



Episode 467: Dr. Tim Jackson on Mold Toxicity, Testing and Remediation

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Katie: Hello, and welcome to the "Wellness Mama Podcast." I'm Katie from WellnessMama.com and Wellnesse.com, that's wellness with an E on the end. And this episode is all about mold. Mold exposure, mold toxicity, and mold remediation, both in the home environment and in the body. I'm here with Dr. Tim Jackson who is a functional medicine practitioner and biohacker, and he's also a member of the Wellness Mama medical review board because I really trust his opinion and his research. And his website is HealYourBody.org, and he has a specific specialty related to mold. Although he helps people who want to perform better in any

aspect of their lives to optimize their physiology, and has worked with high performers in a lot of different areas, he also has this specific expertise in mold, and I've gotten so many questions about this recently.

I wanted to delve in with him to why mold seems to be a bigger problem today than it has been in the past, and really get to go deep on all the factors that can contribute to this in the environment, and if mold is a problem, how to know that, how to test for that, how to remediate it in the environment, and then how to recover from it, because it's a very much multi-faceted issue. And so, we go deep on all of these things today. I took a lot of notes that are all at [WellnessMama.FM](https://www.wellnessmama.fm), if you guys want to read those, and there's links to the things he mentions that can be specifically helpful as well. But if you have every been exposed to mold or worry that it could be a factor in your home, you're gonna learn a lot in this episode. So, let's join Dr. Tim. Dr. Tim, welcome and thanks for being here.

Dr. Tim: Hey, Katie, thanks for having me. I look forward to chatting with you.

Katie: Well, I'm really excited to go deep about mold, but before we do that, I have a note here from researching you that while traveling in high school, you were in a German rock video. So, as an intro, I just want to hear a little bit more about that.

Dr. Tim: Yeah. So, I went to a private high school and we had this week every spring where we had to either do a job shadowing or go on an educational trip sponsored by the school. And so, two of my teachers and I think six classmates went to Paris and we were on a boat on the Seine River and a camera guy came over and said, "Hey, we're shooting a rock video". And, you know, he probably said the name of the band. I think it was an up-and-coming band. He said, "Do you guys mind being in it?" We were like, "no, not at all." And so, that's my two seconds of fame.

Katie: I love it. Well, to my knowledge, you are my first guest that has been in a German rock video. So, that's a cool milestone. But the main reason I was so excited to chat with you today is about the topic of mold because while I, thankfully, as far as I know, don't have any direct firsthand experience with mold, I hear from a lot of people who do, and I live in an area where this is a big problem. It sounds like you do too in the area where there's a lot of humidity. So, to start off broad, I'd love to really kind of understand why mold is such a big deal today. Is it that it's becoming a bigger deal or are we just more aware of it? Like, to me, this is a thing that's been in our environment forever, so why does it seem more acute right now?

Dr. Tim: Yes. So, I think the answer is two-fold. One, the exposure to non-native EMFs. So, 5G, Wi-Fi, that's according to Dr. Klinghardt, he did a study and showed that mold releases 600 times more mycotoxins when it's exposed to non-native EMFs than being...not being exposed. And so, that's part of it. The other part is when you're creating very energy-efficient structures, so you know, it's saving on our energy bills, but that energy efficiency is coming at a cost. So, when there's not a good indoor and outdoor exchange of air, you get

an isolation of a few species inside. And the important thing for the listeners to know is that mold behaves differently indoors than it does outdoors. And so, it's just like in the gut, you know, you don't want just one or two species, you want it to be as diverse as possible. And so, when you don't have that diversity and that competition to keep things in check, then a few species can grow essentially uncontrolled.

Katie: Got it. So, I guess like many things in health, when we moved indoors and changed our environment, we gave ourselves a whole new host of factors to deal with. I've talked before about like, for instance, light and all the chemicals we encounter through an indoor environment. And it sounds like mold is very much the same way where we've sort of created an environment for this problem?

Dr. Tim: Yeah, exactly. And, you know, even if the EMF issue weren't present, we would still have a mold issue. And so, it's not, you know, the mold itself because you could go to the Amazon and be exposed to hundreds of species of mold and you probably wouldn't react. But they have a checks and balances system where they keep each other, you know, in check. And when you have a few species that come indoors...and especially like in the southeast, you were just mentioning we have high humidity levels, but the other thing is I see in neighborhoods where there's new construction, the construction company puts up the framework and they may not come back for three weeks or a month. And so, you know, the rain and the elements are putting moisture into the framework of the house. And then when you add non-native EMF, and so I mentioned 5G and Wi-Fi, but can also be just indoor wiring, like if the wiring isn't done correctly or they take shortcuts, and there's a huge concentration of power in one specific area, that can also create issues.

Katie: And I think this is maybe an area that's not talked about very much is that EMF connection. I know it's an area we're still learning a lot about and trying to understand because so much like 5G is so new, but can you walk us a little deeper through how exposure to something like EMFs can make the mold problem worse, like in a little bit more granularity?

Dr. Tim: Yeah. So, the 30,000-foot view answer is that we are biophysical and bioelectrical beings. Meaning that, you know, at our cell membranes, the charge, the voltage should be minus 70 to minus 90 millivolts. And so, when that gets altered, it changes the firing of our neurons, our nerve cells, many other types of cells in the body. And so, that alters cell to cell communication and also tissue to tissue communication. And so, ultimately, you know, I'm very big into biochemistry, but your biophysics, meaning the EMFs you're exposed to, you know, whether you're in natural blue light from the sun or artificial blue light from, you know, indoors, that determines your biochemistry, right, drives your biochemistry essentially. And so, when we talk about EMFs, you know, the earth has a natural EMF called the Schumann resonance, and that's the principle behind earthing and grounding. So, you're basically adding electrons to your body and what that does is it lowers inflammation and it energizes the mitochondria. When we're indoors or you could be outdoors and you're exposed to 5G and you might live near a cell tower, there's an app, I'm going to see if I can find it, that an engineer created where it converts non-native EMFs into sound waves so you can hear all the impact that your cells are experiencing. And I think that's a lot more profound for people because it's just like with the mold issue, if they can't see it, most people don't believe it's an issue or even take it into consideration.

Katie: That's such an important point. I think I've definitely encountered this with people on the EMF issue. Also even with things like emotional trauma. Like if we can't see something or tangibly measure it, it seems difficult sometimes to grasp it. And certainly, I'm sure you encounter this a lot with mold where people, either not knowing it's there or discounting how big of an impact it can have. So, I guess a good follow-up question to that would be like how would you know that you need to test for mold, whether it be in your home, in your body, like, how would you know to test for that?

Dr. Tim: Yeah. So, with most species of mold, you can't see it and you can't smell it. And so, most people don't know to test for it. But if you do the proper testing and so there's multiple ways to test your home, and usually, you want to choose a company with obviously a good reputation that uses multiple testing methods. So, you can use a camera that's infrared that looks behind the wall for increased condensation. That way you don't have to tear anything down in your home or office that is not needed. And so, checking that. Most of the legitimate companies will have a probe they can put into the ductwork and test for mold there. And they might also do air sampling or vacuum sampling. Air sampling will pick up mold when there's massive amounts. But vacuum sampling can pick it up if it's in the dust or wherever. But going back to the ductwork really quick, you wanna have your ductwork cleaned preferably twice a year, especially if you live in a area with lots of humidity. And you're going to remember...when I first started practicing, you know, the stat that I kept coming across was depending on where you live, indoor air was five times more toxic than outdoor air. Now, I'm seeing that it's 10 times more toxic and it's not just mold, it's volatile organic compounds, viruses, bacteria, all of those are impacted by...especially the viruses and bacteria by the non-native EMFs as well.

Katie: Got it. Okay. That makes sense. Are there also tests for mold in the body? Because I know a lot of people experience issues related to mold. How do we know and test the body?

Dr. Tim: So, I use urine test through through Great Plains, and it's a urine mycotoxin test. And the provocation part comes from taking liposomal glutathione or doing a far-infrared sauna session, something that moves the mold and mycotoxins out of the tissues so that you can pick it up in the urine because if you just collected your urine, you may get a false sense of security. And so, you always want to provoke the mycotoxins in order to get the most accurate reading. And when you get your results, you know, let's say aspergillus is high, which is one that you can't see or smell, we can't say that it all came from your current home or your current office. We can just say that's your current body burden. And so, you know, when we talk about that, we have to work on detoxing the body, but then we'd want to go ahead and make sure that you're not constantly being exposed currently, you know, in your home or in your office. Otherwise, we're just treading water.

Katie: That makes complete sense. Okay. So, to circle back a little bit, you mentioned even when homes are being built, like moisture can get into the frame of the home. So, I guess a two-part question there would be, are there things people can do if they are in the building process to reduce the likelihood of that and/or if they already have a home that's built, can that be remediated at all?

Dr. Tim: Yeah. So, it can definitely be remediated and it varies from state to state. So, in some states, the companies who do the mold testing, legally, they're not allowed to do the mold remediation because it's a conflict of interest. And I've worked with families who've spent \$80,000, \$90,000 remediating their homes and they still have mold issues because the structural problems weren't corrected. So, ideally, you want a different company to test and do the remediation. In terms of building a brand new home, now they have more and more materials coming out that are being prepared with certain coatings to not collect moisture. And that helps prevent a lot of the problems to begin with. And I've even read about certain homes, you know, getting built in specific parts in a warehouse, and then it all gets shipped and put together on the same day so that it's not exposed to the elements.

And the other thing comes down to structural issues. And this gets into more of a healthy building architect or a building biologist, but looking at the slope of the land or the land. So, you know, you might think somewhere like Minnesota or Michigan, they wouldn't have mold problems, but when you have all that condensation without the sunlight that causes the evaporation, then water can pool underneath the home and get into the foundation. And so, you know, working with a contractor, interviewing contractors ahead of time who are aware of mold issues more and more becoming aware as the population at large becomes more aware because they've been allowed to take shortcuts for so long because, you know, if you go into a court of law, most judges are gonna bring...or attorneys are gonna bring in a traditional medical doctor who's going to say, "Oh yeah, I mean, mold is not an issue," when you know, it's a very serious issue.

And so, you know, I think it comes down to working on getting the right materials, working with the right contractor and construction company. And then if you have a home that tests positive, remediating it, but making sure you correct any structural problems. So, I'm not an expert on this, but there are different little attachments that you can get to go in the ductwork that will attract and pull in mold and mycotoxins. There are UV filters that you can put at the beginning of the ductwork that will help. And in terms of indoor, you always want to make sure the humidity doesn't go above 50%. When it goes above 50% especially if there's EMF present, that's just like a breeding ground for mold.

Katie: Do you have any guidance or advice on finding a reputable remediation or resource for dealing with mold if someone has it in their own area?

Dr. Tim: So, if you go to the American Academy of Environmental Medicine, I don't know if they have a complete listing, but they should have some overall guidelines as to what to look for. Because, you know, they're the ones who pretty much brought to the table the issue of mold and VOCs and other toxins in the environment. And so also, you know, interviewing the company and asking them, "Okay, what measures do you take to prevent moisture accumulation during construction?" You know, "What do you do structurally to prevent water buildup?"

Katie: Gotcha. Okay. And you mentioned in passing like the health problems that can be related to mold. And I know that for many people, this can be kind of the canary in the coal mine to know that they even have mold

in the first place. But also I think a lot of times maybe it's hard to connect symptoms that are going on to mold as a potential cause because like we talked about, you don't necessarily see or smell it. So, what are some of the health problems that can be linked to mold exposure?

Dr. Tim: Probably the most classic and well-known is recalcitrant insomnia that doesn't respond to supplementation, medication, good sleep hygiene. And if you want to get down to the nitty-gritty science, it interferes with the hormone called alpha-melanocyte-stimulating hormone. That's the same hormone that makes us tan, but that's sort of a lesser benefit. The more important benefits are the anti-inflammatory properties that it exerts. And so, because mold... It also is responsible for our natural endogenous opioids. And so, when it's low, our natural opioids and endorphins are gonna be low and that's gonna make it more difficult to sleep. And so, I would say that's probably the most common symptom. Does it have to be? Not everyone with mold toxicity will experience insomnia. But I would say probably the second most common is brain fog and all of its derivatives.

So, short-term or long-term memory loss, trouble focusing and concentrating, you know, trouble retaining and processing information. I would say those are probably the two biggest symptoms, but it can also be anything from skin rashes to joint pain to overall fatigue, chronic fatigue. One of the first things that mold and mycotoxins do when they enter the body is they block our mitochondria essentially. And the mitochondria are the batteries of the cells. And so, you're interfering with the energy production process and you need energy to detox. So, it's like a vicious cycle because then the mold's able to stay in your body longer. And so, I would say those are the primary symptoms. Sinus issues, most people don't know this, but even traditional EMTs acknowledge that 95% of all sinus infections are mold-related. But if you just go to a general family practitioner, they're going to give you an antibiotic without even testing. Mold tends to...it can colonize anywhere in the body, but it tends to particularly colonize the nasal cavity.

And there's a test where they stick, it's very uncomfortable, but they stick a large Q-tip up your nose and swab it and then send it off to the lab. And you can tell, you know, for sure what species and how much, you can quantify any mold that's colonized the nose because, you know, essentially, our neurons are hanging down into our nasal cavity. And so, if you have mold that's colonizing there, the mycotoxins it releases, really beats up the nervous system.

Katie: That makes sense. I actually have a neighbor who they didn't know they had mold in their home and their son kept getting these recurring strange illnesses, and, of course, got antibiotics over and over and they eventually identified the mold. But unfortunately, he dealt with some of those negative side effects from so many years of antibiotic use. And it seems like there's almost going to have to be a two-part...at least two-part solution to this. The first being removing the exposure so you're not still chronically compromised. And then after that, helping the body recover from the mold. So, we talked a little bit, especially on the building side about remediating, but are there other things like if you live in a humid environment or you have, you know, that ground moisture, like you talked about, what are some of the things people can do to help get rid of the mold exposure going forward after they've remediated? Is it air filters? Is it changing the environment? What can help there?

Dr. Tim: Yeah. So, one product I have going behind me is the AirDoctor. And I don't have any connection to the company or anything, but, you know, prior to it coming to market, the products I was recommending were, you know, at least \$1,000, maybe \$2,000 or more, depending on the size of your home. But the AirDoctor I like because it's an UltraHEPA plus carbon filtration system. And it also has an ionizer on it and a fan as well. And so, it filters down to, I think, it's 0.009 microns, so it's gonna catch not only mycotoxins, but volatile organic compounds, viruses, bacteria, dust particles, dander. You know, I had my parents get one for their home and they had someone cleaning their house and she said, "You really don't have any dust. I hardly ever see a house as clean." And so, it definitely works.

So, the AirDoctor's a product I definitely recommend. And you know, for each floor of your house, ideally, you wanna have one on each level. It's better to have three...so, if you have a three-story house, have three smaller ones than to have one large one downstairs. And the second part of that is, you know, getting an indoor humidity meter. So, you never want the humidity to go above 50%. And I keep my dehumidifier running all the time to keep the humidity no more than 50%. And you want to make sure...you know, you can get really large dehumidifiers, but you always want to make sure that you empty it at least once per day because mold can start...actually start to build up in the bottom of the water filtration system. And so, you know, an air filtration system, keeping the humidity down.

And then another sort of side note tip, one is when you take a shower, afterwards you wanna keep the fan in the bathroom running for 20 minutes at least. And so, that helps to, you know, recirculate the air and things like your...others you might not consider, but your washing machine, you want to keep the door open, you know, after you've taken your clothes out because black mold and any type of mold can really build up in there. So, I think, you know, those are the primary things along with having your ductwork cleaned twice a year. Another tip that sounds kind of random, but when it rains, you don't want to keep your garage doors open and it gets into complicated building science that's probably over my head as well as everyone else's, but I just, you know, accept it and do it, you know, because it's not like it costs anything to close your garage door.

And so, I think, you know, those approaches will help keep the mold away if you do, in fact, have to remediate. The third approach I would have to say is calming down your fight or flight or sympathetic nervous system. And so, these limbic loops, you know, get activated and they can become activated for mold, viruses, bacteria, emotional, mental, or psychological stress, and so then your body is sort of in a heightened sense of alertness or awareness. And even though you detox mold from your body, you know, you're never going to be able to get away from all the mold. So, let's say you go to the supermarket or a grocery store, you know, you're probably going to be exposed to some mold and so calming down the nervous system, letting it know it's okay, you know, because your body does a great job of remembering, but a terrible job of erasing those remembrance.

Katie: Yeah. That definitely seems to be a common thread throughout. A lot of aspects of health is training our body to stay in parasympathetic as much as possible. And being more cognizant of that, just realizing, like you

said, in the modern world, we have more inputs, whether it's mold, EMFs, light exposure at the wrong time of day, and so, being more cognizant of our parasympathetic balance and doing things more proactively to keep the body in a parasympathetic state, which I think is a good segue into the next part of this that I really want to delve deeply on, which is how to detox the body when there has been an acute mold exposure because like you said, this is tied to a lot of potential health problems, and it seems like it can be a little bit of a tough one to recover from. I'm sure the parasympathetic aspect is a big one here as well, making the body feel safe to recover. But what are some other things people can do if they know they've had mold exposure?

Dr. Tim: Yeah. So, binders... You know, a colleague handed me the book "Mold Warriors" back in 2009, and he asked me to read it and let him know my thoughts. And so, Dr. Shoemaker originally recommended the prescription cholestyramine, which is a cholesterol-lowering medication, but the issue is it binds up all the good stuff along with the bad stuff, not to mention it has aspartame in it. And so, now I use products from Cellcore Sciences, which, you know, their sister company is Microbe Formulas and they have two products, BioActive Carbon Foundation and BioActive Carbon BioTox. And it's basically different carbon technologies along with humic and fulvic acid that will bind the mycotoxins because different mycotoxins weigh different amounts. And so, you know, they do a great job, that company, of including ingredients that will capture most if not all of the mycotoxins.

So, the binders, you know, obviously, you want to make sure that the individual's having at least two bowel movements per day because if you bind up the mycotoxins and they just sit there, that can create another inflammatory cascade. But the products I've mentioned, they do a good job of not re-releasing the mycotoxins into the body. So, some people say, "Oh, Dr. Tim, can I take activated charcoal or Zeolite?" And you can, but most of them will bind the mold and then re-release it into the body causing another, you know, inflammatory cascade. And so, those two products in terms of binders, I definitely like to use. Another product is called calcium D-glucarate, which people may have heard of for estrogen detoxification and metabolism, but it also is helpful for detoxifying certain mycotoxins. And so, if you're estrogen-dominant and you have mold, you can kill two birds with one stone.

And so, those products are great. And then earlier, I mentioned that mold and mycotoxins will block a pathway called NRF2, which is involved in the mitochondria, but it's also how we detoxify a lot of chemicals and compounds. And so, basically, the NRF2 pathway when it's blocked, we can't create antioxidants either. And so, in order to lift this block, you can use DIM, which is the same DIM that we use for estrogen dominance. But you know, in this case, it's being used for a different reason. So, it sort of lifts that block on that pathway, which is important for energy production and detoxification. And, you know, if people are wondering about a specific product, I like the one from Quicksilver Scientific. They have a great liposomal DIM product that can be taken on an empty stomach. And so, the third product or the third category I would say is a product called TUDCA, T-U-D-C-A. And what it does is essentially increases the production and release of bile. And bile is essential. Its production and flow is essential for detoxification of everything, especially mold. And so, taking the TUDCA usually is just a one-month deal. That helps to get things moving so that it then gets dumped into the colon and the binders can bind it up there.

Katie: Gotcha. I'm taking notes. That's super helpful to have some specifics. I think people definitely deal with these symptoms and worry that they're hard to eradicate.

This podcast is sponsored by Olipop, a company reinventing the idea of soda! It's no secret that most things we think of as soda aren't great for your body with the massive amounts of sugar and added artificial ingredients. But Olipop is a new kind of soda that tastes just like the sodas we grew up with, but unlike other sodas, it is packed with natural ingredients that are good for you and that help keep your gut happy too! They have delicious nostalgic flavors like Vintage Cola, Classic Root Beer, Orange Squeeze, Cherry Vanilla and Strawberry Vanilla. Strawberry is my current favorite but I really enjoy all of their flavors. They use functional ingredients that combine the benefits of prebiotics, plant fiber and botanicals to support your microbiome and benefit digestive health. There is also a massive difference in their sugar content. Their Vintage Cola has just two grams of sugar as compared to a regular Coca-Cola which has 39g of sugar. Their Orange Squeeze has 5g of sugar compared to Orange Fanta which has 44g of sugar. All of their products are Non-GMO, Vegan, Paleo and Keto-friendly with less than 8g net carbs per can. They are so confident that you will LOVE their products that they offer a 100% money back guarantee for orders placed through their website. We've worked out a special deal for Wellness Mama listeners. Save 15% off your purchase. I recommend trying their variety pack as this is a great way to try all of their delicious flavors. Go to drinkolipop.com/wellnessmama or use code WELLNESSMAMA at checkout to claim this deal. Olipop can also be found in over 5,000 stores across the country, including Kroger, Whole Foods, Sprouts, and Wegmans.

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They're backed by a world-class team, including Stanford-trained MD, top engineers from SpaceX and Google, and a research team that includes legends in the space like Dr. Dominic D'Agostino and Dr. David Perlmutter, both who have been guests on this podcast before. Health is so personalized, and this has given me a way to know the best foods for my own body, and it's helping me get enough protein and carbs while still maintaining weight loss. Levels is currently running a closed beta program with a waitlist of 100,000 people, but, as a listener, you can skip that line and join Levels today by going to levels.link/wellnessmama.

How long does it usually take for the body to recover? I would guess there's a cycle there, since you mentioned it also affects mitochondrial function. So, something the body has to recover from. How long before people typically start to see some of those first steps in recovery?

Dr. Tim: I would say it depends on, you know, where you are in your wellness journey. So, you know, if you are just starting out, you've been eating a lot of fast food and not exercising, not sleeping well, then it's gonna

take longer. In general...so a colleague told me about a case that their company did and it looked at a little girl, I think she was four or five, and her father, and they use the same products, but different doses obviously. And the little girl, it took her, I think, two months and she was, you know, fully recovered. The dad, it took closer to five and, you know, it wasn't because he was doing anything wrong, it was just that, you know, as we age, we bioaccumulate toxins in our adipose tissue, and so that toxic burden is higher.

Katie: Got it. What about using ozone? I've seen this recommended in some detox protocols for mold. Are you a fan of ozone? And if so, what are the guidelines on using ozone correctly?

Dr. Tim: So, I like ozone for killing pathogens and, you know, mold certainly would be considered a pathogen. The problem... So, you can then also use it in the environment, in your home, you know, as long as you're not there. But what it's gonna do is it's gonna kill the mold and then it's still going to release dead mycotoxins, and dead mycotoxins are still immunogenic, meaning they stress the immune system. And so, it also has to do with our body's ability to produce an antioxidant called superoxide dismutase. So, if you've seen Cindy Crawford's infomercials with her skincare line, that's the main ingredient actually, the SOD antioxidant. It's right up there with glutathione, helps protect the mitochondria. But, you know, ozone has an oxidative effect on the body. But you know, after a few hours, it upregulates or it's supposed to upregulate your antioxidant enzymes, but some people might have certain polymorphisms or SNPs where they can't produce enough of the superoxide dismutase.

And so, I think it's case-dependent. And it also depends on what type, and what I mean by what type is a colleague of mine trained with Dr. Rowen and he does the 10-Pass ozone. And, you know, you don't start someone off doing 10 passes...and so a pass is where you take a certain volume of blood out, add the ozone and then give it back to the body in the IV form. And so, normally, you would start out with three passes and then graduate from there. And so, a lot of people, you know, advertise they do ozone, but then when I talk to them, it's just one pass ozone. And that's still beneficial, but you can't compare that to 10-Pass ozone and, you know, make an adequate, accurate judgment.

Katie: That makes sense. I recently got to do, not for mold, but for other exposures something called EBO2, which is mold plus UV plus, I think, red light, and even like dialysis basically because my kidneys...I had rhabdo recently and found that really helpful, but it sounds like you would still want the 10-pass of ozone, even if you were to do something like that.

Dr. Tim: Yeah. Yeah.

Katie: Okay. Very cool. And I think that's the biggest thing also is realizing...because the people I know who have encountered mold exposure, it seems like a daunting thing to overcome. And so, like, it's helpful to hear you explain both from the home side and from the health side. There seems to be a clear-cut path to recovery.

And I like to always make sure to kind of hammer on that message. And anytime we're talking about any kind of toxicity or health problem or exposure is it is possible to get better. And I think the mindset also there is a tremendous key of like reframing that and focusing on the recovery versus focusing on the toxicity. I feel like people can get easily stuck in that loop of how bad it was and the exposure. And it makes it, I think, a little harder to actually recover when you're kind of in that loop.

Dr. Tim: Yeah, definitely. And you know, thinking positive thoughts, obviously, that's an important part. That goes back to the meditation, the parasympathetic activation. And so, you know, we're moving the trigger. One program that I like that I recommend to my patients is called DNRS or dynamic neural retraining system. And it basically requires...they have in-person courses, but you can order the DVDs or watch the DVDs online and do the workbook. And it basically involves reprogramming your limbic system so that it's not hyper-reactive to every stimulus that it encounters. And that's important because, you know, like you said, we're never gonna be able to avoid all mold and mycotoxins.

Katie: Yeah. And that's an important reframe to think as well. I think about that a lot in relation to like EMFs and to all the things we're exposed to in modern life is while, of course, we want to minimize our negative inputs, these are not things we can entirely avoid. And I actually think there seems to be a balance of when you overly avoid something, your body's less adaptable when it does encounter that. And so, maintaining a resilient mindset, making sure our immune system and our body is well primed to deal with things, but also not stressing and realizing it's not possible to be 100% in these things. And so, it's just important to be proactive in the positive inputs to kind of counterbalance the negative ones that we will inevitably encounter. And in the research for this episode, I have a note in my Google Doc that if you had to give a TED Talk, it would actually be related to mindset. Then you mentioned removing the mind viruses from generational programming and brainwashing. And so, I'd love to if you don't mind touch on that a little bit, because I learn more and more, I feel like, just how pivotal mindset and how we deal with our emotions and our response to stressors is as far as every aspect of health.

Dr. Tim: Yeah. So, I mean, I feel like basically our educational system teaches people...and Seth Godin, "The New York Times" bestselling author talks about this and he has a great book called "Stop Stealing Dreams." And, you know, in school, a teacher asks a question and you have a bunch of students sitting there with their hands raised waiting to be chosen, but in life, no matter what you want to do in order to be successful, you have to choose yourself even when the world chooses against you. And so, Ricky Williams, a former NFL player, you know, he had a great...a great TED Talk a few years ago, and he said that nothing was more painful than choosing against himself. So, all the negative publicity around his use of marijuana, etc., none of that was as painful as going against his innate wisdom. But I think, you know, we're all a lot more capable of accomplishing our goals and dreams than what we're told.

You know, if you look at documentaries and a lot of pro athletes or Olympic athletes, you know, when they were in school, at elementary or middle school, they wrote down that they wanted to be a pro athlete and their teacher said, "No, that's not realistic." But like Joe Rogan says, "Why would you be realistic? Being realistic is the most commonly traveled road to mediocrity." So, I don't want to go down that road. And there's

a great quote, Seth Godin talks about quite a bit and he says, you know, you don't want to fly too high because you can get burnt by the sun, but you don't want to fly too low because you can get pulled down. And I'm paraphrasing, you know, that's not the exact quote, but I think most people are flying too low. And you know, I remember when I first started out, the nurse I had working for me at the time, she said, "Why are you starting your own Facebook fan page? No one cares what you have to say." And you know, now here I am with Wellness Mama. So take that, Alexis.

Katie: Yeah, I think that mindset piece, like I said, is so, so key. And I'm guessing you're going to have a great answer to this question as well, but what I love to ask toward the end of interviews is if there's a book or a number of books that have had a profound impact on your life. And if so, what they are and why.

Dr. Tim: "Tuesdays with Morrie" was a great book that I read when I was a junior in undergrad. And I read it because it was a requirement for a health psychology course, but I ended up reading it several more times. And it's just the life lessons that he imparts. You know, when you're on your deathbed, I tell people and patients all the time, when you're on your deathbed, is this going to be significant? You know, because they've interviewed hospice nurses and doctors, and they talk about what patients have told them and what they would go back and do differently in their lives, most of them say they would work less, spend more time on relationships, more time with family. And so, "Tuesdays with Morrie" hammered home that lesson, and a lot of other important life lessons, you know, what to take seriously, what not to take seriously, you know, don't take any day for granted, those sorts of things. So, I would say that book has had the most impact on my life.

Katie: I love it. I'll link that in the show notes, as well as a link to your website. But for anyone who's listening, especially anyone who's maybe had mold exposure, how can people find you and keep learning more about the topic of mold?

Dr. Tim: Yeah. So, healyourbody.org. And I'm sure you'll put it in the show notes, but it's <https://healyourbody.org>, and you can send me a message through there and I'll respond. And if they want to use the code WellnessMama10, I'd offer a 10% discount on an initial 1-hour consultation with myself.

Katie: Amazing. Yes, that link will absolutely be in the show notes at wellnessmama.fm. For any of you guys listening while you're on the go, you can find everything we've talked about there. I've been making notes about the specific supplements and protocols as well, so you guys can find an overview of those. And Dr. Tim, really appreciative of the work you're doing in this and of having you on our medical review board and of your time today. So, thank you.

Dr. Tim: Thank you so much for having me, Katie, and thank you for the work you're doing.

Katie: And thank you guys as always for listening and sharing your most valuable resources, your time, energy, and attention with us today. We're both so grateful that you did, and I hope that you will join me again on the next episode of "The Wellness Mama Podcast."

If you're enjoying these interviews, would you please take two minutes to leave a rating or review on iTunes for me? Doing this helps more people to find the podcast, which means even more moms and families could benefit from the information. I really appreciate your time, and thanks as always for listening.