DHEA, their cells were more protected.

So the De is a fish oil for those that are listening. And what it functions as is a structural component of our brain and nervous system. In animal studies, if there were mice that had more DHEA in their brain and nervous system, it actually bumped the mycotoxins off the membrane.

It was like, no, no, no, you can't come, no, you can't come in here. So it keeps the mycotoxins in the bloodstream so the body can detoxify it better.

We see if you're lower in reduce glutathione in your in your tissues, in your mitochondria, then you're more affected than an animal. We're animals that didn't have that much, bio paranoids.

So there are these certain nutrients that can lead someone to be more susceptible. So it's genetics, it's diet. It's your previous exposures not just to mold but to toxicity in general.

So how how high is your cup filling up. And we're all given a different sized cup when we're born. So for some people a little bit of toxicity is going to spill over into symptoms a lot sooner than someone who is like one of those super detox ers, you know, people that can drink, smoke, go to McDonald's.

You know, they're just like, they're fine. They sleep great. They poop every day. You know, it's just like, yeah, what are you made of? You know? So yeah, that's a big piece.

Also, who's closest to the mold? Who's got the vent right by if it's in their furnace and the vent is coming down onto

them while they sleep. Who's got the mold right on the wall where the head of their bed is?

Who's got mold at school also. So it's getting a double whammy exposure. We find in, in a lot of families, the person that's most affected when we bring in, you know, the inspectors or the mold dog or whatever, they're the ones that are closest to the most toxic mold, even if there is less toxic mold in other places in the house, the ones closest to the toxic species tend to be more affected, so lots of things can play into it.

The biggest thing in our research, doctor Neil, Nathan and I have a, research project going on right now to validate the clinical questionnaire that I developed.

And all of these years, we're finding that previous or known exposure, but previous exposure is one of the most key problems or symptoms or whatever, that's going to make you a mold sick person.

So that goes back to that colonization thing. Like if you had a bad exposure before and it has changed the microbiome of your sinuses and your respiratory passages, that's going to make you a much faster responder to the next exposure.

That makes sense. I mean, it does. I mean, it's although, you know, we'll talk to EMT is who say, if you can't, you know, everyone has fungus in their sinuses, what's the big deal?

And I agree with them. Everyone has fungus in their sinuses. The big deal is, according to Doctor Brewer's study, which blew my mind and completely revolutionized how I was treating, it that the ones that are sick and sick from water damage, building those spores aren't just things you breathe in and you breathe back out again.

They become residents, and when they're being residents, they're not good neighbors. They're making mycotoxins. So if we tested healthy people and sick people made sick from water damage building with chronic fatigue, which was what his study was, they sampled all kinds of they sampled, sinuses, lung, gut, brain, sampled all these tissues.

And lo and behold, everybody had fungus up there and their noses, but only the sick people did they find mycotoxins. And so that's, you know, I work with a, really talented ENT doctor, Donald Dennis, in Atlanta, Georgia.

I send a lot of patients to him. And the very first patient that I sent, he had sinus symptoms. But you don't have to have sinus symptoms, have sinus colony colonization.

And that's what blows everybody's mind. But this guy did. And so I was like, I think you need the surgery. And he has, he has a cyclone machine that, like, sprays in it, conocen and sucks it all out again or whatever.

But he had to take a fungal ball out of this patient first. He puts it on the on the sterile cloth. And that fungal ball half hour later had made mycotoxins.

It was still making mycotoxins even out of the body. So you and this patient had like Parkinsonian autism. Yeah, he doesn't anymore. He's perfectly healthy now. You know.

And he was he wasn't able to walk without a cane before that. And it's like. Amazing. Why wouldn't we treat that you know and that's it. And you say that I overdo the treatment and I'm like, why?

Why did you get rid of that? Those are right by your brain, you know. Yeah. Incredible I it is your. Story after story about success stories. So I hope anyone listening if you're getting worried or scared I have I cannot tell you.

It's rare to not have somebody do better, you know? So just stick with it. That's great advice. Okay. So take let's take a step back because I got us ahead of ourselves.

Yeah. So please tell us tell us the symptoms of true mycotoxins and illness versus like, a mold allergy. Yeah, I think most people know what an allergy feels like. Yeah, right.

You know, you're you get exposed, you start sneezing, you get itchy, and your eyes water and your throat scratchy, and, you know, your lungs might get irritated.

There's a lot of cases of asthma that started with a mold exposure. And there again, I think lungs get colonized. So, that's like the allergy side. So for an adult, it looks a little bit different than a kid.

In a kid, they're going to respond first with more skin stuff because they're little sponges. And we can take these mycotoxins into our skin so they'll have a skin thing before they have their brain go off.

So whereas an adult, typically it's going to be brain fog, fatigue, that the idea of just like your brain literally runs out of gas and visual problems as well kind of feels that way, that you have trouble comprehending, you have trouble reading, and the eyes can feel like they just literally run out of fuel and that you just need to, like, I just need to close down and shut down for a little bit just so I can, you know, rest my eyes.

Almost. Ear ringing is very common with mold, so I'm just going top to bottom. Young headaches. We can see headaches, of course. Sinus and allergy. So don't don't rule that out.

You know, if you're like, oh, she didn't mention that. Mycotoxins. If you have mycotoxins on your nose and in your sinuses it's going to irritate stuff.

So you'll get more reactivity. You can see irritated lungs is where we're talking about any kind of skin problem. Now that in grown ups, that tends to happen after the brain fog, whereas in kids it's going to go the other way.

But whatever your skin thing is, if it's acne, it's going to make it worse. If it's more aging, it's going to make that was so. It just takes your Achilles heel of your skin and goes goes with it.

Yeah. Gut problems are very common.

Mold Exposure, Chronic Illness, and Hidden Symptoms

So irritable bowel Sibo, so small intestine bacterial overgrowth because the mycotoxins change the, the speed of our, our peristalsis. So the squeezing of the tube of our gut, it'll slow those things down.

And then you can get bacteria moving to places in the gut. It's not supposed to go. A lot of times we'll see bloating food reactions. There might be food reactions to histamine containing foods like leftovers.

That's a really common one. Or broth and things that are cooked for a long, long time. And then another really odd one is pelvic pain. That is really commonly a mold problem.

And the reason is that we detoxify these a lot through our urine. And if, if the urine is there too long, those mycotoxins are just move into the nervous system of that area.

And it when mycotoxins are there, they ping, they just continuously ping the nerves. That's why your ringing is common, because if you're breathing them in through your nose and sinuses now you get a buildup in that area and it just pings the nerves.

And so you get constant ringing. So pelvic pain and ear ringing, visual problems, fatigue, messed up gut. I'm like, we need to be talking about mold. Yeah.

And in kids we've also see also grown ups. So kids will we'll display this a little faster. Is urinary frequency because the body knows oh there's a toxin there.

So let's get rid of it. It's really smart right. But it's inconvenient if you have a kid who can't go to the bathroom other than at recess time, you know, that can be really a problem.

Some kids actually refuse to go to school because they don't want to be embarrassed from having to pee all the time. Yeah, yeah. So when it comes to, like, a family, right?

That's all being exposed. And we have these varying degrees of response from the body. It's just as dangerous for everybody to be living in that environment.

Right? It's not just the person who because they have other genetic or structural or, you know, environmental hits against them. Right? It's equally as dangerous.

And a lot of these mycotoxins can lead to cancers and, and other debilitating neurological diseases down the road that are more chronic. And we're just going to, you know, get explained away anyways like something like Parkinson are you suffering from Lyme disease or another complex chronic illness and aren't sure who to trust when it comes to herbal supplements?

Hi, I'm Doctor Mariah Hinchey, founder of Lyme Core Botanicals, as a naturopathic physician specializing in complex, chronic infection driven illnesses like Lyme disease, I needed herbal medicine I could truly trust.

That's why I formulated Lyme core botanicals, where our herbal tinctures are handcrafted in small batches. Right here in Connecticut, we use the whole herb never isolates to preserve the full spectrum of medicinal compounds.

Every single step, from sourcing to extraction is done with precision to ensure maximum purity, potency and consistency. These are the same herbal formulas I used to heal myself and have used for years to help my patients and family members heal too, and now I'm making them available to practitioners and patients everywhere.

Lyme Core Botanicals herbal medicine you can trust from a doctor who lives this work. Learn more at Lyme Core Botanicals. That's Ali and E schoharie.com.

Yep, yep. And Doctor Bredesen talks about inhalational Alzheimer's. This is linked to breathing and mycotoxins. And they go to the brain. So the person who's not reacting is just not reacting yet right.

Militaries around the world use these mycotoxins for bio warfare. They wouldn't do it if it didn't impact everyone. So it's a matter of dose duration, which mycotoxins?

Some are more toxic and potent than others. And so when I you know, usually it is the dad who's not the reactor. And that just has to do with like the more body fat you have, the more you can take on these toxins.

And you know that no judgment on dads is just your biology and say thank you. You know? And also, testosterone is an amazing anti-inflammatory. So, you know, that that could be just that, you know, they're able to handle it for a while.

However, when we test testosterone levels and we look at testicular function, we got a problem because a lot of these mycotoxins will they're harmful to the testes themselves.

They cause testicular damage. And so when we can start to see, like my long term patients that I had, that were healthy and we were, you know, just tracking I always am in men's men's health is like dear to my heart.

There's a reason God gave me boys because I just like, you know, like, I'm. I'm a boy, mom. And I was like, oh, you men, you're so forgotten by the medical system.

So I had a lot of male patients that were, you know, either working on, like optimizing their VO2 max to I, you know, I've got a problem or hair loss or who knows what.

So I noticed the patients that were having a new mold problem or they moved into a new home, a new house. They had mold, their testosterone was tanking.

And I was like, this kind of makes sense, actually, because if the liver is busy working out the toxins, it's not going to get around to balancing hormones because the liver makes our hormones.

Right. But then also some mycotoxins are estrogenic. And so I was not only seeing their estradiol go up, I was seeing their testosterone attack. So that's what I asked dads, is will you fill out my and your pores questionnaire?

How is your test doing? And a lot of times they were starting to get muscle mass wasting, trouble gaining weight, hair loss issues, you know, erectile dysfunction.

There was that is how mold can affect a man before it even shows up as like the typical toxicity. Right? Yeah. That's important to think about. Very. And it's important also to address and treat because that, you know, low testosterone is not just about sex drive.

It's about bone density. It's about brain health. It's about cardiovascular health. Like this isn't just about, oh, I couldn't have sex, you know, not that that's not important, but it's really important for the whole body.

There's a reason why we have these hormones, and it's more than more than a sex drive. Way more. Way more. So how would you advise our listeners who have medical practitioners that they're seeing that say there's mold in every house, there is mold outside?

We are all constantly exposed to mold. Your naturopathic doctor is crazy, you know, for for suggesting that mycotoxins illness be a piece of what's going on with you or your loved one, right?

What do you how do you care for them to handle that? Sort of, because I mean, it is true, right? It it is true. There's mold everywhere. Yeah. But how do you respond to that?

So the mold that is outside is part of nature. And so it acts more naturally. It has all these nature forces that keep it from acting out of a harmonious way.

So it's got the mycelial network in the soil. That is really the supreme intelligence on the planet is like it's connecting the trees it's talking to.

Is it going to rain? You know, all of that is going on. And then you've got, you know, UV light, you have wind, you have air movement, you have little insects that drink up all the dew in the morning and take care of the excess water.

That's not happening in an indoor environment. So it's rare to find a mold to make mycotoxins outside. The only time it's doing that is if it is like in a swampy environment that does, that has lost, you know, it's gotten like an algae infusion or a chemical infusion or something like that inside.

We don't have any of that. So we have no wisdom. It's disconnected from its internet, so to speak, you know, and it's got moisture. It's favorite, you know, food and water basically, and competition.

Wanting the same thing without air movement, without UV light, without insects taking up that extra moisture. So you've got a problem and it acts very unnaturally.

It's not normal for mold to make the mycotoxins it's making. And actually when they're trying to create it in a lab, there's a lot of old research about how to make these bioweapons.

They have to add certain nutrients to a plate to grow it well enough to make it mad enough to make mycotoxins. Mycotoxins are incredibly energetically expensive for the mold to make.

It doesn't want to do that. It weighs a ton of its resources to make these so. But inside, if it doesn't have all of those forces, it will. It will take the cost, because it also has plenty of water and plenty of food in your house.

Yeah. So remediation. I think anyone that knows anything about mold, you know, remediation is a very serious thing that has to be done appropriately.

Mold in Buildings and Why Remediation Matters

And so when I ask you this question, keep in mind I'm not asking you from a big, you know, remediation standpoint, but if someone has like even a little bit of surface mold that they might see what would be an effective way to approach cleaning it up, that isn't going to just kind of piss it off and make it make more mycotoxins, right?

You know, so something that's effective in cleaning it but isn't going to cause future problems because I know bleach can lead to problems. I'm pretty sure using like, white vinegar is the best.

But then there's all these other industrial mold cleaners. What in your opinion? Again, if it's small, if it's isolated, what is the weight? No. Non-porous on a non-porous material, right.

Yeah. Yeah. So of course remediation needs to happen if you have any mold affected animal defective material that is has any porous ness to it at all.

So that would be drywall wood. You know, anything that is not tile or concrete basically. That needs to be removed. That's the gold standard. Like it just needs to be removed.

There is no such thing as dead mold. Although the inspectors will say we tested it and it's dead mold. What that means is it's not growing little roots.

It's not in growth mode. But that means that a dormant spore, dormant spores can regrow anytime the humidity goes back up of them about 50%. So there is no such thing as dead mold.

There's only a fragment. And so an important thing would be like when people say, well, we took it down to the studs. Well, unless your studs are made of metal, right?

So like if you have two by fours that make up the framing of your house, or if the sill of your house, you know, is, is made out of wood. Wood is porous, and taking things down to the studs might not necessarily be eliminating all of the mold that's there in the home.

Exactly. Yeah. We tested this in my own house. I was like, I was the perfect person for this to happen to because we tested every step and there was one time where the remediate was found in our basement.

We had wood framing, and they weren't able to come back for another three weeks. And I was like, okay, so what I want you to do is in this section, don't do anything.

And it was my whole basement. So we had plenty of room to play with. Yeah. In this section I want you to treat it with essential oils. And in that because the, you know I'm going to say to you guys, I see mold at the base of that sill and I want it out, but they're like, yeah, we can't come back for three weeks.

And then on this one, I want you to do your normal MSR mold stain remover, which has no mold killing in it at all. All it does is remove the stain. Oh, by the way.

And then we tested bleach. So the. And then when they came back in three weeks they removed all of it. We sent it for testing the stuff that was left alone.

What happened with that? Just stayed the same. The essential oils did reduce the mold count, but there was still mold when we removed the sill and we turned it upside down and had a bunch of black mold in there, you couldn't see it.

There's a ton of black mold. The MSR and the bleach grew two additional species of toxic, more toxic mold. So we

water basically. And that's what a lot of these guys are doing.

So what, if you can't access it to sand it off like the bottom of the cell plate, that was touching the concrete, that has to come out because it will just regrow.

Right? It's it's you know, this is a very tenacious creature we're talking about. So if it can be accessed with a sander, they need to sand off. So it's physically removing it.

Physically removing it is the only treatment not fogging. Yeah I mean so yeah. So let's go back. To a non porous material. So not a little bit of mold.

It's on a non-porous material. What do we clean it up with. Yes. Here the most common one is your toilet bowl your toilet bowl that little pink stuff that grows if you are not getting around to cleaning your toilet, that's not likely to have a Kotomi.

So it can be a bacteria. So let me ask you this if you have I mean, can you tell a patient, you know, like, do do you ever do this? Do you ask a patient what they see growing in their toilet bowl?

And I mean, could that be a sign or would that just be coming from the air, or do you think that would also be coming out of of said patient who's, who's peeing and detoxing into the toilet.

Right. It could be coming out any of those. But the one that is most interesting is the tank. If there's funky stuff in your tank, that's a mold problem somewhere in your house.

It found the new lakefront property, so toilet tanks it like people need to be watching those because that can be an early indicator. You're not adding your own biological material to the tank, but you are out in the bowl so the balls don't.

But you know, I was just like giving an example of like, it can be very easy to clean if it's a non-porous material. But yeah, watch your toilet tanks.

Everybody. So if it's just like, let's say, like when I was in Hawaii, the tile would get a little overspray, you know, in the shower, and then within the day it would grow mold because it's just so humid there.

And that's tile, you know, that's not the grout. Grout is a little tricky. If it's not, you know, sealed and all of that. This is tile. And you could just use time essential oil.

There are products that have that are using this one's called benefit or ease. Three. See time is wonderful because it prevents the mold from making mycotoxins to defend itself.

So that's one of the things we know. When you're going to go after mold, it'll start to make this because it's a bio weapon, right? So it's like, oh, I'll defend myself and I'll make all of these mycotoxins.

Well, time stops it from being able to do that. And it's antifungal. So while you're in the process of wiping it up, you can use the time to, to get rid of it, but also stop it from defending itself most of the time, what I like to use rather than those products, if you have kind of a problematic area like that, like in the in the bathroom when I was staying, you know, at a conference for Hawaii, I brought thyme essential oil and just put it on cotton balls and set it around the room. That was humid.

The bathroom that. So then I'm not adding more water to the problem. But yeah, it was shocking. I was like, whoa, this grew mold really fast. So I'm going to need to be doing some prevention.

Yeah. Good to know. Yeah. All right. So let's shift gears. Let's talk about mycotoxins and the immune system. So more in relation to the theme of this podcast.

So when you have a chronic infection driven illness like Lyme, other vector borne diseases, long Covid pans, pandas, etc., how do mycotoxins specifically impact the immune system?

They're very tricky. So there's three different ways they can impact the immune system. They can actually, like impair the genetics of your immune system so that you stop making smart antibodies.

And what we see a lot with like, Epstein-Barr virus, the whole herpes family, it's very common to have those be chronic and recurrent in people who are exposed to mold because they are an a lot like Lyme, too.

They are particular microbes that rely on the immune system remembering so that when season it's like, oh, right, I know about you. And here's how we take care of you.

Lyme is very important that way. You know that you don't have you don't like cure Lyme out of a body based body. Puts it in a in jail. That's a good way to think of it.

So any infections like that where we have to keep it in jail in our body, mold will change your immunity. So the those B cells, those memory cells no longer remember the virus.

So they have to recite it all over again, like Groundhog Day. The other way is it's toxic to the actual immune cells themselves. So these these eater cells, these macrophages, which are supposed to go out and like eat things that that aren't good for us, they start to function.

So it won't even attached to that offender anymore and it loses its ability to eat them. Basically. And then just inflammation, it creates so much inflammation that it changes our ability.

Epigenetic Lee, which means around the genes to say, hey, we would like you to express more anti inflammatory antibodies rather than inflammatory.

How Mycotoxins Disrupt the Immune System

It'll choose mast cells more prevalently than an antibody reaction. So it's it's a mess you know. So then what's the result. You're susceptible to stuff.

You don't get rid of stuff. Once you get it you have more inflammation. You have more mast cells, more histamine. And you have a wimpy immune system wired that way, which we can reverse all of that, by the way.

Yeah, definitely. You just have to take the whole body approach. Yes. Go figure. So I know you work with many patients or have worked with so many patients that have overlapping conditions.

How often were you seeing mycotoxins, illness, at the root of these complex chronic cases. Boy, I would say it's it's in the above 80s percent. I mean, it's been hidden.

It's it's like you said, you don't smell it. There's no sign, right? You know, and and it's also something that is really, kind of Pooh poohed, you know, of like, oh, come on, it's just it's so normalized.

There's the word like an inspector who gets called into sick buildings all the time. So they have a selection bias, right? They have a bias of all homes or moldy.

They will say things like that, like, oh, it's just Aspergillus and Penicillium. They call it even. They have a nickname for it because it's so common.

Aspen, it's just little aspen. We see it all the time. That's not normal. Just because you see it all the time doesn't mean that's good. That's not healthy, you know?

So yeah, we're building houses. This is this is a growing problem because of how we're building our buildings. We

build the same building structure no matter where you live.

So if it's humid, if it's coastal, if it's dry, if it's, you know, and there's crawl spaces, there are these building practices that are just problematic.

And then Hvac, like there were a ton of, furnaces and air conditioning units that got moldy on the inside because they added insulation right where their drip pan was.

So it's just like, this is a completely preventable problem. That's why we're doing our research, is we're trying to get a lot of, published research on human effects to change policy and to bring about regulation in not only in mold inspection and remediation, which both of those fields are really lacking in any kind of regulation.

But also in building like, let's stop building this problem. Right? Right. Yeah. There should be certain specifications depending on the region and the environment.

But you know, it's funny, I had I had a patient the other day whose inspector literally told her, oh, this is just normal house mold. And how do you know?

And how do I like how you know? And I mean, when you've, you know, they did what you said, they did the dust test, they got the inspector, the inspector comes out in the inspector normalizes or poopoo is that they do.

Yeah. They don't even allow the people who are doing the big work like my inspector. They don't even allow her to speak at these conferences anymore. Because who's behind?

Who's the who are the exhibitors? Insurance companies. Wow. That's. We're training inspectors to not find mold, to save the insurance companies money.

It's just all it's all a mess. It's a mess. It's kind of like the complex, chronic illness sort of realm with functional medicine. Right? It's like nobody's teaching doctors and medical school how to diagnose or treat any of this.

So now people are going out and specializing in it and spending a boatload more money on training and certifications and understanding, and then actually taking the time with the patient so they can no longer be part of the insurance model.

So now patients have to pay you know, ten times more out of pocket to see one of these specialists to help them. And it's like, you know, everything is being driven by like this monster machine of in of insurance and everything else.

And wow, we could go down a huge rabbit hole right now, and now it's going to lead us there. Which is why we're doing what we are doing. We are out here educating, you know, creating solutions and, you know, so that people can that's the other thing.

If you're listening to that and you feel like then there's no hope. That is absolutely not true. Because now we have things like YouTube and we have podcasts, and we have people who have been doing this, like you with your your Lyme core products.

You've been doing this for ages. You know what works. You know the combinations. Same thing with me with a light. It's just all all these solutions. We're making it easier for people to access it and we're training more doctors.

So there's you can do a lot of this DIY. You Chakan. Yeah. So back to the complex chronic illness. Let's say, you know, like whether it's Lyme, it's long Covid, it's a child with patterns.

What are some of the biggest clues? Like if you had to say the top three clues that there's also mycotoxins in the mix because so many of the symptoms overlap.

Are there any like really big hallmark symptoms that would make you or should make someone else think mycotoxins are in the mix? Yeah, it's almost more, an exclusion, which makes it hard.

I mean, that's what we found in our research, is that when you look at a pie chart of all of the symptoms, it was a very split up. Almost every symptom had an equal pie chart size.

So it's like, what's the cardinal symptom. And that's what's hard about it. That's so the questionnaire that I developed is a tool people can use in our research.

It is showing that if you have a ten or above score, and this is based on our previous scoring, you know, we're we're modifying it. But if you have a ten or above on that questionnaire, it is a positive predictive value for multiple mycotoxins in your body.

And so yeah I was going to say where can listeners go to do your questionnaire. They can go to Doctor Chris Dicom. It's on there in the handout. So you can just get a downloadable PDF.

If you want to be part of our study, you can go to mold iq.org and fill it out online. And then you get the PDF downloaded to you. And then we get that data that says, hey, you know, but we need people who actually have mycotoxins testing within the month of the time they fill out the symptom questionnaire.

Our whole goal right now is just validate the questionnaire. Are these symptoms correlated to these mycotoxins that were in that person's body the time we tested.

So if you just want to like test yourself just go to my website. You can download it. And then you just fill out your score.

Testing Strategies and the Mold Questionnaire

And if it's a ten or above, there's a very high risk that you have mold and mycotoxins. Whereas with Lyme we do get that like the migration piece. That is a little bit of a hint.

Mold does not have the migration. So if that's part of your picture, I kind of I don't exclude mold. But, you know, I might say I think this we need to go down the the MSDS questionnaire out.

Let's just see what your score is there. But if they have a ten or above, I'm kind of like, yeah, I think mold is part of why you have migrating problems and you can't fight Lyme because you don't have an intact immune system.

Respiratory problems are more common with mold than with Lyme, although if it's Mike on plasm, pneumonia can also be a long hanger on. That could be mycoplasma, but sometimes mycotoxins are getting in the way of you finding that off too.

For most people, mycoplasma ammonia is a nonevent. It's more common to be asymptomatic. So it kind of depends on what what symptom picture I'm looking at.

And just remembering everybody reacts a little bit differently. And that's why I came up with the questionnaire because I'm impatient. It was crazy making sure me I was like, which you know, am I going to ask them to spend a bunch of money on, a home inspector when I'm like, I think it might be mom.

You know, that's not that's not convincing enough. So, yeah, that's why I created the questionnaire. Because we, you know, way back, we only had one way to test for mold.

But now we have more, more things we can look at. I can talk about some of those things that that's helpful of, like. One of the I was my next question.

So but just for all of the listeners. So if you do have mycotoxins illness, if you've tested and you are positive for

mycotoxins, you can literally help to change the way of detecting this.

So you can help so many other people and even yourself in the future to save money on testing by being able to validate this questionnaire. Yeah. So please, if you have mycotoxins illness and you have a test, go on.

It takes a couple of minutes to fill this out. And then literally you will be part of changing history and changing the ability to use this test to detect and diagnose mycotoxins illness.

Yeah. Thank you. Yeah. You name the data. So there's so much confusion about mold testing. So what is your current go to approach for identifying mycotoxins illness both in the patient but also in the environment?

Yeah there is a lot of confusion about this. And I have done more split sample testing than anybody that I know on the planet, which means we take these same sample on the same day from the same patient, and you send it out to multiple labs.

And what I learned is that all the labs have value. So the question of what's your favorite test is not the right question. The right question is, what is the best cluster for the patient in front of you to answer the question you're trying to answer and when.

And it's an exposure based illness. Determining whether they're being exposed right now is the most important question to answer. And that's a different way of looking at these tests versus like, if we're later down the road saying, can I get off my treatment now?

Are we fixed or are we done? That's a different cluster of things. So we try to I try to do a cluster because there's no single test that can tell you you have mold and mycotoxins, illness all by itself.

So the idea of I'm going to run one test and it's going to tell us everything is, is not a great expectation. Just like with Lyme. It's more complex than that. Right?

So it's a clinical diagnosis and you're using the testing to support that clinical diagnosis. Exactly. And also to do a more precise treatment. I'm so excited at Lyme bites that I get to talk about these precision mycotoxins detoxification plans.

Every mycotoxins is different. So I'm kind of doing people a disservice when I say mycotoxins. You know, umbrella. Everything we've talked about on this podcast so far is how are they the same?

They're the same in a lot of ways, but they're not the same in how we get out, get them out of the body. Some of them use the kidneys, many of them use the kidneys preferentially versus the liver.

Many of them will be pushed from the bloodstream into the gut to let the microbiome start chewing them up. So it's not always binders. And, you know, okra toxin doesn't respond to binders, actually, because the kidneys are the primary detoxification.

So we want to also know from testing which mycotoxins are you dealing with. And that could be from looking at your home. If you know what molds those are.

We know the mycotoxins those molds make. Or we can test your body and look. But not everybody is a good excreta. And a lot of these tests are excretion based.

So we wanted to put together a big picture. It's better to spend your money on good detection, because it will shorten your treatment plan and the amount of money you have to spend on treatment.

So I love a good detection. So what am I looking at for a cluster? I'm looking at a visual contrast sensitivity test. That's VCs test.com is my favorite.

If that's bad, there is a chance that you're exposed to mold right now. I look at a urine MPA, which is Michael phenolic acid. This isn't a mycotoxins.

And why is that important? Remember we talked about in the beginning molds. If it's actively living, we'll be off gassing these chemicals but not necessarily making mycotoxins.

So if your MPA is high there's a high chance here in actively living mold right now. And that can be that is easy to excrete through the urine for most people because it's water soluble, it's different.

I also look at a my Miko lab antibodies to mycotoxins of the IGP that the IgG is high. That means you've been exposed to an appreciable degree to mycotoxins in previous two weeks, and then a mold allergy.

No one should be allergic to mold. No one should be allergic to mold. If you are, your cup for handling spores is flowing over. Why is your cup full? So I look at this for exposure right.

Exactly. So I look at those four things and have three of the four are positive. Then I feel very confident and you have a bad questionnaire score. I feel very confident saying, okay, now we need to invest the money on building investigation and removal, okay.

Because that's funds. Yeah, yeah. But you know which question you're trying to answer that's got to dictate it. And then there are little nuances there of you know with like a pans pans kid.

They don't make great antibodies anyway. So why would we do an antibody test with them. So you know, there's there are other nuances. And that's what I go into in the trainings, in my updates course.

Okay. So for everyone listening you're going to have to if you want more information go to Doctor cresta.com.

Healing Protocols and Final Advice

Correct. Yep. Dr. Krista. Yeah okay. And then on there you can do there's the ten hour basic course. But then there's also a three hour course that has all of the updates.

You can come to the Lyme Bites Symposium in person November 14th and 15th or join us virtually online. She's going to do a very in-depth presentation specifically on each micro talks.

And how to clear them out of the body, along with a whole bunch of other very valuable information on mycotoxins illness. But before we close, only for the sake of time because just like, talk to you seriously all day long.

But I just just realized how long we've been going. Walk us through. Leave us with your key pillars for healing for micro toxin illness. Yes. Bio flavonoids before binders.

Since most of them go out the kidneys, they need bio flavonoids to be released from a blood protein so the kidneys can flush them out. So I also have anoints before binders for binding.

I really like to use aloe. It's it's like charcoal and clay, but it gives back aloe you can take with food. You actually should take it with food. And it helps you bring in more nutrients.

But it's also a binder. And the reason I love it is it's a potent antihistamine. It's a potent muscle stabilizer. So a lot of people are dealing with these weird food sensitivities and they're like, what in the world?

You know, I can't eat anything. And aloe also will increase your immunity. It's an immune modulator. So it's just a really simple, elegant binder. To the bio.

So I have a nice little aloe. Then you can do some detox. And then I use antifungals both in the body and in the nose. I preferentially choose plants if I can.

And and that has to be around for a long time. That might be six months that you're doing something antifungal. But boy, when we add the antifungals people get that.

That's when they really turn the corner. They're like, oh, I feel like something just lifted, right. And there's a very important order. This isn't all at once.

It's strategically right. Get yourself out of your moldy environment, then get on the bio flavonoids and what's give me your top two favorite bio flavonoids.

Yeah, I love, of course, because I'm making it one called Color Guard from a lighthouse. It has every band of the rainbow of of bias and annoyed that is specific to pulling out specific mycotoxins.

So it's it's all made for mycotoxins. Detox through the kidneys. Also quercetin, a lot of people just don't think about it's a it's not just for allergies, guys.

You know, it's but it is for allergy. So it helps with that mold allergy. There's tons of information about how it's so protective. It's protecting the liver that kind of thing.

And green tea you can add green tea very easily to your diet. Yeah. So those are just some really easy detox things okay. So number two, number three we have binders.

It sounds like aloe is one of your favorite. So I'll leave it at that. And then I know you love food binders too. So ground chia seeds ground flax meal things like that.

And then number four antifungals. So let us know your top two favorite systemic antifungals. And then if you have a favorite nasal spray. And let's stick with the natural ones for this. Yeah yeah.

Episode I mean it's a it's oregano oil. It's so easy. And if you're a real sensitive person, you can get it in a liquid and just do drop doses of it, you know.

So that's why we love tinctures, you know. Yes. It can be so easy. And clove is also very anti very good antifungal. It's soothing to the gut. And so I think you know if you're especially if you're a sensitive person start with those and start low and slow and just creep up for the nose.

I love one called nature and Nectars nasal guardian. It's propolis. Oh and propolis is a fabulous antifungal. It's anti histamine. It's anti Covid coronavirus.

Yeah. So it's got a lot. It's kind of like this big broad spectrum activity and it's just lovely. Wonderful. Thank you for sharing those steps. Yeah. All right so before we end any parting words of advice for our listeners?

If you are going to test yourself in the urine, please get my test prep handout. It's free on my website. It's down in the handouts portion in the footer.

What you eat can come out in your urine. So we want to make sure that we are minimizing the the challenge or the limitation of that test. So let's make sure that whatever's coming out in your pee is actually from your body.

So yeah, that would be it. I want to make sure people are getting, you know, if you're spending your money on this test, make. Sure that you want accurate results.

Yes, yes. All right. So if you want to hear more from Doctor Krista on how to heal from mycotoxins illness, join us at the Line Bites Symposium, November 14th and 15th at the Pompano Beach Marriott, or join us online virtually.

Thanks for listening to Lyme Bites. We hope this brought you one step closer to true healing. If it helped you, share it with someone who needs to hear this too, because together we heal stronger.

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