Introduction to the Neuroinflammation Summit

Hello everyone. My name is Doctor Richard Horowitz and I'm the co-host of this year's 2026 Doctor Talks Healing Lyme Summit. The focus of our talks this year is going to be the Neuroinflammation Brain Protection Summit.

We're going to be focusing very specifically in the effects of Lyme and co-infections and environmental toxins on the effects on the brain and cognitive functioning, and how to protect you from cognitive decline later on.

And in that regard, is my great pleasure to introduce to you, Jeff Hoyt. And we're going to be talking about a product called Zeo Charge, which is a form of zeolite.

Jeff, I read the scientific articles you sent on before we got on this call. I must admit, it was really fascinating reading all the science on this, so I'm excited to speak to you about it.

So welcome. I'm glad to have you here today. Well, absolutely. I'm happy to be here. Thanks for having me. And I'm really looking forward to the conversation.

Yeah. So so tell me, how are we becoming so toxic? Like, why should someone consider using Zeo Charge specifically in their product line? Because, for example, for me, I'm taking NAC Alpha Lipoic acid glue to my own right to block NF kappa B lower inflammation.

But I know also that the Zeo like products have an effect on inflammation, even with blue iron. Right? So why should someone consider adding this on? How are we getting so toxic?

And how does this kind of fit into the scheme of detox? For all of us who are really concerned about all the environmental toxins getting in? Yeah, and I think it is a growing concern and people are becoming more cognizant of the of the environmental toxicity that's kind of plaguing us.

And I think it's a two part there's two factors to it. There's one there's the increased environmental toxic load that's coming at us. And then there's also the reduced ability of our bodies to deal with that toxicity.

So you could have ten people. They're all dealing with the same amount of toxicity. But if five of them have a compromised and just physiological system, they're not going to be able to handle handle the toxicity as well.

And then there can be accumulation of those toxic elements in the body.

Why Toxic Load Keeps Rising

So the healthier someone is, the less supplements they need, right? Supplements are there to supplement healthy lifestyles. So when it comes to detox supplements, which is where zero charge falls in the category of, along with some of the things you mentioned like NAC, the healthier someone is, the less support they need.

But the challenge in the 21st century is that we're bombarded with so much toxicity that a lot of people are not able to keep up with kind of that daily dose of toxicity, what they're exposed to.

So they need some additional support. So zero charge is kind of one of those tools to help out. Just keep up with the challenge of 21st century living.

You know, I when we see patients, one of the I have a model that I use called the 16 point message model stands for Multiple Systemic Infectious Disease Syndrome.

And number two on the list of where some of the inflammation is coming from is environmental toxins. And I will tell you, the vast majority of our patients, about 90% are now testing positive for mole toxins.

For aflatoxins okra toxins, striker fixing zeolite. Zeller Renault Clio toxins. They're immunosuppressive. They cause the same symptoms we see with chronic Lyme.

They're. They cause a chronic fatigue. Musculoskeletal, neuropsychiatric symptoms. So we're very concerned because the mold and even the heavy metals mercury, aluminum, lead, cabin, arsenic, we're finding them regularly in our patients.

And we do find that they do interfere, right. When patients have overlapping infections. So I think it's important for people to know that if you've not been tested for mold toxins through a place like real time laboratories or Great Plains, looking at other places to check your antibodies, even just getting serum levels initially of heavy metals, but ultimately higher analysis and six hour urine DMZ challenges can be helpful.

You will probably be surprised, as I was, because I was loaded with heavy metals and I've had mold exposure, as had my wife. So we've been doing these detoxes for a long time.

So from my perspective, everyone at this point should be doing some form of detoxification support. So I agree with you. I think, you know, the interesting thing I think for people today is where to fit the zero charge in, because for someone like me, I'm taking so many supplements, it's like, how do I fit that into my my program, right?

My detox program that I'm doing daily. So explain to us a little bit first before we get into that. How does the body store these toxins? Where are they stored?

Where do they go? How do they affect the body. Yeah. So it's all I always like to take a step back and say, why is the body doing what it's doing right.

The body is beautifully designed. It it's designed to function and to thrive. Right. So why would the body even store mercury heavy metals, mycotoxins, environmental toxins to begin with.

And it's actually as a protective mechanism. So the way I look at it is when you're exposed to a toxic element, let's just say mercury, for example. Let's say you eat, you know, 5 pounds of swordfish.

For some reason, you're in a swordfish eating contest instead of hotdogs, and you eat all this swordfish and you're exposed to all of this mercury, your body immediately goes to work kind of in the active toxicity processing center to deal with this mercury toxicity.

Now, the more energy you have for detox, the more you're going to be able to remove. Ideally, you just get all of it out of your system. You move on. Maybe you have symptoms for a few hours, but if the mercury is lingering in your body, is not able to deal with all that mercury because you were exposed to so much at one time, the body has to do something with it.

Because when it's in this active processing center, the immune system's attacking it, just the body's defense and cleanup crews are working on it, and that's causing inflammatory reactions and that's causing symptoms.

So what the body will do is say, okay, this is too much to handle right now. Let's talk this into tissue. Let's put this into storage and we'll deal with it later.

So next thing you know, now you have this mercury that's in. Maybe it's just a just a fat, you know, belly fat. Maybe it's maybe it's travel to an organ.

It's in some sort of fat tissue. And the body says let's deal with this later. And if you're exposed to a high level of mercury or some other toxin or toxicant on a daily basis, and the body can't keep up with this demand, the body continually tucks some of this stuff away for later, and unfortunately, the body usually just never gets around to

detoxing it because it doesn't have the energy, because kind of that bucket is full, and then you just end up becoming more and more and more toxic.

And the interesting thing is, because a lot of people, you know, they get these tests like you mentioned, whether it's, you know, that chelation challenge test or whatever it is, and they're saying where all these metals coming from and it's not necessarily that they were exposed to more metals than a healthier individual.

How the Body Stores and Recycles Toxins

It might be they were exposed to the same amount of metals, but their body wasn't able to process and eliminate those metals as effectively as they were coming in.

So someone on the kind of the chronic Lyme spectrum, and I like to call it kind of that, that client type, like the M or five M spectrum, which is mold, metal, magnetic field microbe and the mental emotional because generally when you have one of the issues, you end up with all of them, and it's because one of them starts draining you, and then the body has less energy to deal with all of the other things, and then you start getting an accumulation of all sorts of stuff.

So let's say you've been dealing with chronic Lyme for 20, 25 years, and that's just been pulling on your body's energy. The body has a certain amount of energy that it can use for everything, including detox.

Some of that is detox energy, but if you're using a lot of that energy on other things, whether it's the chronic Lyme, you know, the end zone, extra toxins, all these things being produced, then the body has less energy to deal with the mercury that comes in from food and from the environmental factors and other toxic elements.

So you get storage. So when people have chronic Lyme and chronic conditions, they generally always have higher than ideal levels of heavy metals and toxins.

It doesn't necessarily mean these heavy metals were the cause of the issue. They may actually be the result of the issue because the body wasn't able to process them as they were coming in, and now you have a higher than normal level, but now they're contributing to the condition as well.

Right? So it's just this kind of negative snowball effect where the body just kind of loses control of the process and it can't keep up. And then you get more and more and more toxic over time, even if you're not exposed more than the average person.

No, I and it's a good point. And the thing with these heavy metals, I mean that they have a life of lead, you know, in bone is like 30 years and cadmium is 30 years.

And now if you get methylmercury, that's going to get up into your brain. They have salivary of this. But the point is, is, as you said, just about every person that I checked for heavy metals and mold, I mean, they're all showing up with some elements.

It's only about one out of ten people. When I check them. I don't find it on a serum blood test, or I don't find the mold on a real time lab. Michael. Toxin, urine tests.

You know, they're being stored in the fat tissues. I think you're right. The body kind of stores it away for later. But the problem is, is that at least from the mold toxins, they affect the mitochondrial function.

They're poisons, they poison the immune system. And we'll talk about in a second that that C0 charge and C0 light can help actually with your immunity.

I was a little bit surprised when I was reading that in the medical literature. And I think it's very important because you get overwhelmed, right? You get Covid, you get T-cell exhaustion, you get Lyman Bartonella, you get B-cell exhaustion, right?

Your antibodies go down in some of these people. Your immune system may not be working well. Your mitochondrial systems are not working well. Your microbiome is thrown off, right?

Even from taking sometimes longer term antibiotics with Candida and cell, you've got a lot of challenges. And for us, the infections and the toxins are at the top part of the list.

So, you know, when I'm telling people about how I get them better and I described the 16 point model, I let them know that of the 16 points, the six major, I call them rivers of inflammation that go into an ocean of inflammation because inflammation is ultimately what causes the fatigue, the pain, the neuropathy, the brain fog, the mood issues, insomnia, infections and toxins at the top of the list.

And it's followed afterwards by microbiome disruption, leaky gut, intestinal hyper permeability with mast cell insomnia, and vitamin and mineral deficiencies.

And when you get these toxins, a lot of times your body's using up the vitamins and minerals, right, to be able to deal with this. So it makes it even worse.

But absolutely, the the infections and the toxins are on the top part of the list because when I detox, mold in metals and use, for example, DAP, some combination therapy for treating Lyman Bard, even though they may have hormonal dysfunction with low adrenals or men have low testosterone, it is getting rid of those toxins and treating the infections.

That usually makes the biggest difference. I think it's an important point to know, yes, we're storing these away, but they are still causing a lot of free radical oxidative stress right in the body just because they're there. And that's what they do.

They turn on these inflammatory pathways. So let's talk a second about what exactly is zeolite. And how does it remove these toxic elements. And, and specifically what does it remove because people listening I think a lot of the people listening who are lem literate and they've been through this before, they know that most of us have been to metals.

They know that most of us have been exposed to mold. But what about things like glyphosate, right. How good is it as opposed to full Vic acid or some of the other things out there?

So if you could go through a little bit, you know, because we're exposed to PE fast and PFOA, I mean, hundreds to thousands of toxic chemicals. What exactly does the zeolite do here?

Because even though I take 70 supplements per day, I must admit, after you got me to read the scientific literature I read on zeolite, I said to myself, man, this might be number 71.

And in fact, I took it years ago. And then, I don't know, it just, you know, fell off the map. But I was impressed when I was reading the. So, so tell us a little bit about it and how it works.

Sure. So so zeolite is it's a class of mineral mined from the earth. Right. So that's the first thing to understand. There's synthetic zeolites, there's natural zeolites.

There's different forms. So what we're talking about is a specific natural form of zeolite called clean up to the light. That's the one that has most of the human clinical research and animal research and water research and all the research clean up to the light and it's mined from the Earth.

It's a it's a negatively charged, naturally occurring mineral that has broad spectrum binding capacity. So it binds to a lot of and I'm gonna explain the mechanism in a second, but it binds to quite a few different toxic elements, including some of the ones you mentioned like glyphosate, which I think is huge.

I'm in Iowa and probably the glyphosate capital of the world. And, you know, I'm always talking about the corn

sweat because, you know, it's very humid in Iowa and it's humid because there's so much corn in the corn sweats.

And glyphosate is water soluble. So I'm sure that there's glyphosate being suspended in the humidity in the air. So it's just this whole thing. But anyway, glyphosate is a big one.

It binds to BPA, it binds to mycotoxins like Aflatoxins Okotoks and A it binds to heavy metals. It binds to radioactive materials. So it was used in nuclear disasters, including Chernobyl, to clean up the water supplies from cesium, radioactive cesium with strontium, it's binds to it.

And one of the most the things that I think is most overlooked in detox and very important is binding to metabolic waste products. So things like ammonia, things like urea, things like some, you know, nitrates, these things in zeolite, a clean up till light has a very high binding capacity for specifically ammonia and when someone's body is not working properly, when they're dealing with chronic lime and mycotoxins and all these things, generally their liver is going to be overburdened and their liver might not be able to process the ammonia or break down the ammonia as effectively.

And you can get a buildup of ammonia that can actually go to your bloodstream and travel to your brain and cause all sorts of issues binding to the ammonia.

What Zeolite Is and What It Binds

And also just lime and various microbes are ammonia producing things as well. So there's all your bodies in ammonia factory. You're producing it for metabolic waste up digestion.

You've got all these microbes producing it. So just binding to the ammonia in the GI tract can be very effective producing that toxic burden. So it has been shown to bind to a lot of things.

It's been there's quite a bit of research on the specific binding capacity because you like, has been used for a long time before human use. It was used for water filtration.

So there's quite a few studies showing that it directly binds to a number of toxic elements to filter water. And then it was used for animals used to bind to the ammonia.

And it was used to bind to the mycotoxins in the animal feed. And then after all that research has started being studied for human consumption. And there's a little bit of additional research, but I think one, it binds to a lot of things indirectly, but I think that and I'll say that one of the main advantages of it is it's not just binding to everything, the good and the bad and the ugly.

It's exclusively binding to toxic elements, which I know kind of sounds like a scam, but it's because it's a swap mechanism, right? So you have traditional binders like activated charcoal and clays and various things.

And generally those are going to be kind of indiscriminate. They just bind to everything. And they're very effective for mopping kind of mopping up the mess.

So you you know, you had some toxic exposure. You clean up everything, but they're generally not. Sometimes when you use them long term, they can cause some issues, including potential nutrient depletion, including, you know, some issues like constipation, where zeolite generally doesn't have those issues because it works through this a cation exchange swap mechanism.

So the zeolite structure is a cage. It looks kind of like a honeycomb cage. So opposed to just attaching things to the surface like the other binders, it actually traps them within the cage, which makes it a more secure detox.

But how that works is in the cage. There's potassium, there's sodium, there's magnesium, there's calcium, there's electrolytes. And these are positively charged elements because the zeolite is negatively charged and attracts the positive charge and then when the zeolite comes across a more toxic or a heavier element that's positively

charged, it trades what it has, which is electrolytes for the more toxic element.

So when the zeolite comes across an essential nutrient, it just leaves it alone because it already has the positive charge that it's looking for. When it comes across a heavy metal, which are heavier than the essential minerals, it swaps it. Right.

So same with mycotoxins, with ammonia, etc. so it can be taken in higher doses than some of the other binders, which sometimes is necessary. And it can be taken a longer term without the some of the nutrient depletion.

And I think to that point, when I was reading the literature that you sent over on this, what I really found fascinating, you know, Neal, Nathan, he has a book for like, the sensitive mole patient.

Right. And we we do. We have a lot of sensitive patients that you give them a GI detox, which has activated charcoal and clay about. Give them a capsule, and they get sick.

The detox pathways just can't handle it in those patients. They sometimes have to start with micro doses. Right of activated charcoal and clay and Shai Detox or the Biden White Detox too, because the detox pathways can handle it.

And then we we've got to give them more glutathione and things to support. What's interesting about zeolite, when I was reading it is that it actually is better to give more of it, right.

People don't get sick with more. They actually do better with more of it if they're highly toxic fighters. This is true. Yes. Yeah. So this this is probably the most important thing.

So it's quality and quantity. The other two most important things when it comes to most supplementation especially zeolite, you want the proper zeolite form.

You want the right quality. You're on the right form. And then you want the right quantity. Because if you take the best product in the world at the wrong dose, you're not going to get the best results.

And it can it can sometimes backfire. So like you mentioned, traditionally, when people are very sensitive, you want to microdose you want to titrate from low to high.

But what you charge specifically, you want to work start from high to low. You want to start high and work down because the micro doses are the super low.

Doses are much more likely to result in negative detox reactions like headaches, like joint pain, like irritability. And that's because essentially it's a less efficient detox.

So what happens is the low dose goes and it kind of stirs things up, because even taking a small amount of zeolite can be quite powerful because it has biofilm disrupting properties.

It has, you know, a lot of other things that can happen. And it kind of stirs things up. It makes a mess. But then if all of the zeolite is used up, then the body has to now deal with that mess with its own defense systems and cleanup crews.

So the net effect actually might be an addition of stress on the body, which is really the entire the opposite of point of a binder. The point of a binder is to reduce the stress load in the body, reduce symptoms.

But you can take a low dose binder. It can actually increase symptoms because your body has to deal with this mess. Now let's say you took the higher dose.

It goes in. It still makes a mess. Kind of stirs things up, but there's enough extra zeolite cages there to clean up the mess that was made during the detox process.

So and I'll explain this another way, another way. When you have traditional detox agents, you always want to start with low doses and work up because by nature, detox is generally designed to add stress to the system.

Right. Because you have these stored toxicants that are in tissue you're adding them to, I call it level one toxicity. Kind of the body's processing center.

So they're mobilized from tissue, which when there's they're still causing issues, but they're hidden from the from the immune system to some extent. So they're not causing as many short term issues as when they're floating around in the bloodstream or GI tract and not being attractively processed.

So when you take something that mobilizes a heavy metal or toxin from tissue, moves it into the body's processing center, that automatically adds stress, because now your body has more to clean up.

Now, if you're at max capacity of what you can handle and your processing center, and then you mobilized more, that's where you get detox reactions, because it's a sign that your body says, okay, this is more active toxicity than I'm used to handling.

So most detoxes are automatically going to add that stress, which isn't necessarily a bad thing. It just means you might have to go on and off, take breaks, etc.

but with zero charge you're emptying the bucket first instead of adding to the bucket. So you're removing the toxicity. That level one active toxicity that your body's working on, which includes the metabolic waste products like ammonia includes mycotoxins, heavy metals, whatever your body, whatever's there your body's currently working on.

So it also uses it. So the more you take, the more you lowered the bucket. And then as the body, as you start that process, there's kind of a detox cascade where the body starts dumping more toxins from tissue.

So you want to have room to receive those things. So that brings up a couple of questions for me. Just because we detox all day long. Right. And it's just part of what we do as functional medicine docs in this field.

So if I have somebody, for example, that was sensitive to DMZ, I mean, normally I'll use either small doses at bedtime or on the weekend if I want to collate metals when they're quite high, or I'll start with a GI detox and a whole mole protocol with phosphate, little choline and the binders and glutathione and etc.

in these chemically sensitive patients and most sensitive patients, as far as I know, I've not generally seen zeolite used first or used in combination with it, but what it sounds like is it might actually make sense in some cases.

To start with, it, to start pulling out some of the stuff to make it easier, especially in the highly sensitive patient. Do you do you know if there's been any studies done on it, or do you have case studies specifically on those type of patients?

Yeah, yeah we do. There's not a lot of research. So that's the other thing about zeolite in general. It's it's only been used for 25 years as a supplement.

So it's not going to have as much research as some of the other binders that have been around for, you know, 75, 100 years. But yeah, we most of our over 50% of our client base, our customer base are sensitive individuals.

So these are the people that have been considered too sick to detox. They haven't been able to tolerate other things, and they haven't been able to take out the binders because they cause reactions.

And a lot of these, not 100%, but a lot of these individuals are able to take the zero charge as long as they take it at the proper dose, and they can avoid or greatly minimize the reactions.

And what is the proper dose. So, for example, someone like me, who literally, you know, I'm taking a lot of

supplements every day to stay alive on the planet because my whole family died of cancer.

There's there's like nobody literally left. So I'm, you know, stimulating Nrf2 with curcumin and broccoli seed extract and resveratrol and green tea. I'm really doing everything I can.

I'm supporting my immune system. I'm not. However, I mean, I am taking prebiotics, probiotics, post biotics. I'm doing things with binders in the sense with fiber that will have some effect, but I've not integrated, for example, regularly.

Something for glyphosate, right?

Dosing Paradox and Sensitive Patients

And I know glyphosate is an issue. Ammonia. I certainly have patients who have issues with the liver. They have nonalcoholic steatohepatitis. Some of those patients do have problems with it.

We tested Lyme patients and sometimes you're correct. The ammonia levels are high. And of course patients with kidney failure. So when is one start for someone like me that is healthy but taking a lot of supplements who I feel like my pathways are probably in good shape, I probably should use my infrared sauna, maybe a little bit more downstairs than I have.

Where does someone like me start? Who is healthy? Who is not that sensitive? Who's been working on the detox pathways versus someone who is a highly sensitive patient?

How do we go about the dosing of using that specifically with the zeolite? Yeah. So the healthier you are, the less you need. So in your situation I would say you could probably just start with one scoop.

You're probably going to be fine. And if you do experience, let's say a headache or some sort of whatever you're prone to in terms of the detox reaction the next day, just go to two scoops and see if that takes care of it.

So that's the general rule. If you have a reaction which is opposite, which is you go up on the dose, not down on the dose. Now does it have to be taken away from any things?

Is it binding to any of my minerals or vitamins? Or it can be taken at the same time as everything else, so it can be taken with food, which is an advantage of it over most binders and in fact all the animal research, it's always mixed with the animal feed.

That's how they administer it. And still the studies show that it increases serum nutrient levels. So it's not depleting the nutrients, it's increasing them by removing toxic elements that are competing for space or just, you know, making the body use more of the nutrients.

But it can be taken with food. It can be taken with most natural supplements. If there is something in question that you think it might bind to, it would be better just to take.

You can take it a couple hours after, or just if you know the half life of what you're taking, just take it. Take the zero charge after. One interesting thing is some people actually take the zero charge at the same time as like, let's say nano silver or colloidal silver, because they know it's going to bind to it.

And they're using the zeolite as a delivery system for the silver because of the swap mechanism. So essentially if you if you mix silver in with the zero charge, and I'm not recommending this, I'm just saying this is, you know, a theory some people utilize.

You mix the silver in with the zero charge. The silver is going the zero charge is going to bind to the silver. But silver is relatively light compared to some of the other heavy metals.

So when that silver a loaded zero charge encounters mercury or some other toxic element, it's going to swap out the silver for the toxic element, and it's going to basically deliver it to the binding site of the toxicity.

So it's kind of an interesting concept. So that's why even if you take it with something that it does bind to, it will still likely release it later to the swap mechanism.

But it's still best not to do that, because it's possible that some of the silver just stays trapped in the zeolite cage. And what about, so someone, let's say, who's on a mall detox.

Generally, I try and kind of separate some of the binders. So I use up the fiber, clean glucagon, and sometimes in the morning for the trial thickens.

And then I'll use, for example, a charcoal clay later in the day, two hours away from everything with mineral supplementation. Right. So in that case, and I've spoken to, Nathan about this, he said, however, you can actually put these together for people that just can't separate them out.

Is there a problem using things like glucosamine and or clay charcoal at the same time of this? Or this could be mixed in with your other binders if need be?

Yeah, you can absolutely mix it in. A lot of people mix it in. It's not going to it's not going to, you know, bind to the other things. It's it's going to be a nice and otherwise you're taking stuff all day long and it's just almost impossible to get this stuff into your body.

Yeah. For people that aren't taking a lot of other binders, I tell them, just take the zero once per day because the key is to get in for this dose. For this dosing paradox concept, we're at the higher doses gentler.

The key is to get enough on each dose, not cumulatively throughout the day. So if you take six scoops, which is kind of the high end, you know, really sensitive individual starting dose, if you take six scoops a day, it's best to take that all at once.

A post is taking one scoop six times per day, because if you take one scoop and it's not enough and it kind of irritates things, now you're irritating your body six times a day.

Or if you took six scoops and it's an efficient detox and it reduces stress, that's ideal. So and I also will say that it's best for sensitive individuals to take it later in the day after a meal opposed to first thing in the morning, because first thing in the morning on an empty stomach is going to be much more likely to cause the detox reactions because of the biofilm disruption and more microbial activity.

I think, you know, it's interesting. I was not aware about the zeolite with biofilm because one of the key factors that I've noticed we'll get live patients better is we've had to use biofilm persistent drug regimens like that, some combination therapy.

But I am using and in fact caps on rifampin does affect biofilms. But I'm using cinnamon, clove, oregano oil. I'm using biocide and I'm using peppermint oil.

I'm using stevia for new dramatics. Like I'm using a lot of things to disrupt biofilm. So this actually, in a sense is is another biofilm disruptor, right.

That might even help with it. So so question. So you said for someone like me who's healthy a scoop a day could be started. What about those people that are highly highly sensitive.

You said in those cases they want to use more. Where would a highly sensitive person start as far as the dosing? Yeah, I say and it's a little bit of a wide range.

But between 2 and 6 scoops all at once. And it comes down to a couple factors. One is what you're comfortable

with. So if someone is just having a very difficult time believing that six scoops is going to be gentler, then just do two scoops because you don't want to do something you don't believe in.

So first educate yourself on the dosing. There's a ton of information on our website on the dosing paradox, and there's a lot of people, you know, with testimonials on it.

We have a podcast, The Detox experience.com, where a lot of people talk about the doses they're taking. Some of these people are taking 14 scoops, like like 80g a day.

Ridiculous amounts. Right. Because it's not tolerate less. And by the way, the audience is going to know now that you mentioned that for the website, what is the website for people to learn about A-Z?

Oh, charge. Yeah. Zeolite labs.com or zero charge.com. But Z would like lab scum. There's an education tab with a bunch of stuff. There's a podcast link. There's a lot of resources on there.

There's a case studies page as well where you can see some heavy metal results from other people's a life blood analysis, some other stuff. But yeah, it's between 2 and 6 groups for the sensitive individual.

I do like starting with two scoops because that gives you some room to double the dose. So if you take two scoops and you experience some symptoms the next day, go to four scoops.

Right. And see how that goes. Now it's it is sometimes if you get symptoms an hour after you take it, you can take the two scoops immediately. And sometimes that clears it up.

But it's better to not have the symptoms then try to mitigate the symptoms later. But yeah I'd say to between 2 and 4 scoops is a really good dose. If you're convinced of the dosing paradox, go straight to the six scoops.

The one thing I will say if you start with two scoops and you feel incredible on it, and then let's say you go to six scoops and you feel worse, it's likely that either you were on a binding dose with two scoops that was just binding, but not encouraging the body to let go of toxicants from tissue.

And the six scoops kind of took you to that next level. That's could be possible, or it could be a microbial issue where you release basically breaking more biofilms apart, releasing more parasites and microbes into the system with the higher dose.

And so if you get diarrhea, nausea, vomiting, some of those kind of GI symptoms, sometimes that's, a result of taking a higher dose, that's really that's causing an initial purge.

And that usually goes away after a few days, and then you kind of stay. But from what I was reading on on zeolite, it also affects the microbiome. And it actually affects the intestines. Right.

Like they've even used for people with diarrhea. Right. To to help with some of these microbes. Yeah. So that all you tell everyone is because everyone's like is it going to do this is going to do this.

There's no way to know because detox is so complex. There's so many elements to toxicity in the body. Whatever it's binding to is going to affect what happens in your body.

And everyone has different things. So for one person, it might cause diarrhea because it's accelerating the microbial release. For another person it may be it causes constipation if it's an inefficient DTA.

So it just depends. Usually it has a normalizing effect. And that's one of the main advantages of zeolite as well over some binders is most binders are inherently constipated.

And like if you tried to take a high dose of a charcoal or something, you just it's very concentrating with zero charge. The higher the dose, generally the less constipated it is.

So a lot of people actually stay on zero charge for the sole purpose that it keeps them regular, which is very interesting. So it's not necessarily the powder itself causing the constipation.

If you get constipated, it's the low dose generally resulting in an inflammatory detox process that's causing the constipation. No that's fast. So so some of these very sensitive people that feel like they're just too sick to detox, right?

Where are they going to start in the process, for example, with this like again, going back to the highly sensitive, you said like it could be at least two scoops, right?

One scoop for someone like, but at least two scoops for a highly sensitive person who says, I don't know where to start, that's a reasonable starting dose.

Yeah. To between 2 and 6, whatever they're comfortable with. Like we have a program that's pretty popular where you start with six scoops and you do that for a month, and then you go to five scoops the next month, and then you go to four scoops, then you go to two, you work down and you can also do an accelerated version of that where you do six scoops for one week.

And if that works great, going to five scoops the next week, then go to four scoops. And then sometimes people get to three scoops and they say, now I need to go back up because they start getting symptoms.

So if you start getting symptoms, you just bump the dose back up. So that's a very popular approach I think works pretty well. Start high, work down and go back up if you need to.

And how many doses are in, like when you get the canisters of the zero charge. How many doses generally do you find. So it's it's 150g of a five grams per scoop.

Daily Detox, LPS, and Gut Inflammation

So there's 30 scoops per container. So if you're going to do one scoop per day, you need one jar for the month. If you're going to do two scoops a day you need two jars for the month.

Got it. Okay. So the importance of dealing with the daily dose toxins for detox protocol, talk a little bit about. And I know this personally because I just finished writing my book and the chronic illness it's it's out this year from Simon and Schuster.

What I found is and this is fascinating and this is like first time people are hearing this. Every major disease that I looked up whether is A. D. D., ADHD, autism spectrum disorder, Alzheimer's disease, the three B's with Lyme, Borrelia, Bartonella with toxins affecting it, cardiovascular disease, cancer, digestive disorders, hormonal disorders in every case, environmental toxins were playing a role.

There was not one exception in all the chronic diseases that I looked at in ending chronic illness, where it was not playing a role. So talk to us again a little bit, because it takes a lot to convince me, by the way, with my 70 supplements a day to take anything else.

And I have to tell you, I've been thinking, my wife and I've had this conversation like she would get some humic phobic acid. Right? You know, for glyphosate. Like what?

Where do we start? Because even I'm taking so much, it's like the last thing I added was a prebiotic. From what, the molecular just to kind of add something from my microbiome.

Explain to people again why this Daily Dose toxin is so necessary. I mean, I know this because I've done the research and I've looked it up. It's literally hundreds of thousands of toxins that are getting in.

But but explain for the audience exactly why I believe that it's an important thing to be doing on a daily basis.

Absolutely. And first I'll say I do like humic and full of gases.

I've been manufacturing humic and Volvic acids in different forms for ten years, and I knew about human control. This way before I knew about zeolite.

But when I got into zeolite, I realized it was much more effective. Right? One it's because it just has a much higher surface area, stronger binding capacity, and you can take a high enough dose to get the desired effect.

Right. So with humic and full vacs, generally you're getting much lower doses. Sometimes you need these mega doses. You might need 30g 60g of zero charge.

You're not going to be able to get 30g or 60g of of a high quality for that. You're humic. And I think that's one of the issues because just because of the cost of production.

So that's kind of why I've moved away. But I'm a reseller. Are human conflict like I love human conflict. So it's it's finding something that your body works to, works with to bind to these toxic elements.

So these daily dose of toxins, I break them into two different categories. You've got the external exposure and you've got the internal production. So we all kind of know about the external exposure.

We've got the food, the water, the air, right. The personal care products, all of the stuff that's coming from outside into your body that your body has to deal with on a daily basis.

Now, the other aspect people focus less on, it's the internal production of toxicity. Right. And I think this is the greatest source of toxicity in our bodies.

It's it's the production of metabolic waste products. It's the production of the microbial waste products. It's it's the microbes, you know, dying off and causing, you know, into an extra toxins, all these things.

And then it's the recycling of toxicity from previous exposure. So for example, let's say 20 years ago you were exposed to lead or, you know, a higher just a high amount of environmental toxicity.

That's the external exposure and it's still in your body. And let's say that ends up in your liver. And then as your liver is releasing bile for fat digestion and other purposes, it carries toxicity from the liver into the small intestine through the bile.

And the body recycles its bile like 95%, sometimes of its bile, which means you're a cycling toxicity intrahepatic circulation. Exactly. So the thing is, if your liver is toxic from previous exposure, you're basically recycling toxicity and poisoning yourself with your own toxicity every day.

So a lot of people, you know, they do something that results in an increased bile dump, whether it's, you know, sauna, exercise, eating a high fat meal.

They feel terrible. A lot of times it's because their bile is toxic. So people say, I'm in this perfectly clean environment. You know, I'm out in the forest now. I'm not exposed.

Why do I still have all these symptoms? So it's like, well, maybe it's not the external exposure daily dose right now. Maybe it's that internal production and recycling from previous exposure and your body just keeps rotating the step.

Now some of it's leaving every day, but it takes a long time to get it out. So with with traditional like let's say you're using a you know, a bitter herb to stimulate more bile, you're basically increasing the risk that the bile flow, which is pushing more toxicity from your liver into the small intestine, and that might make you feel absolutely awful because you've just pushing yourself with your own toxicity.

And if your body can't get rid of all that, it recycles, right? Portal vein back to the level and tear up attic right gut liver

goes back to the liver.

Now with zero charge. I like to call it kind of a bile filter because it's in the small intestine. It's grabbing to some of this toxicity that's in the bile to prevent that recirculation of the toxicity.

So a lot so there are there are people that don't have to use called a star. I mean because people hate called a star, I mean, and I don't use it, by the way, for that reason is because the gas, the bloating, I mean, it's terrible to use it, but that's what it's doing.

It's helping the hepatic circulation by pulling that out. You're saying you can avoid some of those side effects, right? Which is why also I'm thinking for some of these more toxic patients, adding the zero charge, right, actually to the the GI detox and the other things we're using might be helpful because you're right, this will help.

So it does help with the andro hepatic circulation. Oh that's that's one of the primary benefits. So there's there's a number of practitioners who are utilizing it specifically for their liver health.

And they're there. What they do is they have their patients take it 30 to 60 minutes after their largest meal to bind to the most amount of toxic bile, to prevent that recirculation.

So that's a whenever you're releasing the most bile is a good time to take it because you want to prevent that recirculation. If if liver toxicity is your it's your right.

So I tell people to take it whenever you're most symptomatic. But yeah I think that's a huge one preventing that recycling and then binding to the the internally produced toxins.

So these are regenerative. Those are recycled toxins. And then you have regenerative toxicity in your body. So these are things like your metabolic waste.

And these are things like if you have the microbes in excess these are toxin factories. They're producing all sorts of toxic elements as waste products.

So you basically have and if you're not dealing with these issues, it's a regeneration of this toxicity every day. So even if you're in a perfectly clean environment, you're not exposed externally, which you are.

But even if you're minimally exposed externally and you have issues internally, you're still getting a huge daily dose of toxicity and taking something to bind to that kind of calms the storm in the body.

That's the that's the body regain control. So you can start functioning at a higher level. Question. And I don't know that you'll know the answer to this, but regarding endotoxins, one of the ones that kept coming up when I was doing the research for my new book and in chronic illness was LPs lipopolysaccharide, which is getting across the intestinal barrier when people have intestinal hyper permeability, leaky gut, getting into the bloodstream, making a leaky blood brain barrier, right, and increasing inflammation.

Do you have any sense on how the zeolite affects LPs? Yeah, and there actually is research showing that it does directly bind to LP. Does. So in the study that's coming to mind is actually in broiler hens and chickens.

But they did a study. So zeolites used in a lot of animals producing increasing egg production and things in chickens. But in this particular study that I'm recalling, it was binding to the LPs in the chickens.

It was increasing superoxide dismutase. It increased glutathione peroxidase and increased a number of things, and just increased the overall health of the chickens in that situation directly did bind to the LPs, but just anecdotally, a lot of people with endotoxin.

Yeah. And issues with LPs do find great relief. And it's possible that it's, you know, it's probably a combination of binding directly to the LPs. And also binding to a lot of the other toxic elements that are allowing the body to better,

better handle the you know, I don't think most people realize and I will tell you, even me who's been doing this for, you know, over 41 years with these chronically ill patients.

I didn't realize when when we read about LPs and intestinal hyper permeability and the fact that is now impacting all these brain diseases. Right? ADHD, autism, Alzheimer's, chronic Lyme with neurocognitive issues, people don't realize that the intestinal hyper permeability with LPs, where the bacterial toxins are getting across the gut lining and increasing that inflammatory load.

It's a big deal for some people, especially when they have MSL activation. How is the zeolite work with some of these people who are very sensitive to Mast cell activation?

Is it is it helping some people with it also? Yeah, absolutely. We have a lot of people with with vessel activation syndrome that do take the zero charge.

It's one of those things that you have to take the right dose. So the people that get the right results are people that take the right dose. Unfortunately, there's no exact formula to know exactly what you need.

So that's why sometimes there's little trial and error and that can be problematic in someone with MCs because sometimes they they can't risk it. Right.

It's like you have one major immune trigger and then it sets you off for a few weeks. So it's tricky. That's why generally I say, yeah, at least two scoops for me and be confident in it.

But yeah, a lot of people, there's nasal activation practitioners who who do recommend it as their binder and found really good results with it. That's great.

Talk to us a little bit about nano zeolites versus EO charge. Yeah. So traditionally you had just this natural powdered clean up to a light zeolite, which is what we're selling with, you know, we're using advanced manufacturing and cleaning processes to make it, you know, suitable for human consumption.

Now then you what you had with these liquid zeolite products, where marketing companies basically got their hands on zeolite 20 years ago, 15, 20 years ago and started mixing the powder in with water and calling it nano and liquid zeolite.

And literally it was just 1/5000 of the dose of zeolite. There's basically nothing in it. There was lawsuits that was those are liquid zeolites. A lot of the liquid nano zeolites in the market are still those.

They're, in my opinion, kind of scams. And people do get detox reactions from them because of the microdosing. So it is interesting. It doesn't mean it's a good product.

Now from there the companies have advanced and now there are true nano zeolite products, which are not just the powders mixed with water. It's actually a nano manufacturing process.

So in fairness it is different. But there are issues with that one. It's still a microdose. So when you look at the nano products, you're looking at 300 micrograms, which is less than one milligram per serving ratio charges 5000mg.

So if you take six scoops of zero charge, that's exactly 100,000 times the dose of a nano zeolite. So even if it's a really good quality zeolite, the challenge is most of these companies don't understand the dosing paradox.

So when they're recommending these micro doses, it's causing terrible detox reactions, which gets people to think the product is working great. But really it's an inefficient detox.

So what we did we did a SIP challenge where we had people take mix a scoop of zero charge in a glass of water, take a sip, and then a lot of them experienced terrible reactions the next day.

Scoop a zero charge in water. Drink the full glass. No reactions. So it doesn't mean the reaction doesn't mean the product is working better. It just means it's causing more stress on the system.

So it's better. And again, the paradox here is in this case more is better. Which which is not the case normally with these highly sensitive patients regarding binders.

Yeah. So that's why it's just it's just you know, in fairness to these other companies, they didn't and actually discovered this dosing paradox myself.

So these other companies did not understand this.

Using Zeolite in Lyme and Detox Protocols

So they were manufacturing products that weren't able to achieve the therapeutic doses. And you know, hopefully they'll start switching, but you really can't get a therapeutic dose with the liquid for especially for a sensitive individual.

The nanos also have some other issues. I don't need to get into all the issues, but I do not recommend the nano zeolites. Some of them are also synthetic, so they're lab grown, they're not natural, and those can cause some issues as well.

And you can kind of break down the zeolite cage and you have these fragments that can be helpful. But you break down the structure and maybe they do. They basically act like synthetic leaders at that point and they can cause nutrient depletion.

Now has anybody studied because it sounds like this is really it's an amazing product. The zero charge. Is anybody studied using it alone as opposed to hey, I've got heavy metals.

I don't want to use EDTA. You don't want to use DMC, you don't use DMPs, I want to use, you know, the CEO charge for the heavy metals or I'm a sensitive mole patient. I really don't want to use too much phosphate or choline and charcoal, clay, etc..

Have you looked at, just for example, what happens to okra toxins Aflatoxins Zealand? What happens when they use your charge alone versus in a combined protocol?

Yeah. And this was actually very interesting. So I learned a ton about detox during our case studies program five years ago or whenever it was. So we did the six month case studies program before launching, just to see what the zero charge can do and make sure we're not making false claims.

And make sure, you know, we want to make sure it was safe and then it actually worked. So what I discovered, because I didn't think it was going to work as well as it does on its own.

So we, you know, tried combining it with things. We tried it on so and interestingly works in my opinion, it works just as well alone as it does with other things.

So for example, there's a max detox where your body's not going to detox faster than it wants to. Excluding liver, you can keep pushing out toxins from the liver, but in terms of getting the body to release toxic elements from the brain, the body has a certain pace because it's not going to release more than it can handle because it will, you know, be too detrimental.

So a lot of people were getting to that max detox level just with zero charge, and when they added other products, it didn't accelerate the detox. And in some cases when they added too many products, it actually slowed down detox.

If the other products were actually stressing out their system. Because the key to an effective detox in terms of this

long term, getting rid of the chronically stored toxicity is to encourage the body to let go opposed to going in, sometimes fighting against the.

If you take a synthetic key later, even if it enters the brain and encounters mercury, there's no guarantee that the brain cell is going to let go of the mercury.

Right? So there's sometimes there's a tug of war effect with there's a specific key later. From Boyd Haley that was you know, I mean, how how tightly it binds to it and.

Yeah. Yeah, I've had a lot of experience with that as well. And a lot of people were experiencing this tug of war effect in their brain, these chronically ill clients.

And it was in there basically trying to remove it. But the brain wouldn't let go because it's too stressful on the way out. So that's why it's a little bit different.

It's not going in and grabbing things from the brain or organ. It's binding in the GI tract. And then there's the downstream effect where the body says, okay, now we're going to let go.

So it's just a completely different mechanism. Someone that's healthier like yourself has more liberties. You can do kind of more of the push and catch technique where you try to mobilize toxicity through other agents, and then you catch them to mitigate the stressed.

With the zero charge. People that are more sensitive sometimes need, I call it catch and release. Were you exclusively go in and you catch and you reduce stress and then the body starts releasing release on its own pace.

So it just depends where you're at and everyone. That's why, you know, that's where personalization comes in. With detox and health it's there's different approaches for everyone.

But yes, on its own it has been quite effective at removing, all sorts of stuff, including all 15 heavy metals that we tested it for. That's great. So, so finishing up this has been a, by the way, fascinating conversation.

And it takes a lot, by the way, from me to listen to somebody to convince myself to add my 71st supplement on to my protocol. Just because if you went into our kitchen and looked at what I swallow, you'll go, oh my God, how does anybody, even a human being, even get all these things it to their body?

But again, I'm motivated to stay alive till I'm, you know, healthy. Hopefully till I'm 100 and above. I exercise seven days a week, I get enough sleep, I keep sugar out of my diet.

I mean, I do what's needed, but I will tell you this issue of detox, of figuring out even for me, I didn't want to do the GI detox with clay, the humic acid, folic acid.

I read the pros and cons of how much you need. This almost really sounds like it's a perfect solution for someone like myself to finish this up for the lime patient in a lime healing protocol.

Where do we fit this in exactly? So, in my case, we use, let's say, a nine week double dose protocol with antibiotics. Afterwards, I do a mitochondrial protocol, to regenerate the mitochondria.

And then I usually detox molds when I'm not doing, let's say, two week antibiotic pulses. Any reason now that we've talked about LPs, any reason we can't use this during DAP.

So, for example, her time of reactions when we're stimulating those inflammatory pathways with NF Kappa B and the NRF two pathways and LRP three inflammasome.

So all these inflammatory pathways getting stimulated, can we use it during antibiotics to it. Should we use it afterwards. Do you have a sense of where to fit this in. Yep.

So so great question. Very important. So what the research does indicate that the Z like does bind to antibiotics. So you just have to you don't want to take the antibiotic at the exact same time as you charge because you're going to reduce the effectiveness of the antibiotic.

So if you, you know, take it a few hours after, if you know, the half life kind of of the antibiotic and the zeolite is not going to the blood as well.

So whenever basically the antibiotic is out of the gut and it, you know, has moved on, then you can take the zero charge, which is going to be sticking around in the GI tract.

That's one option. Yeah. So I usually tell people, just be very careful with antibiotics just because you don't want to reduce the effectiveness of them.

So you could either wait till that protocol is over and then you could introduce it into the next phase. Or you can try if the detox reactions are very bad and maybe someone can't, maybe someone can't continue with the protocol because you're having too bad of reactions.

Then trying to add something like a zero charge binder is going to be very helpful, because it might allow them to continue on the protocol because it's reducing that stress, the die up reactions.

So, for example, in my protocols, people usually take antibiotics after breakfast and dinner. This could theoretically be sometime after lunch, right?

Several hours in between. Especially because if it's binding LPs and it's helping with inflammation, which is underlying all chronic illness, including chronic Lyme disease.

And the rest there may be could be a role there. I don't know if enough Lyme literate doctors have done the studies on it, but it sounds like it's a study that should be done because there are some people that are so clinically sensitive, they do need as much support as they can get.

So I think it's a study that is that is worth doing. But but definitely it sounds like after they're done with, for example, our protocols, when they're off the nine, we can't do biotics or doing these in between these two pulses.

For Bartonella, it sounds like that's a perfect place to be able to introduce it. If there's any question. Yeah. Yeah, it's I like to call it a foundation to any protocol.

Generally it's you know, it's not like this is the only thing you need is going to cure everything. It's not like that. It's it's just it's a binder. It doesn't directly impact any biochemical pathway or anything else.

That's why it's nice. It's just going in and binding to whatever toxicity is currently present. And then the body can do what it wants with the extra energy.

So that's why it's nice. It's not it's not a a bioavailable nutrient. It is not accumulating in the body. There's no it's just binding. And leaving the body. That's it.

So that's why it's so versatile and can be kind of combined with other things. The only concern there is it does bind to things. So you want to make sure you're not taking something else that it will bind to.

Other than that it's it's pretty versatile. Yeah. Jeff, I have to tell you, this was this was really it was a it was a great conversation. I don't always learn a lot when I'm doing these conversations.

I actually learned a lot because I think a lot of the functional medicine docs out there, they're only utilizing zero charge based on the conversation.

And as I said, I did read some of the scientific studies you sent to me prior to doing this and really do some very

impressive studies on how it affects the microbiome, the intestines, antioxidants affect affecting glue to fire.

I mean, it's some very impressive scientific studies on it. And now that I know that it's not depleting minerals, right. And making people constipated and and it's the opposite, right.

More is better. In this particular case, I think there's a real place for people to use this, and especially for people like me that just want to stay healthy and are concerned about all the, the fashion and glyphosate and metals and all the things that are just getting into our bodies on a regular basis.

Yeah, yeah, absolutely. It's it's, it's it's gaining traction. Right. It's kind of the new kid on the block, but, it's becoming pretty popular and a lot of people are finding it to be quite useful in their protocols.

I mean, for us, it's not new. We learned about it years ago, but I think your company with Co charge, I mean, I think the difference is, is that you've kind of gone beyond some of the older problems that they had with the zeolites, as you were talking about with the other products that are out there.

So again, for the website for people to to look at this and get the information, remind people one more time with the website of how they can get more information.

Yep. Zeolite labs.com. That's going to be the best source of information, tons of information on their education tab. And then there's a podcast, the Detox Experience podcast as well.

But the Zeolite labs.com is the best place to get started and go from there. Great. Well, Jeff, I want to thank you so much for taking the time to speak to me today.

And for those of you who've been listening, just great talk. This is really something you want to consider adding into your protocol. Whether you're having dealing with active Lyme right now, you're just looking to stay healthy again.

My name is Doctor Richard Horowitz on the host at the 2026 Doctor Talks Healing Lyme Summit of the Neuroinflammation Brain Protection Summit. And this is certainly something that I think a lot of us are going to have interest in.

I'm going to be looking this up and speaking to my wife about whether she's hoping to adding one more thing into our supplement list. So so thank you, Jeff.

This was a great talk. I know a lot of people are going about it. Absolutely. Thank you so much for your time already. Listen, have a great day.