

A sunburst graphic with numerous thin, light gray lines radiating from a central point behind the text.

Healthy Moms Podcast

BY **Wellness Mama**[®]
simple answers for healthier families

Episode 170: Using Biological Medicine &
Uncommon Therapies to Help with Chronic
Conditions

Child: Welcome to my Mommy's podcast.

This episode is brought to you by Four Sigmatic. My kitchen is always stocked with their coffee mushroom blends, their Matcha mix, and their straight mushroom drinks. Four Sigmatic has figured out how to get the benefits of mushrooms like chaga, lions mane, cordyceps and reishi into delicious instant drinks. My current favorite is their adaptogen coffee blend that has torsi and astragalus. But I love all of their products. They have options with or without caffeine so if you're not a caffeine person you can find products that you will love. And I find that even their coffee blends that do contain caffeine have less than a normal cup of coffee. But don't let this fool you. I have found that I get so much more focus and mental clarity from these mushroom blends than I do from regular coffee, and without the jitters. The addition of the mushrooms, which are considered nootropics, meaning that they are good for the brain makes these super food blends more effective and much healthier than just regular old coffee. I love them with a dash of macadamia milk personally. I also love that many of their drink mixes are instant and packaged into individual servings so they are perfect for travel or on the go. If you're listening to this, then you can get a special offer just for listeners of this podcast by going to wellnessmama.com/go/four-sigmatic.

This podcast is brought to you by Phat Fudge. If you've never tried it, this is essentially coffee meets fudge meets energy bomb and it's delicious! Invented by my friend Mary Shenouda, this on-the-go food is nutrient dense and delicious. I often travel with a few of these in my suitcase for a quick breakfast or meal if there aren't good food options whenever I'm traveling. Wellness Mama listeners can get a 20% off discount with the code "wellnessmama" at wellnessmama.com/go/phat-fudge.

Katie: Hello and welcome to "The Healthy Moms" podcast. I'm Katie from wellnessmama.com, and I am here today to talk about biological medicine and many aspects of that with Dr. Jeoff Drobot who is one of the founders and medical directors of the American Center for Biological Medicine in Scottsdale, Arizona. It is the largest and most comprehensive in North America and a place that I wanna go on vacation, personally. It looks awesome. Jeoff has spent the last 20 years learning from the best and seeking out cutting edge science and technology to assess and amplify human biology and physiology. He works closely with amateur and professional athletes as well as organizations and companies interested in peak performance and longevity. He's considered a leading authority in the world in biological medicine as well as in chronic and autoimmune conditions and treatments, detoxification, hormonal imbalance and correction, and even customized sports medicine and nutrition. So, obviously he's a wealth of knowledge. And Dr. Drobot, welcome and thanks for being here.

Jeoff: Thanks for having me.

Katie: Well, like I said, I think this is going to be an information-packed episode, because your knowledge is so vast, but I think to start, it would be helpful if you could explain the difference between biological medicine and functional medicine, because I feel like those terms can sometimes get interchanged, and there's not a lot of knowledge about the differences.

Jeoff: Right. So there's systems of medicine and every medicine, or every medical system is based on some kind of premise. And how it all started was we said allopathic medicine, they're all supposed to be based on anatomy and physiology, and then we kind of got into some biochemistry and pharmacology in the end. So we kind of group these systems, or these we'll say families of medicine. We said, "Here is what allopathic

medicine is, and then functional medicine." Biological medicine was kind of playing around in Europe for a long period of time. Of course, everybody knows Chinese medicine too that has its origins in Asia. And so, we brought functional medicine as a way to do allopathic medicine, but also do mostly biochemistry. And I think that was the big difference between what functional medicine and biological medicine is, is functional medicine is a lot of great stuff, but mostly lab tests based on biochemistry and biological medicine and has all of that. So it does a lot of the functional medicine stuff, or has that incorporated, but also incorporates physics in it.

So there's homeopathy, there's a bunch of machinery and technology that's not just based on lab work and nutritional supplementation. There's a lot of machinery that's involved in biological medicine. But I think another one of the big tenets of biological medicine ends up being from top down. And that was one of the things that kind of, I say, attracted me to it, was it also had a dentistry component in that, or it took the whole head in effect. Normally in medicine, we go neck down, that's why we kind of look at it, and we leave the rest for dentists and neurologists, and biological medicine said, "Hey, every single one of these teeth is connected to an acupuncture meridian, which is basically its own organ. So what you put in your mouth, whether it's dental material or root canals actually has an impact on the rest of the body. And so, that kind of was interesting to me as I was going through looking at some of the assessments and they would show you that, you know, and we knew back from the old days that 80% of chronic infections ended up in the head.

We just didn't address it in medicine. And so, I guess that would be the biggest differentiation between biological medicine and functional medicine is the physics and the fact that we do look at dentistry a lot in biological medicine. But functional medicine is wonderful, and it does incorporate a whole bunch of things that, of course, are direly needed in today's chronic disease-infested world.

Katie: Yeah, absolutely. I think maybe more people are familiar with, or have at least heard the term biological dentistry. So, that's a good segue into biological medicine. But you mentioned chronic disease a couple times. And I think a lot of listeners potentially have that, or have struggled with that. I personally have Hashimoto's and that's been my journey. But I'd love to get your take on why do you think we're seeing such a rise in chronic disease in today's times?

Jeff: I think that the environment has gotten chronically worse than it used to be. Evolution is kind of slow for humans in the sense that we don't have...everything is supposed to be set and we're supposed to go through this process of evolution where there's something that happens in the environment. We get a couple of generations to adapt to that environment, and we, just in the industrial revolution, just experimented and put a whole bunch of manmade chemicals into a biological system that was not used to it, did not know about it, and confused a lot of the biological processes that normally occur in the body.

So we could probably blame 80%, 90% of cancers definitely on the environment. We could probably blame, jeesh, 98% of autoimmune disease on the environment. And, I mean, chronic disease kind of is a variation of those two. It's like, how long can the body do its normal natural processes before something, kind of, preoccupies it or something interferes with that, and it has to do something different to try to get rid of something. The problem is, we don't really have, let's say the enzyme systems and all the machinery to get rid of mercury when it's just leaking in our mouth or get rid of plastics. So, it's not that everything is terrible and we're doomed, it's just things become busy. And in the good old days, it was like you just had to worry about a piece of broccoli. And now, you've gotta worry about 15 different chemicals that we kind of made that stay in connective tissue for a long time and just constantly occupy an immune system that used to be able to just

deal with things daily. And now these things have half-lives of like 100 years. So they don't get out, for example, like mercury and lead or cadmium.

They don't get out unless we go and chelate them out. So they can just sit there forever, and we bio-accumulate these things, and we know that it's not like one equals one. It's like you got a couple of metals and then that's like 1 plus 1 equals 10. So, our bodies are constantly having to deal with exogenous things, and that leaves some of the endogenous products to be left on the shelf, and we just never get around to it.

Katie: That makes sense. What are some of the conditions you guys are seeing the most in your clinic right now? Because I know from the stats pretty much all of these conditions are on the rise. So, I'm sure you're seeing all of them. But are there any trends you're seeing as far as conditions that appear more often?

Jeoff: Well, lots of endocrine disruptors, Hashimoto. So a lot of autoimmune disease, infertility, of course, is massive, obesity, just again from endocrine disruptors, is up. And our clinic is kind of a specialty fly-in clinic, so I'm usually everybody's 300 doctors. So I get to see the most complicated, the complicated, just because we might have more tools and more tests that give us more information and we have a whole bunch of therapies. But I definitely, in my last 10 years, you see a ton of autoimmune disease starting to come up, and you see a ton of endocrine disruptors both in males and females, and which are affecting thyroids and anabolic hormones. But those are sensitive glands. Immune systems, neurological conditions are starting to come back up. So we see lots of Alzheimer's. But the nervous system is pretty slow so things can accumulate in that prolonged period of time. Trouble with the nervous system is also slow to treat. So, by the time that kind of sets in, it's harder to treat than autoimmune diseases, which actually, you know, when you kind of learn what's causing it and how to deal with it, it isn't overly impossible to treat, it's just a process.

Katie: Yeah. I would love to delve into that more because, like I said, I think that's a huge pain point for a lot of people who are listening. And I think you guys have a really unique approach that seems to be really successful. So, kind of, let's start at the beginning. If someone comes in to meet with you, what are some of the diagnostic procedures and tests that you take them through?

Jeoff: So we still like to see, I like to see, all the allopathic labs. So bloodwork is still important. I just don't think we do comprehensive enough blood work. We have to remember that bloodwork is only one time of day at one period of a month. So I'd like to see comprehensive blood work. So all the CBCs, chem panels, all the endocrine hormones, free T3s, all the thyroid panels, and all the inflammatory markers. We have some viral titers. And then, we normally do stool cultures, because 80% of the immune system ends up in the digestive track, micronutrient panels, and 24-hour hormone assessments. That's usually what we get when they come in. And then inside our clinic we have three different kinds of heart rate variability. We have EEG brain neuro scans that we do. We do a whole bunch of assessments on the lymphatic systems and connective tissues, full body thermographies.

So we get to get...I like to look under the hood, and I like to have the most tools to look under the hood, because I'm just looking for where the holes in the bucket are. And, you know, I used to try to get into the balancing all the biochemistry, and 1, 1, 1 and by the time they were done, they were on 150 supplements. And it works sometimes, but supplements aren't magic beans either. So by the time somebody is pretty in deep in chronic disease, they can't absorb a lot of things and they can't detox a lot of things, which is why I kind of went to technology and said maybe there's faster, better ways to do it. But the assessment is really looking and seeing what's working, what isn't working, and what organ system is the weakest out of those.

Because, for example, your Hashimoto's, we'll call that an immune system condition, but it's also an inner consistent condition. It's also a digestive condition. So we have to look at every single one of those systems, and we find out which systems are the weakest, and then I'm lazy, so I'll just go with the system that's the weakest and I'll get the most bang for the buck.

Katie: Gotcha. So you've mentioned technology a couple times. And I know that like me, you're a big fan of using technology to improve health when possible. So, I'd love to hear some of the examples of how you are doing this in-office.

Jeoff: So, normally, when somebody...just take chronic disease, for example. Again, I come from a long lineage. My grade five science fair project was on color lights and muscle testing. So my mom was a nursing professor, and this is how we kind of were raised to deal with supplementation, and to kind of look at these, you know, innovative technologies that would come up. And so, I just started incorporating when I was in medical school in Portland, it was lovely because Portland is kind of like a hub of alternative medicine. So every weekend somebody would come in like a circus touting their wares, so you get a pretty good look at technology.

And I went over to Europe a ton of times and went over to Germany and different places, and kind of found the best that would work in North America and brought it back. And so, at the base, we're just trying to get energy in a cell and stuff away from connective tissue. If I could say two things about chronic disease, it gets the stuff out and start to get mitochondria to produce energy. However you wanna do that, if you accomplish those two things, then biology kind of will take care of itself. So in the clinic, we do colonics and we do all that, but we also do tons of high altitude oxygen training. We have lasers. We do tons of pulsed electromagnetic fields, because we're just trying to get energy produced in the cell. So we need oxygen, thyroid hormone, glucose and some electrons. So the oxygen will do blood ozone therapy, or high altitude oxygen therapies. For the electrons we'll do tons of the pulsed electromagnetic therapies, about three or four different kinds.

And then, to get these stuff out, we end up doing tons of using lymphatic machines, so we use STAs, lymph stars, and colonic hydrotherapy, and lots of visceral manipulation. So, I mean, there's probably 25 different machines that we end up using, but they all get based on what is the biggest need as far as what happens with the assessment. So it's individualized medicine at its best because we're finding out what doesn't work. And we're giving the patient lots of information because you don't wanna be a patient. I always say you wanna be a participant in your health before you become a patient, because a patient, by that time, there's things that you have to do, and you wanted to know just things that you should do, so that you never become a patient. And I think that's where technology is absolutely wonderful these days is even though that it's not that ingrained in medicine yet, you can find out a lot of information 10, 15 years before you get pathology, and you can certainly get performance a lot better when you know how your cells and how your nutrient levels, where they're at today. Instead of just going on diets and practicing and taking, like I said, lots of supplements, kind of wanna know what you're doing.

Katie: Yeah, exactly. And I think you're so right. I think that's where the differentiation is so important, because the conventional medicine in the U.S., it has its many strengths, certainly. And like I've always said, if I was gonna be, for instance, if I was gonna be in a car accident and needed immediate trauma care, we are in an amazing place for that. And if, you know, you break a bone, we're in a great place for that in the U.S., but they haven't quite adapted to a chronic disease model. And so, I love that you guys are looking at it early. And I also always love to say that no matter who we're hiring, doctors especially, they're just a consultant in our

health. And I love that the biological model seems to really like encourage people to take autonomy for their own health and to make changes and to be a complete partner in that process rather than just, kind of, outsourcing and expecting, too, like the doctor to say, "Just do this, take this," and that's all. You guys really do take a much more comprehensive approach, which I love.

And you mentioned the PEMF, I believe, in what you were just speaking about. And I'd love if you could delve into that, because that has been an area of research for me in the last couple of months. I've been fascinated by the ideas behind it, and the different types available. So, if you could, for my own knowledge, just kind of go through that, I would love that.

Jeoff: Yes. So there's two...I mean, at the end of the day we're just trying to produce electricity, right? We all know that if we have lots of electricity then, and we get the cell membrane potential a certain amount, I mean, it functions pretty well. So things like vitamins are just catalysts to get that electricity where those electrons could be produced. So the better option is to basically use battery chargers. So we know that we can take a tissue that's inflamed, or we can take a tissue just to generate it, and it doesn't have the same cell potential as normal cells. For example, cancer cells have self-potential of negative 40 millivolts, which is all kind of weird talk. But normal cells have negative 70 millivolts, so they have a lot more electrons in the system. And that's where you kind of heard the craze of alkaline diet, we're gonna do all this alkalization. Alkalinity is just basically adding electrons to something.

You're just trying to go ahead and put all these little electrons in there, because they charge batteries. That's why everybody knows about an alkaline battery. And so, they use food with high mineral content with lots of electrons, and that would charge a battery out. Well, a long time ago physics already figured that out and said, "If I use dilute pulsed fields, I can use them because the cells are like little battery chargers. I can go ahead and use frequencies and voltage, and I can go and increase the voltage in the cell membrane, number one, and then frequencies also basically tell the cell what to do. So things like our earth, which like Schumann frequencies are 7.8 hertz. That's why things like electromagnetic fields and stuff like that are so disruptive, because they're so noisy for our cells, so noisy for the nervous system that we can't get cells to communicate with each other because there's all this screaming in the background. Plus when our body's dealing with hertz, and we're dealing with gigahertz as far as technology is concerned, it's a big drain on our battery.

So the different kinds of pulsed electromagnetic field therapy, some are passive, which means you just lay down and there's a current that you can't even feel. Almost like earthing, you know, that movement where you just kind of lay on dirt and the earth's magnetic field of like 9.8 hertz just kind of fills your body and it tells your body what to do again. That's why when people go camping they come back so refreshed, because their body has kind of had that little pulse that it's educated itself on what to do again. It's kind of recalibrating its system, and we haven't had a lot of noise, or say electrical noise, that has kind of exhausted us. So the passive match, you lay there, you set a frequency, and the frequency basically will do different things, some are anti-inflammatory, some deal with specific organs in the body. But we use some of those, and then the active pulsed electromagnetic fields give off a charge, which is kind of similar to a Tesla coil. And so, they actually produce electrons, and it's an interesting therapy to feel because it feels a little bit like you're on a cattle fence, but it discharges actual volts. So you take a tissue that needs some electricity and you put volts in it, and you pretty much just bypassed all the need for supplementation. And the body will hold those volts for a certain period of time.

So, for example, if somebody comes to the clinic and they have some kind of chronic disease, whatever we

wanna say, or they're just fatigued, or chronic fatigued, we'll do a lot of electrical work because at the end of the day, when we go ahead and make their cell membrane potential normal and when they have electricity, they just feels better. And then, livers work and kidneys work. And sure, we might need to look at some hormones, but you make enough cells, or you turn enough lights on in the body, and charge happens again. So pulsed electromagnetic field therapy is a tremendously beneficial thing for anybody to do. The technology just hasn't come to the place yet where we can really have it that it's that affordable.

Katie: Yeah. I'm hopeful that it will be in future years. But like I said, it's been an area of fascination for me recently. I read the book, "The Body Electric," which really kind of delves into...and I know that many people realize we are very much electrical beings. There's so much going on in the body on that level. And so, I think it's fascinating to hear you and like the perspective of biological medicine addressing like that on the kind of physics level versus also chemistry and biology and how they all interact together and how that's important for the whole picture. Is there a difference in effectiveness between the active and the passive that you mentioned? Or what would be some cases when you would use one versus the other?

Jeoff: So for all the pro athletes, I mean, they love those active therapies because it's a definite regeneration of we'll say replenishment of the electrons that you might have lost. The passive is kind of nice because it's like microcurrent. You know, microcurrent will increase ATP, which is like energy, will increase it like a thousand times. You just don't feel it. But it's just this passive way to kind of tell the body to produce something. An active PMF just goes ahead and does it. Now, the thing with active PMF is it can cause a detox reaction, because your pulsing charge through the body and it's moving lymphatics that never used to move before. It's moving tissue that never had charge before. So it's kind of turning some lights on, but it's pushing some stuff out first. So, that's why we use a combination. If everybody did just dilute pulsed electromagnetic field therapy, which I think, you know, we're creating a little device, for example, because the technology has just come around so wonderfully that you can create in a tiny little space, where it doesn't have to be these big mats that produce all the stuff and it doesn't have to be \$8,000. It can be 300 bucks. It just takes a little while and technology to produce it.

So anybody that sensitive, you kind of use passive pulsed electricomagnetic field therapy first. And then, once you get it into a clinical setting or once you get into a place where you can tolerate having the charge, kind of like when you have chronic disease, you probably can't go ahead and do vigorous exercise yet, even though everybody would say, "Hey, why don't you go for a jog around the block?" You're like, "Hey, that's probably gonna put me in bed for five days." So there's different modalities just depending on what the tolerance that you have for that particular therapy. Because it's not the therapy we're looking for. It's really what's your response to that therapy? Can you respond to that wonderful therapy? And if you can't, then even though therapy might have been beneficial, your body just wasn't ready to respond to that.

Katie: Got it. Okay. That makes perfect sense. And I'm hopeful, like you, and that's amazing, actually. Keep me in the loop on that less expensive option, because that's definitely something I can share with my listeners when you get to that point. I'm hopeful that as we learn more about this, that these are things we can also all incorporate just into normal everyday life, because it's easy to just see the negatives in technology. But if we incorporated these things out just like we do a WiFi router into a house, for instance, that we were all getting these in a passive way, I feel like we could really move the needle in some interesting ways as we learn more and more about these things. And another thing I know that I saw on your website was ozone therapy. And that's one I've researched a little bit as well. But I'd love if you could delve into what ozone therapy is, and when it's indicated for use.

Jeff: So ozone therapy, we do something called major autohemotherapy here, which is taking the blood out, ozonating it, and putting it back in the body. So ozone therapy is O3, and everybody knows oxygen is O2, so what it does is it kind of floods the body with an extra oxygen radical. And so, it's viciously effective to kill off chronic viral infections, so chronic fatigue, it oxygenates tissues, and it also does a pretty good job of detoxing. It's my favorite therapy to personally get, because I get the most bang for my buck out of ozone therapy because it just makes you feel good, it oxygenates tissues.

I also like high altitude therapies, which that's a nice way to do it. We used to do it with hyperbaric oxygen, as you know. But you have to sit in there for an hour and it's 30 treatments. So it's a little slower, but ozone, like I said, for chronic infections, chronic disease, is one of the best things. For cancer, it's one of the best things that you should do. And in other parts of the world, because it's so cheap, it's readily done for chronic infections and it's absolutely wonderful. The trouble is, like I said, it's cheap and you don't have to do it that much. So it's not such an annuity for the medical system, so we just don't incorporate it here.

But if anybody has a cold or flu, or if anybody has chronic viral infections, then to not do ozone is a real shame. I just think it's one of the best therapies that probably we've ever had available. And now in North America were starting to do 10-pass ozone, which is taking a lot more blood, oxygenating a lot more blood, and when it's in the tissues that oxygen hits...in the bloodstream it hits the tissues, and it kills off a lot of viruses or deactivates a lot of viruses, and it also couples with a lot of toxicity to go ahead and render it inert so that it can move out of the tissue, plus it adds electrons, like I said, to cells. So it's one of those rare therapies where it really is hard to do harm with it, and it is really hard not to feel better from it.

Katie: Yeah. And I feel like it got kind of maybe a bad rap just by association, because people kind of associate the word ozone with like climate change and environmental problems, and I think that's an important distinction to realize. Like it has some really cool biological uses when used correctly, correct?

Jeff: It's, kind of like when we say it's the old thing with hormones, right? Where we say, "Well, hormones are bad." It's like, "No, synthetic birth control pills are bad." I don't know that biological hormones really did anything except what they were supposed to. It's hard to say reproductive cancers are caused by estrogen. It's like, nah, they're probably caused by things that look like estrogen, but you know, if we just left biological molecules the same and stop making things that look like biological molecules then we'd have a lot of different effects and we'd have probably a lot better health system than we have now. So ozone kind of, gets into the same rap where we hear, "Well, it's ozone, and the ozone layer. And if you breathe it it's a harmful toxin." And it's like, "Yeah. That's true. But there's also a lot of biological uses when you put it in there." So where one thing is...it's like food, right? It's poison for one person, it's a cure for another person, so it just depends the application that you use with them.

Katie: Yeah. And how true is that for so many things in life? You guys also talk about IV therapy on your website. And this is another thing I'm fascinated with, and I've never been able to try on the long-term scale. But I have read about it quite a bit, and for instance, like alternative cancer treatments and using vitamin C intravenously and things like that. But I'd love if you could give a more comprehensive picture of what IV therapy is and when it can be used and for what.

Jeff: Sure. So, again, some of the sub-populations of people that we have after we do the assessment, the first thing to usually break down in chronic disease, or we'll say even in fatigue, is the digestive system. Just

because it's the largest organ in your body, you know, your small intestines are the size of a tennis court, you got a thousand different kinds of bacteria in it, you've got six pounds of bacteria in it, and you have about 80% of your immune system that resides in there. So chronic stress, or chronic toxicity, or immune, we'll say battles or food sensitivities, they usually effect that biggest organ first. And because it was the most vital organ, your body protects it to the end. And once it runs out of resources for that, that's when you really start to get into the immune compromization and, you know, fatigue. And we just have to find ways to bypass that digestive tract because putting oral supplementation in is kind of like putting food in. We then have to require that digestive tract to have enough power, which again, is why we use our electrical machines, because that's a massive muscle once it runs out of juice.

I'm not big into patience, so I can't wait for it. So I like to go ahead and charge those muscles back up. But supplementation or oral supplementation has to work through that digestive tract. And when it's compromised, we don't get the same effect off oral supplementation that we should. So, we have to bypass that digestive tract and that's why we go to IV therapy. So IV therapy puts those vitamins and minerals, and of course we do ozone too, right directly into the cells, so we don't really have to go through the digestive track. So we deliver a massive amount of the nutrient to the cell, which is where we're all trying to get it. It doesn't really do that much in the digestive tract unless it's probiotics.

We're trying to get all those vitamins and minerals and antioxidants and all the good stuff to the cell because that's where all the action is. Or we're trying to get the stuff to the cell so that we can pull some of the other stuff out like elation therapy. So to do these kind of things, it's much more effective to bypass that compromised digestive tract, which we all kind of have a compromised digestive tract because nobody rotates the food, or everybody's doing paleo this month, ketogenic next month, and vegan the next month. So it changes so much in the integrity of the digestive tract even though it's the fastest regenerating tissue that we have, it replaces itself every three weeks, gets compromised. So IV therapy is a way to bypass that, put all the vitamins and nutrients right into the cell where they need to in a very short period of time, and in doses that there's no way we could orally accomplish.

Katie: That makes perfect sense. And I wasn't actually gonna delve too deep into nutrition, but since you said that, I would love to go like a little bit on a tangent with that, because that's my background. And I've seen, like you, all these very polarizing dietary, kind of, groups recently. And it's amazing how dogmatic people can get about paleo or keto or vegan or different things, when I like to say, for one, we have 95% in common. Like most of us agree that you should be eating seasonal plants and choosing local foods. There's a lot in common. But I also have become increasingly more convinced that personalization and diet variation are some of the biggest keys, and that maybe we're actually all right. Maybe keto works great for some genetic types or gut types or whatever that may be, and it doesn't work for others. And maybe the key to all of it is a very personalized approach. But I'm curious, what approach do you take?

Jeoff: So again, the background in exercise physiology says...and nobody's tested more...before cross fit became cross fit, I tested a million different...this is when paleo started to come on the rise. And so, we tested a bunch of people that were just doing exclusive protein diets, or proteinization diets. And you'd end up to see over time, between the combination of producing a ton of lactic acid in the tissue and taking in a ton of amino acid in the diet, you clog up the lymphatics in a very short period and of time. And, of course, with full body thermographies in some of the assessments, we see it. So there are some people where we need to go ahead, because your body accumulates things, we all understand this. And so, we're like, there's nowhere done...and I used to study these kind of things, and there was nowhere in history where we just eat a buffalo every single

day. Like we just didn't do it. And there's no day where we just eat fat all day for the next 12 months.

Organ systems aren't designed to be able to accomplish that. So, you're right, we're all having these things in common and it's good to do loading diets, and then it's good to do unloading diets at the same time. So the perfect diet would be, go ahead and figure out what your food sensitivities are, because you're just trying to get proteins, carbohydrates, fats, and some vitamins out of this stuff. And that's supposed to rotate too, which again, in the good old days, we wouldn't have food sensitivities because we wouldn't have genetically modified food, and if we were sensitive to tomatoes, they were only there for three months and they were gone for nine, so all the antibodies got out of there in that period of time and we can reload again.

So, your system and your connective tissue is designed to load up on something, and then we're supposed to utilize it. So we're supposed to load up within the spring and summer, and then we're supposed to recycle it out of the connective tissue in the fall and winter. And so, we get into an issue with these diets when we just say I'm gonna pound this dogma in here and I'm gonna overload because the connective tissue is all we've got. So it's funny, just recently, you know, even medicine said, "Hey, there's this massive new organ called the interstitium." And it's like, "Well, everybody kind of knew that a long time ago." That was called connective tissue, which just means there's a lot of space that we store these things in. Now, these days we store a lot of toxicity in those spaces, which kind of bays the cells and suffocates the cells. But we also stored proteins in them. So when we overloaded with protein, we end up suffocating the cells and time. And that's when we flip, again, to the vegan part of it, which is loading and unloading.

So constantly with my chronic disease people, I'm looking and seeing, what does their lymphatic system look like, and if I've gotta unload it, we all are vegan for a little bit because we do know protein diets, which will horrify some people. But again, if we put a bunch of amino acids in there, I can't get the charge that I want to in the connective tissue because I need negative charges and amino acids are positive charges. So we usually deload the chronic disease person for a little bit, and then we have to build hormones and tissues again. So, that's when we start adding protein again. So it's very flexible, as you said, and it's all based on where are we at now?

But I think the perfect diet would obviously be if we didn't have to go to the grocery store and read books, and we just kind of bought what was there, we'd probably would do pretty well with it. Which means there will be sometimes we'd have lots of fruits and lots of glucose. And other times we'd have more protein, and other times we wouldn't have a lot of anything, and we utilize what we, kind of, squirreled away for the wintertime. And that way, you know, all the cells and all the tissue kind of loaded at certain points and they unloaded at certain points.

And all the immune system saw one thing at a certain point, and saw something different at a different point. So diets are like religions for people. They get really tied up on it. But the proof of the pudding is, I mean, we have technology that can tell you whether your white blood cells are reacting to a food or not. So if it's the most organic broccoli in the world and you have, you know, either an IGG or immune system reaction to it, then simply it's just not gonna do what you want out of it. So you need to take it...it's rest cycles and loading cycles. That's how it's always been, and that's pretty much, you need to determine where the body's at, and you need to go ahead and flex it like that.

Katie: Yeah. That seems so logical. And I've been kind of experimenting with that the last couple of years, trying to buy pretty much only things that grow in my area at that certain time. And it's been a really

interesting experiment, and I've noticed more and more that I tend to start craving the things that are actually seasonal where I live the more I do it. So, for instance, right now everything green is going crazy and I've been craving like kale and cilantro, pesto, and things like it's going out of style. But those are the things that are seasonal and designed to be growing right now where we live. It's just fascinating for me to see that. And so, you mentioned a zero protein dieter, which would be by default, a vegan diet. But also that would be a similar to a fasting mimicking diet. Is that right? Because I know that like Dr. Valter Longo and some people like that use a similar type concept, and it has amazing clinical research behind it. But I'm curious what your thoughts are on both fasting mimicking, and also fasting in general, because that's something I've been experimenting with as well lately.

Jeoff: So, again, for my patient base that we have, fasting is a wonderful thing. I mean, we used to do a lot more of it. Here's a problem that I found with fasting these days is that, when we're looking...and again, we have technologies so that we can look at patients and we cheat a little bit to know electrically where they're at and what they can deal with. Fasting used to be a great thing because you rested the digestive tract, and then the rest of the cells kind of got going and they got into that detoxification phase. And that used to be...I mean, it's been done for as long as humans have been around. But now, with some of the more, we'll say, chemically-sensitive people and some of the more...we'll say, the way that we design chemicals, sometimes you don't want that all out at the same time. Sometimes we don't need to flood, take everything off the shelf. In Chinese medicine that's called shaking the tiger's tail when they're in the cage. And sometimes you just don't wanna do that.

There has to be something that's a little bit more gentle. And that's why I said there has to be some calorie coming in. A lot of people will do different diets or modified fasting, which is great because you rest the system. We all know caloric restriction increased longevity. But we're not playing the same game anymore. We're saying if we look at that connective tissue and we stop something that's coming in, normally we increase what's going out. We really need that 72 hours before we start to see that connective tissue start dumping. So I always like to fuel the system a little bit. I know intermittent fasting is kind of like that paleo thing now. Everybody is saying, "Well, I'm just gonna do intermittent fasting." But it's an interesting thing when you're looking at cortisol levels and endocrinology to say if you're gonna do a 12-hour fast, you should probably do that 12...you should probably eat breakfast and then do the 12-hour fast after that. But nobody does it that way, because the digestive tract...like the thyroid, for example, is the highest metabolically at about 2:00 in the afternoon, because that's when cortisol is the highest in the morning.

So everybody kind of does this intermittent fast where we fast from dinner to the next lunch. And that's like, you know, that's putting too much stress hormone and too much of the sympathetic nervous system in play at the time. And unless the person's gonna do that also with their lifestyle, and not work in the morning, because that would be a true intermittent fast, right? Fasting used to mean resting. And then all of a sudden we said, "Well, fasting just means not eating." And so, if you look at the old way the literature said, it was like, "If you're gonna fast, you stay home, you rest, and you let your biological processes do what they're supposed to without having to compete with food." And so, I think we messed that up in North America a little bit where we were just like, "Just not gonna eat." It's like well, you're going to go to work, or even worse, you're gonna work out. Now people like now just to work out while they do intermittent fasting, because they're like, "I lose a lot of weight." It's because you just released a lot of stress hormone. And so, you're gonna pay for though in the next, you know, one to three years when you kind of burn that hormone out.

So I like fasting. I just like fasting the way that fasting was meant to be done, which is like rest everything. You

know, stay at home, don't eat, or you can do the old master cleanse, which is called the mirror cleanse nowadays, where you have a little bit of fuel coming in, so you're fueling some of the liver and kidneys so that they can actually get some more energy, so that they can filter some of this nastiness that we're just really getting out of our connective tissues. So I think fasting and resting, we need to revisit that logic and say, you know, "If I'm just not gonna eat, but I'm gonna do everything else in my life, probably hormonally I'm putting myself in a very interesting situation.

Katie: That makes perfect sense. And I have never felt great on intermittent fasting, and that's probably why. Although I have experimented with what you mentioned where you actually need that 72 hours for the body to actually really start seeing changes. I've experimented with more like a five to seven-day water fast under the guidance of a doctor, and seen really cool lab changes from that, obviously watching thyroid hormones very carefully. But that was interesting to hear you say that, because I know that there is some research on the autophagy, and like stem cell production, things that ramp up on a longer water fast, but I think what you said is so key. That's not a time you should be running a marathon or even working out. And those for me are times when I just take a few days off and get to relax and just read books in bed with my kids. Because, like you said, there's a lot going on even when you're not eating, especially probably when you're not eating.

Jeoff: Yeah. You're supposed to just lay down and put a bunch of blankets and rest by the fire as you increase your metabolic rate and you had a fever. And then you wake up and you'd kind of come out of it and you'd feel like, "Oh, there's a nice catharsis there." And intermittent fasting, or fasting as we've done it today, that's just kind of another stress that you're putting on the body, and we're not validating the process that is supposed to be going on. We're just saying, "I'm not going to put calorie in there. So I'm going to get this extra effect off of it," but it's like, ugh, that's the same thing that we kind of see with like marathon training back in the day when you never used to rest. It's like "Yeah. Really looks good on paper. You're really tracking a lot of miles down." And then when you run out of cartilage it's like, "Well, that didn't look so good." You know. So there was things that you were supposed to do with rest cycles, and that's the way the biology kind of wrote it up. And as long as you're not gonna eat, I mean, you are resting one organ system, but you're also putting work on the other organs of detoxification. So you just have to pay credence to that's what you're doing.

Works real well at the start, and then you realize, like I said, down the road that you really donated...that was a heavy tax and you donated a lot of great things. And the reason why we get increased growth hormone and increase stem cells is because of stress on the body. And that's an application, or it's a reaction to that stress on the body. But it wasn't supposed to be replicated that often. You know, we're supposed to go into our cave, have fast, and the body said, "Great. Now I have time to recycle. And all the increase in growth hormone because we're gonna utilize some things we never had, we better prepare and we better increase in stress hormone, and we better go ahead and do these things and regenerate."

But there was very few times that that was done electively. You know, usually is we always go back to this paleo, and it's hard to find like a guy that was just watching a bunch of deer cross the road and be like, "I think I'm just gonna rest for about seven days here and not eat." So when you did do that, that was a cue for your body to do these other things, and it was just meant to be done in a restful state. So North America's kind of funny because we're just like, "If it looks good on paper and it looks aggressive, then we'll just put it into play." And again, if you don't get assessments and you don't know hormonally what you're going into that intermittent fasting with, you can be pretty shocked at the results you end up with.

Katie: Yeah, 100% agree.

This podcast is brought to you by Phat Fudge. If you've never tried it, this is essentially coffee meets fudge meets energy bomb and it's delicious! Invented by my friend Mary Shenouda, this on-the-go food is nutrient dense and delicious. I often travel with a few of these in my suitcase for a quick breakfast or meal if there aren't good food options whenever I'm traveling. Wellness Mama listeners can get a 20% off discount with the code "wellnessmama" at wellnessmama.com/go/phat-fudge

This episode is brought to you by Four Sigmatic. My kitchen is always stocked with their coffee mushroom blends, their Matcha mix, and their straight mushroom drinks. Four Sigmatic has figured out how to get the benefits of mushrooms like chaga, lions mane, cordyceps and reishi into delicious instant drinks. My current favorite is their adaptogen coffee blend that has torsi and astragalus. But I love all of their products. They have options with or without caffeine so if you're not a caffeine person you can find products that you will love. And I find that even their coffee blends that do contain caffeine have less than a normal cup of coffee. But don't let this fool you. I have found that I get so much more focus and mental clarity from these mushroom blends than I do from regular coffee, and without the jitters. The addition of the mushrooms, which are considered nootropics, meaning that they are good for the brain makes these super food blends more effective and much healthier than just regular old coffee. I love them with a dash of macadamia milk personally. I also love that many of their drink mixes are instant and packaged into individual servings so they are perfect for travel or on the go. If you're listening to this, then you can get a special offer just for listeners of this podcast by going to wellnessmama.com/go/four-sigmatic.

Katie: And another area I'd love to touch on with you, so I've mentioned that a pretty large segment of the listening audience has some form of chronic disease or autoimmune disease, and that's why they're interested in health and finding health answers. But I know based on our age demographics, and I'm speaking for myself too, that aging is top of mind for a lot of women. And so, I'm curious, if there are ways that we can use some of these principles of biological medicine to affect aging not just on the visual level and how we look, but also on a cellular level, because we now know I think with telomeres and a lot of different tests, that's something we can actually somewhat track, but I'd love to hear your take on that, because I know that can be a little bit controversial. And I'm curious what advice you would give to slow aging in a gentle, natural, biological way.

Jeoff: So I mean, the first thing we wanna look at again is if we took my pro athletes, for example, who aren't the most healthy specimens by the time you break down biochemistry, but we said if we took pro athletes or we took people that actually were optimal performers and we looked at some of their biochemistry, we'd see that normally we're in the upper 70th percentile on things like vitamins and things like hormones, and we're on the lower percentiles far as things with toxicity. So those are the two areas, and we're just looking for cell aging. You know, how much work does a cell have to do and what environment does it have to do it in? And we know that DNA has a remarkable capacity to live a very long period of time with replication as long as it doesn't have to compete with anything. So if we have lots of nice anabolic, youthful hormones coming in and we don't have to deal with some of these other byproducts of having to do well to processes going out, we end up with doing really well for a really long period of time.

So as you get rid of the waste and you keep hormones high, which is an interesting thing to do these days, I mean, everybody has this controversial thing of, well, should we do hormones or shouldn't we do hormones? And as long as your hormones are below the 50th percentile, and for example, someone your age has hormones of 50-year-old, or 40-year-old, it's really hard to perform at the level that you want to for an increasingly long period of time. And so, it's all about the environment that the cell lives. If you have

hormones...and I'm telling you, we look at infertility, for example, these days and we say sperm counts in males are greatly reduced from where they were at 50 years ago. And that's an aging of the population, not a chronological aging of the population, but a biological aging of the population saying humans just can't seem to produce what they should, and they can't seem to go as long as they should without having something that breaks them down like a car.

So when you're looking at that, you're looking at micronutrient levels, looking at vitamin levels, looking at antioxidant levels, and like you said with technology, now we can cheat. And we can say, "Hey, if I can't, you know, produce vitamin C, or if I can't absorb vitamin C, that's where supplementation comes in. And I put all my markers in the top 70th percentile and I promise you when you do that to anybody, they're gonna perform, and they're gonna be a lot less adapt to, we'll say, breaking down, or aging, or oxidation, or degeneration. We just know that when we do that in physiology that if we make everything really good and we put it at the top end, and everything can repair really fast, plus we get rid of some of the stuff in the connective tissue that may be competing, or we get rid of lymphatic stagnation so we can get oxygen and electrons to the cells and waste products away, it works every single time and we get a lot more longevity. Just like out of a car if you take the car in and you make sure all the parts are kind of new, and you change the oil, and you put good gasoline in, it runs a long time and it runs pretty fast.

So human physiology hasn't been any different for a long period of time. We just have the ability to look at it now and say, "If we have the mineral level in our food that was 20% of what it used to be 100 years ago, organic or not...and we can't exactly go back and ask a farmer to rest the fields these days, because commercially, I mean, that would be suicide for them. So we just have to say that's where the supplements and some of that other world comes in. Find out what you are low in. Go ahead and make that in the top 70th percentile where it should be. Look at all your hormones, because that's what you're doing this aging game with. Find out which ones are low, and either find a way to make them better by taking them or remove the barriers that are preventing them from being where they should be, and the net result will always be a magical thing, which ends up being that people look younger, they move differently, they think differently, and they act differently.

Katie: I love that. And a question I love to ask towards the end, especially someone with a vast knowledge like you, obviously those of us with children, especially those of us with health conditions who have children having gone through them ourselves, and any mother especially doesn't want their child to ever have to go through these things as well. So I'd love to ask if there are any specific things that you suggest regularly to kind of keep kids healthy as they grow and to avoid some of these problems, especially if there are any strategies that women and moms can take at home even if they don't have access to your clinic locations, although we wanna talk about that in a minute too. But just things that are kind of more where children are building their foundation for life, like that, things that we can do to support it. And I know my list includes things like getting enough daily sunshine and spending time outdoors and eating seasonal food. But I'd love to hear any suggestions you have as well.

Jeoff: So, I just have a two-month-old at home so it's fun. And the interesting thing was we...you know, I take it from pre-conception all the way to pregnancy, because a lot of times during pregnancy we just say, "Well, we can't do anything." But when it's your own family you can do whatever you want. And so, I really take an active role in saying this is as much...before pregnancy is a really important time for those prospective mothers out there to get those nutrient levels to the point that they need to be at. And then during pregnancy, like you said, all the stuff. But then, once a baby, for this first seven years they develop

personalities and the adrenals are developing in the first year, and the thyroid develops up to year three, and then we got reproductive hormones develop after that. And it's vitally important that we just go ahead...organic food is just a necessary thing for raising little people, because they bio-accumulate things so much more than adults do, and they've got so much bigger of a growth cycle and they have so much more action than we have.

So, I always like to supplement minerals in little kids. I always like to supplement human probiotics because probiotics are transient, and little ones don't really have cellular immune systems developed, again until tell about seven, even though at two it kinda gets formed. So probiotics, good balance of essential fatty acids and minerals, and the rest of it is organic food, a lot of fun, and a lot of love, and you can get a lot of things done with that. Kids still need a lot. I used to volunteer at a street kids' clinic. And I was always like, you're looking back and you're just watching some of these stories come in, and I'm seeing some of the diets that the moms are eating," and I'm like, "There's no way that kid..." And then they bring that kid back, and I'd hold that kid, and it looked a lot like the baby I just had.

The trouble is chronic disease sets in after that, because what you're developing with, you're kind of doomed to living off of for the rest of your life. Now, genetics and everything can change, but like I said, minerals, because you can't get enough from food, and kids need those to grow. Probiotics, which human strains just sit in there a little bit better for kids. And a lot of the action is happening in things called Peyer's patches, which is in the small intestines, so anything that you can do to encourage that developing of that immune system, you greatly reduce the chance of chronic disease. And then we always get into toxicity with vaccinations and stuff like that, which everybody asks me that question and I'd say, "That's a loaded question." And you always kinda wait until you have things in medicine. Wait to get into medicine. You'll have your chances to get into medicine when they fall out of trees and stuff like that. But in my opinion, build things first, and then use medicine so you get the best responses off medicine later. So, there's nothing better. There's nothing I enjoy more than my pediatric patients because they just heal so much faster than us old fogies and they're quick to absorb things and you get great benefits in a very short period of time.

Katie: Agreed. Kids are amazing. And I'd love to hear, as we finish up, with your vast experience and all of your research history, what do you see as the future medicine? Because you've already seen a lot of changes during the time that you've practiced, but I'm really curious what you see and hope for the future?

Jeoff: Now, what I'd like to see. Here's where medicine...So, I have a lot of doctors as patients, which is always funny, because we always sit around, I used to sit on health boards. And medicine's in a very terrible spot right now where we don't really pay doctors enough for them to spend time or get X training. So they'll say to me in a consult, they'll be like, "I'd love to do all this stuff but I only get paid for five minutes." It's like, "I can't blame you. You're not getting paid to learn." I know that sounds like a cop out. But when you still have to keep your lights on, you know, medicine is in a weird space where we're kind of running medicine with insurance companies and the insurance companies don't necessarily pay you to get better, they just pay you to see people.

And then the pharmaceutical companies, which we have to, because like you said, if you get over that rollover accident in your car, you have to ask somebody to pay for that. So, we need all these little facets, which everybody looks as the devil in one turn, but they play a role in the ecosystem of medicine. Where medicine should be going in the next little bit, which is where I would love to see it go, there's a lot less out of biochemistry and a lot more into physics. I mean if we would have said, "If you would have told me 20 years

ago that I'd still be talking about cortisone and antidepressants, I would be depressed myself." If we look at iPhones and we say, "What was available 15 years ago?" and I'm still popping a Tylenol, we've got this biochemistry model which we just say, "We have to sell this amount of biochemistry because we have to keep the medical system in play and if we introduced this technology, or these assessments, or this physics, it will limit the ability for us to make money of biochemistry." And I understand the business of it.

But I'd sure like to see a lot more of technology being implemented where we say, "Why aren't we using something that's sloppy, has some effects but also has side effects?" Why don't we just use this technology that doesn't have side effects?" We do it an assessment all the time. We use MRIs. You know, we're using all these other, you know, guided ultrasounds. We're doing all this wonderful thing in diagnostics. Why are we just doing all this antiquated...why are we doing all this ancient stuff in treatment? And it's because we get paid monthly to do treatment. Like why are we still kinda doing chemotherapy? I mean it's got like 2% effective and it's not a great therapy. It's not great, but we generate some money off of it, and that pays for raising, you know, a 1.5-pound baby, which is a miracle.

Back when I started 20 years ago, I mean, that neonatal care and, we'll say, surgery or orthopedics, those have done miraculous things in the last...if you have a gripe about allopathic medicine, you should go ahead and spend some time in those wards, because you see miracles happen every single day. Unfortunately, when we're talking about health or chronic disease, we don't really see any advances in it, because we're not willing to say, "I'm gonna give up this, we'll say, biochemical model," and supplementation is nutrition. You know, nutritional supplements fall into that play too. You go to Europe and everything's behind a counter. So you can't go there to Whole Foods, for example, and get loads and loads of nutritional supplementation and practice on yourself. You have to go to a pharmacy so it's at least controlled. And medicine with the implementation of Dr. Google, and the fact of things that we're doing right now, there's a lot more exposure, and I think that's great because it pushes the envelope on what people are exposed to and what they learn. Doctors, unfortunately, we've kinda take that ability for them to learn right out, because we just kind of grind them down with 50 patients a day.

But you know who learns really well? The person that has a condition, and they start learning about anatomy and physiology, which is kind of why I made...you know, my new website is drdrobot.com, and it's all question and answers. That's all I encourage because I don't have a lot of time to do presentations. And so you just go there, you go to the Facebook page and you just ask questions because that's one of my hobbies, is just answering questions. And we have that in medicine where we we're saying, "We're not getting a lot of the questions answered, so people are starting to go to technology to find some solutions, but then technology, I hope, comes into treatment, because I think we'll see a lot of things. I hope by the time my little kids are my age, which is 43, I hope that we do things a lot differently by using physics instead of just pharmacology and biochemistry.

Katie: I 100% agree with you on that. And I think you're so right, I hope as well that the technological advances and the rise of Dr. Google, as you say, will lead to a more balanced approach in the future, because I say it jokingly, but I'm actually not joking that never doubt that a concerned mom with a child with a health problem can do better research than the FBI. And it's true. If you or someone you love has a health condition, you have a very strong motivation to learn about that and to experience any potential options that would help you. So, I think that's gonna be hopefully a really good thing that we'll see in the future of medicine. And I also 100% echo your points about there are so many strengths of allopathic medicine. I had placenta previa with my third, ended up with an emergency C-section and lost a ton of blood, and he and I are both alive today, thanks

to allopathic medicine. I certainly don't discount it and I think that the future...like you, I hope the future is a very good combination of the two and working together and using the strengths of both. So I think you said it so well. And I want you to wrap up by saying where people can find your clinics and also your website. Mention it one more time.

Jeoff: Yeah. So the new website is drdrobot.com. You can go there and it's all Facebook-based. So, Facebook Live, you ask questions, I'll give the answers. And then the clinics that we have right now are our big one in Scottsdale, that's the American Center for Biological Medicine. And then there's another American Center for Biological Medicine and Dentistry going up in Providence, Rhode Island. That will probably be open in September. So that'll be 15,000 square feet of biological butt-kicking class. We have a biological dentistry. Then we also have a project going on in a community called Albany in the Bahamas, where we'll also be doing some biological treatment. So, I also have my Canadian clinic up in Calgary, Alberta. So you can find me everywhere and nowhere at the same time, but if you go on that website and start asking questions I'd love to start giving you answers. So that's pretty much, that'll fill me up for the next 45 years probably.

Katie: There you go. And all those links, for anyone listening, will be in the show notes at wellnessmama.fm. If you're driving please don't try to write them down while you're driving. Those will be there for you to find when you're in a safe place. But thank you so much for your time and being here. You are wealth of knowledge. This was such a fun conversation and I know it really helped a lot of people. So thank you.

And thanks to all of you for listening and I hope to hear you next time on "The Healthy Moms" podcast.

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