



Your Functional Medicine Expert®  
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## [#60: Dr. Jill Interviews Dr. Shelese Pratt on EMF, Histamine and PEMF](#)

### **Dr. Jill** 00:11

Hey everybody! Good Friday afternoon, and welcome again to Dr. Jill Live! Today I have not only a brilliant naturopathic doctor but [also] one of my dear friends, Dr. Shelese Pratt. We're neighbors in practice and it's just so fun to talk because there are so many levels on which we relate, and today is going to be no different.

### **Dr. Jill** 00:31

I'm really excited about our topic. We're going to expand the topic from EMFs, histamine, and PEMF. You'll find out what all those mean and how they're linked if you don't know and if you're like, "Why in the world are these topics on one presentation?" Dr. Pratt has not only a wealth of knowledge on this topic but she's even got some slides to share and some incredible content. She was the one who first introduced me to PEMF. I had known about it for years. But really, the science behind it and sharing some of her patients' stories and personal experience—I'm just a huge fan. If you've heard me talk before, my mat, I love it. I use it every day. So we'll get into some of that.

### **Dr. Jill** 01:10

Just a little background before I introduce her. If you want to find any of the other podcasts or episodes, you can go to YouTube and just search my name, Jill Carnahan. We now have over 60 episodes. We're podcasting, so you will be seeing all of these episodes and more on YouTube, Stitcher, and all of the apps that you can find podcasting on as well. So stay tuned for that. We'll also have a landing page with transcripts all fully written out. In case you don't want to listen to the episode, you can read it. So all that is coming; just stay tuned. If we do mention any products, my store is just [DrJillHealth.com](http://DrJillHealth.com). You can find things there.

### **Dr. Jill** 01:47

Without further ado, I'll introduce my friend, Dr. Shelese Pratt. She is a believer in integrative and holistic medicine. Her practice in the clinic focuses on neurology and complex medical conditions relating to metabolic disease. She uses functional

medicine and her expertise in biochemistry, methylation, and physiology. She is one of the experts on some of these pathways. She's the one I go to if I want to talk about methylation pathways, COMT2 mutations, or some of these things. We have some really fun discussions. She helps patients get to the root cause of their symptoms through a strategic approach. The modalities she uses in her practice are nutrition, botanicals, environmental medicine, classic homeopathy, and hydrotherapy.

**Dr. Jill** 02:32

Many patients come to Dr. Pratt's office after seeing other doctors. They're scared, frustrated, and looking for answers that no one's been able to figure out. We both do these medical mysteries. She often tells people that she looks at medicine like a detective. She looks for clues that lead to the current health situation with strategy. She will work with you to figure it out, no matter how complex your health issues [are]. She's been featured in so many different interviews and posts. You can find our previous episode on YouTube and on Facebook here. I don't know what number it is, but if you go back, it's recorded here as well. Dr. Pratt, thanks for coming on. It's great to have you here and it's always fun to talk to a friend and colleague!

**Dr. Shelese Pratt** 03:12

It's so wonderful to be here! Thank you so much for having me on your podcast!

**Dr. Jill** 03:16

You're welcome! So I always like to start with [one's] story. This is a broad topic. We'll dive in in just a minute. Like, how do they relate?—defining the terms of that. And, of course, you can share some slides too. But before we do, why is this relevant to our medicine? And have you seen cases where, either in your personal life or with patients, this really, really does make a difference? Give us just a framework for why you and I are interested in this topic and why it matters to the health of our patients.

**Dr. Shelese Pratt** 03:46

Well, I think the journey began when I started seeing autistic children way back in 2005/2006 through 2007. I became a biomedical doctor, a 'defeat autism now' doctor, as they were called back then. We were looking for environmental medicine clues, metabolics, and genomics. We wanted to get to the root of why we were seeing these really tough neurological cases. We had to individualize care. It wasn't

[just] plugging a protocol in and everybody got better. And you can't throw the kitchen sink at them either or they just don't get better because it overwhelms their kidneys and their liver. So it was a journey, one step at a time, in environmental medicine, I'd say.

**Dr. Shelese Pratt** 04:33

I know you sit on a lot of different groups for environmental medicine, but electromagnetic frequencies are like smog. It's like the smoke that we used to think of in the '80s. We'd be around smoke and feel like: "This is carcinogenic. This is really bad for us." It's called electromagnetic smog. It's the same thing. So we started seeing in practice that this is really impacting people's health, especially if they have Lyme or infections, mycotoxins, or chronic fatigue. These were the canaries that first showed up in the practices, [with people] saying: "I don't feel well. Something is going on and I don't know what it is." We as doctors had to sleuth it out and figure out: What is causing this new level of our new exposure to them?—because we've cleaned up the diet, we've done all these other things to support them. And, for a long time, we weren't thinking about EMFs because we can't see them so we don't know that they're impacting us. So I started helping a lot of patients.

**Dr. Shelese Pratt** 05:42

On a personal story, my family was in a really terrible car accident three years ago last month. My husband got really hurt and injured and has been disabled since, and has been dealing with chronic pain. And you, as well as many other wonderful doctors, have come together, and we've found some really amazing things. But one of the things that I was looking for was pain management for my husband. That's when it all clicked to me when I was at an EMF conference in 2019. I started learning about PEMF and what it did for metabolism, nutrient absorption, oxygen saturation within the cells, and what it did to heal the cells, manage pain, and actually slow down arthritis, which is something my husband has. So personally, there are many complications. And, Dr. Jill, you know many of those. But it was an aha moment when I found PEMF therapies. That's when I dove in—I guess it's almost three years ago—to start to really figure out this technology that has actually been around a long time. So then I started telling everyone I knew about it.

**Dr. Jill** 07:00

I always credit you. You've heard me say, "A naturopathic doctor friend of mine." That's you. If you heard me say it on another [episode], that's Dr. Pratt. From my perspective, same as you, I've known about PEMF. I've known practitioners who used it. I've known that there's good science. First of all, you said, "Hey, Jill, this is amazing!" And all that I knew was that the machine that you have is very expensive and amazing. So at that price level, I was like, "Well, how practical is this for patients?" And I kind of poo-pooed it for a while. Then I got a chance to get one that was at a cheaper price, and it ended up working okay. But the bottom line is this: It's not about the price or the machine. The technology, when I started diving in, had such good science. This is NASA science.

**Dr. Shelese Pratt** 07:45

This is Tesla.

**Dr. Jill** 07:46

Tesla, yes. And what's interesting—and again, I'll let you talk more about the details—how I got to be a convert to PEMF was partially through you and your stories and like: "Jill, you really need to check this out." All of these things, whether it's EMF or PEMF, and how they relate—we'll talk about that—are invisible. So patients aren't always thinking about this. But there's so much power in this electromagnetic spectrum, not only to hurt and harm cells but [also] to heal.

**Dr. Jill** 08:16

Personally—you guys have probably heard me talk about it—I've seen dramatic changes in my energy, my labs, and my sleep. And I love objective data. So this is not just "Jill feels better." My labs are showing a dramatic improvement in malabsorption and things for my gut. And for my sleep, I look at the Oura ring and the deep sleep has sometimes been double or triple as before. There's really objective stuff that I've reproduced. So there's no doubt in my mind that this works.

**Dr. Jill** 08:43

I want to give it over to you because you've got just such great content, and you're going to pull this all together. If you want to share your slides, you can jump right in. Tell us about what they are, how they connect, and your experience with them.

**Dr. Shelese Pratt 08:56**

Well, let me just put all of this up for you. These are just some ways that people can get a hold of me. You can find me at [ThePrattClinics.com](http://ThePrattClinics.com). And this is my clinic. So a lot of people are like: "What's the big deal? I know the X-ray is bad for me. I know that radioactive plutonium and uranium are bad for me." We've known that for a long time. That's called ionizing radiation. But we've had a little bit of confusion about this non-ionizing radiation. These are things like microwave ovens in your home. These are things like computers that sit on your lap or next to you, your smart appliances all over your house, energy meters like smart meters on your house, Wi-Fi routers, cell phones, Bluetooth devices, power lines, and MRI. They're all full of non-ionizing radiation that we used to think, "not a big deal," but collectively, it's becoming a very big deal.

**Dr. Shelese Pratt 10:04**

I also ranked these in terms of least ionizing to most non-ionizing. So this is stronger than, say, the microwave oven. But I just want you to think about the collective effect of your home when you think about all the smart technology we've brought in, along with alarm systems and making sure our thermostat is on a smart set and that we can walk into a room and it turns a certain temperature. Well, that all has Wi-Fi running through your house, bombarding you. And we're going to talk about what the implications of that are.

**Dr. Jill 10:43**

Shelese, if I can just give a really practical example, I had a building biologist come to my house. You can have someone come and measure these. So if you wonder, there are building biologists out there who will come to your house and actually look at it. My shocker was that she had me lie in my bed in my bedroom, where I sleep and she measured my body voltage. She measured it with the master switch off and on so either all my electricity [was] off or on. The difference was 10-fold. It was 3,000, whatever the units are, in my body when everything was on... And again, in my bedroom, there were a few lamps. There are no smart meters or anything else. I do have a Sleep Number bed, which has electricity on it as well. Then, when we turned that off, just the master switch to my bedroom, it went down to 300, which is actually safe; 3,000 is not safe. I just wanted to put that in perspective because I have a pretty clean home and pretty low Wi-Fi, from what I think. I was shocked at the amount that was measurable in my bedroom.

**Dr. Shelese Pratt 11:39**

The same kind of story. I'll share my personal experience. We had a building biologist. Here I gave them websites for building biologists, both the Institute for Building Biology as well as Jeremy Johnson's website. He knows all the building biologists all over the country, if not the world. He's a wonderful resource. He has a great TED Talk too. But I was not feeling well in my home. And I wondered why. Well, there were multiple reasons. But the first thing I was okay with was finding out what our EMF situation was.

**Dr. Shelese Pratt 12:13**

He walked into our bedroom and he was like, "What is sending this off?" The meter just went off. I can't remember how high it went, but he said he'd never seen it so high. So he was thinking it was [something] like a drone sitting outside our window. What was it? You know what it was? It was our printer. It was the Wi-Fi sending out from the printer for it to pick up the signal to print something. So we learned we had to turn off our printer, which is in the office right next to our bedroom, every night. Otherwise, we're bombarding ourselves with EMF. The other thing that was really high was something called EMR, which is electromagnetic radiation. It was a noise maker. All it was was a noise maker on the floor and it was sending out all kinds of dirty electricity. So you start to learn.

**Dr. Shelese Pratt 13:04**

And I have some slides in here. The Environmental Health Trust is a great website for you all to know about. That gives great ideas about where to go through in your home to get [what] they call low-hanging fruit. Then you bring in a building biologist and they create a whole report. It's so wonderful. They show you how to set up kill switches so you can make your bedroom like you're sleeping in nature. So yes, absolutely. Thanks, Jill. It's great to have that story.

**Dr. Shelese Pratt 13:34**

So who is this harming besides humans? We know it's harming us at this point. We have lots of research to support and you're going to hear about all the symptoms that go along with it. But we've got immune system dysfunction; we've got an increase in bacteria and fungal resistance, even to our antibiotics and our antifungals, because of EMF. EMF is starting to show that bacteria and fungus not only grow faster in high EMF environments, but they also become resistant to our

medicines. Then we have fertility problems. We know that. But it's also harming our insects. There's a huge problem with bees. We are coming up with solutions, but we don't know all of the ramifications of these electromagnetic fields that we're producing for our plants, our animals, and our insects. You know, we just don't know what we're doing. So we're still trying to figure that out.

**Dr. Shelese Pratt** 14:32

Wow, look at all of the things that EMF exposure or when you have sensitivity to electromagnetics [cause]. There are people who literally cannot go into a building that has Wi-Fi. The reason why I started these is because look at how many of them are also associated with histamine. And maybe some of you didn't know that these symptoms were related to histamine. Jill, what do you think of this list?

**Dr. Jill** 15:00

Yes. Gosh, that's why I was so excited for you to start telling us about this. At first glance, when you see the title EMF, histamine, and PEMF, you're like: "First of all, what is EMF? What is PEMF?" And then, "What does histamine have to do with it?" Clearly, there's a connection because it's such a correlated list. And you'll talk about this, I'm sure, but it's like poking the bear. Whatever pokes the immune system or pokes the system—EMF is one of them, mold is another, infections are another—can cause our own mast cells to throw out excess histamine. And this is one of those things that can do that, right?

**Dr. Shelese Pratt** 15:34

Absolutely. I'm going to show you some research after this slide—eventually—that shows we're starting to see more and more of the correlation between mast cell dysregulation. Mast cells are like little balloons that hold your histamine inside. When they pop, they release all that histamine out into your blood. So when you are exposed to a lot of EMF... Let's talk about junior high kids, high school kids for a second, and college kids. They all have their devices. They're all in a room next to all the other kids with devices. They all have their phones on them and their computers. They have their Apple watches. And then they have a router right above them. All of these devices are being tested alone to say, "This is safe," "This is safe," and "This is safe." But when you collectively look at how much [EMF there is] when we get into a room full of devices, it's exponential.

**Dr. Shelese Pratt** 16:33

We also know that in a lot of those schools, we have mold growth. A lot of those schools, whether they're junior high, high school, or college buildings, have mold. Well, that's going to trigger a compounding result of these kinds of symptoms. Even without mold, Lyme, or other infections, you can get a burn on your face just from sitting in front of your computer. I saw some pictures today [while] reading through the research of a before and after. When somebody was on their computer for, like, two hours, their hands were red when they got up. That wasn't even with it on their lap; it was on a table. We're having skin burns. They almost look like chemical burns and they're from electromagnetic frequencies that are coming off of our devices.

**Dr. Shelese Pratt 17:29**

But if you see this list—I'm just kind of letting it hang out; I don't want to read every one of these—many of these are also associated with histamine. It made people start to wonder. It also makes it really hard. Somebody may be coming in with ADD and eczema. It's not just that they have allergies to their environment but that they're maybe on their game console and have a phone in their pocket all the time. That's the reason they have eczema. That's the reason they have shortness of breath or asthma. We may miss it. That's what I'm saying. A lot of us miss these symptoms. [Here's] a wonderful man in the environmental medicine world. In fact, he's kind of one of the grandfathers, wouldn't you say, Jill?

**Dr. Jill 18:16**

Yes.

**Dr. Shelese Pratt 18:17**

Dr. Ray. He had an environmental medicine clinic, and he created this barrel approach. I had never seen it before Dr. Ray. Had you, Jill?

**Dr. Jill 18:26**

No, I didn't.

**Dr. Shelese Pratt 18:28**

He was brilliant. Anyway, you can see all of these different chemicals, infections, pollens, and environmental toxins. They all add up. And some of them make us more sensitive to EMF. A lot of them do, especially mercury amalgams and heavy lead burdens in our bodies. Even gold fillings. There are people who have actually



reported that they can pick up on signals if they have enough amalgams in their mouths. They can actually hear things that are over radio waves, which, wow, that's intense. So we have to put it all together. And I just want to remind any doctor who's watching this or patient that if you've been really confused, this is how complicated it gets. We have to look for all of these things, sometimes in these really complex chemical sensitivity long-term chronic infections. Wouldn't you say, Jill?

**Dr. Jill** 19:30

Absolutely. I love that you're saying that. The elephant in the room, our total toxic load per Dr. Ray, is increasing exponentially every year. I don't know what the numbers are or how much more Wi-Fi and radiation we have. But literally, the curve is not doubling; it's exponentially rising.

**Dr. Shelese Pratt** 19:54

It is. It is. And this isn't all going to be bad news, but these are pieces that we have to pay attention to. What we found, as you'll see in some of the studies as we go on, is that even people who seem normal and have no histamine response are showing changes after spending time on technology. So it's just something, either as a doctor or as a patient, to know exists.

**Dr. Shelese Pratt** 20:17

This is my bread and butter in my practice. I love reading genetics. I really like StrateGene because it puts all this pathway together and you see the genes kind of in motion, which I like to think about as a big picture. A lot of you may have heard about MTHFR, and that's kind of the sexy, most famous gene of this metabolic pathway. But what I want to bring up here is that this is really complicated. And if you're a patient, you don't have to understand this other than that this is the folate cycle. Eventually, we want to go over here and make something called SAM. SAM is your universal methyl donor that turns on and off many other enzymes. It's really important for making new tissues, your neurochemistry, your ability to break down histamine, and repairing your DNA. We need all of that. We need SAME for all of that, this methyl donor. It's our master methyl donor.

**Dr. Shelese Pratt** 21:16

So what happens is that we go through this folate cycle. If you see mine, this is mine, this purple means it's slow. It doesn't do it really well. So my lifestyle and

having a clean lifestyle are pretty essential. But you come over here to something called MTR and this MTRR. Imagine it's like a cog in a wheel. The more oxidative stress we have, the more infections. The more heavy metals we have, the more toxic burden we have.

**Dr. Shelese Pratt 21:45**

It's like a stone gets stuck in that cog and it's not working very well. It's really limping to move. That means that all of this work can't get over here to make SAM. So what's a rate-limiting step often? This choline. And patients, if you're out there, if you have EMF sensitivity, if you have chronic illness, if you have mold, we really need to work on methylation. Sometimes the answer just isn't 5-MTHF and B12. Sometimes it's giving choline, riboflavin, or creatine to help this cycle move past. It means that doctor needs to keep working and be patient with them because they need to keep working on bringing down the reason why this cog is getting stuck. And it's very essential. We need to get this to work. Right, Jill?

**Dr. Jill 22:42**

Yes. And I would just mention, if you're a patient out there or you have had your doctor give you [supplements], there are even prescription versions of methylfolate that are in incredibly high doses. I see more often than not—probably you too, Dr. Pratt, because we see these sensitive patients where patients are given 5, 10, or 15 milligrams of methylfolate with no other intervention in a toxic environment—that they crash and burn because what you're doing is upregulating this detox pathway. But I think of it as taking an old Model T Ford and running it at 100 miles an hour on a racetrack. Everything's shaking, rattling, and flying off—falling apart. The patient is not able to go at that pace, and the toxic load is so high. So I just want to bring home what you said, because if you're out there and your doctor says, "Oh, you need methylation," [or that] one size fits all, it's not going to work that easily usually, especially in those high doses. You're pushing this system to its capacity and it doesn't work.

**Dr. Shelese Pratt 23:36**

I love Dr. Lynch. Actually, I got this from him. When you give too much methylfolate, it just ends up being like a recycle bin that's overflowing and not going anywhere if this isn't moving. So you're actually creating more for your body to deal with than you're doing anything with. And I've seen the same thing, Jill. I love your [example of the] Ford falling apart. Some of those people, though, stop on

a dime and they can't function. They feel really good on high-dose methylfolate, and then they crash on the other side because they get to a point where they've saturated and this pathway isn't moving. And it's not the B12 and folate. It's that we've got to take care of the redox. Why? Why is it slowing down? And we have to give it other support over here with choline, betaine, creatine, and riboflavin.

**Dr. Shelese Pratt** 24:36

So this is just a quick methylation talk, but I wanted to bring it home with histamine. I'll talk to the people over at Seeking Health. We'll probably add EMF over here and EMF up here because I really think it is impacting the release, the gene trying to manage, and what happens with histamine. Anytime we have inflammation, infection... All right. Are we okay?

**Dr. Jill** 25:10

Yes.

**Dr. Shelese Pratt** 25:11

Okay. So I think high-stress catecholamines cause us to dump histamine. And then we can take it two different ways. I just want to give everybody a little bit of context. There are things that are happening—I don't know if you saw that list—that resonated. It may not be EMF that's causing your histamine issues. Lots of things cause histamine issues, right, Jill? But it can go down into the GI and then it's more of an enzyme. Then you take an enzyme called DAO. Or you come over here and we're managing the release but there are offsets to managing that release.

**Dr. Shelese Pratt** 25:47

Many people are taking a lot of quercetin these days. They're stressed out, they can't sleep, and they don't know why. We all know that quercetin, although it helps those mast cells stay together a little bit better and that would help a little bit with EMF too, causes COMT—which is an enzyme that breaks down norepinephrine, dopamine, and epinephrine—to slow down so you hold on to that longer. So you're up later and you can't sleep. Or you wake up three hours after you fall asleep and you're wondering why.

**Dr. Jill** 26:18

I have a very funny story about that, Dr. Pratt. This was not even too long ago. And

I know better but I like to experiment on myself. I was in the office one day and I don't know if I had some exposure that I knew was allergenic to me. So I use quercetin as an antihistamine. And I don't use a lot of it because I have a COMT++, just like you said. So what happens is that stops the breakdown of norepinephrine, epinephrine, and estrogens. Then you'll feel kind of anxious and revved up. Well, I'm not typically an anxious person. I know better than to take a lot. I don't know what I was thinking; I took five caps—2,500 [milligrams] of quercetin—because I didn't want to get all allergic. That drive home—you know how you feel after you just get into a car accident? You're just shaking and internally, you're just dying. I was like, "Oh, I think my adrenaline is sky-high because of that quercetin." But it was so funny because I was like: "Well, if I ever want to feel totally like I just got out of a car accident, I know how to do it. I'll just take those five quercetins."

**Dr. Shelese Pratt 27:18**

We like the Goldilocks principle. We like to have just the right amount—not too much, not too little. But green tea extract does that sometimes for some people too. So I'm just giving you some ideas about why maybe you took some of these things to help manage histamine, whether it was EMF exposure, whether it's mold that you have in your world, whether it's seasonal allergies, Epstein bar, or some kind of infection that's causing histamine. Yeast overgrowth, even in the GI, will cause histamine intolerance. And some of these great things to stabilize our mast cells can mess with our neurochemistry. But that's not today's lesson. Maybe someday I'll come back and we can talk about biochemistry with methylation because I love it.

**Dr. Shelese Pratt 28:06**

So here are some studies I just wanted to show you. This is well documented. We're pretty clear about what's going on. But mast cells are activated, and we are finding EMFs are basically making that dendritic cell or mast cell—that's what MC is standing for in here—degranulate these cells, and then these inflammatory substances like histamine make our skin red. Or you see somebody's really flushed. I especially think about these boys or men on the game or some women. They have red cheeks afterward, and their hands are all red and a little swollen and clammy. There's a ton of dopamine that's being dumped while they're playing the game. But with the EMFs and that, the histamine just goes straight up. So it's just something I'm hoping that you all put together when you're thinking about these things.

**Dr. Shelese Pratt 29:11**

And then this study was really interesting to me. They were looking at personal computer screens and TVs. They took healthy individuals, and they took more sensitive individuals. They thought that healthy individuals wouldn't have any change. And what I highlighted here is that, to their great surprise, they changed too. They had a reaction, even though they weren't prone to histamine intolerance. So it's just going to show that there is a reaction here. And histamine also opens up the blood-brain barrier. If you have heavy metal toxicity, mold illness, or chronic illness, when we run high histamine, we're opening up that blood-brain barrier. We're letting things in.

**Dr. Shelese Pratt 30:02**

This is from a French doctor. I listened to a wonderful presentation he gave at the EMF conference in 2019, and this was one of his slides that I just thought was a great takeaway of how this model is being comprised of how we're thinking about it. Did you want to go over any of this, or can I move on?

**Dr. Jill 30:23**

No, I just love that you're mentioning that. And for you guys listening, if you have leaky gut, the same thing. Basically, [across] any membrane, histamine will increase permeability. So it could cause increased permeability in vascular capillaries, more swelling or edema, extra tissue, space of fluid, and a leaky gut. So if you have a ton of EMF exposure and more histamine, you might get more sensitive to foods and have more food sensitivities or reactions post-meal time. So it's not just the brain, although that's such a big one because of our brain function. And like Dr. Pratt mentioned, toxic metals or infections in our sinuses can go right into the brain as well. But really, leaky membranes all over the body will increase with histamine.

**Dr. Shelese Pratt 31:06**

Which both Dr. Carnahan and many of my patients have experienced. I think you've shared your story of having that pitting edema from your mold exposure. You had leaky capillaries. Especially in your lower limbs, you got so much swelling. And that was a big histamine response as well as leaky capillaries.

**Dr. Jill 31:26**

Absolutely 100%.

**Dr. Shelese Pratt** 31:27

Yes. So I just want to talk about reducing exposure for a minute. We could spend hours talking about this. And I encourage you to go to the Environmental Health Trust. They have a lot of free information for you. Always keeping your devices as far from you as possible [is an important tip]. I get really worried when I see women tuck their cell phones into their bras or carry them in the back of their pants because we've seen an increase in cancer wherever that phone is stored on a regular basis. When we have it up to our heads, the rate of gliomas has gone way up. And heart tumors have gone up as well [due to] people putting their cell phones on their chests.

**Dr. Shelese Pratt** 32:17

It's really remarkable when you start to look at the studies of how much that radiation is pouring into your body and causing cellular mutation. So getting things away, not keeping them on your body, [is important, as is] using airplane mode whenever you can. I know some of us don't have landlines anymore. If that's the case, you may want to turn off Wi-Fi. But you can keep your phone away, maybe in a room that's far away from your bed or as far away within your room as you can. Distance matters. You're going to see that over and over. And turning off Bluetooth.

**Dr. Shelese Pratt** 32:57

I was on the phone with one of my patients last week, and she was telling me about all these wonderful things she's doing to clean up her environment. And I had to be at the end of the call, "And now I want you to get rid of your AirPods" because they're Bluetooth and they're constantly pinging. If you get a meter, you hear what it sounds like, and then you actually have some kind of sensation to tie it to. Just these little things can actually make a big difference in your health. Just having headphones like I have that are wired [and] getting Ethernet when you can and plugging in—this all reduces your exposure. It's not pinging you with radiation. So let's see: Keeping a distance, working offline more often, and again, cording—these are all important.

**Dr. Shelese Pratt** 33:50

I think it's really, really important to talk about kids really quickly. I was one of the people who let my kid play with an iPad. He watched *The Backyardigans* on flights. I

look back, and it made my life a lot easier. I would do it a little differently now that I know how much EMF comes off of a device. But they have thinner skulls, and they have smaller heads. When they do have a lot of EMF exposure in utero, they're developing their brain. We see more leukemia in kids who have higher exposure to EMF. And we really don't want to set our phone on our belly when we're pregnant. We're just sending a lot of radiation right to our unborn child. What many of us don't know is that whether it's drugs, EMF, or vaccines, they're all tested on adult men. They're not tested on children, and they're not tested on women. So these radiation limits are very different for women and children than they are for men. So it's just something to think about.

**Dr. Shelese Pratt** 34:59

And lifetime exposure and compounding matter. Like I said, the Apple Watch, the computer, the router, and all your friends around you having the same, compound the amount that we're getting exposed to. So here are those resources for you. You can stop this video later and write them down. I may be able to put them in the comment section if you need me to, Jill.

**Dr. Jill** 35:23

I'll do that for you.

**Dr. Shelese Pratt** 35:24

Yes. The Environmental Health Trust is a wealth of information. The doctor who runs that is helping everyone understand more about 5G and the risks that come along with electromagnetic smog. And the building biologists can come to your home like Jill and I did and tell you how to make your home safe.

**Dr. Shelese Pratt** 35:24

So what are the solutions to all of this? Now we're going to get into the third topic that we said we would discuss today. But just real quick, I think you should find a good doctor. There are many of us out there. You can find naturopathic doctors. You can reach out to Dr. Jill and me if you can't see one of us. Changing your diet to organic, rich in antioxidants, and low-pro-inflammatory foods are the basics, supporting neurological health with omega-3 fatty acids. And the DHA/EPA [ratio] is 1:1. You're not going to be looking for one more than the other. You really want a lot of both. Vitamin D3 to support your immune response as well as your

neurological system [is also beneficial]. Electrolytes are really disturbed when we have EMF sensitivity or EHS histamine problems. So getting on a good electrolyte... I really like Seeking Health, and it's just back in stock if you were wondering. That one just came back. There are other really great ones out there. Jill, do you have another one that you love?

**Dr. Jill** 36:57

No. It really depends—I don't want to get too complex—certainly on the potassium ratios. Our really severe adrenal patients need a higher sodium-to-potassium [ratio]. So you can look, and you can just calculate yourself. It's like 2:1. That's better for severe adrenal issues. But what we're talking about and what we want is high potassium-to-sodium ratios. I love Seeking Health. There's no one else out there that has a 5:1 ratio. And Seeking Health has 500 to about 90 to 100 of potassium to sodium. So look at your electrolytes, because it does matter what the ratio is.

**Dr. Shelese Pratt** 37:29

Right. So supporting the adrenal glands is also helping with hydration. Many people who have adrenal dysfunction are low in sodium. But some people are sensitive. It'll make them have more leaky vessels. So we have to watch that sodium. But supporting the adrenal glands with adaptogens and things like that—you can talk to your doctor about it—[and] managing histamine with the things that don't overstimulate you, of course, [can be helpful]. Reducing oxidative stress [is important]. Peroxynitrite and methylmercury are big problems with EMF sensitivity. So antioxidants [help]. And one that Jill and I are both really excited about is hydrogen tablets or hydrogen inhalation, right, Jill? Have you done a podcast on that?

**Dr. Jill** 38:17

I haven't, but often I bring out my machine and show people.

**Dr. Shelese Pratt** 38:21

I love it. I love it. Well, it's incredibly helpful for EHS or for sensitivity to these EMFs. Fiber helps. For phase III detoxification, really good fiber [is recommended]. And of course, replacing nutrients that your doctor would find would be either high or low. Removing amalgams, like I said, [is helpful]. Heavy metals are a big problem in being sensitive to electromagnetic frequencies. And then [for] a low EMF sauna or blanket, which I think Jill talked a little bit about, HigherDOSE. I think they make



a low-EMF sauna blanket that you can get. We both like High Tech Health. I think both of us love that company. I think both of us have had it in our offices at one point or another. Saunas just help us detoxify.

**Dr. Shelese Pratt** 39:19

Now let's talk about pulsed electromagnetic frequencies. What is magnetic field therapy? That's what PEMF comes from. It's using magnets, whether they're static or dynamic, to create fields to treat and maintain health. The earth has its own resonance, and it produces electromagnetic fields. So there are patients that I have had over the years that feel anxious and restless, and they don't feel good. I just ask them to go outside and lay down on the earth. You don't need anything fancy. Or go for a walk in nature, or wherever you can go to walk on the beach or be in nature. You get bombarded with... It's negative ions, right, Jill? And when we get bombarded with those ions, we actually start to calm down. It's having too many positive ions that is difficult.

**Dr. Jill** 40:16

Have you ever noticed in a lightning thunderstorm or rainstorm or if you go on vacation on the beach and all of a sudden you're like, "I feel so good." And obviously, we're on vacation; there are other reasons. But there is actually a powerful effect just walking barefoot on the beach, being outside, or just after lightning, a thunderstorm, or a rainstorm. And the reason why we feel better is that negative ion.

**Dr. Shelese Pratt** 40:41

Yes. It's the Schumann resonance that's created by that lightning, Jill. I don't know if you knew that. It's extremely low frequency. That's the ELF—7.83 is the average. That goes up and down. I am not a mathematician.

**Dr. Jill** 40:57

Shelese, that's the one that changed my deep sleep. It's 7 to 8 hertz. That is a game changer. And I always tell patients, if I'm discussing this, it's like if I were sleeping on the ground in a sleeping bag.

**Dr. Shelese Pratt** 41:08

Right. And that's what PEMF is trying to achieve on a certain level—trying to help you ground and feel the electric pulse that the earth would give. We once lived on

the earth, right? And we didn't have lights, we didn't have technology, and we didn't have cars. And we slept on the earth. And in some ways, that was so much more restorative. We are electrosensitive beings. And you'll see in history that we are connected through the electricity that runs through our own bodies. And we do resonate, constantly pinging back and forth between us and the earth. So sometimes just getting and sitting on the earth... I know Jill and I have taken hikes where we [would] take off our shoes and put our feet on the ground. It's just so peaceful for your body.

**Dr. Shelese Pratt 42:06**

You'll see there's a long history. It's not new. PEMF is not a new phenomenon. And we've been using it throughout history. The father of toxicology used these load stones, as they were called. They were magnetic stones, and he would treat seizures and psychiatric disorders back in the 1500s. He was already using magnetic therapies. And then it just kept going on. Franz Mesmer, out of Germany, had [a theory on] animal magnetism [that described] a natural energy of transference between all things and that we are all energy and we are transferring energy. Then Samuel Hahnemann used homeopathy as an energy-based medicine. He also used magnets in his treatments. And then Faraday created electromagnetism. He kind of came up with and contributed a lot to that study.

**Dr. Shelese Pratt 43:01**

Then, for each one of these, Tesla developed the coil that we use in PEMF to create the different waves. They're all different. There's jagged; there's rectangular. And it's how we set the machine up to deliver this field so that it can be tuned into what you need. So for somebody who needs bone healing, [the setting] is going to be totally different than somebody like Jill, who just needs to lay on a low frequency and her body starts to increase oxygen absorption. Her circulation and microcirculation change dramatically. Her red blood cells get into these stacks, and they all break apart so that she can actually have better circulation when she's on that mat or when anyone's on PEMF.

**Dr. Shelese Pratt 43:49**

So anyway, it's made; it's progress. A lot of people looked at it as what it could contribute to astronauts that went further than our gravitational pull out in space so that they wouldn't have bone loss and things like that. So NASA has developed

techniques around it. It's been in Europe, though, for years. I think for the last 100 years, we've had it in Europe. It started in Hungary and moved across Europe. It didn't make it to the United States, I think, until the 60s or 70s.

**Dr. Shelese Pratt** 44:24

Again, what is PEMF? What is a mat? Or sometimes there are pieces that can come off of it. People with migraines could wear a coil around their heads. Or, let's say, you have a shoulder that you just had surgery on and you want to heal. They can put a coil on your shoulder. But I like this generalized ability to lie down on a mat. You'd experience a low frequency and all these shifts for pain relief, energy, digestion, repair, and to enhance sleep. So these are all the ways in which it's used. And you use different frequencies based on the technology that you have.

**Dr. Shelese Pratt** 45:06

And there are lots of different technologies out there. Again, I think HigherDOSE has a far-infrared mat that also has PEMF. Jill gave those to all of her office people. Lucky people. And yes, they're really affordable. Those mats are great. And if you want medical grade, you can find doctors like myself who have more of the fancy units that we can do a little bit more with. But you don't need it. Not everybody needs that level. So that was what I prepared today.

**Dr. Jill** 45:42

Oh, Shelese, this has been amazing. And hopefully for you guys listening, this just ties it all together because it just makes so much sense. And it's funny because, sadly, EMFs and Wi-Fi have gotten so politicalized. It's really not a political issue. It's just a basic science issue. And the sad thing is, the reason Dr. Pratt and I are talking about this is because we see patients who are suffering and we want to help them, heal them, and find the answers. What we've seen in our clinical practice is that for many of our patients, this really does make a difference.

**Dr. Jill** 46:15

As you could see all the resources Dr. Pratt had, I'll be sure—here and on YouTube wherever you find this—to include links to her clinic, to all the resources that she shared, and to the HigherDOSE. And both of us love the High Tech Health sauna in Boulder. They're actually local here. But it's funny; I went to Switzerland and guess

what they had. They had the High Tech Health [unit] from Boulder. So it's a really good unit. But there's also the sleeping bag mats. There's a little one you can sit in.

I was talking to someone the other day; I think it was Lyn Patrick. You can just put a space heater in your bathroom and close the door if that's all you have. And you sweat. That's the key there for detox. It's a whole other topic. We didn't talk about the infrared sauna. But you don't always have to get the most expensive devices, which is what we're talking about here today. But any way you can reduce your exposure will be helpful. Any last words of wisdom or parting comments, Dr. Pratt, that you have for everybody?

**Dr. Shelese Pratt** 47:10

Well, I always like—when I go over topics that can be scary or we can get overwhelmed by the amount of information or what's working against us in environmental medicine—the resilience of our soul and the resilience of us as human beings in a collective. And I just want to remind everyone to keep a positive mindset. Find one thing to be grateful for every day, and that's going to bring down those peroxynitrites, lipid peroxidation, or anything that could be attacking you from these environmental medicine perspectives.

**Dr. Shelese Pratt** 47:49

And it's about making little choices all the time that lead us to our biggest success. So maybe it's drinking more water today. Or maybe it's saying no to a sugary snack. You can start to incorporate some of these things and they don't have to be expensive. But hopefully, you got something that you could do even today. Maybe you [will] unplug your router tonight when you go to sleep. Or maybe you set it on a timer. Or maybe you go to the Environmental Health Trust and you see: "Oh, I didn't know the baby monitor was pinging me so much. And I will sleep so much better without doing that. And I have a different solution." There are other solutions that building biologists can come up with. So there are always solutions. That's what I'm trying to say.

**Dr. Jill** 48:32

I love that, Shelese. It's funny because [with] most of the environmental medicine conferences that we go to, especially on the first day, it's like: "Whoa! Everything's bad. We're all going to die!" But I think you did a really good job of framing it. There

are practical things. There are things that are free. You can turn your phone off at night. There are very simple things you can do and not be overwhelmed. And this isn't all doom and gloom, and you definitely brought that [up] today. Thank you so much for this great information. I can already see likes and comments. People have really enjoyed this and I'm sure more will come and watch. Thank you again.

**Dr. Shelese Pratt** [49:07](#)

It's my honor. It's great to see. You are such a dear friend to me and I'm so happy to be here.

**Dr. Jill** [49:13](#)

Thank you.