# The Neurotoxic Loop: Why Your Brain Must Feel Safe Before Your Body Can Detox Transcript

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## Introduction and Dr. Mooreu2019s background

Hey everybody, Dr. Rob Silverman here, Proven Health Alternatives. I've got superstar, I got him. Guys, I got him. I've been asking for him and I got him.

Dr. J. Bin Moore. Doc, how are you? I'm great. I'm excited to have this conversation. It's one of my favorite topics to talk about. Without question. So let me give your bio, boy, and it is impressive.

Dr. Moore is a nationally recognized expert in root cause medicine and the founder of Redefining Wellness Center. After overcoming his own battle with Lyme disease, we really have to talk about that.

In mold toxicity, Dr. Moore committed his life to helping others break free from chronic symptoms that conventional care orphan overlooks. With more than a decade of clinical experience and 10,000 plus clients and patients served, He's become a trusted voice in the gut-brain health space known for blending cutting-edge science with compassion and clarity.

Whether he's on stage, in clinic, or across his digital platforms, Dr. Moore empowers audiences to uncover the real reasons they're not getting better and shows them how to finally move forward.

Lime disease guy? Yeah, yeah, that was my origin story. I was sick, didn't know why, went from doctor to doctor, like so many other people that are probably listening, kept getting pushed off.

I had a number of symptoms, brain fog, body pain, all the complex chronic illness commons. But I also had erectile dysfunction. And when you're a 25-year-old dude and you have erectile dysfunction, there's just about nothing else that will motivate you more to search for help.

And I ended up going to medical doctors and they're like, here's a little blue pill. You know what the problem is? I went to functional medicine doctors are like, here's a largenine, which is basically going to do the same thing.

Neither one of them is what I wanted. I wanted a solution. And that's what really pushed me down like this. How do we figure out actually what to do to solve problems to give people real results.

And I drove to Wisconsin from Missouri and found a guy that finally understood what was going on. He diagnosed me with Lyme disease. And that was like the origin story where I actually started getting results, but I didn't even realize that living in a moldy basement in college as a poor college student was probably where my immune system got crashed.

And then adding all the stress of professional school, a chronically ill mother and life is what actually made me susceptible to Lyme. It wasn't Lyme is the big problem because I don't fear Lyme at all.

Now I'll go outside of tick bites me. Yeah, I don't like it, but it's not going to end my day. I'm not worried about getting Lyme from that.

## Lyme origin story and root-cause perspective

Now. Now I realize that if you can optimize your body and your nervous system, then You actually can be really defensible. Your body's really resilient and strong and these chronic conditions and infections have a real hard time taking it out.

So why don't you walk us through the idea of your order of operations from a complex Lyme perspective, mold case, testing, first four weeks, objective milestones.

Because where I am in the Northeast, so many people have Lyme and so many people have tick-borne infections that isn't Lyme, you know, but it's a bacterial infection.

So if you could take us through your routine, it would be great. Yeah. So Lyme disease, let's, let's just talk the basics just for a moment to make sure that those who aren't from the Northeast, as we're going to have a good reach here with the people we're talking about is one, this is a bacterial infection.

It has a number of co-infections that are not bacteria. So you got Babesi, which is a parasite, Epstein-Barr, which is a virus and a number of other infections that the tick actually will spit into you when it bites you.

And. Lyme disease does not only come from a tick. It actually comes from numerous vectors that could bite you. So mites, spiders, mosquitoes, et cetera, can carry the Borrelia bacteria.

So it's not just ticks. And the type of tick that bites you that is most commonly associated to Lyme is called a deer tick, which is the size of an end of a pen.

So I don't know about you, but if it's the size of an end of a pen, it's smaller than a freckle, I'm not probably gonna notice that very easily. If it's biting me, I'm not gonna feel it.

And most of my scratch it off if I get lucky. So finding that you got bit is even hard. So I didn't find that I get bit. Most people don't because that bullseye rash that is so much associated to Lyme is only at most 40% of individuals that are even contracting Lyme.

So I just wanted to get the basics out there. And then Lyme disease is thought of as the great mimicker. It's thought to be so difficult to deal with.

And I'm going to tell you right now, Borrelia Lyme, when it's by itself, is not that hard. And I know there's going to be some people that are just like, oh, this guy's crazy.

He's just talking crap. He doesn't know what he's talking about. But here's the deal. When someone walks into my clinic and that's all we find, I'm like, oh, this is gonna go by pretty quick.

It'll be a few months. Here's the process. And I'll walk us through that. It's the complicating factors, the childhood trauma, the mold toxicity in your house, the radon in your basement.

And up in the Northeast, by the way, whether it's New Hampshire or Connecticut or New York up in the mountains, what I keep finding is people are living where their water, whether it's a well or the city, go look it up right now if you're listening, ewg.org.

This is a website database where you can look it up. There's radioactive elements in a lot of the water supplies up in that area. And that radioactive element, radon, uranium, radium in your water is immune suppressive.

And that suppresses your body's ability to defend you against things like Lyme, like mold, parasites, SIBO, H. pylori, UTIs. So the biggest thing is I want to get rid of the misnomer that can keep you from getting well because that's usually a bigger problem than the actual bacteria itself is the things that keep you from getting well.

So those are just a couple of them. We can talk about more as we go, but I'm looking for reasons why you're not gonna get well first. Once we've dealt with the air you breathe, the food you eat, the water you drink, the hygiene products you put on your skin, the dental issues like root canals and metal in your mouth, and do you have implants in your body?

Once we've dealt with that, I figure out if your nervous system is on track for being well enough to mount an

immune reaction. If you're stuck in fight or flight and you feel like you're running from a bear, all the time, whether it's conscious or subconscious in your brain, if you're stuck in fight, flight, or freeze, your body is worried about one more step, one more breath, one more, you name it, not rest, digest, recovery, immune function, cleaning out lime.

So you touched on a myriad of things there. Number one, you spoke about the idea that Lyme is not just a bacterial infection. It's a whole calamity of things.

It appears to be a poly reactivity if you, you know, when you mentioned Epstein-Barr and stuff like that. So that's fascinating. Number two, you're really speaking to the choir when you talk about the idea of, you know, sensitizing, upregulating your nervous system.

When you're talking about sympathetic, you are clearly talking about the autonomic nervous system. We got to get that parasympathetic system in that autonomic nervous system up, i.e.

the vagus nerve, which I'm sure you'll touch on. And you also, you probably alluded to the idea of this central nervous system. And knowing you haven't talked to you before, I'm sure you're tying in the gut.

So you are really going to give the classic example of the gut to vagus nerve, to brain, to central nervous system pathway.

## Lyme basics, co-infections, and environmental factors

So that said, Tell me how Lyme and mold affect that central nervous system, because I think this is new to a lot of people listening. Yeah, so I've been talking a little bit recently, and I kind of just named it the neurotoxic loop, because when your body is stuck in this fight, flight or freeze, it doesn't mean it's from Lyme.

It could be from any number of things, shouted trauma, mold, etc. But what it does is it puts you in this reactive response. So when you're in a reactive response, your vagus nerve is stressed.

This is a nerve that runs from your brain all the way to your gut. So it's managing immune function, digestion, communication, brain to gut. So when you're in the stress state, it's starting to break down normal vagal tone.

As that tone breaks down, the dysbiosis of your digestive tract or bacterial overgrowth, yeast overgrowth start to grow. As that grows, it creates a leaky gut, which so many people are like, Oh, I got to fix my leaky gut.

And I'm like, Yes, you do, but it's not just taking glutamine, butyrate, BPC-157. There's more to it than that. Although those things can help. They're useful tools.

They are band-aids that you're just trying to glue things together and you're not actually solving what cut you. So when I'm talking about this and you said brain all the way down to gut, I'm looking for what is generating the stress.

If you've had chronic Lyme for a decade like so many have the Lyme is creating the stress. But if you've done antibiotics for two years, if you've done herbal protocols, if you've done the gut reparative stuff and you're still stuck.

Why? We have to ask our questions. Why? And that's where I bring in the neurotoxic loop is because if you've done all the antibiotics and herbs and you're still stuck, is it because the nervous system never got rehabbed after it was triggered?

The vagal tone was never brought back. The fight or flight was never brought down. So you're still stuck in parasympathetic. Or for those people that are.

We'll just say guilty of maybe being brought up in a way where They're a little more anxious, a little more worried, A-type, people pleasing. They were dealing with OCD.

They had the trauma background. Did that create a susceptibility to where now any infection you ran into, instead

of being able to fight that off, you accumulated that.

So you now got Lyme disease because of that tick bite. Because let's be honest, If you spend any time outdoors and unless you're in New York City where there's not very many bugs because, well, you're in the middle of the concrete jungle, for anywhere else, I'm in the middle of the United States of Missouri here in Kansas City where I go and walk in nature.

And when I'm out there walking in nature, bugs are gonna get to you. You're gonna get bit by something. And that's just the way it is. So it's not, you know, if you're gonna contract something, it's when, if you're weak.

So it's that neurotoxic loop of is it the stress that's keeping you sick? Is it the toxin that's keeping you sick? And there's usually people on one side or the other.

They're either the people that want to go do yoga and breath work and nervous system work, but they don't want to take all the supplements to the detox or they've done all the detox work.

They've done all the antibiotics, all the meds, and they don't want to necessarily do the brain work. And what I find is you have to do both to connect them.

And that's when the tools start working. So yes, Go do the cleanse and detox work I'll walk you through how to do that on this talk of what I like to use for Lyman mold But also go do the nervous system work We can talk about what we like to do there and don't do one or the other It's not this or that it's both and in the middle of that in the middle of those two working together That's where we can use those band-aids those glutamines and butyrates and leaky gut protocols those BPC 157s to bring down the symptoms to increase absorption, to increase healing rate, to make sure that we get the results we're looking for.

Because so often by the time someone gets to me that's been dealing with chronic Lyme, chronic stress, chronic mold, they're so depleted when I run their testing, there's just no resources in their body to pull from.

They're bankrupt on body resources like minerals, vitamins, et cetera. So essentially you're saying to you cure that loop to the brain. It's not going to heal.

Yeah, God is not going to get better until you fix that that top to bottom loop that is triggering and firing. I'm with you and I agree with you and I love the You know, neural loop concept, it's new, it's hot, it's validated, it's science-based, it's forward thinking.

How many practitioners have we spoken to who said, hey, you know, I did your 5R program, your 3R program, your 7R program, and I couldn't fix the gut.

How many of them would benefit from this theme? How many patients listening now? Would benefit from this thing but you do them together i agree with you because you know before we got on we're talking little bit about liver detox and stuff like that is you.

I like to treat the gut in the liver simultaneously i don't think you can split them up because they're interconnected but what you're saying is the body's all interconnected put to use put that stop the brakes.

on toxins affecting the brain in a detrimental manner, nothing's gonna heal optimally. Absolutely. So let me piggyback. There's a huge conversation around chronic illness right now.

What are the protocols that are missing? Because this is obviously a chronic illness, if you will. It shouldn't be, like you said, a few months and gone, but it is.

## Neurotoxic loop and nervous system dysfunction

Yeah, the protocols that are missing. So you have your psychiatrist, I was just talking to one this morning, an

amazing one. ketamine and cannabis and neurofeedback and light therapies and No detox work.

No gut work. I Was talking to another practitioner that is an expert they're using it your condos all nano liposomal herbs Ivermectin the best liver support supplements and binders.

No brain work. I And then talk to a third one who's like, here's the diet that you have to do. You have to get yourself in nature. You have to do the breath work.

You have to calm down the nervous system. You have to support normal function in life. You have to, um, make sure everything's organic and non-GMO and, and high nutrient grown in your backyard, but no detox and, and no, no higher level psychiatric work for the trauma base.

And I'm just like, why is functional medicine fragmented when we left Western medicine? Because it was fragmented. You had a psychiatrist, neurologist, gastrologist, whatever ologist you want to talk about.

And they were fragmented and they would just send you from one person to the next. That's what happened to me. I was, whether it was, you know, the, the urologist wanting to give me the little blue pill to the psychiatrist that wants to give you the depression med to the so on and so forth.

When you have ED, Functional medicine can't be there. We have to see the person as a whole. So the missing link is that there's really not a missing treatment.

It's a missing understanding of how those treatments are needing to interact. Now, well, I tell you that I say things to people all the time that they haven't heard.

And I honestly, I just listen to them. I'm like, hey, what have you done before? Can you just list out all the things? Oh, well, you've been to the killer guy, right?

So he kills everything, kill yeast, kill parasites, kill bacteria. you didn't go to the guy that also respected your nervous system while doing that because that's going to stress you out or you went to the guy that respected the nervous system and told you all you got to do is do limbic and somatic work you don't need to kill anything once you do limbic and somatic work it lime will be gone no it won't be because you never did anything to get rid of it if it was strong enough in your body now do you need to do both yes Because I'll hear that like, for instance, there was a practitioner out there that came up with a nervous system program.

She's like, you don't need to do Lyme protocols or detox. You just need to do my program and that'll solve the problem. And I'm like, well, yeah, if you already did all the detoxes recently enough and you went and did the limbic work.

Yes, that might be the thing that shifted for you. So So those are some of the pieces. And then the other cutting edge things that I'm talking about, which feels not cutting edge, it seems logical.

And so much of medicine should be logical. I actually asked my team, can we just call what I do logical medicine? And they're like, that doesn't sound sexy.

And I was like, well, no. but it's what we're doing. And they're like, you can't call it that. I'm like, fine. So things that I'm talking functional, logical medicine.

So there's one thing that I want to interject. When you talk about the nervous system, you are qualifying at the autonomic nervous system and the central nervous system.

Yes. And you're also incorporating the largest nervous system in the body and it got called the enteric nervous system. All right. So just for clarity and one more thing, I would say for the win, protocols that involve both the brain and the body or what you're talking about.

You want to treat them in synergy, not in isolation. That's correct. Here comes the kickback. Get ready. Doc, you're going to give me three sets of supplements.

It's too many supplements. What am I going to do? So here's the thing. I tell people no more than five, five to seven supplements at any given time ever.

That's my rule. I don't want people taking a bunch of stuff. So, If you can't take a bunch of pills, we'll figure it out. We'll do tinctures. We'll do other things.

We'll do powders, whatever. And I think what you're asking is, what am I using in the lime realm or the mold realm? Everybody's going to want to know.

Here's what they're going to want to know when it comes to Lyme. They're going to want to know about what test, how you differentiate a negative from a positive test because there's, you know, CDC has five antibodies and we can go down the list and some other governing organizations.

What do you consider a positive test? And what do you do in the time frame, which it takes somebody, you know, a general time frame. I know everybody's end of one individual, et cetera, a time frame to attenuate a lot of the conditions from Lyme.

And if you want to tackle a third topic, what line elevates the other type of conditions like long COVID, mitochondria dysfunction, things like that. So you've got a bridge to a lot of spots.

All right. Well, here we go. Let's do the bullet points of these things. So testing. The CDC has a test. It's garbage. And if you have any bands positive on that, I'm going to run better testing, say Vibrant America.

I'm going to run their Tick-Borne 2.0 panel. Here's why the CDC back in 2015 said we found 25,000 people to be positive for Lyme this year. We think it's more like 300,000 to a million people probably got a test would test positive.

So that was interesting to me. And I'm like, okay, well then your test is at a million with 25,000 people found 8% accurate. That's that's not good for me.

I'm not good with that. And then if you go beyond that, you can talk about the fact that we've got a lot of other things going on when it comes to the Lyme community.

It's a lot of other different mutations of Borrelia, species of Borrelia that are not necessarily Borrelia badorfii, which is technically considered Lyme.

the friends, the family, et cetera, that can cause similar symptoms. And that's where the TIGBORN 2.0 panel comes in. But you have to be able to read this test.

And this is where some of these tests get bad and raps. If a doctor reads a test, they have to understand what IgG and IgM mean. IgM is an antibody. that happens, it's about a three month window that it will be positive when you get a new infection or mount a new reaction to an infection which can happen when you've had something for a while if your body newly reacts because you get strong enough to do so again.

IgG is a more chronic long-term response, which can be 12 to nine months where that antibody stays in your body, in your blood, where it is testable. So for instance, you get strep throat and you beat it after three days, you might still have a positive antibody for up to 12 months.

So when I see somebody come in with a Vibrant America test and they have IgG positive, they're like, do I have this doc? I'm like, well, sometime in the last year, you mounted a reaction to it.

I don't necessarily have the ability to tell you, yes, you are positive for Lyme or not. I can tell you you mounted a

reaction to it. What does that mean, Doc?

## Fragmented chronic illness protocols and missing links

Well, let's first start here. You ran the test a year ago. You're still technically showing that the Lyme antibodies are positive now today. Have your symptoms gotten better in that period of time?

No. Have you done treatment for Lyme in that period of time? Yes. Well, because symptoms haven't improved, you probably are still dealing with some of it.

We can rerun the test. If it's still there, you're probably still mounting some kind of response to it. So understanding the nuances of test is really important when it comes to Lyme and then also getting something that is sensitive enough to be able to give you the info to at least consider it being there because it's not a black and white Yes or no and what I'm using for Lyme if I've got people and this is just the bacteria part This is not the co-infections and etc I like a company called Regenex.

They have LSF which is Lyme support formula one because it's supporting your immune system to help you with Lyme and That is actually the formula that I took that helped me to overcome all of my symptoms associated to Lyme But remember you may have co-infections almost most certainly do, you may need to do other pieces of that puzzle, which is another reason why I like the tick-borne 2.0 panel because it's testing for Ehrlichia and Toxoplasmosis, Babesia, Bartonella, and the list is long because there's about a hundred different organisms that it's testing for.

So that's my favorite formula, my second favorite formula when it comes to Lyme. It's going to be A-L complex and that's from Byron White Formulas. It's another herbal complex that helps and I like to use those more because if you look at PubMed, you look at antibiotics and you figure out do these have efficacy toward Lyme after two weeks in the body of Lyme?

not much efficacy. I've seen people with eight years of a port pick line into their body still having Lyme and they were cycling antibiotics for eight straight years.

We got them off of that onto herbs into a better physiological function because those antibiotics were wrecking them and then they overcame the problem.

So I'm not a big huge proponent of antibiotics for chronic long-term Lyme. That was the next question. So I didn't mean to stop your fuego. Let's assume they come to you and they've been on antibiotics six months, nine months, 12 months, eight years, decades.

Yeah. Um, how are you going to address that? Where are you going to go? And by the way, can you also, cause I know they're going to ask, they're going to want the protocol in the notes.

Do you think you'd be able to send me it and we'll add it into the notes? I can definitely send you a, Framework of it. I will just say this out loud and know this is what everybody says.

I work so in with the single person intimately understanding what their cofactors and cofact findings of infections are. That's the secret sauce. Just taking a supplement if that worked.

I would just mark it all over Instagram Take this and I make a bunch of money. It doesn't work that way You need to know the cofactor so I can give ideas and if people want to reach out to me I still work with people virtually all around the world.

So reach out to me and we can support you Terrific antibiotics, they come in six months, nine months a year. How does that change the trajectory in the treatment program?

We know their mitochondria are wrecked. We know their gut is wrecked. We know that because of the length of

time they're on antibiotics, they most certainly have parasites and they have fungal overgrowth for sure.

So we've got to bring in the butyrates, the glutamines to start healing and sealing the gut. We got to bring in the spore based probiotics, the prebiotics to start reclaiming the gut territory.

And I'm going to be doing parasites first, then while I'm doing the gut repair. And then I'm bringing in the antibacterial, antimicroplasma. And then after that, that's when I'm going to go up to the fungus.

So in that step, one, two, three, four, parasite, bacteria, mycoplasma, fungus. And that's just with the knowledge of having bacteria, being Lyme. and taking a ton of antibiotics for it.

If you've got other compounding factors, it can lengthen that. And for your question of how long do I work with somebody, come in, give me all your labs.

If you have multiple categories of problems, so parasites category, bacteria, mycoplasma, virus, heavy metals, molds, microplasma, or I think, yeah, so there's about seven different categories there that I just put up.

Each category is going to be one to two protocols minimum, likely up to three, and they're a month apiece if you can go at full speed. So depending upon your number of cofactors alongside of Lyme, It could be six months.

It could be a year and a half, depending upon your complexity. And we just put it in a roadmap at the top of your note. And I just say, hey, here's the things you're dealing with.

Here's the bullet points of them. It's going to be two to three protocols per each one. So that's two to three months. You're not extra sensitive. If your mass cell serves multiple chemical sensitivity, histamine person, and it takes you a while to build up on those things, it may take us a little longer.

There are tools to help with that, whether that's KPV, thiamacin alpha, chromaline, ketatophin, which are all prescriptions. You can do queer-synsting unitobromalin or DAO that also work well with histamines to bring down that reactivity to accelerate us, but it's all in flux depending upon the person.

What I really like that you said, I mean, there's a plethora of things to dice through that were really key takeaways, all in that last answer. But one of the things was the idea of mitochondrial dysfunction, and mitochondrial dysfunction leads to a host of different things.

But the number one easy thing to talk about is without question fatigue. So when people come in with fatigue, they're talking about mitochondrial dysfunction.

However, You said trauma and toxins trigger the same brain pathways. Can you unveil that? What does it actually look like in the body and what can you do for it?

## Testing, treatment, and antibiotic history

Yeah. So, you know, it was a little bit interesting for me when I was really getting into mold. And I started getting all these people that seemed like they'd had significant trauma in their life and there was this connection that led to MCAS or Massive Activation Syndrome.

Right. And as I dug into the research trying to figure out how to help these people because They're complex. They're very difficult. They're highly reactive.

You know people get red ears, red face when they work out. That's a little bit of a histamine. People get that post-nasal drip. That's histamine. People that are dealing with increased sensitivity of their menstrual cycle toward the end of the month.

There's all these different symptoms that can be associated with histamine. Well, when that becomes more

extreme, and you start losing food groups, you start reacting to more chemicals, you can't go into the mall because of the way people smell.

I was just like, what is happening? So I was diving into inflammatory responses and I came across some studies that showed that when you've gone through stress or trauma by itself, not due to mold, Lyme, toxins or infections, you can trigger the same interleukins.

the same cytokines, which are inflammatory markers in the body, just by being stressed, especially the extreme stress that you have when you're breathing in a toxic mold or you have an infection with endotoxins going into your body, it can trigger the same kind of inflammatory stresses.

And that opened the door for me to go, wait a minute. So emotional trauma, can be just as damaging to your inflammatory pathways as toxic and infectious stress.

So then when I was looking into the mast cell histamine situation and trying to uncover it, I was like, okay, so if your body's reactive, if your body's sick, if you're fatigued and you're using up all this energy to build immune responses, You're also going to have brain fog because short-term memory is decreased when you're dealing with the stress trauma.

What are we going to do to get you out of it? And sometimes the easiest entry point for these individuals because they're so sensitive. They have hurts reactions, detox reaction, die-off reactions.

You name the thing that they call it. I started asking them. I'm like, How are you defining these? Well, I take something I feel worse. Okay, well, I mean, sure, that could definitely fit in the Herxheimer reaction category, but Herxheimer reaction is a septic response because you say you kill off a bunch of bacteria, that bacteria dies, you have to clean it out.

It's causing toxicity inside your body. Your liver can't keep up. I go, okay, well, how much did you take to get there? I took a granule, a single granule of a supplement you recommended.

I'm like, that didn't cause a herxheimer reaction. That's not possible. That's a histamine response. So that response came from this excitatory inflammatory response that's a loop in your brain.

It just keeps going because of the stress and the trauma. It doesn't actually shut off until you deal with that. So your body is constantly in this reactive state, not because of something necessarily currently.

It could have been the childhood trauma you had 30 years ago. but it's still going today because you haven't dealt with it in the way that you break that pattern in your brain.

So it's in the background, it's not necessarily the forefront, but it's continuing to go and go and go and go. But you're like, well, it wasn't there my whole life.

No, it's when you added increased stress from mold and job and kids and spouse and all the other things in your life that compounded on top of it. And now it got excited And now your mass cells are triggering these inflammatory responses all the time because they don't have the energy to differentiate in between what is safe and normal life and what is dangerous pollen, your food that you're eating today, the smell in your homes.

It's just reacting because it's, it's stressed out and it doesn't have the energy to keep up. So in short, physiological, psychological issues, stresses to the brain can hitchhike the same pathways as toxins and infections.

And to you clear all three of them simultaneously, no, you're not going to get an outcome in any one of the three. And mass cell activation is behind curtain number one.

Wow. Now, by the way, for those who don't know, I haven't seen my podcast, The Brain and the Gut Communicate, they're bi-directional. The body's all interconnected.

The idea of functional medicine is root causes resolution, not root cause anymore. So I know I'm speaking to you right then and there. So how does being stuck in fight or flight block your body from detoxing or repairing?

I know you talked about that, but what's the science behind that? Because what we do is based on science, it's not hearsay. Yeah. So when you're stuck in a fight or flight or freeze, which is the piece that most people don't hear, the freeze portion.

Polyvagal theory you're taking that from. That is great. Yes. That freeze portion is the piece that's missed so much because what do you do when you're in the rest and digest versus when you're in sympathetic?

Well, when you're in overdrive, when you're in stress mode, the sympathetic mode, the dysregulated mode, the autonomic dysregulated mode, the POTS, the type of place where your body no longer is operating normally.

## Trauma, mast cells, and inflammatory loops

Well, oftentimes we become constipated because we're not using pulsatility of your digestive tract because when you're running from a bear, you're not worried about pooping.

So when you're stressed out, you're not clearing your gut. So you get constipated. When you're not clearing your gut, you're accumulating toxic burden.

And so that's a piece of the puzzle. You're accumulating poop, which is going to accumulate toxins over time. You're not worried about cleaning out your mitochondria.

You're not using energy to stabilize repair processes in your body. And what we see is when you dive into the mitochondria, which you mentioned earlier, what we see is we see your body going into what's called a cell danger response.

Love it. And as you go into a cell danger response, it's almost a situation where your body's trying to figure out, should this cell, should your mitochondria, which is kind of controlling cell function, it's an organelle inside that cell, should we die?

Should we cause apoptosis right now, which is cellular death because the cell isn't functioning normally and healthily, or do we stay where we're at? And when the body's in cell danger response, the cells are overreactive.

and they're not really functioning optimally. So you've got receptor sites that are not bringing in more information from hormones. So we're hormone resistant.

We are not bringing in nutrients appropriately because we have the inflammation that led to the cell danger response. So it's a situation and I like to speak in as simple a terms as possible.

Give yourself a big old hug and get in the fetal position and that's what your cells are doing. They are hiding they are not going out and working they are at best in Full-on protection mode hiding in their bunker.

They're not out trying to improve heal and multiply so When when you're stuck in this state this cell danger response state and You're just simply dysfunctional, trying to survive, waiting for the stress to pass.

And if you've got trauma, which is a loop that continues, like I said, keep going. Those trauma loops, which trigger the inflammatory loops, they're self-perpetuating.

Once they get going, they actually don't stop on their own. You can't wait them out. They just keep going. If you have colonizing mold in your body or Lyme disease, same thing.

They're self-perpetuating toxins and infections. They're not going away. You're not waiting them out. They're just continuing. So now if you have one or both, creating cell danger response.

This is why for me understanding this that you have to remove both pieces. You have to break both parts of their own individual loop that then keep a larger loop going.

So it's like your infinity symbol. They attach and now you just got a big loop and you've got to work through both of those to bring down the excitatory continuous inflammatory problems to actually get progress forward.

You just really elevated the conversation when you talked about cell or cellular danger response because most people don't realize that the mitochondria have a secondary function after producing ATP energy, the battery, the powerhouse of the cell, and that's to subsidize and help support the immune system.

And they do so by switching off their energy producing properties to immune producing or immune enhancing properties. Now cellular danger response is that response.

And unfortunately, that's one of the reasons why people suffer from fatigue to piggyback on what you said before. In addition, the cellular danger response is three switches or three light switches on.

So it's not like this, it's one, two, three. which is quite difficult and it provides a myriad of things that are needed to get the mitochondria to function well.

So when you've got this immune system or like you're saying, double and triple pathways of toxins, infections, and psychological things, your mitochondria has nothing to do but to shut off energy, go towards immunity, and that person's going to get more and more fatigued.

And hopefully that gels everything together. So the real question is, well, we told the problem, What's the answer? That's what we've been talking about this whole time.

It's identifying stressors in your external environment, air, food, water, hygiene, dental and implants. So identifying those external stressors, removing those things, because that's the easiest step that you can do.

Eat clean, breathe clean air. Drink clean water. Those are very simple sounding things. Sometimes they're difficult to implement for someone just starting.

So pick one little piece and start changing there. From there, the next thing that can be the test or the tool, I use a program called Primal Trust. It's a limbic somatic and vagal nerve exercise program.

I call it physical therapy for the brain. You do your breath work. You do eye yoga. You're doing canceling of negative thoughts and repetitive thoughts that are keeping your body going because a lot of people stuck in cell danger response get that repetition which triggers more and more anxiety.

So as you get into that situation, you identify those things you got to remove. You start working on your nervous system.

## Fight-or-flight, cell danger response, and recovery strategy

So that's step one and step two. And then step three is We run the labs, we figure out what toxins and what infections are elevated in your body. And we put together a roadmap to health and we go line by line, one at a time, not to stress your body too much, but to just make sure that we are lowering toxic and infectious burden.

And that's the way out. And if you can do those three things and it's simultaneously, we're going to have success. Outstanding. I got a buddy of mine.

He listens to all my podcasts and I always end with a question similar to this, but I'm going to press you for three things instead of one. What should he do on Monday morning or what three things should he do on Monday morning to have a better chance of avoiding all the things we talked about Monday morning?

Let's do this first thing. Take a account. of your stress burden in life. Get your journal out and just write down the things that take your energy, that you're aware of.

So that could be good things and bad things, your job, your work, your kids, things that worry you about the world, whether that's politics or pollution.

Write down the things that stress you. That way you at least get a log of them to understand what is there. Figure out in your day to day what benefits you and what takes away from you so you can start to put together a priority list of what should be good for you to continue doing because oftentimes it's a priority of where your energy is going.

And what most people do, or most people find when they do this, is they're doing things throughout the day that steal their energy, that don't give them anything back.

They don't love. Even if it's just the repetitive thought in your brain, is it taking away from your ability to be happy? Because you only have so much energy in a given day.

So do your journal. That's step one. Step two, evaluate now the environment that you live in. Is it curated to be your safety sanctuary? Or is it? Is it something that you just really haven't thought about?

And that's okay. A lot of people that come into me have not thought of it that way, but your home should be somewhere where your body recharges. It should feel better.

So the toxins on your laundry soap and your shampoo on your food should be very low at home. And I'm not saying you can never go out and eat a meal somewhere else.

I'm just saying at your home, make sure things are good. Is your water clean? So if it's one piece of that puzzle that you do on step two for me, Google your water, figure out what it's in it.

Do you need a distiller or reverse osmosis system if you don't already have one? If you have radioactive elements, you need a distiller. If you don't, you probably need RO.

So let's get clean water. Step three is find something that you know relaxes you and make time for it. Today with society that we live in, so many people are giving up rest in exchange for stress.

And we see it. I once had a woman where I legitimately told her, please go stare at a tree. She was so busy with so much on her plate. She just could not make that shift.

And I begged her, go stare at a tree.

## Monday morning action steps and closing advice

Just do that for 20 minutes tomorrow and let me know how it goes. And she's like, I felt better afterward, more calm. Something that simple can start bringing your body back to balance to just go stare at a tree and do not allow yourself to think about anything else.

So when you start thinking about work or the thing you haven't gotten done or cleaning your house, you just say, cancel that thought. Just stare at the tree and think about the beauty of the tree.

And you just keep repeating that. It's going to take practice because it's not easy for most people to just stare at a tree and think about its beauty.

So my three things are journal what takes every bit of your energy all day and figure out what benefits you and what doesn't and get rid of some of it.

Check out your water. Figure out what toxins are in your environment and lower them and go do something that creates rest and replace the stress even if it's 20 minutes.

This has been great. I think that people are going to find it very fruitful on your unfortunate or fortunate Lyme story, because again, that conversation is just raging.

The poly reactivity, you're a neurotoxic loop without question. Even though you say it's logical, it's quite earth shattering. I do not hear that much.

And when I say not much, maybe a couple people have talked about the idea. And I love it because I always used to combine the liver and the gut together.

Now I've got another step to go. So this has been great. Dr. J. B. Moore, we've got to get you back on. Thanks so much for taking your time. It's been fun.