



THE SPECTRUM
OF HEALTH
— P O D C A S T —

Podcast Session #34

Deuterium Depletion

With Dr. Petra Dorfsman

Dr. Petra Dorfsman is a board-certified naturopathic doctor of naturopathic medicine who focuses on individuals experiencing chronic health challenges. She speaks with Dr. Schaffner about deuterium and deuterium depletion – an important indicator of health that is often ignored.

To learn more about Dr. Dorfsman,
please visit [www.https://www.drpetrad.com/](https://www.drpetrad.com/)

00:06 **Dr. Christine Schaffner:** Welcome to the Spectrum of Health Podcast. I'm Dr. Christine Schaffner and today I'm speaking with Dr. Petra Dorfsman. Petra is a friend and colleague and she has educated me greatly about this idea of deuterium and deuterium depletion. I have been watching this for a few years now and I've been impressed by the clinical results that she has shared. And we even started getting Dr. Klinghardt on the water and he started feeling better. So I really wanted to get this information out there and give you all the opportunity to learn more. If you want to find out more about deuterium and deuterium depletion, we talk about it today on the podcast. So please enjoy the podcast. Welcome, Petra, I am so excited to interview you today.

01:00 **Dr. Petra Dorfsman:** Thank you, Christine. I'm super excited to be here.

01:03 DS: Well, as many of our audience may or may not know, we've been friends and colleagues for a few years and I've really admired your determination and your quest. We're both really inspired to understand why so many people are so sick out there. And so I know that you've landed on this really important topic of deuterium and this idea of deuterium depletion, and it's still a rather new topic and a really new paradigm for us to be thinking about. So I wanted to have you on so we can educate our community about this important topic and for people to learn more about your work. I'm excited to learn more from you today.

01:55 DD: Thank you. I'm so happy to share.

01:57 DS: Well, great. As many people might know already, you're a naturopathic physician, but how did you really start learning about this idea about deuterium and how it impacts our health? And how did you find out about deuterium depletion and the role it plays in chronic illness and cancer today?

02:19 DD: I first heard about deuterium in 2014 when I spent some time with Dr. Cowan in San Francisco. And I had been so involved in so many other things and I sort of let it go. And then very early last year my mother was diagnosed with colon cancer. And that along with my frustration of not achieving the results that I was looking for in many of my patients, even though they were doing many of the things that I asked them to, led me to just dive deeper and I felt like I missed something and I wanted to go back to deuterium and understand it better. I found a little book online called *Defeating Cancer: The Biological Effect of Deuterium Depletion* by Gabor Somlyai. I dove into that and explored that for my mom. Then I wondered how we would figure out what deuterium is and what deuterium levels are in our body.

03:29 DD: I started Googling, like you do, and I happened to find that there was the one lab in the world right in Santa Monica, right around the corner from where my office was. I reached out to them, The Center for Deuterium Depletion, and have been working with them ever since. They've educated me, they have trained me, and I have implemented protocols. It's been a really eye opening experience and one of the most foundational interventions that I can imagine.

04:08 DS: The synchronicity of all of this, right?

04:10 DD: Yes.

04:11 DS: You've been on that path. So many people don't know anything about deuterium and how it applies to their health. So why don't we really start with an overview. What is deuterium and how does it impact our health?

04:25 DD: Yes, let's start there. H₂O is water. It's two hydrogen atoms and one oxygen. And in nature there is a stable isotope called deuterium. An isotope is a very similar molecule as a hydrogen atom except that it contains an extra neutron, and this changes the properties of any molecule that has a hydrogen replaced by a deuterium atom. The rate at which deuterium is present in all water on our planet has steadily increased over the centuries. Back in the ice time as humans evolved, the level was about 130 parts per million. Today that is for most water, 150 parts per million and the ocean is 155 parts per million. And so you may think, "Oh, that's a little. What's the big deal?"

05:29 DD: Well, it's actually many times the amount of calcium that we have in our bloodstream. It's 12 times as much as we have magnesium. So it's significant and it isn't really on anyone's radar and it is very much affecting biochemistry and biophysics and the physiology of all of ourselves. So we get that water in our system through the water we drink, through the foods we eat, through the air we breathe. And if we don't live a lifestyle that allows for us to clear these excess levels, they will build up in our tissues. They will sort of mess up the machinery of the mitochondria, cause dysfunction, and that leads to all sorts of chronic disease issues that we are faced with today,

which probably is 85 to 95% of all disease we see. That includes obesity, cancer of course, autoimmune disease, neurodegeneration, diabetes, all of it.

06:41 DS: Deuterium is this naturally occurring isotope, as you just mentioned, that we are exposed to in our water and in our food. You said that had been 130 parts per million, and now it's up to 155 parts per million in the ocean. Why have we seen an increase in deuterium? Is this part of how our environment naturally evolves, or what is happening that we're getting this increased exposure?

07:15 DD: I think it is through climate change, through the water evaporating and becoming denser in the oceans. And so it's over many, many... I don't even want to call them decades, thousands of years, literally, that this has changed. I think the other piece to it is that our lives have changed to such an extent that we're not able to clear it. That's the other part of it.

07:49 DS: Again, this is something that we've all been exposed to for millennia, probably. And we have naturally occurring evolutionary mechanisms to deplete the deuterium but because of modern life, we're getting this increase in exposure and then there's a decreased ability to excrete and process the deuterium. That is my understanding.

08:14 DD: Yes.

08:15 DS: And so let's talk about this. Tell me, Petra, how do we naturally get rid of deuterium?

08:23 DD: We get rid of deuterium particularly when we sleep. When our body goes into ketosis after four hours of sleeping, we start clearing it. We clear it by breathing it out, we clear it through sunlight, UVA light is important for our skin. We clear it by peeing it out and having our kidneys filter the water that we take in or that we drink, or our bloodstream. And so there are many mechanisms that we do it with.

09:08 DD: The reason why we are seeing increasing levels in our tissue is because we're eating foods that are high in deuterium levels. We are not sleeping in clean environments without WiFi around us that enables us to detoxify. We're exposed to too much light, unnatural light, not sunlight. We're shying away from sunlight, we're using sunscreens, on and on. All of these pieces come together and cause us to hold on to these higher levels of deuterium.

09:46 DD: Another very big part of it is that we're drinking large amounts of water, and this completely changes how our body regulates the production of metabolic water. And this is a little bit more detailed, but this goes all back to mitochondrial function. What we have all learned in medical school is that, really, the main purpose of mitochondria is to produce ATP. And in fact, there are actually three important functions. The first one, and probably the primary one, is the production of metabolic water, and this metabolic water is deuterium-depleted. That bakes all of our cells and our tissues, and allows us to transmit energy and information and have optimal functioning in our body. If we drink lots of liquids throughout the day, we inhibit or we reduce the hormone called antidiuretic hormone or also known as arginine vasopressin. And if we reduce that, we let go of a very important primary filtrate that we create in the kidneys. New research, it's not published yet, but it's in the

process of being published, shows that we actually produce and recycle 7,200 liters of water a day.

11:29 DS: Oh, my God.

11:32 DD: At the same time, we produce 800 liters of primary filtrates. This primary filtrate, again, is deuterium-depleted. We want to hold on to that and then we want our kidneys to re-absorb that into our bloodstream in order to lower tissue levels. Again, if we drink too much water, we will not do that. We'll just let go of this gold, basically, which we really want to hang on to. And antidiuretic hormone will be suppressed when we drink this water. And this has so many other effects because it also governs your production of this water in your tissues. But it also, for instance, is important in social bonding, it is involved in information, in aging, in pain perception, in all sorts of social behaviors. So it's a critical hormone. Recently I found out that it also, when you inhibit ADH, you inhibit or you reduce gonadotropin-releasing hormone. And that, of course, is required to release all your other steroid hormones. And so, I've been starting to see patients that have had long periods of secondary amenorrhea, not having any cycles at all. And then when you ask them, "How much water do you drink?" It's like, "Oh, four liters, five liters." It's a huge amount of water. I think this is playing a role. I'm hypothesizing that that actually is part of why they're shutting down their own hormone production.

13:17 DS: I'm so glad that you mentioned this. I know, in our conversations, one of the things that we see in the chronic illness world is this low antidiuretic hormone. And again, it's a hormone that's produced by the pituitary, it helps us to hold on to our water. What I've been taught is that, this

is what's called part of the biotoxin pathway that Dr. Shoemaker really was the pioneer, and looking at how biotoxins from Lyme and mold, especially when people have chronic sinus issues, and they can produce biotoxins in the sinuses and how that can affect the pituitary's production of antidiuretic hormone.

13:58 DS: I've always tried to understand it in that way. And as an observer, I think as a physician, we're observers a lot of the time, really nine out of 10 of my patients I would say, have low antidiuretic hormone, and they're getting up at night to urinate, they're getting up during their visit a couple of times to go to the bathroom, they're really thirsty, they're peeing a lot, and we're trying to look at it from this all these different angles. This is really exciting for me to explore in this other way. Because as you said, the goal at the end of the day for our bodies is to have this metabolic water that can actually help us in all the activities and metabolism, right? And to help us bring nutrients in, and waste out, and all of that.

14:44 DS: And so this is flipping the script on my thoughts on antidiuretic hormone, and looking at it in a different way. I guess the one question I would have is, why do you think people are drinking all this water? Is it because that's what people have been taught to do to be healthy, or because this water that's not low in deuterium makes people more thirsty? I'd just be curious what your theories about that are.

15:15 DD: Well, I think part of it is economical. We've been suggested by companies that we should drink lots of water, that we need to hydrate. I think we're also not really been taught that thirst is okay, that that's an okay sensation to feel and just be with that for maybe five minutes and see if it

goes away, because... Thirst is a biological subjective marker for the vasopressin, for the ADH, and you actually then stimulate a release of it, and therefore you will hold on to more water, and the thirst just may pass, so I think that's part of it. And water is really just for cooling us down, rather than quenching our thirst. We should be able to produce our own water if we have enough of fats coming in. This is another important piece of it in terms of the foods that we eat, from 100 grams of fat, we can produce 110 grams of metabolic water. If we consume 100 grams of carbohydrate, we will only produce 55 grams of metabolic water, and so that's half. So the food choices are also very, very important, and perhaps the type of diet you consume will also determine the amount of thirst you have.

16:44 DS: How do people know if this is an issue for them? I know probably your answer, that most humans probably have this issue because of the conditions you've just shared. For someone struggling with their health who wants to dive deeper in, how do we measure our deuterium levels?

17:10 DD: What we do is, we assess your breath, and we assess your saliva, or your urine, either one, we generally choose saliva. What that tells us, this gives us an indication, your breath sample will tell us what's the level in your tissues, and then the saliva or urine sample will tell us how well you're able to excrete that. What we're looking for is a margin, a difference between the two. Ideally, your breath level is 10 points lower than your excretion level, 10 to 15 or 8 to 15. So let's just say we're going to test your levels, your tissue levels, and your breath appear to be 135, and your saliva will be a 145. That would be ideal, although 145 is high, ideally were a much lower, but the difference between the two is what we're looking for. And so most people that

I've tested that's... Actually I'm the one I've tested so far, that's never the case, it's usually only two parts per million or four parts per million difference.

18:36 DD: And so, as we had discussed, 130 is sort of the point that we believe, if you're below that metabolic dysfunction is really not a big issue, you're able to manage it, but if you are above that, and certainly when you're above the 150 parts per million, your tissues are fully saturated, and metabolic disease is absolutely present. And so, with those numbers, we then can calculate your depletion factor. So, how well you're able to do that, and then also your ATP synthesis rate. We know from studies on beef heart what level of the deuterium concentration in your tissue correlates with the efficiency of the ATP nanomotors in your mitochondria, and if those levels are higher, that gives us an idea of how efficiently you produce ATP, and that's how we dissect.

19:54 DS: So then, we're looking for that differential between the breath and the saliva, and then what is the optimal, I guess, level of deuterium? What levels are we aiming for for optimal health?

20:10 DD: So initially, when we're really trying to deplete you to restore function in certain our organs and tissues, we really want those numbers to go below 130 and however... And that's different for everybody, how well they're able to do it, how well they sleep, all of the other pieces that they implement. So there's many parts to that where there's masks that we can use, so you rebreathe your deuterium-depleted breath. Certainly, when you're on deuterium-depleted water, that becomes even a greater benefit. At the same time, you're also breathing in some of your own carbon dioxide, which will then stimulate your hemoglobin to release some oxygen, and that oxygen

can either oxygenate your tissues or bind deuterium, and you can breath that out, so further depleting you.

21:05 DS: I definitely want to talk a lot about some of these strategies to optimize and deplete deuterium, but I want people to also know about the resources. The patients can just go directly and purchase a test themselves, is that correct? You don't have to work with a physician to actually order the test? Or how can people test their levels?

21:29 DD: They can go to ddcenters.com, and they can order a test right there. If they want to take part and use some of the modules and the protocols that have been designed for optimal depletion, then it's best to schedule a consult with one of the providers, researchers, and physicians that are part of the Center for Deuterium Depletion.

21:58 DS: Great. Thank you. I just want to make sure people know that. Just out of curiosity, Petra, what are you aiming for personally? I know you've embodied this lifestyle as well. What levels are you aiming for for your own health at this point?

22:15 DD: So my first attempt was to get below the 130s which I did, and I'm hovering somewhere in the low 130s right now, and I feel great at that. I'm not trying to get any particularly lower than that, I'm healthy and I'm well. But this is very different if you present with cancer for instance. Once we get your starting levels, we implement a protocol and then maybe a month later, we re-test to make sure that we achieve the drop down in levels that we're looking for, and particularly what's important that we get that difference between your breath and your saliva, that you really are excreting it. And we

have all these different ways that we can track that with where we monitor your sleep, your metabolic rate on and on. We also follow certain land markers, whatever specific is to that particular presentation that you show up with whether that's a thyroid issue or cancer or diabetes, we can then follow what happens in your blood work as well.

23:30 DS: Many of our audience have already probably heard about deuterium-depleted water. You've mentioned even this already. What's naturally occurring? What is the deuterium level in our naturally occurring water? Why do we actually use deuterium-depleted water and how do we use that as a therapeutic strategy?

23:55 DD: Most drinking water in America is around 150 parts per million. I know here in LA, it's about 149-148. Some spring waters are a little bit lower. There is Oregon spring water that's about 140. I think Divinia is about 130. But the therapeutic water is very different. This water is currently only made in Europe and in Russia, I believe, and we work with the one pharmaceutical grade water at the Center for Deuterium Depletion called Preventa, and that comes in different parts per million. It starts at 25 parts, then there's 45, there's 65, there's 85, there's a 105. And depending on what your condition is and what your goals are and what you're aiming for and what your budget is, we can prescribe a certain parts per million for you at a certain amount of water a day that you can kind of have as a goal.

25:12 DS: Is this kind of a lifelong strategy, or do you use this kind of more in order to get people therapeutically in that range that we've talked about?

25:26 DD: Of course, great question. We use the water really in situations where... I mean, people are using it for wellness as well, but it really is best served for cancer treatments where we know for sure at that point that the mitochondrial dysfunction is to such a level that for a cancer patient to deplete themselves by just using lifestyle interventions is not enough, and the deuterium-depleted water bypasses important metabolic steps that helps you clear it from your tissues and then maintain lower levels.

26:13 DD: Particularly for cancer patients, this is really important to do on ongoing basis and certainly when they're going to treatments to support them, and it helps them improve all aspects of their other therapies as well. Then there's of course also the wellness crowd and the biohackers that are very keen in optimizing already quite well-functioning bodies, and they use it for a period of time to just drop down and see if they can increase their energy. There are certain sports teams that are using it for performance enhancing properties and certain athletes that are using it, and they are able to achieve higher excellence on what they're doing because of the deuterium depletion and really just because it completely restores function in tissues and optimizes efficiency.

27:18 DS: You mentioned cancer a few times, and I know that you are now working closely with the Center for Deuterium Depletion in supporting and treating cancer patients, and so why don't you just set the stage a little bit... I know there's two physicians and researchers that you work closely with, and they've done a lot of research to see the role of deuterium in cancer. Can you just bring that into context a little bit more, so people have an understanding of that?

27:48 DD: Dr. Laszlo Boros is from Hungary and has been working in cancer research for over 20 years, has published over 100 papers and started working with Gabor Somlyai, the researcher and scientist who wrote the book that I mentioned earlier, and he himself has been publishing papers since the '80s and '90s I think, and he's involved in actually the Preventa water. So they formed a team with Dr. Que Collins and Dr. Anne Cooper, and they started the Center of Deuterium Depletion. All of them have a long history of working with cancer patients, and it's first established as a cancer treatment and in Europe, the deuterium-depleted water is registered as a pharmaceutical for pets, for treatments as well. Dr. Collins has done many projects and research and studies on treating pets with deuterium-depleted water.

29:10 DS: And so then, I guess this sounds like a non sequitur, but I kind of... I want to understand this too. So going back to this deuterium-depleted water, does this naturally occur, or is a water actually, when you say pharmaceutical grade, is it manipulated to get the deuterium levels lower than what's found in nature?

29:31 DD: It's absolutely processed. It's distilled many, many times over to achieve that. So it's a very evolved process, and that's why the water, the lower the level of the parts per million is, the more expensive it gets, because it just takes more time and processing.

29:55 DS: Thanks for clarifying that. You also mentioned Divinia water, that was 130 parts per million, and so, some of my patients actually might know about Divinia water. That is a water that is supposed to have a high exclusion zone water account. And so that is interesting that that also is lower in

deuterium. Do you have any insights on that whole interplay between the exclusion zone water and deuterium-depleted water?

30:28 DD: I don't know enough about it. I think that's a conversation that is much better had with either Dr. Collins or Dr. Boros, I'll leave that up to them too.

30:38 DS: Yeah, we could get a Dr. Pollack to talk to them too. That would be a fun conversation. [chuckle] We'll organize that, right?

30:47 DD: Yes!

30:50 DS: I know there's the water conversation, right? I don't see cancer patients, but I see a lot of chronically ill patients, and a lot of our framework has been, "Okay, why people are sick is because these chronic infections, and then this whole environmental toxicity from aluminum to mercury to glyphosate to... You name it. For me, it's kind of turning this all around. You've educated me to think, "Okay, think of deuterium first, and then the body can deal with the stress of everything I just mentioned better." Can you just maybe share your insights on that? This is a whole new framework to look at, at why and how people are sick, and how they get their bodies to function better. If someone's struggling with a chronic illness and has not seen results, how this is all interconnected?

31:57 DD: I think it's so foundational, because it affects the cell physiology and biochemistry so intensely that it increases microbial infections. So for instance, let's talk about the gut for a second, the microbiome. We have a microbiome in our intestine which actually consumes the deuterium from our

foods. And so that's what the function is. They are prokaryotes. They use the deuterium from the foods that we eat as a growth factor and they just replicate. And so if you eat a lot of foods, very high in carbohydrates and therefore, deuterium, you can get yeast overgrowth, because yeast loves deuterium. And so you just encouraging that to grow larger and become a problem for you. So that's one part of the microbiome issue that you may have had. Because of your tissues being saturated with deuterium, it changes the resonance of all of the bonds in between them and it causes metabolic crowding in tissues and you're not able to detoxify as well.

33:26 DD: There's so many connections to be made, you will hold onto metals in a different way. So yes, I think rather than placing specifics, starting with these basics, first and then maybe zoom into what is left over where you can still make change happen. But I think that's the focus, what should be the focus. I think medicine needs to become deuterium-based medicine, mitochondrial medicine, and we need to optimize that function. If we can do that, then all the other pieces will fall into place. The reaction of iron in our mitochondria, where is being converted from an Fe^{2+} state to an Fe^{3+} state, is very important reaction. And the enzyme that facilitates that reaction is called ceruloplasmin. And ceruloplasmin presents copper to this reaction to make it happen. And if we don't have enough ceruloplasmin or if we don't have enough copper, or if the activity of the ceruloplasmin is incorrect and we don't really measure that, we can only measure levels, the conversion of that iron will not happen. And so we start having free iron in our tissues.

35:00 DD: And of course that's toxic to our mitochondria and to our body. And so we store the excess free iron somewhere, and some people put that in ferritin molecules. And one ferritin molecule can hold 4500 atoms of iron.

And so these become these little bombs of iron floating around. And we've been told that this is good. You need ferritin levels. If it's too low, it's an issue. Well some people are actually suggesting that higher levels of ferritin, certainly above 50, 30 or 50, is a sign that you are having mitochondrial dysfunction. And so I'm still looking at these papers. There is a lot to dive into. I just recently, on my trips, spend hours looking at the whole series of papers I downloaded on ceruloplasmin and all of its activity. And it's really, really interesting. It's a great rabbit hole to go down and understand better. I think this is all related to it as well.

36:13 DS: Please keep going down that rabbit hole because I feel like this is another observation that I've made over the years with the iron dysmetabolism where we can have low iron. We can have high ceruloplasmin. We can have, you name it. These iron dysmetabolisms. And the solution does not seem to be to give people iron and they get better. I know that most alternative docs have thought that way. And then also thinking about some of our agents that we use. We use a lot of the plant *Artemisia annua*, and there is an iron chelating component of that. But I think about *Artemisia* as a tool for getting iron out of the tissues where it doesn't belong. I would love for you to go down that rabbit hole, Petra, for us because I think there's a lot to learn.

37:12 DD: It's been really, really fascinating because once I started looking, and I had been actually testing ceruloplasmin and zinc and copper for many of my patients because I'm also seeing individuals with cognitive decline for the Bredesen protocol. And I had been measuring that, but I have been looking at those numbers very differently. I was able to just go back and pull up their records and I go, "Look at that." Most of them had a very low levels of

ceruloplasmin and I thought that was fascinating. And then they also have dysregulated copper and zinc and it's high copper and low zinc in most cases. They're not able to actually use the copper they have, that's dysfunctional. And so giving iron is the worst thing do because they have iron. They're just storing it in tissues that we're not able to measure, so whether that's a spleen or a liver or a brain or a kidney. It's all pretty interesting.

38:14 DS: Yes, and Bob Miller, who does a lot of the metal genetics nutrition (that's his company) talks a lot about iron. Some of the snips that people make couldn't use the iron in the Fenton reaction and oxidate. It creates more oxidative stress on the body. And so I'm sure that's another piece to think about. If you're supplementing with copper, do you have a recommendation of what copper you like to use?

38:42 DD: Yes, I suggest that they eat liver. [chuckle] That doesn't always go over too well. If they don't, if they're unwilling to do that, then I suggest that there are really great products from New Zealand or other places that have dessicated beef liver, and they'd just take a few capsules. That's how I suggest they do it.

39:07 DS: Great. That's a great tip. Very Weston Price, right?

39:12 DD: Yes.

39:13 DS: So Petra, let's circle back...I want to hear, if you're open to it, to bring this information to light with maybe some clinical examples or any cases that you've been really excited about seeing how this unfolds for a patient

when you start addressing the deuterium and what kind of clinical results have you been seeing lately?

39:43 DD: I'll give you three different examples. I have one cancer patient who has ovarian cancer, stage 4. It reoccurred last April and we started her immediately on the water. And at Christmastime, she had been told that maybe she would have until June, which is tomorrow. And she again went through a whole series of chemotherapy. And this time, when she went to chemotherapy, she did not lose her hair. I know she did other strategies as well as the cold cap, but I like to think that the deuterium-depleted water also played a role in that. She's doing really well at the moment. She feels great, she has energy, she's doing lots of things. And yeah, tomorrow is June, so I feel good about that. I have another patient who had a failing thyroid. She was already at three-and-a-half grains of Nature-Throid and felt that she was getting worse and she had no energy, and she was gaining weight and feeling bloated and couldn't fit in her wedding ring and all sorts of issues, with a lack of energy. After trying all sorts of different approaches, I asked her to please start a deuterium-depleted protocol. And she did. And she went slow, she didn't go all in, but she's doing it. I'm happy to report that, six months later, we have her down to half of that dose of Nature-Throid, one-and-three quarters. Her cholesterol dropped over 100 points...

41:37 DS: Wow!

41:37 DD: Including the LDL by 85, itself. And all sorts of other markers improved, inflammatory markers as well, so that was really great. And then I have this one story of this dad who contacted me, who has a 19-year-old autistic daughter who has never spoken a word in her life; she's not verbal.

And she does go to school for a few hours every day and she would come home and she would just sleep and lay on the couch and just do nothing. That was her daily routine. And he had wondered if deuterium-depleted water would make a difference. And so he purchased it and started her on it, and he called me two weeks later to say that a week into being on the water, she came home from school and just stood at the piano the entire afternoon and played and made music. He had never seen any intervention make such a drastic difference in such a short time. So that was really great to hear and he was very excited.

42:53 DS: Those are incredible, stage four cancer and autism. This is why I'm still very curious. I feel like I've just started to grasp how to apply this clinically, so I'm going to be probably calling you up more as I go through this. Petra, do people have side effects when they start lowering their deuterium levels or do they feel, for the most part, better?

43:28 DD: It's varied, to be perfectly honest. Some people say they don't feel it. There are others who feel actually some sort of a reaction... There's a very few of them that have reported that they feel hungover a little bit, like they're detoxifying. But most people feel great on it and they want to stay on it because it feels that good.

43:52 DS: How much water should people be drinking a day?

43:57 DD: I think the less you can drink, the better off you are. I think if you try to aim for maybe one quart or a quart-and-a-half... I'd like to say "liters" because I'm European but I know people don't know what that is. So about a quart, or four cups. We can really let go of the popular belief out there that we

need to drink our body weight in ounces. We don't have to do that at all. There is really no biochemical or physiological foundation for that recommendation. But really do what feels good and don't just drop down. If you have been drinking four litres for years in a row, you will feel that if you just all of a sudden drink one quart. So just go gradually and really pay attention to thirst and see how you do with that.

44:58 DS: I know, being in this world... I've only been practicing nine years. And I know things come and go and there's all sorts of trends. To be honest, I never thought we would question water. [chuckle] That one seemed like, "Okay, we got that one down." But as you have just shared with us over this interview that this is absolutely something that we need to take a deeper look at. I think about this as another environmental stress, right? And maybe the biggest environmental stress that we need to look at first. And once we get this addressed, the body can handle all these other things that we're talking about more elegantly. I know that you and I both see really challenging patients, and for me, I'm always trying to figure out how do we make this easier for people? How do we also get them well and get them less reliant on treatment? With my patients that I've seen get better and return to their life over the years, they still have to put a tremendous amount of effort into their health. That's why I'm really excited to embrace this.

46:29 DD: I'm excited that you're as excited as I am about it!

46:36 DS: We should have people go on a deuterium depletion plan before really diving into all the other things that we look at at Sophia Health Institute. That's what I'd like to try and see how that works for our patients.

46:52 DD: Great. I think that's an excellent idea.

46:56 DS: So Petra, I could ask you questions all day long, but I will respect your time, it's Friday night and everything.

[chuckle]

47:03 DS: How can people learn more about you and your work? And how can they become a patient if this is something that they want to learn more about and explore for their own health? How do they find you?

47:17 DD: I have a website that you can contact me through at drpetrad.com. I can also be reached at Elysia Life Care, which is a practice in Santa Monica. I'm also working with the Center for Deuterium Depletion, and that's ddcenters.com.

47:44 DS: Great.

47:44 DD: Also, the Center for Deuterium Depletion has really great informative videos, podcasts, and presentations. There's a lot to learn and cover there. So I definitely encourage you to explore that.

48:02 DS: Great. Well, I appreciate your time, and we'll have all that information in the show notes. I'm sure we will have you back to dive even deeper as this becomes more in the consciousness of everyone out there, and more people are exploring this for their health. So thank you so much for joining us today.

48:21 DD: You're so welcome, Christine, it was my honor and privilege.

49:22 DS: Thank you for listening to the Spectrum of Health podcast. I hope you enjoyed my conversation today with Dr. Petra Dorfsman. If you want to learn more about Petra, her website is drpetrad.com. And again, she has educated us on this really important topic about deuterium and deuterium depletion. She also introduced us to one of the people who taught her, Dr. Laszlo Boros. And Dr. Klinghardt is going to be interviewing Dr. Boros on our upcoming Body Electric Summit, that's going to be airing October 7th, for a week. We're really excited to be putting this on, and I will be sharing more and more about this as we approach. So please let me know if you have any questions or if you have any feedback for the podcast. You can reach us at info@drchristineschaffner.com. Thank you and have a beautiful day.