



Dr. Drew Sinatra: Mold — it's insidious. It can be lurking in your ceiling, behind your walls, even in your children's toys...and you won't know it. And even worse, it can cause a lot of illnesses that are very hard to identify and very difficult to treat. I know this personally, I've experienced two very serious bouts of mold exposure myself.

Dr. Drew Sinatra: I'm very excited to be joined by Dr. Jill Crista today. She's a naturopathic doctor, author, and prominent educator on mold illness and treatment. We'll talk about what mold and mycotoxins can do to your body, tips to identify if you are suffering symptoms of mold illness, and how you can find treatment and support if you are sick from mold exposure. We'll also share the foods you'll want to eat — and avoid — to minimize potential mold exposure. All this and more on today's **Be HEALTHistic**.

Narrator: Welcome to **Be HEALTHistic**, the podcast that's more than just health and wellness information — it's here to help you explore your options across traditional and natural medicine, so that you can make informed decisions for you and your family. This podcast illuminates the whole story about holistic health by providing access to the expertise of Drs. Steve and Drew Sinatra, who together have decades of integrative health experience. **Be HEALTHistic** is powered by our friends at Healthy Directions. Now, let's join our hosts.

Dr. Drew Sinatra: Hi folks...if you like what you hear today and you want to listen to future conversations on all things integrative and holistic health, subscribe to our podcast at **BeHealthisticPodcast.com**. Also, check out and subscribe to the Healthy Directions YouTube channel, which features video versions of our episodes, plus extra videos you won't want to miss. And finally, we have more with me, Dr. Drew Sinatra, my dad, Dr. Steve Sinatra, and other health experts at HealthyDirections.com.

Dr. Drew Sinatra: Hey everyone, welcome to another episode of **Be HEALTHistic**. Today on the podcast we're welcoming Dr. Jill Crista, who is a fellow naturopathic doctor, the author of *Break the Mold: 5 Tools to Conquer Mold and Take Back Your Health*, and an internationally recognized educator on mold illness and treatment. Dr. Jill says her passion is healing, and she's on a mission to raise medical literacy about mold and mold related illness.

Dr. Drew Sinatra: This is a topic that hits very close to me, since I've personally suffered through two horrendous mold exposures before, and I can tell you that the symptoms can be quite intense from those exposures. So I'm really looking forward to jumping in so we can educate folks about mold and mycotoxin illness. Dr. Jill, welcome to the show.

Dr. Jill Crista: Thank you so much. It's such an honor to be on your show, thank you.



Dr. Drew Sinatra: Oh, thank you, thank you. So for our audience, they've probably heard my father and I speak a little bit about mold here and there, but they may not have heard about mold illness, and mycotoxin illness. So I wanted you to just begin today by telling our listeners what mold and mycotoxin illness is, and why it's important for them to know about it.

Dr. Jill Crista: Yeah, I'm on a mission, not only to expand literacy with medical doctors, but also regular people, because I think that the definition for mold illness right now, if you look on the CDC website, is basically what I refer to as spore illness. So that's going to be reactions to interacting with spores and spore fragments — things like allergy, postnasal drip, sinusitis. And if it goes on long enough and it's severe enough, asthma. And that, in my patient population, is about less than a quarter of the type of symptoms that we're seeing. The other three quarters of the symptoms are related to mycotoxins, and possibly chemicals.

Dr. Jill Crista: So, mold also makes two other problems that can affect your health. One is chemical, which is happily living mold. I kind of joke, it's like mold farts. So mold is the factory, and it's eating and metabolizing, and it's putting out all these chemicals. Which we're really familiar with in the chemical environmental world, which is VOCs. You know, people are trying to find low-VOC paint. Well, mold spits out VOCs, alcohol, aldehydes — puts those things into your air, and those can get through building material.

Dr. Jill Crista: So now you've got spores, spore fragments, chemicals...and then the most dangerous part of mold is a defensive thing that it spits out, which is a toxin called mycotoxins. And those toxins create...they just wreak havoc on the body. They can seep into almost any tissue in the body, create almost any symptom. And so that's why we're missing mold a lot of times, because our definition being just "allergy," now you're seeing how, wow, we're not even paying attention to all the symptoms that could be from mycotoxins.

Dr. Drew Sinatra: And can you give our audience a frame of reference around the size of these mycotoxins, because they're quite small compared to the mold and the spores themselves. So, what were we talking about for size here?

Dr. Jill Crista: That's a great point, yeah. So mycotoxins are 50 times smaller than the smallest spore, and they also can get through building materials. So if you have a situation where someone has a brewing mold problem behind the building material, under flooring, under a shower on the second floor that's maybe affecting the seepage of those toxins into the first floor — those mycotoxins are getting right through all that building material, and you won't have any of the respiratory-type reactions that we associate as being a mold problem. But 50 times smaller than the smallest spores; teeny.



- Dr. Drew Sinatra: And that's an important point, too, because I think people think, "Well, mold's behind the walls, or maybe it's behind the walls. It can't affect me, it can't go through the drywall," but it certainly can. I've heard you talk about in the podcast before, if you're in a basement and you light a candle or some incense, pretty soon that whole basement is going to smell like that candle or the incense. And the same concept is applying to mycotoxins, in terms of their spread throughout your whole home.
- Dr. Jill Crista: Absolutely.
- Dr. Drew Sinatra: And you've also mentioned before, which I think is important for our audience to know, in terms of how we are exposed to these mycotoxins. We can get them through our skin, we can breathe them in, our mucus membranes can take them in. I mean, there's many different pathways for how they can affect us.
- Dr. Jill Crista: Absolutely, yeah. Yeah, I mean, a classic one for through the skin is baby bath toys. If there's a bath toy that can squeak, or has any kind of little hole on it, that could be hosting toxic mold. And then you squeeze it and squeeze it, and now you've just shared mold and mycotoxins with the bath water. So some kids who have reactions to bath — and you know, as a naturopathic doctor, you're saying, "Did you change your soap, did change your laundry detergent? Did you do..."
- Dr. Drew Sinatra: The list of questions!
- Dr. Jill Crista: Exactly. And now, since I've learned so much about mold, I'm always asking, "What does baby play with? What does your child play with in the tub? Let's take a look at that." Yeah.
- Dr. Drew Sinatra: How do you recommend cleaning these toys? Like, baking soda? I mean, what do you do in terms of remediation of the toys?
- Dr. Jill Crista: Toys are fine as long as they don't have a way to let water on the inside, and can't be dried out all the way. So anything that is...a lot of those bath toys that are like the squishy fish, where you can have a water fight, or something like that...I consider those, almost, a one-time use only. Unless you can fill it up with vinegar, or something that's going to be mold static. Yeah.
- Dr. Drew Sinatra: Got it, got it, okay. Now in your book, *Break the Mold* — which I think all of our listeners should read, because it's a phenomenal book on mold and mold illness — you have a questionnaire in there that you recommend that your patients and people reading the book fill out. Since our listeners may not have the book right now, I wanted you to tell our listeners some of the basic symptoms, or the



most common symptoms associated with mold and mycotoxin illness. I know there's a whole assortment of them, right? It's sort of like Lyme disease, in the sense that you can have neurological issues, and cardiovascular issues, and dermatological issues. But what do you see as the most common symptoms that our audience should be aware of?

Dr. Jill Crista: Yeah, I'll go through the common, and then I'll go through the oddities, because there are a couple of weird ones that are almost keynotes for mold. So the common ones are fatigue. Usually there's some sort of gut disruption, because these mycotoxins do go to the fattier tissues in our body, and our gut is really very fatty; it's lined with fat. So fatigue, because of the mitochondrial changes and also because of brain fog, so it affects your brain function. Again, our brains are mostly fat, most of us are fat heads. If you're lucky, you have a fatty brain. So these mycotoxins can go into these fatty tissues. So you can start to see — fatigue makes sense, brain fog makes sense, gut disruption makes sense.

Dr. Jill Crista: Some kind of skin thing; a lot of people have skin changes. And that could be taking whatever your Achilles heel is and making it worse. So if you're prone to acne, it's going to push it to more acne and more cystic, more inflammatory. If you're prone toward rosacea, then you can get a little aggravation, the rosacea. If you're prone toward aging skin, we'll see more age spots. So that's a very common one that people have, some sort of skin change.

Dr. Jill Crista: The oddities, which are very interesting is ear ringing. And if we look at the number one medication that causes ear ringing, it's antibiotics — and a lot of antibiotics are actually mold toxins. They're made from fungus and they're used to kill off the other living things in your body, like bacteria. So we see ear ringing is a really common thing that people that are being exposed to mold describe.

Dr. Jill Crista: You can definitely have sinus issues and things like that, even if you're not exposed to spores, just because of the irritation of the respiratory passages. So we might see some kind of sinus congestion, or something where people maybe have trouble breathing at night, and they kind of lay down and slow down. If they're in their moldy environment, that's going to all swell up and have trouble with breathing at night.

Dr. Jill Crista: Insomnia is very common...and anxiousness. I almost said anxiety, so I always catch myself. It's not to the level...although it can be to the level of anxiety disorders, where someone needs medication. A lot of people with mold described kind of an inner sense of feeling restless, or like things just aren't okay. And they're right, that's their body saying, "Yes, you're in an environment that's harming you." But you don't see it, so you can't pin it on anything in your environment. So they just feel just restless and anxious, which can impede sleep



and that can definitely be worse in the environment, better out of the environment. So those can be little clues.

- Dr. Jill Crista: Another oddity one is bladder irritation. So it'll look sort of like interstitial cystitis or pelvic pain. Those are things that are highly correlated with mold exposure, because the pathway that mycotoxin through the body, it goes through your respiratory passages to your bloodstream, and then it takes a Y in the road — that mycotoxin either go to the liver to be processed out, or it goes to the kidneys to be processed out. And while they're in the bladder, they're bumping into that bladder wall and irritating it, and you can feel like you have a bladder infection even if you don't.
- Dr. Drew Sinatra: Exactly, yeah. Well, let me share really quick my two experiences with mold exposure, because they were quite different in how they presented. My first was when I was six, our basement flooded and no one knew about mold back then, right? This was like 1986, and it wasn't even a topic on anyone's mind. But I developed asthma and allergies that year, and I continued to have asthma and allergies throughout my childhood until I was 18 and I went off to college.
- Dr. Drew Sinatra: And then, everything kind of disappeared at that point and my health came back, which was amazing. Because I thought it was going to be this chronically ill kid that never got better.
- Dr. Jill Crista: Right, right. You miraculously grew out of it.
- Dr. Drew Sinatra: I grew out of it — I grew out of my asthma, exactly.
- Dr. Jill Crista: I'm like, no, you moved out of it. That's different.
- Dr. Drew Sinatra: I just wish some doctor back then had known about mold illness, so I could have not been on Prednisone and Albuterol inhalers my whole childhood.
- Dr. Jill Crista: Yeah.
- Dr. Drew Sinatra: And then when I was, I believe I was...I was 32. So 2012, we lived in a moldy basement. And there was actually mold growing on upholstery, and on our shoes, and everything — and it was awful. I mean, it was a terrible experience. I developed asthma again, but now I developed really bad vertigo and dizziness. And so I knew that my neurological system was affected. And it was quite terrifying, actually, being outdoors, walking my dog, and I looked down, and the whole sky was spinning sideways. And I knew I had a serious issue, and I knew I needed to really get some help. So that's when I really dove into mold and



started learning about all the testing methods, which we're going to talk about shortly.

Dr. Drew Sinatra: But for our audience, just know that it can present in many different ways and for different people, too. And my follow-up question to you here is, when it comes to a household of, let's say, four people — why is it that maybe one or two might be sick, but not everyone may exhibit symptoms?

Dr. Jill Crista: Yeah, and that's more common than not. So that's more the rule than the exception, that there will be some family members that react and some that don't. And they are having a reaction, but it's not in any way that we can put our finger on, because it isn't enough of an exposure for them.

Dr. Jill Crista: So we are all individually quite different in our susceptibility to mold. So it has to do with whether you had a previous exposure, because if you have, then that's going to display more rapidly and more severely in a previously exposed person. It has to do with your nutritional status. So there are certain nutrients that protect you from mold exposure, more so. So those would be things like good fats — if you have a really hearty, good fat balance in your body, then that protects you. It's also your glutathione status. If you have good glutathione, you don't have a lot of liver polymorphisms for detox and glutathione challenges, then you're going to be less susceptible.

Dr. Jill Crista: Dose is important. So if you're the one who's living in the basement versus a person on the second floor who has their bedroom up there, that's going to make a big difference. Duration, so that's another thing. There's this whole...some people work from home now, or more and more people are working from home now, and we're seeing much more incidents of mold related illness because people are having more exposure to their moldy environment if their home was that environment, and they're not escaping for the day. So that's why we might see in a family a toddler reacting and their caregiver, whereas the rest of the family that gets to leave part of the day, doesn't get that duration of the exposure.

Dr. Jill Crista: And then just basic genetic susceptibility, which there is a panel you can do for mold genetic, it's HLA prototyping. But I've found in my practice that it's the people who have tougher time detoxing, the ones that have the genetic polymorphisms for detox issues, that tend to have a harder time with mold illness.

Dr. Drew Sinatra: Got it. And what do you tell those folks that aren't symptomatic from mold, but let's say their daughter is being treated — and the dad says, "I'm fine, I don't need to be treated at all." What do you tell him?



- Dr. Jill Crista: Yeah, I remind people a lot...and I'm not trying to be an alarmist, but militaries around the world are using these mycotoxins as biowarfare. Some of the mold chemicals we use in medicine to kill cancer, so it's been altered just a bit to attack the cancer, but that's how deadly it is. We also use one of the chemicals from mold as an organ rejection drug. So it shuts down the immune system to be able to tolerate that other organ. So when somebody says, "Well, that stuff doesn't affect me." I'm like, "Not yet...and it might be affecting you in a way that you don't really realize by filling your toxicity cup. We might be wearing out your liver and kidney's ability to handle other toxins. And then it may not be the mold that's triggering you, but then when you go to work and you're exposed to welding gases or something like that, now that's the thing that tipped the trigger."
- Dr. Drew Sinatra: Yeah, and this is all what our teacher, Dr. Walter Crinnion, really, one of the best environmental doctors out there, he always talked about...
- Dr. Jill Crista: Oh, I just got chills...
- Dr. Drew Sinatra: Oh, I know! He was just such an amazing man, such an amazing man.
- Dr. Jill Crista: I know!
- Dr. Drew Sinatra: He always talked about the toxic burden and mold being one aspect of that toxic burden that we're exposed to that can just weaken our immune system, weaken our bodies long term.
- Dr. Jill Crista: Yeah.
- Dr. Drew Sinatra: So in regards to testing, I'm sure our audience right now is wondering, "Well, gosh, I might have mold in my home. How do I know if I have it in my body?" Now in our practice, what we usually do, there's four mold tests that are kind of big right now. One's the RealTime Labs, that's an ELISA test looking at antibodies. Then there's the Great Plains Labs, and also Vibrant Wellness, which are more mass-spec based testing methods. And then the one that we prefer to run in our clinic is the MyMycoLab, which is this antibody, IgG, IgE antibody tests against these mycotoxins.
- Dr. Drew Sinatra: Can you tell our audience, sort of, when they should run one versus the other, or any sort of pros and cons versus running one versus the other?
- Dr. Jill Crista: Yeah, you bet. I've been spending a lot of time on this and doing split sample testing. I have identical twin boys, and mold did happen in our own home. So I had a very unique situation where I had genetically identical people with the



same exposure, one doing one thing, one doing another thing and really realizing what...and we don't have the answers yet, because that's a very, very small sample set, so we need population statistics and studies.

Dr. Jill Crista: But overall, all of them have merit. So when people say, "Well, which one do you like?" I'm like, "That's not really the question. It's which one do I like for which certain situation?" So the MyMycoLab that you're talking about, what the benefit of that is, it's not an excretion test. So it doesn't rely on the body's ability to excrete. The downside is, if you have somebody with immune deficiency, we may not be seeing a representative truth there about what their challenges and their exposures are.

Dr. Jill Crista: The idea of an antibody blood test is, "Okay, maybe it's not the mere presence of these mycotoxins, it's more, what does your body feel about it?" And the thing I like about the IgE portion is it's the only one of the tests that tells us is this a current problem, or a past problem? Because if the IgE is positive, then we know we probably have an environmental problem. Sometimes the urinary mycotoxins are dumping and they're not necessarily a current exposure problem. And so that's what I like about the blood test.

Dr. Jill Crista: The RealTime Labs really helps when you have somebody who does need to be on certain detox agents, like glutathione or binders. I think that that's a better lab, because in my split sample testing, I found that the mass spec is a little more tweakable by the supplements that you give a person. The problem with that one is, it's also an excretion test, and they don't control for creatinine. Whereas with the mass spec, they do control for creatinine. Also an excretion test — but the mass spec, if you look at all the research, they're calling that the gold standard way to look at small molecule toxins. So, we're always doing this game.

Dr. Jill Crista: In my current split sample testing, Vibrant has been the most closely matching the known environmental exposures. And what I like about that one is they show you each individual mycotoxin metabolite. Great Plains is also testing metabolites, but they're not telling you which ones. And maybe that doesn't matter for anybody other than us that are deep into it. But what they're doing is they're testing these different metabolites, so you can see that they're not testing just that one mycotoxin. Our bodies might be in the process of getting rid of it, but it's still there and so we need to be able to see that.

Dr. Drew Sinatra: Got it.

Dr. Jill Crista: I hope I didn't just totally confuse people.



- Dr. Drew Sinatra: No, no, I think that's great. I think that's great. I mean, I'm learning something too here, which is wonderful.
- Dr. Jill Crista: Yeah.
- Dr. Drew Sinatra: With that MyMycoLab, the one that we tend to run a lot, I even learned from Andrew Campbell, he's the director of that lab...fantastic man. He's written 25, 30 articles on mold, so he's well-versed in this topic. I had a young girl with juvenile rheumatoid arthritis/Lyme, and we think mold was kind of involved in that. She was only on one milligram of Prednisone and we couldn't run that test because of the immune suppression, just from that one milligram. So like you said, there's certain factors that will kind of push you towards running another test.
- Dr. Jill Crista: Yeah.
- Dr. Drew Sinatra: What about the impact of foods, and how some foods contain mold? Can you speak to that — and how that might influence the tests?
- Dr. Jill Crista: Yeah, that's the argument that I think a very strategic insurance/lawyer-based mode of, "Let's just not have mold be a real thing, because then we don't have to pay for people to get better. We don't have to pay to remediate our building, we can just paint over it, and it's not a problem anymore," those kinds of things. So there is a push to suppress research and findings of mold related illness in humans.
- Dr. Jill Crista: The argument that they...or the distraction they've thrown in the mix is that, "Oh, it's because everybody's eating all of these. Whatever you're finding is because they're eating it. It's not from the building, couldn't be from that moldy building that's making you sick." And so I've really dug into the research to figure out how much of that is real in human food. Most of the research on humans is on spores, very little is done on the mycotoxins — versus most of the mycotoxin research is done on animals. And so we can learn a lot doing translational medicine from animals to humans, especially when you and I already have a comfort using nutrients and botanicals and things like that. We can really see how that fits into a protocol.
- Dr. Jill Crista: It turns out in a review article done by my alma mater at University of Wisconsin, they did find mycotoxins commonly in cereal grains, cereals particularly, coffee, chocolate, apples, grapes. So they were looking at actual human food, not animal feed, and then making assumptions that if we're finding it in an animal feed, we're going to find it in human food. They looked at real human food and these were the findings; it was a really nice review article



because we can say, “Okay, it’s happening.” And there’s a few other studies out of China, but we can’t really translate that to the U.S. So those that are listening in other countries, it might be different for you in your country. Belgium also did a great study, and they found about the same kind of things — that grains are really, really high in mycotoxins.

Dr. Drew Sinatra: Like corn.

Dr. Jill Crista: Corn, yeah, soy, peanuts — some of those things that we mass produce, we mass store, and we take away all of their mold defenses before we store it. So we shell the nuts, we hull the corn. Those are all full of anti-microbial things that are protecting that plant. So yeah, I don’t know, wheat chaff or whatever we do, we take all the outside parts of the wheat and then we store it in a moist environment. Of course, it’s going to grow mold — and multiple species.

Dr. Drew Sinatra: So do you tell your patients to give up these moldy foods, at least the high risk ones, like corn or something like that?

Dr. Jill Crista: Yeah, especially before testing. So that we take that distraction, that argument out of it. Because every test is going to have its strengths and challenges. So that’s a challenge of these tests, is that, okay they probably are eating some mycotoxins — is that enough to be tipping the balance here of why all of a sudden they’re developing asthma or those kinds of things? No, that’s probably the water-damaged building. But either way, that exposure to the water-damaged toxins is now creating a change in their microbiome to where they’re tipping toward fungal burdened. And so why would we add to that message? The message then in the toxin is, I’m coming to take you over. I’m coming to invade you. That’s basically the message.

Dr. Jill Crista: So if you’re continuing to eat foods that are carrying that message, that doesn’t make sense to me. So I consider this a therapeutic diet, just a short term, beginning of the stages. I think both you and I are on the same page of, everybody should be able to eat a really balanced, whole food diet. And too much withdrawal of things can create different issues. What are you replacing it with? I mean, there’s going to be lots of questions there. So yeah, I do take people off those. And if anybody wants that I have a “10 best and worst foods” on my website, you can download the handout. And it just kind of gives you a rough guide, I guess. There’s more complicated and extensive lists in my book, but this is a nice...I took kind of the top ones out, and you can get that from the website.

Dr. Jill Crista: And if anyone’s wondering, if you’re working with your doctor to take a mycotoxin test — let’s say you think you might have mold going on and now



you're having that conversation, I also have a prep sheet before doing mycotoxin testing, the urinary ones. Because I don't see that the blood ones change as much on a day-to-day basis based on what someone's eating. But I have people go off of this certain food list three days before taking their test. So then we've just taken that argument out.

Dr. Drew Sinatra: And then also I've heard you say that for ELISA, in terms of RealTime Lab, that you might have them do glutathione, but you wouldn't have them do glutathione for Great Plains Labs.

Dr. Jill Crista: Right.

Dr. Drew Sinatra: Got it, okay. That's great.

Dr. Jill Crista: And that was just based on looking at my twin study, my little, tiny study. And we've changed different things throughout time, and so I'm watching these labs throughout time — and I'm doing other split sample tests, but I didn't have the genetic equal for that test. That was the one...I was seeing that in other split samples thinking, "Hmm, that's weird, because I know that they were exposed to that mycotoxin. Why isn't it showing up?" And then I did it on my own kids, and the one that was taking glutathione, certain mycotoxins looked better than they actually were, most likely.

Dr. Drew Sinatra: Mm-hmm, okay.

Dr. Jill Crista: Yeah.

Dr. Drew Sinatra: So our audience is probably wondering at this point, "Okay, I might have mold in my home. Maybe I do, maybe I don't. I've got some really kind of strange symptoms, some that are kind of pointing towards the mold illness." In terms of testing, we just talked about, it can range anywhere from \$300 to \$400 or more, depending on where you are. Now, if people don't have the funds to get a mold test, but let's say they know there's mold in their home — how do you approach that? Do you just say, "Yes, that's okay, we know that you're affected, we're going to treat you?" How do you approach that?

Dr. Jill Crista: Yeah, I mean, if we know it's mold...and that's why I developed the questionnaire. It really started as my own questionnaire to help me in practice, because seeing Lyme patients, as you know, the Venn diagram of that crossover is like, I was like, "Wait, when is it mold? When is it Lyme? I can't tell." So I took the inspiration of Dr. Horowitz's MSIDS questionnaire, and created one for myself in practice to really suss out what are the things that are unique to mold and mycotoxins that I'm seeing with my chronic Lyme patients that weren't



getting better — and it turned out it was mold all along. And if anybody wants that, you can get that off my website as well. You don't have to buy the book, you can get that questionnaire. It gives you a score, and I'm working to scientifically validate that — so people that are low on funds, we can find out if that score has meaning, has clinical meaning for them.

Dr. Jill Crista:

There's also a little quiz on MoldQuiz.com that I put together, that just goes through 10 easy questions that might point the arrow toward mold or not, so everyone's welcome to do that. So if we know it's mold and everybody's on board, which is a little rare, unfortunately, because usually the healthy one in the family is also in charge of purse strings and is like, "Why do we have to change everything? Why do we have to get an inspector?" But if everyone's on board, then we just go into treatment. And I do treat, mildly, I treat the asymptomatic members of the family as well, because we know they're being exposed and we want to protect them. Animal research has taught us you can protect cells, there are cytoprotective agents we can use, like quercetin and DHA. And those aren't dangerous to take, all you're doing is maybe wasting some money. So I go ahead and treat the asymptomatics, as well.

Dr. Drew Sinatra:

And since we've transitioned now into treatment, I'd love to hear and have you explain to our audience your general philosophy on treatment, sort of, how you go about doing this? I mean, you've mentioned glutathione, you've mentioned binders, you've mentioned liver support, nutrient support, now supporting the cell membranes and such. So, run us through your whole thinking process around how to support someone with mold illness.

Dr. Jill Crista:

Yeah, I ended up creating a protocol that I didn't realize I was creating — after making people sicker. When I finally figured out some of my chronic Lyme patients had mold, my brain thought, "That's fungus. Okay. Oh, that makes sense now why they have toenail fungus, and candida rashes that just lay smolder, and we can't quite get rid of them. Okay, I'm going to start with antifungals" — and got people really sick. Because I didn't prep their organs of detoxification, I didn't prep everything, their lymph system and things like that to get ready to get rid of what we were killing off, and also freeing up, from inside of those molds.

Dr. Jill Crista:

So when I sat down to write the book, I thought, "What is the best picture that describes this?" Because there are five basic methods or steps, and in some people, they can all happen at the same time, as long as you're addressing them. And the first two really need to be done as close to 100% as possible. And then the other three, the next three steps, were just sort of things you pick and choose. And so I came up with an orange — because that has the outer orange layer and then the outer white layer, unless you're one of those people that



really likes that white layer. Those two need to be peeled completely, so you can get to the juicy stuff in the middle, and then you can pick and choose out of those sections.

Dr. Jill Crista: So the five steps are: avoidance, fundamentals, protect, repair, and fight. And I know you probably just heard Dr. Crinnion in your head when I said avoidance, because he says, “The first three steps of any toxic...”

Dr. Drew Sinatra: The most important step.

Dr. Jill Crista: Yeah...and he said, to make the joke, “The first three steps are: first is avoidance, second avoidance, third avoidance.” So he’s really, in his very Crinnion way, making the point that that is so very important. There are occupational studies that show 50% of people just by getting out of the mold, get better.

Dr. Drew Sinatra: Exactly.

Dr. Jill Crista: And so, why not start there?

Dr. Drew Sinatra: And also, too, I should add — I know you’ve had this before, as well as me, but we have these patients that either are so stressed out from physically being ill and mentally being exhausted from around all this that they don’t want to remediate their home. They let the mold sit there, and they want to just get better, even though there’s mold still left in their home. That unfortunately never works — you absolutely have to take care of the mold in the home, or the workplace, or your car, or wherever it is, or else you’re not going to get better. I mean, you can get slightly better, but you’re not going to get fully better if that mold isn’t addressed.

Dr. Jill Crista: Yeah, absolutely, 100% agree. Yeah. And if you’re not up for it, just get yourself out of there.

Dr. Drew Sinatra: Yes.

Dr. Jill Crista: It’s amazing how many times people, once they do get away from the mold and they get to a safe space, then they start to have the agency to take care of this. But in when you’re in it, you have brain fog, fatigue. It’s like you’re being drugged or you’re drunk all the time, it’s because alcohol has mycotoxins. It’s hard to make good decisions when you’ve had a couple of glasses of wine, so of course, why would we expect someone to make very good decisions when they’re sitting there in that toxic soup?



Dr. Drew Sinatra: And that's another great takeaway here is that, if you feel toxic in your home and you tend to go on vacation, or you go visit your parents for a week, or wherever it is, where you're away from that home or that environment for an extended period of time, and you start to feel better, that's a clue that there could be something happening in your home. And it's not just the vacation part of being in Maui, on the beach. There's actually something happening there where...I always liken it to Superman and kryptonite. You're in a home where there's this toxin, it's like, you can't escape it. It's interesting, I've been in this situation too, where you just don't want to move out of your place. It's like, you feel really sick and toxic there, but yet you don't want to move. It's almost like the mold is kind of keeping you there.

Dr. Jill Crista: Yeah. It starts to do its Jedi mind trick of, "Just stay, it's fine." Because then it can compost you. I mean, that's really gross, but it's a survivalist. It's been on the planet longer than we have. So, it's got us figured out.

Dr. Drew Sinatra: Exactly, exactly. Well, in the last few moments that we have, or minutes for that matter, I'd like to just go over some really basic stuff in terms of treatment for the mold. Why don't we talk about binders, because I think binders are a great place to start there.

Dr. Jill Crista: Yeah. So binders...that's a key part of Dr. Shoemaker's protocol, and I'm not Shoemaker trained. In my experience, binders alone are not enough. We need to be doing all of the things that you would do with a naturopathic doctor, other than avoidance, getting away from that exposure — and then just basic, clean living. So we would address diet, we'd address good water. I loved the episode with you and your dad talking about breathing. One of the things that mold does, that your body does in reaction to being exposed to mold, is it starts to learn to under breathe. So you breathe just enough to survive, but not thrive. And so, if anyone listening, that is a great episode, where you're talking about all these different ways to teach the body how to breathe again. We actually do have to make an intentional choice to learn to breathe again, after you've been exposed to mold.

Dr. Jill Crista: So all of those kinds of things are important. And most of the time, if you're getting the diet in order, you're getting enough insoluble fiber to assist some binding already. And what binding is basically talking about is binding up the bile that your liver has packaged all these mycotoxins inside of, and then sent into the gut to get picked up by fiber. Fiber, insoluble fiber, is the best binder. There've been studies not related to mold, more related to...people are missing a gallbladder and having trouble with too much bile. They found that things like steamed kale and insoluble fiber are the best binders of that. There are also



pharmaceutical binders. So, if you're dumping enough toxin that you're needing some assistance, that can also work.

- Dr. Jill Crista: But I've found that by just getting the diet in order, and then adding some insoluble fiber as a supplement — and typically I'm finding some of the blends and mixes work better. So the "on the cheap" version is get some flax seeds, and some psyllium husk, and chia seeds, and grind them up and add that, sprinkle that over your food. Try to do about two tablespoons a day and you're going to be boosting your insoluble fiber. Eat a little steamed kale every day, just all those little things you can do that are really effective binders, but aren't going to be giving the problem with binders that are pharmaceutical binders, which is nutrient depletion.
- Dr. Drew Sinatra: Right. And of course...
- Dr. Jill Crista: And constipation.
- Dr. Drew Sinatra: And constipation, exactly, the side effect to that. And I think, too, it's important for our listeners to know about this enterohepatic recirculation of the mycotoxins that occurs. And so the binders are there to help get them out, so they don't continue to be recirculated throughout the GI and the liver.
- Dr. Jill Crista: Yeah, yeah. And bile is an amazing...I'm a bile-a-file. I'm super into bile.
- Dr. Drew Sinatra: I love that, that's great.
- Dr. Jill Crista: I did a whole podcast with our colleague, Dr. (Adam) Rinde, on bile. It's so under appreciated. And so it's important to bind bile, but it's also important to support your body making more. Because the whole idea here is we're grabbing it so that it can't get recirculated. The whole point of our really effective recirculation of bile is to preserve that soluble nutrients. Well if we're getting rid of it, now we may actually be causing a depletion of your fat-soluble nutrients, like A, D, E and K, essential fats, CoQ10. Some of those that are really important for protecting you against mold. And we're also possibly depleting the nutrients that we use to make bile.
- Dr. Jill Crista: So I loved...I think it was the Suzanne Somers episode you had, where your dad was talking about artichoke. And I was like, "Yes, it's one of my favorites." So artichoke, milk thistle, turmeric, all of these things support your body in not only the detoxification process, but the biomanufacturer process.
- Dr. Drew Sinatra: And that's where the bitters come in, as cholagogues and choloretics, to kind of just produce more bile, right?



- Dr. Jill Crista: Yep, yeah, I love those cholagogues and cholaretics, yeah. Yep, all about bile.
- Dr. Drew Sinatra: All about bile, sweet. Well, Jill, as we wrap up today, as always, we're going to share some **Wellness Wisdom** with our listeners. In keeping with what we've been talking about today, if you had one big, simple "pearl" of wisdom for people who think they've been exposed to toxic mold, what would it be?
- Dr. Jill Crista: Get outside. Yeah. It sounds so simple. I mean, that's why I loved your episode on breathing...that the simplest things make the biggest difference. And part of this problem with mold is we have a species who's supposed to be connected with nature, then moves into a disconnected space, and that's why it starts to behave badly. It's confused, and we are the same way. So if you get outside, you reconnect with where your place is.
- Dr. Drew Sinatra: Couldn't agree more. Well, Jill, thanks so much for coming on the show. This was great.
- Dr. Jill Crista: Yeah, thank you so much. It really was an honor, thanks.
- Dr. Drew Sinatra: That's our show for today, folks. If you have a question or an idea for a show topic, please send us an email or share a post with us on Facebook. And remember, if you like what you heard today, and you want to be an active member of the **Be HEALTHistic** community, subscribe to our podcast at **BeHealthisticPodcast.com**, or on Apple Podcasts, or wherever you download your favorites. You can also find more great content and information from us and the Healthy Directions team at HealthyDirections.com.
- Dr. Drew Sinatra: I'm Dr. Drew Sinatra, and this is **Be HEALTHistic**.
- Narrator: Thanks for listening to **Be HEALTHistic**, powered by our friends at Healthy Directions, with Drs. Drew and Steve Sinatra. See you next time.