Terry Wahls, MD



Rebekah Kelley: Welcome to the Humanized podcast, all about personalizing your health. I'm your host, Rebekah Kelley, and today we'll be discussing Healing Autoimmunity with Diet and Lifestyle, with Dr. Terry Wahls. Before I introduce Dr. Wahls, I want to remind everyone to subscribe and get all the variety of casts in audio, video and transcription at HumanizedHealth.com. I'd also like to thank our lead sponsor, Village Green Apothecary, at MyVillageGreen.com.

A little bit about Dr. Terry Wahls. She's an Institute for Functional Medicine certified practitioner and a clinical professor of medicine at the University of Iowa, where she conducts clinical trials in the setting of multiple sclerosis. In 2018, she was awarded the Institute for Functional Medicine's Clinical Care and Patient Advocacy Linus Pauling Award for her contributions and research.

Thanks so much for being with us, Dr. Wahls.

Terry Wahls: Thank you for having me.

Rebekah Kelley: I want to just dive in and ask you to please share your personal story and healing. We really would love to hear from you about your experience.

Terry Wahls: So, in 1980 during medical school, I developed intermittent electrical face pain that would get worse over the next 20 years. Then I developed weakness and was diagnosed with multiple sclerosis. I saw the best people, took the newest drugs, within 3 years I'm in tiltrecline wheelchair. I adopt the paleo diet. I continue to go downhill. I read the basic science, create a supplement cocktail for my mitochondria. Very helpful. I discover the electrical stimulation muscles, I add that to my physical therapy. Somewhat helpful. I discover the Institute for Functional Medicine. I have a longer list of supplements for my mitochondria. I add those. Then I have this big aha, like what if I redesign my paleo diet based on all the supplements I'm taking, and I start this new way of eating. Now, at that time, I'm so weak I cannot sit up in a regular chair. I'm in a zero gravity chair with my knees higher than my nose. I can walk just a few steps using two walking sticks. I have profound fatigue and I have severe trigeminal neuralgia. A month after starting this new diet, my pain is resolved. My fatigue is resolved, my mental clarity's improving, and my physical therapist says, you're getting stronger. He advances my exercises. And 5 months later, I am walking without a cane and I'm able to bike for the first time in 6 years. And a year into this, I'm able to do an 18.5 mile bike ride. So this really transforms how I think about disease and health, and it will transform the way I practice medicine, and it will transform the focus of my research.

Rebekah Kelley: Wow. So tell us about this clinical research. Obviously, I'm assuming you've had some ahas along your journey that you've then decided to dig into. What are the most impactful results you found?

Terry Wahls: So, the first thing we did was we tested my complicated protocol with others with progressive MS. We showed that yes, they could do it, we could dramatically improve their quality of life, reduce their fatigue, improve their thinking, improve walking function in about half, which is quite remarkable for progressive MS because at present, nothing restores their function. Then we started doing randomized controlled trials. We've studied the ketogenic diet, the paleo diet, the low-fat diet, and we consistently find that improving diet leads to less anxiety, less depression, higher quality of life, less fatigue.

We have done seven clinical trials, consistently finding that diet is super helpful. There was recently, Dr. Snetselaar did what's called a network meta-analysis that combines dietary studies. There are 12 studies looking at eight different diets – the low-fat diet, the Swank diet, McDougall diet, the modified paleo diet (which basically is the Wahls diet), anti-inflammation diet, fasting diets, calorie restriction, and Mediterranean diets. They were able to rank order how effective these diets are at reducing fatigue, and the Wahls diet is about 50% more effective than either Mediterranean or low-fat diets. And then for improving quality of life, there were two diets that improved quality of life. That was the Wahls diet and the Mediterranean diet. And again, the Wahls diet was about 50% more effective than the Mediterranean diet. And Dr. Snetselaar got that paper published in *Neurology*, the highest impact journal that publishes MS-related research and MS care papers, so that's really huge.

They also published an editorial authored by three leading diet researchers in the field of MS. And they said there is evidence that diet really matters and that everyone who's been diagnosed with multiple sclerosis should be directed to a nutrition professional to improve the quality of their diet, in that the diets – the Mediterranean diet, the low-fat diet, and the paleo diet – all have good science supporting their use.

Rebekah Kelley: That's really, really amazing.

Terry Wahls: It's huge.

Rebekah Kelley: I love how you're learning and you're helping other people with it, right?

Terry Wahls: Absolutely.

Rebekah Kelley: Because you're doing all this research yourself and then people can go and find this and use it themselves so that they can have a better quality of life. How did the diet studies differ from drug studies and how do you kind of control the sort of bias for that research?

Terry Wahls: So, drug studies are easy. You can take a pill and it's masked, so it's either a placebo or the active ingredient. So that's a very easy study to do. When you do a diet study, you have to convince people to stop eating their current food and start eating new foods. We

have to teach them how to cook. We have to teach them how to meal plan and shop. So there's a lot of things that you have to do to help people adopt and sustain these new diets.

Rebekah Kelley: Yeah. And a cantaloupe is not a cantaloupe is not a cantaloupe sometimes, and the same thing, right? So you have to...

Terry Wahls: Correct. We teach people who are fatigued how to do these things. So we help them figure out how to manage their energy, their supply, we teach them how to batch cook, how to use things like slow cookers so you can prepare the meal in the morning, have it cook all day, and then freeze some of it so you don't have to cook every day of the week. We help our patients make this a much more affordable process.

Rebekah Kelley: I didn't even really think about that until you mentioned it. You're right. It's not just changing of habit, but it's dealing with people who don't feel like doing it either, right?

Terry Wahls: Right, who are exhausted, who are struggling with fatigue.

Rebekah Kelley: Yeah. That's really, really amazing. One of the things I wanted to ask you about is, is there any, can we move on from the diet to any sort of drug studies? Is there anything that you discovered as it related to that for people that it might...

Terry Wahls: So the drugs do a really great job of turning off relapses. They do a good job of preventing enhancing lesions. They do not do a good job of reversing fatigue, reversing anxiety, depression. And we also know they don't do a good job of preventing brain volume loss. People with MS, our brains shrink at three times the rate of healthy aging, at about 1% per year. Healthy aging, you want to have brain volume loss of less than 0.3% per year.

Rebekah Kelley: Wow.

Terry Wahls: So, I'm really excited. We have a new study that we're doing comparing a ketogenic diet that's olive-oil based, and the modified paleo diet, which people know as the Wahls diet, to the usual diet. And we'll look at changes in quality of life, changes in mood, changes in fatigue, in walking, hand function, vision function, thinking. And we're getting MRIs so we can look at brain volume over time. People would come in at baseline, they'll come back at 3 months and then again at 24 months, and we'll get MRIs using a research magnet, so no contrast, at baseline and again at 24 months and we'll see what the rate of brain volume loss is.

I am hypothesizing that as we teach people how to improve their diet, we'll get them back to healthy rates of brain volume loss. And that I think will be the most impactful finding that we'll have, if we can get people to healthy rates of brain volume loss because that lowers the risk of cognitive decline, it lowers the risk of depression, anxiety, and problems with thinking.

Rebekah Kelley: So do you think the diet is related to how people are learning to process nutrition? Is it related to slowing down the aging process? So what is it?

Terry Wahls: I have another study that we're proposing to investigate, can we slow down the aging process? And I think that we can, we have some really interesting biomarkers that we'll look at to test that question.

When you're repairing damage to the brain, we have to rebuild structures, rebuild myelin, rebuild synapses – that's the connection between brain cells – and that takes more resources, cellular resources, than maintaining healthy tissue. Therefore, one of my theories is that we have to have nutrition that is much more intensive than the average healthy individual, that you can have no empty calories. We can't be having added sugar, processed foods, because we have to provide the nutrients, the nutrition that your brain and your spinal cord and your cranial nerves need to fix themselves.

Rebekah Kelley: That makes sense. That makes perfect sense. I get it. So, no empty calories, like maximum nutrition.

Terry Wahls: NO empty calories.

Rebekah Kelley: Yeah. Everything needs to just be vibrant and able to provide as much support as possible.

Terry Wahls: Correct. And you want food that is really packed with nutrition. You can't have food that is just marginally nutritional for you.

Rebekah Kelley: So then you can be in constant repair.

Terry Wahls: You need to be in constant repair. And it's also why we're following people for 2 years because it will take time for that repair to happen. While I fully anticipate we'll see changes in fatigue, quality of life in the first 2 months, but changes in the function, the walking function, hand function, vision function, thinking function, I think that will take more like a year to 2 years to see that difference, which is why I'm so excited that we have the funding to do a 2-year study.

Rebekah Kelley: And do you think it's encouraging then, for people who are trying this out and they see themselves being able to do a little bit more or feel a little bit better? Because, I mean, changing diet is... a friend of mine said it's like changing religion. Like it's really hard for people.

Terry Wahls: It's hard. We spent a lot of time supporting people as they make these changes, and thus far in our study... And we have, for the two intervention arms, we have monthly group

calls. People talk about, as they implement these changes and they're beginning to experience reduced anxiety, better moods, the enthusiasm for these changes grows. The other thing that people are telling us is that family members are reporting that their moods are improving, that their mental clarity is improving, and that spouses who have blood pressure issues are discovering that their blood pressure is getting better, and that people who have blood sugar issues are discovering that their blood sugar issues are improving. And then when you're in that group call and people are reporting these findings, there's a lot of excited crosstalk back and forth between the participants. So in those group calls, the first half is the dietician answering questions. The second half are the participants talking to one another and they have lots of excitement. And really, in my experience, it's the group calls, the group meetings where the peers talk to one another and they are answering the questions, encouraging each other, that is a huge driver of success.

Rebekah Kelley: Yes. Well, they're creating a community with their own family, right? Of health and wellness.

Terry Wahls: Absolutely.

Rebekah Kelley: So, what would be your guidance then for those living with MS? What are some actionable things that they can start doing to start feeling better?

Terry Wahls: Of course, the first thing I'd have you do is follow me on Instagram, because you get to see what I'm eating and doing. That's a really fun page.

Rebekah Kelley: And what are you, what's your Instagram identity?

Terry Wahls: So that handle is Dr. D R Terry Wahls T E R R Y Wahls W A H L S. So absolutely do that.

Rebekah Kelley: Okay, I'll follow you. So you'll see "Rebekah" pop up.

Terry Wahls: So, follow me. You can go to my website, TerryWahls.com, and we have links to the study so you screen and see if you could be eligible to be in this study.

Rebekah Kelley: Oh, okay. So they can really participate then.

Terry Wahls: They can really participate. We'll have 156 people in the study. We're halfway there. We still have about 85 more that we'd like to enroll. And you'll help build the research that leads to changing the standard of care so that people, when they're diagnosed with MS, will all be told of course diet matters and you should go see a dietician and get instructed on how to improve your diet.

Now in my clinical practice, it is nearly always easiest to add. So I'll interview people, get a sense of their diet, then we talk about what are the things to add. And I talk about green leafy vegetables, cabbage family, onion family, mushroom family, and deeply colored things like beets, carrots, berries. So we work out what the adds are. And then I hand them off to my health coach, because she used to work with them on that.

And then in the final week, then we begin to talk about what are the things to remove. And we talk about all these empty calories that are preventing you from getting the nutrition that your brain needs. So we talk about processed foods, fast foods, added sugars, and then we talk about foods that can be very inflammatory – gluten, dairy, eggs. And then we may talk about the medical comorbidities that we have to think about, as well.

But for everyone who's listening, the first thing to do is figure out what you're going to do for the adds to improve your nutrition, and then a lovely place to start for the things to remove: get rid of the sugar-sweetened beverages. Quit buying them. If they're in your house, you'll drink them.

Rebekah Kelley: Because they are just empty calories. They really are.

Terry Wahls: They're empty calories. And I would also tell you that the artificial sweeteners increase the risk for insulin resistance, diabetes and pre-diabetes in that they damage your microbiome. So instead of having artificial sweetener, buy sparkling water, buy herbal teas, drink water, drink an herbal tea instead. Or green tea.

Rebekah Kelley: I love that. So that's an easy, fast [thing you can] start today with, right?

Terry Wahls: You can start today. And then, you can pick up my book *The Wahls Protocol*. That'll be inspiring, you'll hear my story, hear about other stories that you'll find inspiring, and think about being part of our study. You can be already following a diet that you really love, whether it's a vegetarian, vegan, ketogenic diet, paleo diet, Mediterranean diet. As long as you are willing to be randomized and follow the diet to which you are assigned. So if you're a paleo, you're willing to be ketogenic if that's the one you're assigned to. If you're a ketogenic, you're willing to be paleo if that's the one you're assigned to. If you're assigned the control diet, you get to follow whatever your current dietary pattern is. That will help me build the evidence that diet really matters. It will help me meet my big hairy audacious goal, which is changing the standard of care. And we could not do that without people being willing to be randomized to be part of the study.

Rebekah Kelley: I love that. Now, is there any one piece of advice or information that maybe someone who has a loved one, who has a family member living with MS, that you would give them?

Terry Wahls: Improve the diet together as a family. If you, as a family, if your loved one said, I need to take this food item out of my diet because I've decided it's potentially harmful to me, then you need to not see it anymore – because if you see it, a lot of that processed food is addicting. It will find your loved one's mouth, they will chew, and they will continue to consume it. If you take it out of their eating environment, they don't have to see it anymore, they'll be much more successful. So have a conversation together, decide what you can do as a family, and then when you're in the presence of your loved one, have the same diet.

Rebekah Kelley: I love that. Thanks Dr. Wahls. Those are really valuable insights. Dr. Wahls can be found at www.TerryWahls.com. I'm going to spell that: T E R R Y W A H L S.com. Let me remind you subscribe and get access to all Humanized videos, podcasts and transcriptions from all our thought leaders like Dr. Wahls on personalized health at HumanizedHealth.com. Thanks so much for being with us.