# Detoxification: How Toxic Burden, Stress, and Environmental Exposure Shape the Body’s Response wi... Transcript

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## Introduction to Toxic Burden

The thing with these toxic elements is once they get in your body, a lot of times they just stay there for decades. Right? So even if you're not exposed right now, if he were exposed in the past and your was not able to excrete it, A lot times that stuff gets stuck in tissue.

So that's one of the challenges. The body's focused on short-term survival over long- term function. is if the mercury is safely, it's tucked in tissue causing minimal issues at the moment.

Maybe it hasn't resulted in the neurodegeneration or whatever, but it is also not causing inflammation in short term because it isn't being exposed to the processing center.

The body doesn't really want to let it go out of tissue. Because if you detox it, if your body excretes it from tissue, it has to go through the processing center, that's going to cause stress.

So the reason the body put it into tissue was to remove that initial source of stress, put them into storage. When it comes out of storage, It's like you were just exposed for the first time.

It can be stressful. Welcome to the To Curious MD podcast. I'm Dr. Ali Ahmed. And I am Dr Surya Ravan. With the wisdom from holistic, alternative, and these conventional medicines, we are here to challenge the status quo.

We're curious about the connectivity and complexity between diverse fields of knowledge as it relates to consciousness, chronic illness, mental health, resilience, learning more about the art and science of healing, or listening to stories of extraordinary healing.

You're in the right place. Let's dive in. This is the space for the curious. Let's dive in. Today's guest is Jeff Hoyt, a wellness innovator and founder of Zeolite Labs and a host for The Detox Experience podcast, A platform dedicated to exploring detoxification, root cause healing, heavy metal toxicity, and the evolving world, which I love, of integrative wellness.

Jeff's work sits at the intersection of curiosity and unconventional thinking.

## Jeff Hoyt and the Detox Experience

And through conversations with physicians, functional medicine practitioners, health educators, and individuals navigating chronic illness, he's become known for challenging the status quo around detoxification and around the deeper questions about what it may be driving our modern health struggles.

His podcast, The Detox Experience, explores real-world healing stories, the science and controversy around detoxification, environmental toxins, nervous system regulation, gut health, and what it means to approach wellness from a root cause perspective.

Today's conversation, we'll explore detox culture, that detoxed culture through a more nuanced lens. Asking what detoxication actually means biologically and environmentally and of course emotionally as well because we deal with that in our center when we talk about treatment resistance conditions and its impact on mental health.

We'll discuss heavy mental metals and modern toxic burden, the nervous system and why so many people are searching for answers outside of conventional medicine.

So welcome Jeff Hoy to our podcast. Thank you, thank you so much for having me. I'm looking forward to the conversation today. Thank you. Your work has become deeply connected to detoxification and root call wellness.

Can you tell us a little bit about what sparked your interest in detox and environmental health? Yeah, absolutely. I mean, it kind of started with just, there's so many great things, so much great protocols out there, right?

And I was utilizing a lot of more of the natural alternative methods and I had a biohacking center where I, you know, a of that, the fun technology, people could come in and use oxygen therapies and hydrogen, PEMF, and all these other things.

And it was great because people would could, come and it could help them combat the modern stressors of, 21st century living kind, of props up their body, makes them better able to deal with things But if they stopped coming in, it would go back to feeling terrible, right?

So I said, this is okay, but it's not really sustainable. Because one, when people are coming and every day, It's very expensive. And it just, just not getting to what I would call the root cause, Right?

It is not removing the source of the issue to begin with. So that then when they stop it, then they're better. That's when I got into detox. I need to figure out something.

where people can do a protocol or, you know, change their lifestyle or something that when they stop doing it, they're better off than when They started.

So it's not just propping up the system, but it is also helping resolve internal issues. I started digging into detox and you there's tons, detox is just a massive, massive field with lots of therapies and modalities.

And I explored a lot of them. And then got, you know, we could talk about some of the different ones, but basically I, so delve into detox and say, this is, what I'm going to focus my professional career in, because I think that it's something that is misunderstood a lot in the community.

And it sometimes a little bit more challenging than people think. That's, that's where I am at now. Okay. Detox is a buzzword and especially in our field and in the wellness world as well and you mentioned biohacking.

## What Detoxification Means

From what perspective and we'll tell us a little bit more about what detoxification actually means biologically to our audience. Yeah, and so I'll give you my definition first of detoxification and that would be removing unwanted things from your body or from life.

So anything that is weighing you down, that's adding stress, making your work harder than normal to stay balanced, whether from an internal and stored toxicant perspective or, you know, emotional stressors, relationships, all that thing.

So that's all, removing stuff that you don't need or you want in your life, getting rid of it. That's detox. In medicine and in alternative health, when we talk about detox, we're really talking about removing the stored toxic elements that accumulate in tissue and the body.

So things like heavy metals, mercury, cadmium, lead, arsenic, environmental toxicants, microplastics, glyphosate, these issues and that's generally when you hear people talk about detox, it's talking about getting those things out of the body.

What's our audience a little bit about? Because we both providers who listen to this podcast, as well as patients, how does that toxin actually impact or cause chronic symptoms?

And how would that accumulation worsen that condition, say, for gut issues or for mental health? Yeah. And the

first thing to understand is that our bodies are detox machines, right?

We're all detoxing all the time. So it's not that we have to completely rely on some sort of external therapy or supplement to do the work for us. We want to encourage our body's to work better.

That's really one of the keys with detox. The challenge is our bodys are designed to deal with some level of stress and toxicity. And if we're consuming toxins in the food, water and air and our bodies are able to handle them on a daily basis, kind of process them and excrete them through normal processes, then we are going to have minimal negative effects from those.

But if the external exposure becomes greater than what our body is able deal with, the body has to do something with that toxicity and the natural storage unit for toxins is going be fat.

So at that point, the body starts tucking these toxic filaments away into tissue and says, you know what, we can't deal with it now, let's tuck it away and deal it with later.

So when we talk about toxicity, there's kind of different levels to toxicity and levels of toxin storage and they result in different symptoms for different people.

One you have, I call it level one toxicity. And this is your daily dose of toxicity or your active toxicity of what your body is currently processing.

like processing center toxicity. That's what you're exposed to daily from external sources, along with what's being produced from internal, like inside of you, whether it's metabolic waste products like ammonia, urea, histamine, or it is microbial waste product or recycled toxicity, etc.

All of this stuff kind of makes up your daily dose of toxicity and when it being processed and the body says, all right, we have this toxicity that's excreted, let's break it down, get rid of it.

and we'll be good to go, right? When it's in that processing center, it causes more acute issues because it is there, your body is dealing with it. It might be causing an inflammatory reaction, an immune reaction if it in excess and that's the problem when people become symptomatic from toxicity because their body can't handle the level of toxicity they're dealing on a daily basis.

And this could be a chronic issue where every single day you're dealing with more than what your body can handle. And that could twofold. One, because you are exposed to a lot or because your bodies not working properly or a combination.

Or it could from an acute exposure where you just exposed something in a high level and your just is not able to get rid of it all right now. So there's that issue.

And then you have the long term accumulation, where if you a sustained period where there is this toxicity coming in that your body can't process, you're getting accelerated accumulation and tissue.

So the body is more focused on the short term survival, opposed to the longer term function or long-term thrive.

## How Toxins Build Up in the Body

That's the first thing to understand. Because we might ask, well, if these toxic elements are bad and causing these issues, then why would it keep them in there?

And it's because it actually, when the body tucks a heavy metal like mercury in tissue, it is causing less problems immediately than if it was floating around and being processed because its hidden.

from the defense systems and the immune system and it's not causing the same level of inflammatory reaction. So

on the short term, some of the symptoms that it might be causing could be headaches, irritability, joint pain, just exaggerating the inflammatory response, which could exaggerate any of symptoms you're currently experiencing or prone to.

Whereas when it gets tucked in tissue, it is more of a neurodegeneration. If you have mercury in your central nervous system, your brain, and might cause more long-term neuro-degenerative conditions, but it over time.

So the short-term daily dose toxicity causes immediate issues if your body can't handle it. And then the stored toxicity is, you know, after 20, maybe 10, 20 or 30 years or just depending on the person, it starts building up and kind of passing what the body handle in tissue and you get some of those long- term chronic issues.

Fascinating. I mean, I can definitely see, can you give us an example of how mercury or lead kind leads to this toxic effect? Yeah, absolutely. And there's also multiple things because there are so many symptoms that can arise from different toxic elements.

It kind of depends on the individual and what they're prone to. But there're different things to consider when it comes to, let's say, mercury or any other toxic element.

One, we want to considered the amount of mercury present. So that's an issue. We want consider the level of sensitivity to mercury. Because if you and I were both exposed to the same left from the mercury, but I had a stronger immune reaction to it, that same mercury is going to cause more issues for me because it's a strong inflammatory reaction.

So we have to look at the sensitivity or the immune reactivity to an element, the level of the element and then synergy between elements. When you have mercury in it if that's combined with aluminum or lead or some other metal, they become synergistically more toxic.

So there's that issue. But for example, like mercury is notorious for causing more like neurological issues. So it could potentially be contributing to all time marginal generation.

There was a researcher at the University of Kentucky. Boyd Healy, a biochemist, and his research was on Alzheimer's trying to kind of identify some of the causes of Alzheimer.

This was a number of years ago. And he identified mercury as really the top in his mind, the Top Contributor to Alzheimer and even though there's kind Of a combination of other issues, but he said, you know, out of The six kind mercury was the only substance that could cause all six on its own and not even in combination.

So he traced the onset of Alzheimer's to the release of the mercury and Malcolm fillings in the early 1840s, I think, where the first Malcolm filling is being used.

And the 1st case of all timers I believe was 1906. So the first generation of people that died that had the amalgam fillings, that's when Alzheimer's started existing for the time.

And Alzheimer can be one of the characteristics of Alzheimer is a reduced brain size. So through autopsies, it wasn't a lack of technology we had that we just started identifying it.

It was, you could see, a 25% trunk and brain if you had Alzheimer. That was never seen before until the 1900s. He was connecting all this and basically identifying that mercury was one contributing factor.

And it's because, I mean, the brain is very fatty and that's where these toxic elements like mercury like to accumulate, right? So the challenge with the Malcom's is that they're so close to your brain that that one of the nearest fatty, you know, that is the newest fatty organ.

So it is going to go to the Brain or the Thyroid or somewhere nearby. A lot of times there's issues. There's a lot issues that can be caused by specific metals and then when you combine metals it causes more issues, but

generally you have an inflammatory response, You might develop some sort of autoimmunity.

You may develop accelerated allergies, all sorts of stuff. And if you have another condition, a pre-existing condition and then you add heavy metals or toxic elements on top of it, then it just exaggerates the symptoms you were already experiencing because it's more for the body to deal with.

I mean, just historically, I think the Greeks or the Romans were known to use mercury because it kind of beautified the, you know, the fountains and they would have, historically some of the exposures that we know about really came from what we learned about that kind exposure.

when the Greeks used it to beautify their water, you know, paddy fountains and pools. So you mentioned exposure. Where are we seeing this kind of exposure of mercury, lead, arsenic?

And why are seeing these increase if we're able to, if you're seeing, we are supposed to be clearing it in our water systems. or in our land or wherever it tends to store, why are we behind the ball here?

Yeah. So there's good question. And there is, there in some areas, less exposure than they used to be of those specific metals, because there was more awareness and more research done showing the negative effects of things.

But then we have an increased level of other toxic sources through manufacturing processes and things that have been less studied. The problem is really the synergy and the combination of the toxic elements that overburden the system.

Just for sources of like mercury, I mean, the biggest source by far is going to the amalgam fillings. And, you know, the more amalgam fillings, because those are 50% mercury by content.

So, there's just a lot of mercury in there. And then you have, I mean, fish is a source, especially the larger fish like tuna or swordfish or something like that.

There's a number of sources that used to be in some more of the medical interventions that they've taken them out of for safety concerns. Then there was exposure years ago through the thermometers, the mercury thermometer that people would take apart and play with because they were fun to play.

## Mercury, Metals, and Chronic Symptoms

And the skin exposure results in more accumulation in the body than internal exposure. So it's kind of interesting. The thing with these toxic elements is once they get in your body, a lot of times they just stay there for decades.

Even if you're not exposed right now, If you were exposed in the past and your body was not able to excrete it, a lot of times that stuff gets stuck in tissue.

So that's one of the challenges. And because going back to the body's focus on short-term survival over long- term function is if the mercury is safely, I'll say safely it's tucked in, tissue causing minimal issues at the moment.

Maybe it hasn't resulted in a neurodegeneration or whatever. but it's also not causing inflammation in the short term because it is not being exposed to the processing center.

The body doesn't really want to let it go out of tissue because if you detox it, if your body excretes it from tissue, it has to go through the Processing Center.

That's going to cause stress, right? So the reason the body put it into tissue was to remove that initial source of stress. Put it in a storage. When it comes out in storage, It's like you were just exposed for the first time.

It can be stressful. So if someone, especially if somebody has more of a complex or chronic issue, their body is

much less likely to naturally let go of the stored toxicity because it's too stressful on the way out.

So it might be previous exposure, it may be current exposure. And I think one of big things is even forgetting about the physical toxic elements, which are many.

I mean, like I always say, food, water and air. There's a lot of toxic element we're exposed to, personal care products, all this stuff. And then when you add the just emotional stressors and the mental stressor and physical stressers of modern living, those all contribute to taking energy from the body that it could otherwise be using towards detox.

Cause the only only has a certain amount of energy that can allocate for everything on a daily basis. And if a lot of that's being taken up for an emotional or mental or some other purpose, the bodies not going to prioritize detox cause it says, well, we can just tuck this stuff into tissue.

Right? So it's not just about the exposure to the toxic physical toxicants. It's also the exposed to other stressors that are inhibiting our body's natural detox processes and taking away energy.

It sounds really that the body is quite intelligent and able to kind of discern when it needs to clear it out of the and when to store it. And then I'm curious to know what that process would be.

You know, physiologically, how does a body know when this mercury or this heavy metal needs be tucked away and not processed through the kidneys or the liver to break down?

And also you also mentioned the immune system is an inflammatory response. And of course, and how heavy metal is not, it may not be just one single metal, but it maybe multiple level toxins together that is causing that reaction.

Would you say that's correct? Yeah, yeah, absolutely. So, and I don't remember the exact combination of metals, but Boyd Haley actually did some research on this as well.

Or he was looking at neurotoxicity, like this was in vitro. He was putting, I think, aluminum and lead and mercury and aluminum, different combinations of three of the more immune stimulatory metals.

And they were up to a hundred times as toxic to the brain cells in combination than individually. And I do want to ask about the difference between inorganic and organic mercury.

Because when we talk about organic Mercury, which is present in natural resources, such as water or in fish, versus in organic, Mercury which, is a preservative often used in vaccines like Mirasol, for one example, there is, a difference in how the body metabolizes that, correct?

Yeah, there is a difference and so there's some people who say all metals are the same regardless of form and I would disagree with that because I mean mercury I'd say is toxic in all forms because mercury is little bit different.

You have certain things like aluminum which there are a number of variations of aluminum. You've got synthetic aluminum that is specifically designed to cause immune stimulation that's put in, you know, medical interventions and various things.

Then you've Got alumina or aluminum oxide that isn't actually occurring from the earth, which is one of the most abundant elements in the Earth. and that is a non-metallic material.

It's actually considered a ceramic and it's not very immunostimulatory and is not conductive. So the very different properties based on the levels, but I think with organic and inorganic mercury, they're both going to be very toxic.

I thinks it depends on accumulation. The body processes them a little different. And I don't remember which one is which, I but think one of them is absorbed much better through the skin, maybe the in organic, and then one has

absorbed better internally.

Like through, through oral consumption. So I think there's the body processes them a little bit differently, but I do think in the case of mercury, they're both pretty immune stimulatory and can both cause issues in excess.

But it all comes down to what is the. Body able to handle. Right. And that's depends on the person. You could give 10 people the same exact amount of Mercury.

like mercury poisoning, and maybe one of them dies, maybe five of him gets sick, or maybe four of then don't get sick at all. It's just based on their body's capacity to deal with and process that poison as it comes in.

And if their bodies are dealing with a bunch of other stuff at the same time, they're going to have less energy to do with the current poison because you're already preoccupied, where someone that is physiologically healthier going to have more energy to deal with it.

So that's where it's interesting. It's just, it s about the exposure, t's about, you know, the body's reaction to it, and then just the capacity to d eal with things.

And that s why some people will develop cronic heavy metal and tox filament toxicity. Over the years, that' s because it' you know, daily situation where the body cannot deal with it and you get a little bit of accumulation every day because you're exposed to heavy metals.

They're all over the place. You can't eat vegetables and just can even eat a meal really without getting some level of heavy metal and that's normal. It's just that if your body can not process it, you're getting a little bit of storage, so you have to be more careful.

So someone that is chronic leo might have be a bit more carefull with eating seafood, opposed to someone who is very healthy because their body is able to process all of the mercury that's in the seafood.

Opposed to somebody who's not healthy, they can't process it efficiently. Give us an example of what you've seen a patient or a person comes to you for this detox program.

What does that typically look like? What is that process? Yeah, so there's a lot of ways to detox. So one, I always say the key to, one of the top keys to an effective detox is to get healthy, right?

And then they're like, well, that's not helpful, but that really, you have to understand that as a foundation because the healthier someone is, the better their natural detox functions are working.

## Sources of Exposure in Modern Life

Okay. And that is truly the key because the body knows what it's doing. It's storing the toxic elements for a reason and it is detoxing them when it wants to detox it.

When we go in and we try to fight against the bodies natural desire, that's where we kind of come into some issues because we have this tug-of-war effect and were kind- of trying to find against what the may or may not want to do.

We think we know what body needs but we might not. The body always knows when needs to and acts accordingly. So there's different approaches, but one is just to get healthy.

So let's say that someone is going through a severe emotional period, like going to a divorce or someone, you know, pretty significant emotional time of their life.

They're probably going be detoxing slower than they normally would because their body is occupied with a lot of energy. And, and the reason for that is that if, so the body's always trying back to the short-term survival.

The body will slow down natural detox. during times of stress and during the higher the level of toxic toxicity that becomes present because, and you would think it'd be the opposite.

The more toxic you become, the faster your detox, but it's the. Because as you've become more, toxic in tissue, their body slows down, it stops sweating or it slows, down sweating.

It slows. Down bio flow, which slows it, slows them flow. Actually slows natural detox processes because it wants to keep the toxic elements hidden. in storage, opposed to releasing them into the processing center because the body just cannot handle that level of daily dose toxicity.

So trying to conserve energy because obviously more energy is needed to handle the stress. And maybe cortisol has a factor in deciding between metabolizing that detox element, whatever it is, and or sending it to storage.

Yeah, absolutely. And that's why like a lot of, you know, doctors that are not necessarily like focused on detox, sometimes they're helping people detox even more than people that're exclusively helping detox.

Because it's like if you're help someone get healthy, your helping them inherently detox better because the body's working. But then even if someone's doing everything right and you are on all the right protocols, Sometimes a little additional support is still needed.

to kind of accelerate the process to get some of these toxic elements out. And then there's a number of different approaches that you can look at. So you've got, there are approaches designated or designed to take a toxic element from tissue and move it into the processing center for excretion.

So that could be, I mean, it could even be a homeopathic remedy. It could like a bitter agent that is designed to increase bile flow. So to push more toxicity out of the liver through bile.

And there's chelation where you're going in and trying to actually grab onto a heavy metal. There's all these methods. The challenge is if someone is already kind of at max capacity at what they can handle, maybe they're not as healthy as they want to be.

Those might not be doable for them because they experience terrible detox reactions. And a detox reaction or detox symptom is just, it's when you get a headache or irritability, you feel terrible when start doing one of these detox protocols.

And that's a sign that your body telling you there's more active toxicity than we're used to or that, what we want to deal with. So when take something from tissue and you move it into the processing center, if the process center was already at max capacity, and you just overflowed it, you're going to get symptoms.

So in that situation, these people, a lot of doctors will, will deem these, people too sick to detox. Like, oh, we can't, know you can do a detox protocol yet because you are too to do that.

But in, that, situation I would say they're not necessarily too, sick, to, detox, they are to sick detox in way with that specific approach. And that's where there's other approaches that come into play, which is kind of what I specialize in.

which is more of the stress reduction detox methodology, so such as using binders. So traditionally we have, you know, bindars that are, activated charcoal, pectins, clays, all these things.

And the purpose of these is to go in, kind of mop things up, reduce the stressed load. so then the body kind can breathe a little bit. and there's some advantages to these, there are some disadvantages with a lot of natural bindings, they're not really designed for longer term use.

Because they're indiscriminate, they go in and they just grabbed everything. They could potentially cause nutrient depletion. they might be constipating, et cetera.

And then so that's why I, so my specialty is working with zeolite, zeolyte powder, which is kind of a next generation binder. The way it works is through a swap mechanism.

So opposed to just going in an indiscriminately binding everything, it swaps. electrolytes so potassium, sodium, magnesium and calcium for heavier elements.

So it's got a cage kind of a honeycomb cage like structure and zeolite is a naturally occurring mineral with a negative charge. It goes in and it'll bind to say it has magnesium in this cage, the zeoli cage it comes across mercury, it swaps the magnesium for the mercury and traps the Mercury in its cage and excretes it out of the body.

But if it comes across an amino acid or another essential mineral vitamin or something, it just leaves it alone because it already has the magnesium it prefers.

So it's swapping opposed to just grabbing or absorbing everything. But the advantage to that for sensitive individuals over some of the other methods like that are adding stress to the system is you're just going in and you are grabbing in the small intestine, toxic elements that currently present, and then that helps the body breathe.

And then the bodies can start working a little bit better. So it binds to heavy metals, it bind to environmental toxins like BPA and glyphosate, It's even been shown to bind radioactive materials.

So the zeolite we're talking about is clean up to the light. It was used in the Chernobyl nuclear disaster to bind to radioactive elements in water to clean it up.

And it's been studied pretty extensively for water filtration, it has been used industrially, and it is been use in animals to binds to aflatoxins and okotoxin A in animal feed.

So it binds a lot of things and I think one of the main advantages of it, is its ability to binding to ammonia. because when someone is, is their body's not working properly, or if they have toxin overload, their liver is generally congested.

They're probably not breaking down ammonia properly. And then it can build up that can go to the bloodstream that could go into the brain cause a lot of issues.

So just the, just binding to ammonia aspect, I think is very important. of zeolite and, but just whatever it's binding to is binding into something in the GI tract, right?

And by binding it, that's less work for the body. Cause now the, body doesn't have to process those things for excretion cause they're already bound. Then the buddy can start dealing with other stuff.

So a lot of people, when they take a binder like a zealite, it'll, calm the storm in their body and then their buddy just starts working better. And then in some individuals, they then start naturally detoxing faster because they.

They notice increased lymph flow, they start sweating. They noticed increased bio flow because their body was kind of congested. Kind of the detox machine was a little clogged.

Then the body says, all right, now we can open the flood gates because we've got this assistance to help remove the toxic elements.

## Testing, Environment, and Hidden Risks

Fascinating, I think, to hear you speak about, you know, the systems and how the body can kind of regulate it while it's, while they're using what you described as a, with a binder, kind having a selective binding process.

And the, body kind to be able to manage through that and recognize the level of response it has. I'm very curious about though, if that's if we're, If we are exposed in our environment to these toxins, how do we really treat this long-

term because the person is still going to be exposed to something or another that's really causing this.

So, what would be the root cause treatment for this sort of treatment? Yeah, so it's, well, there's multi-faceted. One is trying to reduce the exposure as much as possible.

You can eliminate it because we're always going be to expose to some level of toxic elements. I mean, if you're in a very toxic environment, than trying to eliminate that exposure, even work, you know, trying clean up your, just drinking better water.

What would be a toxic environment for our audience? I mean, if someone is in a town where they're like a coal mining town or something like an industry town, where there's just heavy metals and mercury in the air that they are breathing in on a daily basis, something that would be the most obvious.

Everyone is being in city. If you're living in New York City, opposed to living the country in Wyoming, there is going to be more pollution and more toxic elements in air just from industry.

And then you have electromagnetic smog as well. So if you're living next door to a big cell phone tower, that could be contributing not to accumulation of toxicity, but contributing to stress on the body, which could result in accumulation other toxic elements.

There's all these things. The water is a bit one. If someone's just drinking tap water, generally not going to be the highest quality water. People can go to ewg.org, environmentalworkinggroup.

And there's a tap water database for all the municipalities in the country. And they can actually see some of the things that are in water and you can see that it might not be as clean as you thought it was because a lot of their regulations have not been like the regulatory.

The limits, the safe limits of a lot of these toxic elements that are in the water have not been updated for decades. And even if they know now they're much more toxic than, than they originally thought, they still haven't updated the regulations.

So this EWG will give, will get people kind of what their safe, limits are. Like for example, where I live, The level of arsenic is over a thousand times the same level.

But it's, it' s legal. So it s still the legal limit, but just cause it is a legal, doesn't mean it safe. so just filtering, and I don't drink that water.

I've got, I' ve got a well with an LSF, you know, reverse osmosis, deionization, structuring, like all sorts of stuff, just trying to purify your water is one source.

Air purifier is just whatever you can do to reduce what's coming in orally and what you're breathing in. is a good start in terms of reducing the toxicity.

And then the second aspect is getting your body in a better position to handle the toxic state. So let's say you're in toxic environment and you cannot leave.

That's where you are at. then the key is, all right, let's optimize physiological function so that the body is better able to deal with the toxicity when it comes in.

So it can excrete it without having the issues or, you know, adding something like a zero charge, zero light binder to help grab some of that toxicity in the small intestine to accelerate the removal of it, to the help body out.

There's different approaches, but really it's getting as healthy as you can, reducing some exposure and potentially taking some additional detox support, maybe some liver support and binders.

to help just naturally to give the body a little bit of a boost in terms of its detox functions. And it sounds like you have to do a lot of education to find root cause sources, correct, of where these sources of exposures are occurring.

Tell us a little bit more about where other resources that you share with patients. I'm actually looking up the ewg.org website, the water database website.

What other sources exposure do we have in our environment currently, and why is it increasing? Yeah, so I think, I mean, there's all sorts of thoughts and theories on why it's increasing.

I Think when you have, and it depends on your region. So for example, in Iowa, So I live in the middle of a forest, but you know, outside of my forest you Have corn fields.

Lots of fields. So for me, some of the highest level exposure is going to be farming chemicals, pesticides, herbicides, and especially glyphosate, or basically the glyphasate capital of world.

Glyphasate is the active ingredient in Roundup, which we know has been banned in a lot of countries. It's quite toxic. And interestingly- It is still not banned here.

No, it's not banned here. I see they're spraying it all over the place. So I talk about corn sweat a lot because the Iowa is one of the most humid states in the country, which always surprises people because there's a not a a water, but it is humid because, there is so much agriculture, corn and soybeans, that the water gets absorbed through the soil up into the crops and then the corn, and the soy, sweats it out and it generates humidity.

So you can actually see like mist. in the evening over the fields, especially when we hit like July and August when, after they're grown. So like right now it's not that humid cause the corn hasn't grown, but once you hit July, when it starts growing, the humidity increases because the Corn is growing.

The problem with this is all of these crops were sprayed with all sorts of chemicals, including Roundup and glyphosate is actually water soluble. so what I'm thinking is, all right, you're, your, The corn is sweating this toxic water, say filled toxic, water into the air, which is then we're breathing in it right and it's being you know the breeze is taking all over the state so it''s very interesting Iowa also has one of the highest cancer rates in the country second highest and I think the top like increasing cancer rate and maybe the top pediatric cancer rates.

So I think a lot of that does have to do with the farming chemicals. There's also high levels of radon and other things. It's interesting. it kind of depends regionally where you're at.

there's different levels. Of toxicity just naturally from the earth as well. And then what's going on. so there was the, farming, then you have the pollution from just factories.

I mean, if you look in the sky, you've got all people, there there are all sorts of thoughts on what is going. Because you, look up and there is a, lot stuff going, on in, the air.

with, you know, planes and whether, whether people want to believe in, call them chemtrails or not. Either way, when you have all of those, those trails, even if they're just contrails coming from planes, that's still not good to be breathing in no matter if it was nefarious or no.

Right. It's like, I mean, there's a lot of lead talking about lead from before a lead in the jet fuel and things. So just, just from an increased airplane activity, increased automobile activity, just that all contributes to kind of pollution.

And we're just breathing a lot of that stuff in. So breathing it or drinking it, or absorbing it through our skin. How would, I mean, we test for these things both by blood sampling, stool sampling.

## Detox Approaches and Zeolite Binders

hair sampling and maybe even sweat, I imagine urine. And I also know as a physician, when we were talking about lead exposure, of course, there was a national, international campaign against lead, exposure that was quite effective, but it still tends to be a problem.

And now the requirements for lead testing are even more stringent because we had a treatment, you know, we used to actually treat them among a certain level and now we treat even at that, even in a microscopic level compared to what we're used even with promotion for testing and advocacy and raising awareness, we're still exposed to now, as you mentioned, just from our cultural and mining and our environment, EMFs as well.

It seems like we are kind of overhauled by all the exposures. What is the best way that you would suggest you know, testing your environment, how would one really assess the safety in their own home environment or in the school or work environment?

Yeah, it's a little bit tricky. So there's different, I mean, you could spend as much money as you want in testing. You can test the environment and you can text your body.

Yeah. Or you test both. Like with mold, for example, but you contest the environmental for micro toxins. you contest your both body for excretion or immune reactivity to micro-toxins.

to see if there's antibodies being produced against them. So there are different methods. I'd say for school, like I just interviewed someone two days ago who had just quit her job as a teacher because the building had flooded and she was getting chronic illness, chronic symptoms from mold toxicity.

And there is a combination of synergistic effect between mold-toxicity and EMFs as well. A lot of the schools will put cell phone towers on the school or on their property because I think they get paid.

by the companies. So when you have the mold growing, whether this is in your house or in the workplace or whatever, it's, the mole is not necessarily causing the problem.

It's the maltoxins or the mycotoxin that are being released during stress, when the mould is stressed out. When you scrub it, you clean it. you're releasing micro toxins that might be poisoning you.

But the electromagnetic frequencies like Wi-Fi also irritates the mold. So now, now we have the same amount of mold we used to, but so many people have mold toxicity.

And I think it's because there's more Wi Fi and wireless signals that are irritating the mode. so there are more micro-toxins present in the air, which is causing more of an inflammatory immune response.

So one, one test would be like a mole test for the environment to see. But then like I personally don't use wifi. If, if one simple thing people can do is just turn their wifi writer off at night.

Cause you want to have as clean of a sleep environment as possible. I have everything hardwired, but just turning it off. At night is a really good place to start.

It doesn't cost you anything. Just turn it back on before you use it. There's way more advanced. concepts, like I use like, you know, little cards and things that can help modulate the, the response.

Yeah. So this is actually, I made this, this hasn't even launched yet. This is coming out on Tuesday. this will be launched in like three days, but this the EMF structuring card.

so essentially you put this on a wifi router or a cell phone and it helps make it, it harmonizes the field to the point where it makes it a little bit more biocompatible.

So we have thermography. We sent it in for testing before. That's why we haven't launched it yet. But the thermographic results showed almost 100% mitigation from the cell phone radiation.

So the non-protected person, the person that puts a cell up to their head and does a before and after thermograph, thermal imaging, you can see a greatly increased heat signature in the brain from using a cell phone.

And then when you put this on the cellphone, you see it mitigate that a lot. So there's things like that. This is kind of next level stuff. I've sent one of the top competitors for testing and it didn't work at all.

You can't just buy little things and expect that it's going to completely protect you. But there are things that if you've already done everything else to take your health to the next levels.

Cutting out the Wi-Fi, don't put your cell under your pillow. Or right next to your bed when it's turned on at night, like you want to distance as your friend when It comes to frequencies, the closer you are to something emitting radiation, electromagnetic radiation.

The worst it is going to be for you. So, and that could even be dirty electricity in your wall. Some people notice like, okay, if I sleep on this side of the room, I feel way worse than if i sleep On this.

Well, don't sleep. On the side, you feel worse because there's probably some sort of current being generated there from the wall Or even getting deep into it, like, geopathic stress, where there's natural frequencies coming from the earth that can be harmful in certain areas.

So that's where, you have certain pockets of houses where everyone develops cancer. And a lot of times that is actually geopathy stress where it's just thrown some sort of fault line or something where its stressing them out daily.

It's very interesting. That stuff is way next level and it is a little bit harder to test for. I can definitely see the advantages of kind of knowledge here.

First and foremost is for audience to kind really educate themselves about where they live and how they lived and not really ignoring that because mental illness, I mean, we see a lot of mental and this worsening, especially in children, which is very, very sad to see and the exposure risk that they have cumulative over the course of their lives because of the way we're living.

and the way that we've advanced our living, say, quote unquote, advanced living. We actually have created all these problems even, and exposures now even earlier.

So it makes us, makes one feel like a little overwhelmed by, you know, all of the things and then, how can one really live? You know it just puts that to question.

you know, the work that you do, what do you notice when patients are, you're using or undergoing treatment, how that impacts them, some of the stories that hear from people who've used your product?

Yeah. So two types of person. First, first I want to say for people listening, it's the worst thing to do is panic and start just overthinking about the level of toxicity you're exposed to.

Cause that level stress you are going to generate from that is going maybe be worse than the toxic exposure. Yeah, just, you know, It's, okay. Your body's designed to detox.

You're body is very resilient. It is really amazing how well the body has designed and what it can handle, what we put it through. And so just it is okay and then just do what you can when you And, you know, maybe in the future, if you can be in a better environment or do more for your health as finances improve or whatever, then, do it at that time, but do what you, can when you.

And then just do your best, right? Go from there in terms of what people experience. There's, there's kind of, There is a short term and the long-term benefits.

## Root Cause Treatment and Reducing Exposure

So in, terms, of a detox protocol, when I'm talking about, what I am saying this right now, I m saying removing mercury from the brain or a deeply stored toxic element from, the, brain, or, somewhere in tissue.

The ideal situation is actually to feel nothing right away, because if you feel handling the removal of those toxic elements from tissue. If you feel terrible, which is usually what happens when people detox, it's because it stressful on the way out.

So you want the least amount of turbulence possible as these toxic element are leaving. In those situations, if you don't feel anything, that's actually good.

Generally, If had a symptom or condition you were trying to see a resolution with, a lot of times you start seeing improvement. about three to six months later, because it takes a long time to start.

The longer you've had them, the longer it take to remove because your body only lets go in its own pace to protect you. It's not going to let go of everything at once, right?

So this is a multi-month process, maybe a multihier process. So three-to-six months, later is when people, a lot of times notice my brain fogs gone or, you know, my memory, usually it's like a spouse says, oh, You can recall names now.

Everything's just working better, Right? so that's very common. Some people feel better right away. And some people never feel anything at all. And they're disappointed, but that's still not bad because you probably prevented a potentially bad situation in the future.

It's never a bad thing to get these things out of tissue, right? They might not be causing problems now, But they might be cause problems later. So you might as well get them out as quickly as you can to prevent that.

But the people that feel better right away, It's it's generally because their body is so overburdened on a daily basis that they can't even handle all the stress of their daily life.

And when you take like a zero charge binder, it grabs a lot of that. It puts their. Under that stress threshold, It can kind of breathe. it calms down the inflammatory reaction.

That just calmed things down and they feel better. I mean, sometimes within the first couple of days or the week. And then when they, you know, they go off of it, maybe they feel worse again.

And that's because they still have that high level of daily dose toxicity. So there's the two camps. One, if you feel better right away, that not necessarily indicative of a deep level detox like from your brain.

Although people a lot of times feel, you know, better in their brain right away, but that's because there's a lots of inflammatory things that can cause brain fog.

But anyway, so you might feel better right way. You might fell better at three to six months or you may not feel at all. Either way you're getting toxic stuff out of your body and that is a win.

Yeah. So really observing the body's response while treating. What type of mental health benefits have you seen in treatment? Yeah, absolutely. There's a pretty big connection between certain mental conditions and heavy mental toxicity.

And I mean, with mental-health conditions, there's generally a GI component. They go hand-in-hand. When your gut is disrupted, a lot of times the mental issues start in the GI tract.

Because when you have increased intestinal permeability in your guts, you increase intestino permeabilty in and

they kind of go hand in hand. And it can be reversed too.

Even a concussion can cause leaky gut. So binding in the gut can largely be helpful because when you have increased intestinal permeability or leky gut, a lot of the things that are coming in through just food that your body would normally process and excrete without issue, They're now leaking through the small intestinal lining, entering circulation where they don't belong, and that's where the will incite an inflammatory reaction from the immune response.

So by binding to some of those things in the GI tract, it can help prevent that. And when you prevent the reaction, that prevents the getting to the brain and causing the inflammatory brain reaction as well.

It just depends on what is causing some of the issues. I mean, there's so many things that cause mental health issues, it may have nothing to do with physical toxicants, right?

It may. There's certain conditions that are more correlated than others, potentially like bipolar and schizophrenia and things, that generally there is a high toxic metal burden present.

But the other interesting thing is let's say the heavy metals and toxic elements had nothing to do with the brain, with mental health initially, but then the body is so stressed out by the mental condition that it starts accumulating heavy metal and toxins over time because now it can't process them efficiently.

And now they become a contributing factor to the condition, making it even worse. So even if it's not the cause, it might be an effect and then a contributed factor.

So it's a lot of people have noted a pretty significant improvement in the mental health, but it just really depends on the person. It also really on their response to detox because either you're going to, when you take something like a binder, like CO charge, it either going add stress to your system or reduce stress on your.

If it adds stress to your system, then it could actually accelerate the symptoms you're experiencing. If reduces the stress, that's what you are going for.

That's where that dosing is crucially important. So there's a reverse titration schedule with CO charge where with most things you start with a lower dose you work up.

You don't want to do that with high quality zeolite powder because the higher doses are actually less likely to cause the detox reactions. So we don't have to get into it, but there's a whole bunch of them information on that on my website, zeolitevax.com.

I've got a pretty lengthy document going into the zeolyte dosing paradox. But if you're someone that is concerned with detox reactions and maybe you have tried detox before and it hasn't worked out for you, you don' want to micro dose it because the micro dosage is actually the worst idea.

And it's more likely to cause stress on your system than a higher dose. Yeah, and I do want to stress that there are some key neurological impacts with exposure that do affect mood conditions, depression, anxiety, stress, tolerance, as you mentioned, neuroinflammation, altering the gut brain permeability.

And I'm just summarizing things that you kind of spoke about. Cognitive decline. We see that, as you mentioned, with Alzheimer's and other neurodegenerative diseases.

And of course, behavioral issues, which we see in children. cognitive impairment, you know, they're not doing well at school or dropping or changing or regression in their developmental growth and milestones.

## Mental Health, Neurology, and Detox Outcomes

Exposures that that do cause some of these things are from the drinking water, fish, as we mentioned, certain

foods, and of course, agricultural products, lead-based paint, which is now off the market, but still available in some cosmetics, traditional remedies even, posing risks.

So there's several types of exposures and it's always good to consult a professional and a doctor for these sort of treatments. as well, and I want to make that kind of clear to our audience, too, that this is not to be taken lightly, then this does require evaluation and monitoring.

And, of course, lifestyle interventions. So, thank you. Thank you for being here and thank for the work that you're doing. How would somebody find out more about your work and some of the published studies or evidence-based research that alluded to?

Yeah, absolutely. Thanks for having me. First of all, this was a lot of fun. I think I had a good time, at least, so hopefully the audience did, But yeah, the best source of overall information and education is going to be zeolitelabs.com.

That's got a lot of information. We did a six-month case studies program prior to launching just to show that the product actually was safe and that it worked, et cetera.

So you can view some of those case-studies on the website as well. And so that's going be probably the bet. There's a whole lot information on this site.

If I go to the site, we also have Instagram at zeolitelabs, so Instagram and zeolithelab. com are going the two best places to learn more. Yeah, and I think there's so much to learn.

A very fascinating topic and definitely in conventional medicine, we need to know more about it. I'm sure you see patients coming in who have been gas-lit and from the conventional space and then find out that they actually have this kind of exposure and so it's important, again, that doctors be also aware of the options for this risk.

And in closing, we always usually ask our guest a question because this is Too Curious MD. So we want you to ask us or the audience, or even for our next episode, a curious question or a questions that maybe you still have about further work that you're doing with the work you do with patients.

Okay. So how about this? What is one thing right now that you think is way overhyped in either medicine or natural health that a lot of people are jumping on board with that would maybe caution against?

Gosh, I don't think people are jumping high enough. I think the, you know, the exposure is you, your microplastics. It's a hype, but it's also something that's not really fully understood.

So I would say that. Yeah. Wi-Fi exposure. So I think it's a lack of awareness that I see. And I thing when we talk about integrative medicine, people come in to their doctorate and they're depressed or not getting better or they have insulin resistance.

There's something going on besides the condition itself. It's more, and having a look at the environment can be a key factor. So, I would say it is the opposite.

That's not enough hype out there. What would be your answer to that question? And I was kind of not even thinking about detox, I just thinking in general.

So I would say, for me, so I'm kind-of contrarian. Anytime everyone is doing something I usually just automatically don't do it. Just because I don' like going with the crowd.

For me it would be like the GLP-1 craze. I mean, even relating that to, well, first of all, it's just being so promoted. I just talked to two people that the doctors, you know, they went to the doctor's and the Doctor's kind of were like yelling at them and called them both obese and were very rude and then said that you don't care about your health unless you go on GLP-1s.

And it was just like this high pressure sale situation. But I think so that that would be the one that's probably most irritating to me right now. Yeah, because it's so it like everyone needs to do it and you don't even care about your health if you're not on it.

And from a detox perspective, there's a number of concerns because the body is sometimes storing extra body fat as a protective layer against microplastics and other toxic elements.

Because if it's not in the general fat, that's going to be lost through a GOP one and it also muscle and things being lost, but then it is going be in an organ.

And you'd rather have a micro plastic in your stomach belly fat opposed to in. Your brain or it causing more issues, right? So, so a lot of times people will lose a a weight very quickly.

And then you get a dump of this toxicity and then the body, you'd get very sick or you'll get to redistribution of those, of, those microplastics and heavy metals to organs.

And that could cause issues long-term. So that'd be my answer. Well, that's a beautiful answer.

## Closing Thoughts and Where to Learn More

And I'm so glad that we're ending on this because it's such a delicate balance between, and I think that the nuance that you mentioned in the beginning is that this is so nuanced and we cannot ignore the power that body has and the resiliency that that has, the ability to really stay in touch with that capacity and really understand it before implementing all these different things and keeping that in mind.

the push from pharmaceuticals, especially about certain drugs that are being sledding, you know, doctor's offices, and with a lot of push, I think, in medicine as well, that aren't fully understood and don't really address the question that you just brought up, which is the body's response to that, or is treatment the right time for this, is this really the thing?

And it's not universal to all people. Correct. Just one more on that. I was piggyback off of that really quickly. It's not just conventional medicine, it's natural medicine and alternative and functional medicine practitioners that are doing the same things.

And one thing I'll say is just because something is natural, doesn't mean it is good for you. Because you feel better, does not mean that it helps you, right?

Just because you are taking an herb or a natural remedy, do not means it something you should be taking every day. It's basically a natural medication.

And if it's still going against what the body wants to do, if you sustain that for multiple months or multiple years, there could still be negative ramifications.

That's true. If it worked at one point, does it mean it continues to work at the same way? Correct. Because it is interacting with the bodies as it changes and evolves.

Thank you. That is right, I think, when we talk about integrated medicine and staying curious, in this podcast, we really want to push that layer of curiosity forward and keep asking questions and paying attention to the body's response and being even curious to what your body, the ability that your has.

So thank you for being here, Jeff. Fascinating topic. More to come, more to learn. Absolutely. Thank Thanks for joining us on the Two Curious MD podcast.

We hope today's episode inspired you to ask new questions and explore fresh perspectives. we challenge you ask us those unasked questions that you're curious about in your medical practice, condition, health and wellness.

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