



Mold, mycotoxins and how to support your healing

Guest: Evan Brand

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Kirsty Cullen - [00:00:15]

Welcome to the Fatigue Super Conference, I am Kirsty Cullen, CEO of the Optimum Health Clinic, and today I'm joined by Evan Brand.

Evan is a certified functional medicine and nutritional therapy practitioner. He is also host of the Evan Brand Show, which is a globally popular podcast series, which is now over 350 episodes, 12 million downloads devoted to discussing various health conditions and effective functional medicine strategies.

Evan is also a published author of both '*Stress Solutions: Hack Your Stress, Calm Your System and Take Charge of Your Life*', which I'm sure we could all benefit from reading and '*The Everything Guide To Nootropics*'. Evan was also a featured speaker on the Toxic Mold Summit and has had his own health journey with toxic mold.

And so, Evan, I am delighted to be speaking with you today about the very subject of mold and mycotoxins. Welcome.

Evan Brand

Thanks for having me.

Kirsty Cullen

Not at all.

So, let's start by covering some of the basic terminology, especially for those people listening today who perhaps haven't already explored the subject of mycotoxins. Can you just start by explaining the distinction between mold and mycotoxins themselves and explain why mycotoxins are potentially problematic to human health and within the body?

Evan Brand

Sure. Well, I don't know how much of the media has been showing it across the pond, but what's been going on in the U.S, we just had a major, winter storm take over. It went down into deep south and Texas, places that rarely does it get that cold and rarely does it get snow or ice. And so now we're seeing all these reports of people where their roofs are caving in. And, even one of my colleagues told me that his property had busted pipes and there was an inch of water all over his duplex unit down in Texas.

And I've seen countless videos come in of people where there are busted pipes or water heaters are exploding or just crazy things. So now there's going to be a whole new epidemic of sick people, unfortunately, because all it takes is one leak or even just a high humidity situation. 48 hours is all it

takes for mold to start growing. So you get these companies where they're backed up for weeks or months before they can do a remediation or to fix it and you're screwed.

So mold is not necessarily what makes you sick, but rather the mycotoxins that they produce. And so if you think of just a car and how you'll get it tested for emissions, you'll measure the tailpipe and see what kind of pollution is coming out the tailpipe. That's the same thing that molds do because they don't have teeth, they can't bite you and they can't bite other molds. So, to stake out their territory, let's say in the example of drywall, let's say you've had a busted pipe and you've got water behind your drywall, and that paper backing on your drywall is the perfect food source for the mold. It's going to be off-gassing these mycotoxins to kill other molds to basically claim its territory.

And then you've got your ductwork where your intake and extake vents are going to be pumping and circulating these mycotoxins through your home. And then you as a human occupant, or in the case of dogs, which a lot of dogs get cancer or what they call lipomas, which is a non-cancerous fatty tumor, if all of a sudden your dog randomly gets it or if you get a lipoma, assume that you've been a victim of this mold or mycotoxins exposure.

And it could cause anything from chronic fatigue to depression and anxiety, panic attacks, insomnia. It really messes up hormones, mycotoxins cause leaky gut. So food sensitivities and histamine intolerances are linked, mitochondrial damage happens. So that's where the chronic fatigue piece comes in. Adrenal dysfunction is common, memory issues, focus, concentration problems.

If you're up in the middle of the night to go urinate, you're going to be exposed to mold, probably, and you just don't know it yet. That was one of my issues. I was up in the middle of the night to go pee sometimes 4 or 5 times a night to go pee. I couldn't quench my thirst. I was chronically dehydrated. I had low blood pressure, sometimes spiking into high blood pressure. So it can be really confusing, just like Lyme disease they call it really the great mimicker because mold can seem like so many other things. You may get a chronic fatigue diagnosis or you may get an autoimmune condition diagnoses, but you're really missing the root cause here, which is the building that got you sick.

Kirsty Cullen - [00:04:55]

And in your situation, Evan, what was the problem? Was it a problem that you were aware of, or was it that you became ill first and then kind of sort out the issue?

Evan Brand

Yeah. So I think just looking back, the more I tell the story, I think looking back, I was exposed to mold even as a young kid. I remember my grandmother's house had flooded, her basement flooded when I was a kid. And she would just set up these little box fans and it would take two weeks to dry out. We know now that 48 hours is all it takes for something to grow. So I know that I was exposed as a kid and I love the outdoors. So I've had many tick bites over the years.

And so it's tough to say whether it was the chicken or the egg, was it the Lyme and the Bartonella and the Babesia and some of these co-infections from the tick bites that triggered it? Or was it the mold and then new exposures over the years to living in various apartments and building homes and living in homes, was it that?

It's tough to prove, but I would say it all goes in the toxin and the stress bucket. So it's tough for me to say, like, hey, this was the day that it all went south. It's nice to be able to find a clear breaking point like that. But sometimes it's more of just a gradual illness that kind of piles on.

But I was exhausted. I lived in Texas for several years and had major sleep issues and skin issues and all sorts of mood problems. And I measured my urine and wow, I had a ton of mycotoxins and I'm almost 3 years into treatment and I'm almost done. I've almost got all the mycotoxins out, so luckily you can reverse it.

Kirsty Cullen - [00:06:24]

Yeah, it takes a period of time, doesn't it, consistent work, which we'll talk about in a second. But the results are definitely there to have. But identifying the issue in the first place is usually half the problem, especially if there's a leak or not even a visible leak within the home. It may be a humidity issue may be to do with leaf mold and gutters just outside your bedroom window. It's not always as obvious as an overt leak in the house is it?

Evan Brand

Very, very true, yeah. And then one of our homes, we didn't have any visible mold. So that's the thing. People think you have to see some kind of ugly black thing growing on the wall. But that's a very rare situation. Or they think you have to smell must. That's a very rare situation. Most of the time it's kind of at a clinical level. You don't really see it. But if you were to do some of the testing, which we can talk about, you may find it.

And of course, if you go to your GP or your conventional doctor with some of these complaints, like fatigue or mood issues or skin issues or histamine intolerance, you know, they may refer you to an allergist and they'll put you on allergy medication or maybe they'll refer you to the gastro for your gut issues and they'll put you on an acid blocking medication and they'll then refer you to the psychiatrist and then they'll put you on, of course, antidepressants and anti-anxiety medication, and then possibly for some of the heart related symptoms which often happen, they'll refer you to the cardiologist where you'll end up doing beta blockers like metoprolol, possibly blood pressure medication like lisinopril. And then maybe you go to the endocrinologist and then you get put on hormones.

So you can see how you could go through the conventional medical rabbit hole and never get to the root cause of the issue.

Kirsty Cullen

Yeah, absolutely right. So just to then recap, we're talking mycotoxins as being secondary metabolites, as we would call them, by-products produced by mold and those molds are commonly found in water damaged buildings. And the science really tells us that those mycotoxins produced by molds in water damaged buildings are the possible cause of human illness and sort of have this adverse impact on human health.

So what are the links then between mycotoxins and chronic fatigue syndrome? What's the relevance there?

Evan Brand

Sure. Yeah, there's a paper on this. It was a guy named Dr. Brewer and he's still alive, as far as I know, and he ran or either runs or has run in previous, a chronic fatigue clinic and he tested his patients for mycotoxins. These were patients that were diagnosed with chronic fatigue. And I want to say it was 96, maybe even 97 percent of his chronic fatigue patients had at least one mycotoxin show up in their urine.

So when I saw that paper, I thought, oh, wow, here's the smoking gun. And as soon as I started talking about mold on my podcast and some YouTube videos I did on it, all these chronic fatigue people started coming out of the woodwork and they would say, hey, I've been working with this practitioner for chronic fatigue, but I'm still sick. And so then I would say, well, what about mold? And we would uncover it. And sure enough, I found the same thing to be true. I would say 9 out of every 10 people that I'm testing that have chronic fatigue or related issues.

Because see CFS is really by itself. Usually that's just one piece of their complaint list, but usually they have a lot more. But yeah, I'd say 9 out of 10 that we're testing, sure enough, either there's something in their home, their car, their office, if it's a child we're finding the schools are very commonly moldy and it's really crazy.

And people may say, well, why is this such a you know, people would say, well, why is this such an epidemic problem now? What's changed? And a lot of it has to do with our building practices. A lot of the energy standards have increased the tightness of our homes, meaning that our homes don't breathe anymore and you don't have any cycles of air. So like an old farmhouse in the 1800s, you'd have leaky windows, you'd have drafty doors. And so you would get some dilution of the toxins even if you had mold. And of course back then they were using plaster and they weren't using drywall. So there were less organic materials in the home that could actually become moldy. So the building materials have changed. We now make boxes basically made of cardboard and fiberboard and all this other crap. So we're making the perfect home for mold. And now our homes are so tight.

And also we're not farmers anymore, right? Less than 1 percent of the population is a farmer now, and the historical numbers were so much higher, meaning, and with everything that's happened with the world, everybody's at home or working from home and they're inside their house 95 percent of the time.

So we have tighter homes, we have more moldy building materials, and we're in our home all the time. And so that is really the perfect storm.

Kirsty Cullen - [00:11:14]

Yeah, and I remember looking at the study you just referenced there and I think it was 90 percent of the CFS patients in that study had had some past or present exposure to a water damaged building. So, that in and of itself says a lot, doesn't it? And I remember the study, it was 93 percent had a couple of mycotoxins. And then what was interesting particularly I thought about that study was that of those positive tests, I think 83 percent tested positive for a specific mycotoxins Ochratoxin or OTA.

And OTA is so interesting within the CFS community because we've seen in research that it specifically has an ability to impact on the mitochondrial membrane and cause oxidative stress. And of course, those things fundamentally damage the mitochondria and therefore kind of impact on energy production. And I think that's why we tend to then see a rise of typical CFS associated symptoms.

Evan Brand

Yeah, and I was off the charts for Ochratoxin. I had other mycotoxins too, but at least the reference frame changes with some of these labs but at least at the time the reference range was, I want to say maybe less than 10 was optimal for Ochratoxin and I was like 196. I mean, it was scary. I was off the charts and it wasn't record breaking, but it was one of the highest levels I've seen. And I had other, like Mycophenolic acid we see that a lot too, from water damage buildings. And what that'll do and just, some of these mycotoxins in general is they'll really just weaken your immune system.

So as you mentioned, the mitochondrial damage is one mechanism and the other mechanism is weakening the immune system. And so then what happens is you'll get all these opportunistic infections that'll take over. So you'll see Clostridia, which, Clostridia can inhibit an enzyme and that's called beta-hydroxylase and what will happen then is you get a buildup of dopamine and this can cause aggression and all sorts of behavioral issues in children. So we'll see a big link between like autistic kids, Clostridia and mold. A lot of these autistic children are really moldy and that's very important to address if you want to reverse the condition.

And then with the candida picture, too, I've spoken a lot about candida and how that plays into the whole chronic fatigue picture and brain fog and sugar cravings and memory problems. And so we know that, at least now after doing this and doing it wrong, I would say for years, maybe not doing it wrong, but I wasn't doing it optimally, clinically, meaning I would give people herbs. We would get the candida under control and then 2 to 3 months later, the candida will come back and we would say, well, they're not eating sugar. So it's not that. What is it? And it was the mold. And now we found that if we just get rid of the mold and the candida, the candida won't come back. But if you just try to kill the yeast and that's it, you won't get better.

Kirsty Cullen - [00:14:07]

Absolutely. Evan, do you want to say a little bit about the impact of mycotoxins on the limbic system, so thinking about how mycotoxins provoke issues with sort of anxiety, cognitive function, brain fog, hormone balance and even temperature control?

Evan Brand

Sure, yeah. This is a big smoking gun, and it was for me, too. So the limbic system, you have your amygdala, you have your insular, you have your hippocampus, you have other parts of the brain that get involved in the whole chronic fatigue fight or flight sympathetic overdrive. It's almost like a PTSD, so to speak. And when people think of PTSD, post-traumatic stress disorder, they're thinking of like sexual abuse, a car wreck, being in a fire, witnessing a murder. I mean, crazy stuff. But people don't really think of being exposed to mold or mycotoxins as a traumatic event. But it certainly is to the body and it certainly is to this limbic system.

And I don't know the exact mechanism of how this is happening, but it's said that the mold and mycotoxins really hyper stimulate. It's probably the immune system that gets involved and then somehow the nervous system gets looped in and both of these systems basically get stuck on high alert.

And so now this is where the chemical sensitivity can come in. A lot of chronic fatigue people also have chemical sensitivity. And I believe that's because the limbic system is so stuck, if you will, that it perceives subclinical levels of a toxin as a threat. So you may have the laundry or the perfume or the dryer sheets or the fabric softener. And you just get a little whiff of that stuff. But your body thinks that you just drank a whole bottle. So now you get this huge emotion of cortisol and stress hormone that really happens.

And so the temperature regulation problems I suffered with that, the anxiety, the panic I suffered with all that, too. So we can use herbs like passionflower and motherwort to really calm the system while we're working through this or maybe like a fermented GABA. But ultimately, you've got to get the toxin out.

Kirsty Cullen

Yeah, and interesting then to think about the hormonal impact as well, because obviously some of these mycotoxins have a very powerful estrogenic impact, which is, of course, then potentially relevant to puberty and menstrual balance and also to reproductive health as well right?

Evan Brand

Yeah, unfortunately, I mean, we've seen a huge decrease in the age of puberty with girls, it's like 6 years in the last 150, average age of puberty for a female in some studies is 10 or 11 years old and it used to be 16 years old. And, yeah, you're right. So some of these mycotoxins, they definitely, they're highly estrogenic, more than soy. People freak out about eating soy, but really getting exposed to mold could be more estrogenic.

Kirsty Cullen

So, I want to talk a little bit about POTS postural orthostatic intolerance, which is why we call it POTS, because it's a mouthful. Now, obviously from a CFS perspective, there's been a common link between POTS and CFS for some time. So the classic kind of dizziness on standing, feeling light headed, feeling nauseous, fatigue, altered vision. So that classic picture of going from horizontal to vertical, getting an increase in heart rate and a decrease in blood pressure. But what is the link between mycotoxins and POTS?

Evan Brand - [00:17:29]

I think they're intimately linked just because I've dealt with POTS personally and I also dealt with POTS a lot during COVID when I had that last summer, so.

Interesting, I've seen a lot of people that have said the same thing, if you just look up like POTS, COVID a little bit of a tangent, but I think it's doing something to the system, to the adrenal system.

So with the mycotoxins, I think a lot of it is because it's affecting your gut, which is then affecting hormones and possibly your aldosterone, which aldosterone is going to help you to regulate your water balance. And so this is why a lot of people with mold are going to be chronically dehydrated. You just can't quench your thirst. I think it has something to do with aldosterone. And so we can do things like Quinton, which is kind of like a filtered seawater that you can drink, you can do electrolytes to try to help it. But I think ultimately to calm it down, you really got to get the mold out.

So you'll see a lot of these like POTS protocols. There's people that talk about certain exercises, like physical strength training that you can do. But I don't know. I don't think that's root cause I think they're missing the root cause. I think mold is definitely a big trigger.

And unfortunately, as I mentioned earlier, Lyme is a big problem, too. So a lot of people that have, what we think of as chronic Lyme, I believe a lot of those cases, the reason they can't get better is because of mold and Lyme can trigger POTS also, Bartonella, which is a co-infection that can come from ticks, but it can also come from your cats. So most house cats or especially outdoor cats have Bartonella and that can be a vector. So if you play with your cat and you play rough and your cat scratches or breaks your skin, your cat could give you Bartonella and that can cause a lot of the same stuff. Anxiety, panic, blood pressure problems, what's called mast cell activation, chronic fatigue.

So I think a lot of people. As you see, it's getting tricky as we try to unpack this together, but as you see it can go deep, you could have a little bit of a mold problem, a Lyme problem, a Bartonella problem, a candida problem, all overlapping. And all of those issues can cause similar symptoms. So it can be really tough to try to tease apart what is your biggest smoking gun? That's why we just try to fix it all.

Kirsty Cullen

Yeah. And I think Neil Nathan has mentioned previously that if you've got kind of a plethora of different things there, infections, co-infections, heavy metals, mold, start with the mold because it's probably the easiest thing to get going with and to sort of clear out the system before you then move on. So it's quite interesting in terms of getting the order of events right.

Let's talk a little bit about testing. Evan, I know we've got Louise Carder joining us on the conference to talk about the various testing options available to us in the U.K. But can you tell us a little bit more about the testing approaches that you took personally and those that you would recommend clinically?

Evan Brand - [00:20:18]

Sure. Well, a lot of people go crazy trying to figure out where the mold came from, and they think that it's a current exposure. But I would say in the vast majority of cases, it's a previous exposure. So, I mean, for me, it could have been over 30 years ago in my grandmother's basement. I could have had exposure then. We know that the mold and mycotoxins can go through the placenta. So there could even be a multi-generational exposure. It could have been your mother and your grandmother. So when we're doing an intake, we try to look at family history and see what the health issues were and also the mental health issues. If we saw that the grandmother was depressed and anxious and so was the mom and so is the daughter now, we'll often think that there was a mold exposure kind of going through the generations. So it can be kind of a multi-generational toxicity, which sounds crazy, but it is real.

In regards to the testing, though, people are trying to, like I said, they're racking their brain like where did this come from? So we'll do what's called petri dish testing. And I like it better than air sampling because the molds will fall to the floor. And so you may take an air sample and it may give you a false low report. So we really like people to do petri dishes. And in particular, we use a company out of New Mexico called ImmunoLytics, like your immune system ImmunoLytics.

So ImmunoLytics is a great company and we use their petri dishes all the time. So if we have a woman who suspects it's her office or her children's school or the kitchen, whatever, you'll put the petri dishes on the floor for an hour. You put the lid on and then you send it back to the lab and then you get a health score and it'll show you exactly how many colonies you have growing. And then if we see a problem, then we have different protocols, have a whole product line called Oasis, we have candles that we burn, I've got one on my desk here, just an essential oil based candle. And it works. It sounds like some hippie stuff, but no it works. You can burn these candles and you can treat it.

I actually had a woman in London who, she was on an extreme budget, she had no money for anything else but to buy My Oasis candles. And we confirmed with, before and after petri dish testing that she treated her entire flat with just the candles.

So if there's a major water damaged material, like a wet piece of drywall or carpet, you got to cut it out and replace it. So we can't fix those type of issues with some of the essential oils. But there's a lot that we can fix.

And then regarding the body, so there's a couple of companies out there, but I like Great Plains because we like to run an organic acids profile also. And you could do a combo. So you can get two labs on one urine sample. So that's what we like to run. It's just one cup of pee and that gives you a ton of information. And then, of course, you can do retesting to confirm how well are you doing.

And then, why is it important to test? Well, because when you're looking at these different mycotoxins, there's different binders that are appropriate for different ones. So like ochratoxin you may want to go for charcoal or clays. If you see zearalenone, which is that estrogenic mycotoxins, we know that that's going to work better with clays also. So we may come in with like a GID toxic blend or we may do some chlorella.

So a lot of times we'll just give a broad spectrum approach because sometimes we see false negatives where we only show up one mycotoxin, but we suspect there's others. But there are some cases, if someone's really sensitive, where we'll just spot treat, meaning will give them just this binder or just that binder based on the lab. And also for compliance too, it really convinces the person that their issues are real. So they're going to stay motivated. If you just tell somebody on the street, hey, you're tired because you've got mold, they'll be like you're crazy, mold's everywhere. Why is this a problem? But when you have the data and you can prove it to them on paper, it's much more convincing.

Kirsty Cullen - [00:24:06]

And I know certainly in the clinic here, we have been educated really to look at building a body of evidence through testing. So looking at assessing urine samples to see what mycotoxins may be in the output. And then maybe looking at dust swiffer or swab testing within the home to find out what's in the environment. And then beyond that, maybe considering nasal swab testing or immune sensitivity testing. So really building the evidence from, ok, it's present and it's an issue, but then beyond that, what kind of issue is it to the immune system? How is the immune system responding and reacting?

Evan Brand

Yeah, one thing that's interesting too, with the testing on the home or the office is you can actually show up with candida, too. So candida can grow on these petri dishes. I'm convinced that what's happening with a lot of people, why they can't beat candida, candida is an opportunistic yeast, but it doesn't always have to be a problem. So we're not trying to get rid of candida 100 percent. In fact, I

think that's probably hard or close to impossible. I rarely see candida completely gone from someone's picture. I think we can get it under control, though.

But what I'm seeing is people, especially with pet, dogs that are coming into the home, they may be bringing spores of candida into the home, especially if the dog sleeps in your bed and then you're getting reinfected from your environment. So, people think of candida as just something that's in their body. But no, it's actually in your environment as well.

So some of the worst cases of candida overgrowth that we've seen in people, and these are generally chronically fatigued people, we'll test their home and the candida's off the charts. So we find that if we get the candida under control in the home, that they often do better on the protocols.

So that was kind of a revolutionary thing for me to figure out, because here I am just focusing on the body, right? As a clinician you kind of get hyper focused on the person, but you often forget that they're living in this bubble of a room where the candida spores may be reinfesting them on the skin, on the clothing or colonizing their sinus cavity. So I think a lot of it we're really missing is the sinus treatment, doing some sinus stuff, like some antifungals up the nose and in the gut, but then also treating the home as well.

Kirsty Cullen - [00:26:19]

Yeah and let's talk a little bit about the histamine link, because I know clinically we can see a case that looks primarily like a histamine issues. So you have the allodynic symptoms, you've got hypersensitivity, you've got some sense of relief with kind of antihistamine support. But in my experience, then you dig a little bit deeper and actually, you find that it is a mycotoxin issue with further investigation. And is that your clinical experience to see that mast cell activation as a significant clinical clue that maybe mycotoxins are present?

Evan Brand

Totally, yeah, and unfortunately, I suffered with it personally, too, and I'm still recovering from it, I didn't even know the possibility that, when we think histamine, we always think it's like a bacterial overgrowth situation. We think it's like histamine producing bacteria in the gut. We think it's leaky gut, that kind of situation. But initially, I had no clue that mold could really trigger this whole mast cell histamine intolerance and so, yeah, I think mold is probably the biggest trigger, but we do see a lot of, as I mentioned, Lyme and Bartonella pieces.

And Neil Nathan did a good job in his book called 'Toxic' all about mast cells. But he talks about Bartonella being a big trigger, too. So I think if you have a histamine problem, you really need to tease apart, is it mold? Is it Lyme? Is it Bartonella or is it all of it? And is it possibly even more? I mean, even just extreme stress can create a mast cell and a histamine problem.

I notice for me, if I'm on a particularly stressful call, I can almost feel the histamine just kind of building up in my body. Or if I'm, I don't know, I'm rarely stuck in traffic, but if I'm stuck in traffic, I can just feel, you can feel it building. And of course, cortisol is involved with this, too. And we talked about the whole limbic system being stuck in sympathetic mode. So once again, I think it's, in theory when you ask the question, it sounds very simple to answer. But then when I start unpacking it with you, it's like, oh, wow, this gets complex because then you think about the cortisol and how that's affecting the gut, which is then affecting histamine, too.

So it's hard to just point the the gun at one bad guy and say you're the bad guy because there's so many things dysfunctioning. This is why I'm often recommending people to stay on some sort of adrenal adaptogenic herb blend, something that they tolerate throughout this process, because it's a very stressful situation. So whether it's holy basil or reishi mushroom or ashwagandha or Siberian ginseng, rhodiola, possibly licorice, schisandra berry , I mean, there's a lot of things that I use personally and clinically. And we'll use those. It's just hard to keep people afloat while they're working through all of this other stuff.

Kirsty Cullen - [00:28:52]

And talking about stressful situations, sometimes when we're testing the environment I hold my breath a little bit because we're never quite sure what the home test is going to unpack and the level of the issue that we're going to find. And so I'm interested to know what your experience of that was, because it's not always about a major remediation, is it? Sometimes it is about humidity control or cleaning gutters or whatever it may be. But what was your experience, Evan with how you had to clean your environment?

Evan Brand

Yeah, so in this current house that we moved into, I'm sure I've had previous exposures over the years, but just because this one's freshest on my mind, the current house that we moved into, it was a relatively new build. It was only 2 years old when we got into it. And there was no water leaks or anything like that. But in Kentucky, where I am, it's very similar to a lot of the London area climate where you get a lot of rain, you get moisture, you get humidity. So I think just over time in this particular home, because it was a walk out basement, that we had humidity build up.

So there wasn't anything crazy. There wasn't any critical levels of mold here. But when we did the initial petri dish testing in some rooms there were 40 colonies growing and we want less than 4. And so we immediately did the fog machine treatment and we got the levels down into the single digits. And then just for maintenance purposes, we do the candles and we have whole house dehumidifiers hooked up. So we're constantly pulling moisture out of the home and keeping the home at a very, very good level, never higher than 40 percent, even in the summer when it's very humid, we're still keeping the house at 40 percent humidity, max.

So and then, of course air filters. We've got those in every room. I really like the Austin, I know there's a ton of different ideas and thoughts about air filters. I just like Austin Air. The Molekule is a good system too, Molekule destroys mold and VOC's and then the Austin just filters it. So there's different technologies out there. But I'm not a fan of Ozone. I don't like any kind of Ozone based stuff. So that's one thing I could say. But humidity, getting that under control, doing some type of a treatment if there's no damaged materials, your candles, your misters, your fog machines with the essential oil blend, and then just maintenance. Some type of a maintenance protocol.

So, in the summertime, we have a big screen room. We like to open up our doors and tons of humidity comes into the house, which over time that'd be a big problem but as soon as we shut the doors up, the dehumidifiers go to work and just suck all the moisture back out. So I have so many clients that are like, oh, I love the sound of the ocean, and they live on the beach and they open their windows and we test their home and they've got 85 percent humidity in their house. It's like, wow, you've got to shut those windows, you've got to get some dehumidifiers running.

Kirsty Cullen

And what about the EMF piece of the jigsaw puzzle. So suggested that EMFs amplify mycotoxin production. Is that something that you kind of build into those home strategies?

Evan Brand

I haven't tested this yet. I think it's a really cool idea and a thought that EMF actually aggravates the mold and causes it to release more mycotoxins. Sounds like an easy test to do. I haven't confirmed this. I've heard people say that and it makes sense. I would say that EMF sensitive people, they generally have mold or Lyme. So once again, you're back to the same root causes of trying to fix that. But for us personally, we definitely are a hardwired connection house only. We don't use Wi-Fi at all. We've got 5 acres, so we've got a lot of land, luckily there's no cell towers anywhere close, it's several miles away before there's any cell towers. So we know we're good there.

I think a lot of people get paranoid about the EMF situation, but I would say if you work on your nervous system, you can handle it better. So I know a lot of clients that once we've detox them, they can handle the EMF better. We've had some people who, I actually had a woman in London who had

very, very, very strong, Wi-Fi sensitivity. And she basically couldn't go anywhere because, I mean, even the grocery store has Wi-Fi now. And so I was like, well, this is tricky. So what do we do? And we just focused on all the root cause stuff I always do and then somehow that was enough for her system to settle down and now she can go travel with her husband. He was on business trips all the time and she was stuck at home because she couldn't go anywhere. And now she was able to travel again to be with him.

So I think it's pretty cool. Once you get the system stronger, I think it's OK to hyperfocus in and try to reduce EMF where you can. But I don't want people to get too lost in the mitigation of the EMF that they forget to address the root cause that led them to that sensitivity in the first place.

Kirsty Cullen - [00:33:20]

Sure. And when you deploy the tools that you use commonly, how quickly do you expect to see some of those symptoms start to reduce?

Evan Brand

Well, if you're doing some of the brain retraining, there's one called Gupta Program that I really love. I'm going to be interviewing him and putting him on my podcast real soon. But if you're doing some brain retraining or you're trying to calm the nervous system and you're doing affirmations, maybe you're doing some tapping, so like some EFT, emotional freedom technique, maybe you're getting on binders, glutathione. I think within 6 weeks you could notice a difference. But to fully get better, I would say 2 to 4 years, depending on the person.

Kirsty Cullen

And what part does the diet plan that you have, and I mean there's some great suggestions there on tools and strategies you use, but obviously we're familiar with mold producing foods. What role do you think that plays?

Evan Brand

Well, I think it's a small piece of the puzzle compared to the buildings. I'm not saying go eat grains and just eat conventional American diet. Don't do that. But I think that, like, moldy coffee, maybe some moldy chocolate, some moldy nuts. You know, I think they are a contributing factor. I think it's a small percentage, though. I would guess maybe 10, 15 percent of the total equation. I think the biggest majority of the source of exposure is from water damage buildings. But is it still important to get the diet dialed in, go organic as much as possible, and reduce the inflammation where you can, where you're only doing pastured meats. Totally, I push everybody towards mainly a paleo template. I think rice is OK in a lot of situations, but grains are notoriously contaminated, like corn is very notoriously contaminated with mycotoxins.

In fact, you know, here in the U.S., when you go to buy corn for hunting season, you can buy bags, 50lb bags of, what they call deer corn, so you can put it out to feed the deer and try to get them in the area, get them comfortable with your property to hunt them in the fall. And it's funny on one of the bags of corn I purchased, it said we test this corn for mycotoxins and we can certify that it's less than X amount per part per billion of mycotoxin. I thought, oh wow, cool. This is interesting.

So farmers and people in livestock industry, they know about this. This is not anything new. They've known about molds and how contaminated grains that are fed to the animals can make the animals sick. And if those, let's say grain fed animals are being eaten by humans, I would assume you're probably getting some of the mycotoxins there. So this is why in another way, in a roundabout way, it's even more beneficial to do these pasture raised, grass fed animals if you're going to do these animal proteins, because not only is the animal healthier, but the animal's not eating contaminated grains. So I think that's just another benefit of get rid of the factory farm type foods.

Kirsty Cullen - 100:36:17

As if all this wasn't enough, Evan, you alluded to the fact, earlier, you've actually suffered with COVID as well in the recent past. So, how are you getting on?

Evan Brand

I did. I think I'm OK now. I think I've had some, post-COVID fatigue. I mean, you hear about some of these, what they call long haulers, kind of this long-term thing. It's tough to say, right, I mean, I'm still detoxing mold, so it's tough to know what to point the finger at, but yeah, I mean, I definitely, I was tired for about a week. I didn't luckily get into any breathing trouble. I know a lot of people have, but I was really hitting the glutathione pretty hard with a nebulizer. So I think I beat most of it. But it was definitely a factor.

And I've heard some people talk about like a severity of COVID related to mold, but I haven't seen too much on that. I would blame it more on what I have seen published, which is vitamin D being a big problem and having vitamin D deficiency. So I think if you're just really trying to up your defense, I think getting your vitamin D optimized is important.

But is it possible that the mold with the weakening of the immune system and all that, it's making you more susceptible? Maybe so. But luckily, so far, I don't feel or think that I have any long-term effects. But it's too early to say. I mean, this is a really confusing thing for a lot of people. And I've talked to many smart doctors and they fully don't understand what's going on. I mean, there's a lot of talk about this thing possibly being synthetic and it having some man-made components to it that people don't fully understand. So I think it's too early to tell. This is going to make a really crazy documentary or some horror movie in 5 to 10 years when we truly uncover it all.

Kirsty Cullen

Absolutely. And I think we're sort of analyzing the data all the time. Obviously, we've seen an increase in people coming to our clinic with post-viral fatigue and long-COVID as it's becoming now known. And one of the things clinically, that we're observing, is that those old co-infections that may have been present, Epstein-Barr, other co-infections that were managed, actually then in a post-COVID scenario, are elevating the IgG levels. Those old infections are possibly on the increase.

So it's about the overall impact on the immune system, as you say. And it's going to be very interesting, I think to see how that plays out.

Evan Brand

Yeah.

Kirsty Cullen

Evan, thank you so much for joining us today, that's been really interesting. If people want to find out more about you, where do they need to go?

Evan Brand

Yeah, just check out evanbrand.com, I've got the podcast there, like you mentioned, I've got hundreds of episodes. It's all free. If people need help clinically, they could reach out there too.

Kirsty Cullen

Superb. Thank you ever so much, again for your time.

Evan Brand

Thanks for having me.