Introduction and Guest Welcome

– Welcome to this episode of the environmental toxicants, auto immunity and chronic diseases summit. We're your hosts. I'm Dr. Wendy Trubow, MD, MBA, IFMCP, and this is my co host Dr. Edward Levitan, MD, IFMCP, ABIOM?

– A B I O M. – [w] I got it baby. Our guest today is someone who I've been a huge fan of for a long number of years. So it's one of those, right, okay, I'll speak for you too. Like one of those fangirl moments where I go, oh this is an awesome guest and I like all of our guests but really I've been a tremendous fan for years. So I'm just beyond honored that Terry Wahls, MD has come on our summit to talk about ways to prevent chronic diseases and auto immunity and so doctor and reverse. Absolutely. So Dr. Wahls, would you mind introducing yourself to the, to the team?

– I'm an internal medicine doc Professor of medicine at the University of Iowa. I have a secondary appointment, department of neurology because I have my own personal remarkable healing journey recovering from profound disability due to secondary progressive M. S. Where I could not even set up to where and now I am now jogging two miles out of crack and as a result of that it I wrote a case report, a case series. Then my Chief of Medicine said let's do some uh proof of concept clinical trials. We did a safety and feasibility study and with others with progressive M. S. That was successful.

Then we've done a number of other slowly larger and larger trials. Uh, and um, we're now on our eighth clinical trial. We are changing the world. It's lots of fun and I can't wait to tell you more about that. – [w] You know, I always loved the intersection of driven, wicked smart And and purpose living a life of purpose and, and contribution. I'm so psyched to dive in.

– [e] I mean, I think the most appropriate place to start is if you don't mind sharing, I mean, – My story, – [e] Your story because it's pretty profound.

– So for the listeners who aren't aware of this, I'm going to tell it in real time as it happened. So in 2000 I'm diagnosed, uh, well In 2000 I developed weakness of my left leg. I see a neurologist says Terry, this could be bad or really, really bad. And I know really, really bad could be really, really, really bad. And I think about the 20 years of worsening to a general neuralgia, these archaeological pains that come across my face and I don't want to be disabled. So actually I'm praying for a fatal diagnosis because I don't want to disabling 13 weeks later, I hear multiple sclerosis.

I do some research. I find the best M. S. Center in the country. I go see them, see the best person take the newest drugs.

Terry Wahls' MS Diagnosis and Decline

Three years later, I hear tilt recline wheelchair. I get my wheelchair my face pains are relentlessly worse. My 10 year old daughter hugs me as tears streamed down my face. But you know, I am a physician.

I And night after night I go to pub med and I start reading the basic science. I developed theories. I began experimenting on myself and decide mitochondria are the drivers of disability and I create a supplement cocktail that I take that does slow my decline and I'm very, very grateful, but I am still declining by 2007 I cannot sit up. Let me repeat that.

I cannot set up. I have a zero gravity chair that lets me recline with my knees higher than my nose. I have went to work one at home. My chief of staff tells me he's reassigned me to the traumatic ranger clinic.

Come January, he describes the job. It's clearly something I cannot do physically. Um I'm quite distressed. The

following week I discover a study. I'm assigned to review a study that uses electrical stimulation of muscles uh in people with traumatic spinal cord injury.

I read it. I think, well, that's really interesting. I do some uh searches. I read the 212 abstracts. I convinced my physical therapist, let me have a test session hurts like hell.

But when it's done, I feel great. He lets me add that to my physical therapy and then I discovered the institute for functional medicine. They have a course of neuro protection I take that I have a longer list of supplements.

And then I had this really big aha moment that actually quite embarrassed. That took me this long to have this aha moment. I had already been following the paleo diet for five years after having been a vegetarian for 20 years.

Um And I finally have like what if I redesigned my paleo diet based on uh the supplements I was taking from my review of the science from functional medicine.

Uh and that's several more months of investigations, forget where the that stuff is in the food supply. And I start that new way of eating and then January comes and I go off to the ranger clinic and you know the first two weeks, I'm just watching my partner, so I should be able to do that.

The third week I start seeing patients at the end of the first day, I'm like, well I could do that at the end of the week I realized this wasn't too bad.

And then at the end of the month I realized my fatigue is less, my energy is better. And I think I can sit up again and I sit, I sit at the table with my family to have supper in my in a regular chair, you know that that's a pretty big deal. And at the end of February I have, I have a letter to mail, I'm at the uh in my office and I decide to try with my walking sticks walking down the hall to mail my letter, and people are like, oh my God Dr. Wahls you're walking.

And then I began walking around the hospital and then around the block and then in on May Mother's Day. As a matter of fact, I tell my family, I want to try riding my bike, we have an emergency family meeting because my kids don't want me to ride my bike. I've made so much progress, I don't want to fall and lose ground. Jackie, my wife says to my big 16 year old, six ft five, you know, son, like, you're gonna jog alongside on the left side views 13, you jog alongside in the right, she'll follow and I push off the bike wobbles, but I catch my balance and I bike around the block, my big six year old boys, he's crying, my daughter's crying, Jackie's crying, I'm crying and I still cry talking about that moment, because that is when I understood that the current understanding of progressive, you know, secondary progressive M. S.

Is incomplete and who knew how much recovery might be possible. Four months later, we do the same thing this time, it's an 18.5 mile bike ride, part of the courage ride, and once again everybody is crying, my kids are crying, Jackie's crying, I'm crying as I cross that finish line and this fundamentally changes how I think about disease and health.

It changes the way I practice medicine and it changes um ultimately, the focus of the clinical research that I do, and of course, I can't tell that story without crying, you know, and and part of the reason it's so emotional is that when you have a progressive neurologic disorder, part of the the coping strategy that most people go through is that you let go of the future, you just take each day as it involves.

You know, things are gonna get worse over time. You take incredibly toxic drugs to try and slow down that decline. Uh and so I was remarkably better, but I had let go of the future.

It wasn't until I got on my bike that I was like, well, my future is pretty good. We just don't know how good it's gonna be, but my future is good again.

– [w] Did you create a new future from that point? – Yes, anew, absolutely. Because then it's like, well, who knows how much, how much better I might get, how close to uh normal health and vitality. How close could I could I get? Uh and that radically changed the kinds of interactions that I was having with my patients in my traumatic brain jerk

language, which of course, now Wendie, I see that as God was whispering in Dr.

Calgary's ear when he said send Dr. Wahls because that clinic, those folks, they didn't have any future. There was like, we don't have any treatment for you guys. All we've got for you is, well, we'll give you psych drugs to keep you from becoming a raging violent individuals.

So you can hopefully keep your family and your job and you'll recover maybe some function. But we don't know how much. – [e] One thing that you're pointing out that for me is just striking is, I think in this day and age, we really think we're living in the golden age of medicine, or a lot of us physicians think that, and I think we've lost our wonder and our inquisitiveness and there's so much more out there. Um, and most of the time it's poo pooed by the majority of physicians out there. Yeah, just what's available and what nature can heal, what your own body can heal is.

It's just remarkable to see. – Doctor, who teaches with me in the bio energetic course, has a really wonderful uh point of view when he's dealing with people with severe mental health issues that in um physics, you know, really basic science that was 90% of the matter is dark matter that we fundamentally do not understand at all. And that dark matter governs the reality of the universe, which means dark matter must also cover govern the reality of biologic matter as well. And he says to his people with severe mental health illness, there is an immense amount of stuff that we do not know.

And uh, the ability for the mind to heal and repair itself. There's far more about that, that we do not know than we know. So everybody needs to have hope and realize that's part of my mission is to remind people that there's a lot we don't know in functional medicine, ancestral medicine, conventional medicine. Um, and so my focus is teaching people how to create more health, more resilience, using the kinds of things that we know of course, that there's more to learn. And I let my partners in conventional world here at the university and elsewhere, they will treat disease.

That's fine. I'm not about treating disease, I'm about creating health. And I have a variety of tools that I work with my patients to help them create health. And that's a side effect.

I have to monitor the use of drugs that my convention colleagues are using so that people aren't overmedicated. – [w] Those are your, those are actually your confounding factors in your study. Now, instead of the primary agent, you're evaluating, what did they do to script the study?

– So in every study, what I've had to do, you know, we have data safety monitoring boards, uh, and the big side effect that every time is unintended weight loss and people are overweight or obese.

And so I'm always filling out the safety points, how many people are losing weight, how rapid the weight loss is and the more overweight you are, the more rapid the weight loss is, and so far no one has become underweight, you know, people lose weight rapidly very rapidly initially.

Then it slows down and they get back to the weight they were at in their early twenties and that's where they that's where they live because now they're at the appropriate weight for them. The body wants to be in balance, the body wants to be in balance. Uh And if we focus on health and what what do we know? Of course, we don't know everything, but we do know some things about what can um improve health and vitality. Uh and you know, those are the things that when in my own healing journey, when it's like, okay, that's what I'm going to be focusing on.

Rebuilding Health Through Diet and Supplements

That's when the magic began. – [w] I think it's really critical to just highlight, you know, you walked by us at a conference in Boston and it took me a moment because one of the last times I saw you was about a year prior to that and you weren't moving as fast and this time you went strolling by us lugging your bag and I said to Ed, that's Terry Wahls because it was such a huge transformation in just that period of time. You have had and I've seen you when you were using a cane to walk years ago and now you were pulling a bag at a rapid clip after speaking. – [e] speaking, but after a long plane ride with a stop. – [w] So the transformation is marking and it continues to improve.

– Yeah, it's been a very big year because you know, I was jogging for a while about six years ago, but that's going to be more trouble back pain had to deal with that. Uh So that's when I was back with, it came for a bit uh intense rehab, you know, once again intense rehab, intense exercise, uh back pain got resolved. Uh and I'm back to, you know, walking briskly and now jogging and I'm just so excited that I slowly mind you but jogging two miles, 2.3 miles, that was the longest I've gone.

And uh it gives me just immense joy. I used to run marathons, ski marathons by, you know long distance as well. Uh and um that kind of athletic activity gives, you know, gave me immense joy as a young young person and gives me immense joy now.

– [e] Yeah, and I want to pause again one more time because for our audience members, if you just pause and think about this is the person that was in the wheelchair, could not move out of four years, four years, four years, like how, – [w] you were wheelchair bound for four years, – Four years and I was so weak, I could not sit up in a regular chair if I sat in a regular desk chair, like I am now or you are for more than 10 minutes.

I was so exhausted to lay flat for the rest of the day and could not work. I could not go out to a movie. I could not go to a restaurant. Uh, if we drove to my family to Jackie's parents for Christmas, we had a van that uh in the front seat, I would like recline all the way back that strap me in with elastic straps and that's how I made the trip. – [w] When you decided to change your, the way you eat, what it sounded, what I got from this was that you were essentially trying to get from your food, what you were taking in pill form and see if that made a difference.

How did people react to you and what were the things that you added and or subtracted? – So I'm gonna go through the sequence. Um, I had been a low fat vegetarian.

So this would look like a tremendously healthy heart friendly diet and I've been doing that since a very healthy diet. – [w] Can we drill into that? Because like vegetarianism, you know, was it like, so, – so it was lagoons, uh, and a lot of rice, a lot of vegetables, whole wheat bread, I did have some eggs.

Uh, and so that would look a lot like a Mediterranean diet, which um, a lot of people say really, really healthy. Now we also now know that gluten, I have severe reaction to gluten that will turn on my trigeminal neuralgia incapacitated by pain within 6 to 24 hours. If I have even the tiniest amount of gluten or dairy. – [e] next time you're in Boston you should come to us because there's like no trace for the last 20 years, 10 years, 15 years. – [w] We got got diagnosed right after our second daughter was born. So you can track into her age, She's 16 right now.

– Yeah, okay. So yes, I would love to come to your house and try your food. – [w] that would be safe, – That would that would be marvelous. So um now, in retrospect, that was part of the problem.

Now, however, I went on my neurologist recommendation in 2002, I gave up being a vegetarian and went back to eating meat. My parents who were farmers, uh they unfortunately both died and become a vegetarian.

Uh as a teenager they said terry, you're gonna wreck your health, you need meat. And so I was like, okay. Uh so I became a vegetarian, no no gluten, no grains, no gluten. I was still having um dairy uh in cheese, I was still having eggs. Uh and was that part of the problem, I had uh My uh supplements targeting Mitochondria that I started in 2004 and I gradually added more and more and I took my new protection course, added more. I did a food sensitivity test, which uh and then I also took out dairy entirely.

Uh so I take out lagoons, dairy night shades uh and but I'm still eating eggs. And I did a food sensitivity test that summer's one, I took out eggs um at least him.

Um I'm still having my trigeminal neuralgia, although it's less. Uh then I get that like, okay, I should redesign my paleo diet because I thought the science made sense, and who knows how long it takes for my brain to repair itself, even when I get rid of the bad stuff, I'm eating the right stuff.

And then uh at the beginning of November, I'm like, you know, I got to figure out where this is in the food supply because then I probably get other things that are along for the ride with these nutrients.

Uh and that's why I have a long list of food stuffs that I should have, and this is November of what year? 2007. So I'm getting this list organized December 27, I start uh and uh so it's wild fish.

Um uh it is more um garlic, more onions, more mushrooms, and incredibly lots more greens. I mean incredibly a lot more greens. Did you did you did you steam it like uh I'd say about half, half of it's cooked in half of it is raw.

Now, I'm starting this in December. So there's it's mostly cooked because, you know, I'm starting in December. – [w] Were you able to feed yourself when you started this? – Yeah, correct, correct.

– [w] You were able to still work, – You know, I'm still working, although I'm beginning to have brain fog. So you know, john john was probably right to assign me to the traumatic brain injury clinic for a job that he knew I couldn't do. So. So then I would have to face, it's time to apply for medical retirement. That was probably kind of coming in saying terry like you can't do this, you're having brain fog.

So I mean, I don't criticize him for that. I think he was making a reasonable decision. – [w] So let's go back to the vegetables. Can you quantify that? I know right now you've quantified it to nine cups a day. – That's probably 12 to 15, 12.

– So were you eating all day? I mean, this is just a really large amount of bulk. – It's a huge amount of stuff. And so at that time I would have, so we would have a big meal at supper.

I would take leftovers of that meal for breakfast and lunch. So I would have a big smoothie in the morning. And uh whatever the protein was, Continue to take more of that smoothie for lunch and more of that protein in a thermos. – And the smoothie was blended vegetables so that you've got it in a way that was a little, that was easier, easier to eat.

– And keep in mind if you, if you are measuring 15 cups and cooking it, that's only down about eight cups. – [w] So you're talking 15 cups cooked or or okay. Can I ask a personal question? Well sure, okay, I'm a gynecologist.

All I love to talk about is gut function and sex, this isn't about sex, it's about your gut. So did you did you poop? – It was easy. Well, yeah, I don't recall, you know, most people with uh neurological issue, whether it is um neural immune, like M. S. Or your agenda, Like Parkinson's constipation becomes a big issue in constipation often precedes the neurologic diagnosis.

So I had I had developed constipation. Yes. And did that become less of an issue with this new way of eating? Yes. Uh I don't recall any bloating issues or or abdominal pain or discomfort? Uh That way I certainly recall uh that I needed to take less stuff to manage my bowels because usually I was taking stuff to manage my bowels. There's always a question of take enough to poop, but not so much to have incontinence or diarrhea.

And you know, that was sort of had been something I was balancing basically since probably diagnosis. – [w] I think it would be a good idea to just take a little detour into the importance of pooping because if you're not pooping regularly, fully generously, you're not getting rid of your toxins.

So it's just sitting and building up in you and then you start to recycle the toxins and hormones into your body as it sits in your gut. So that's my plug for pooping every day.

– Yeah. And let me put in my plug for rocks, logs, snake putting in t um for research, we like to do the bristol poop chart, you know, 1 to 7 great research tool, patients don't know what that means, but they do understand. Are you pooping rocks?

Are you pooping logs so dry and hard to get out? Or logs that are easy to manage or snakes that are easy to manage pudding or t and is the poop getting in your pants?

So everybody understands that question and it really comes down to I want them to poop comfortably easily and have it not get in their pants and if it's an easily passed log that's okay, it's uh easily controlled snake, that's ideal.

But if you have M. S. Or Parkinson's, well if you have M. S. Fecal incontinence becomes an issue. And for many of those folks are gonna prefer a tendency towards constipation as opposed towards the snakes. Even those snakes are ideal.

Those snakes have a tendency to get into your pants and that's the problem, – [w] I remember vividly. So our youngest came to work with me for about six months after she was born, I just had this flexible role and at the time.

Clinical Recovery and Returning to Work

And one day I said to Ed who's I think everyone knows by now we're married. So I said yeah we're married. So I was like honey, can you make my shake for me because I don't have time.

I'm rushing to get us out to the office. So he makes my shake. I'm not watching I drink my shake and I proceed to have diarrhea the entire day, the whole day. I'm like what's going on here?

And the reason it sticks out in my mind so much because I had a baby strapped to me and do you know how hard it is to go to the bathroom with a six month old in the carrier on you?

You know like you can't even bend over because she's there so and you can't see what you're doing because she's there. So I said to him, how much Mag did you put in my shake? Do you remember this?

I normally did like you know half a quarter of a teaspoon and he's like I did four. I was like oh no wonder I've been in the bathroom all day with the six month old on me.

And then and then I was nursing her since she got it too. That was fun. That was very memorable. So a good plug for like managing. – [e] I'm glad I made you a memorable moment.

– [w] You gave me a shareable moment with Dr. Wahls. – People learned through stories, we learn through stories and that's how we can categorize uh knowledge.

So people will remember that Magnesium has a variety of effects. – [w] Yes, we love Mag. So you started this new eating plan in in December 27th and then 20 starting december 26 in 2007 and you're starting the brain injury clinic a couple weeks later in January and how do people react when they see you consuming these?

And and how many people went crazy when you started to improve and crazy in a good way? Like, oh my God, what's happening? What'd you do? – So it's wild. So they're they're necessarily watching me because I'm in my office having my smoothie and my lunch.

But what they see is, you know, I'm walking for the first time that that's really quite remarkable and now I'm walking without my walking sticks. That's really quite remarkable. And then my my patients are getting remarkably improved. You can see who I saw the ranger clinic.

Uh and they're they're hearing about that. And the primary care clinic um you know, people are um impressed. My residents are impressed cause I'm teaching all this biochemistry. They think I'm talking about the latest newest drug. And what I'm talking about is broccoli and curcumin meditation. Uh and there's sort of puzzled and I go staff uh meet the veteran and I get the veteran fired up for eating vegetables. And so now the residents are getting sort of fired up for wanting me, They can't wait for me to meet cantankerous jane or john because they want to see how I can convince them to radically change their diet in a five minute conversation. – [w] So how do you do that?

Well what happens? What impressed on the residences? You tell a story and you tell your own story about the health transformation. And then you have a metaphor that matches that person's point of view.

So I had farming metaphors, I had mechanic metaphors. I had um uh factory metaphors, so I needed to know their occupation that would have a story of transformation.

Uh And they, you know, they understand that you can't put sugar in an engine and expect it to run. Well I'm like okay, you gotta you gotta provide yourself the proper fuel. And it doesn't take long, particularly if you're speaking from your own personal experience.

Uh And so I was remarkably successful in the track ranger clinic in primary care and not everyone, but getting 50% of your patients to radically change their diet and experience health is astounding. – [w] And sustain it, right? Is there some period of time that they it's not like you do this for three weeks and then you're good, you do this for three weeks and then you do it for three weeks more.

And then you do like you keep. – Well what what I would invite them to do is you pick a time to start. Uh And the first thing you want to do is add in the stuff that's good for you.

And then we can talk about what you wanna remove that is harmful to the first thing is to ramp up the vegetables. And we have a big laugh and I say okay the goals nine cups.

Uh and they're like, okay, is that for a month or week? I don't know that, that's per day like, oh my God, you gotta be kidding. – [w] You live in the midwest, right? I mean this, this conversation is not a normal normal conversation from the things that people who live in the midwest have told me about the food and the relationship people, – it was a very different conversation.

Um but I would also make the observation that okay, you've been doing what you've been doing for years and you're getting worse. How about you give this a try for two weeks.

Let's just pick the two weeks that you want to give it a try and see what happens. Uh We emphasize, you add food first, get the good stuff in and when you're ready, then you start working on taking the bad stuff out.

I warn people that sugar is addicting, uh gluten is addicting, dairy is addicting. And so if we're gonna go down that route, you want to get it out of sight. So you don't have to be watching this tempting food all the time because if you watch it, it will find its way into your mouth.

So you got to get it out of the line of sight, – [w] it's hand mouth disease. – Oh, that is true. – [w] I don't sit on my first floor after dinner. After dinner, I leave the first floor, where is where our kitchen is? And I'm either in the basement, in my sauna or I'm upstairs. I try not to stop in the kitchen because otherwise I developed hand mouth disease. – It that's right.

If it's in your line of sight, you'll eat to see you is to want you totally. Now the thing that's really interesting Wendy that is that So I'm having this remarkable clinical success.

You know, patients are, we're reversing diabetes, we're reversing our a anxieties, improving depressions, improving people are losing weight without being hungry.

– [w] They were too thin though. Be careful. Yeah. – Yeah. Thank you in the, you know, folks with severe, severe light sensitivity, that's less of a problem, severe headaches, that is less of a problem. People were still employed.

That was a big deal. The trade Granger click that you got, you got to hang on to your job. They were still living with the same, you know, romantic partner that was a big deal because you know, all the rage and anger. People were losing jobs and romantic relationships. So clinically people are like, wow, you know, so I'm having this great success.

Um and I have started doing some talks in the community at the local churches, temples, synagogues, mosques about my healing journey and um the M. S. Chapter society chapter wanted me to speak.

So. Yeah sure, sure. So then I get interviewed by the clinical advisory committee for the M. S. Society because they want to understand my message. So you want me to tell my story.

Uh And then I'll encourage people to work with their medical team to implement the parts of it. That makes sense to them. – [w] How'd that go over? – Well they they were like horrified said well how would you feel if a neurologist came to tell you what to do for rheumatoid arthritis? And I said well if you were convincing them to eat more vegetables, I would say hallelujah and they said no that they my message is way too dangerous. – [e] That's funny.

– And I said well uh and so I was banned as a speaker. They told me they were going to ban me and said well you need to do what you think is morally correct. I'm going to do what I think is morally correct.

I was in a wheelchair for four years. Uh and I think people should get to hear my story and have hope and then work with their personal physician to see if they want to implement eating more vegetables, learning how to meditate and asking for physical therapy referral. Uh And so over the next several years I would speak to a wide variety of organizations.

And I would progressively get interviewed by people who would have these amazingly hostile interviews and they would always know that was going to be a hostile interview.

That would it would be uh very upset that I had a dangerous message. They would tell me that that I was faking being disabled for four years. They would um ask intrusive questions about my personal life.

Uh very intrusive. They were horrified. I was depraved and depraved. Being a lesbian would somehow be the reason I went on this very depraved mission of being in a wheelchair.

So I could uh pretended to have M. S. And then have this wildly dangerous message to people with M. S. That they should stop drugs and start doing what I did.

Teaching Patients and Facing Skepticism

You know, I was on some pretty wild, awful interviews, but I was always kept my calm saying, well, you know, I think people should get to hear my story and decide if they want to eat vegetables and if they want to learn to meditate and if they would like to ask for physical therapy referral. I think that's an OK message and they can learn that I am doing clinical research and that I'll publish whatever I find in peer reviewed journals. And if you think that's a dangerous message that you don't want people to hear, you can do what what you what And I will do what I think is morally correct. – [w] Did you tell them that the Earth was round?

– Never, never, never got interviewed by the flat Earthers. – [w] Well, I mean, that was a dangerous message. Originally when he said the Earth was round, people were like, you're getting burned at the stake.

You know, you're done. – And what I tell my my um followers is that this is what happens to everyone who has a new idea is that You are condemned for a dangerous message in every scientist who has a new um way of approaching a disease state. You do your first experiments, you cannot get published because it's such a radically new idea.

So from our very first study, we finished it uh in 2012, we we had with our first set of date in – [w] because you said you published on yourself, right?

– We published so we did a case study on myself, but then we did a case series, uh and it took it took a while to get written up, uh and then trying to get it uh published that. That took a while of course, so about a year to get written up another year to find a journal to get it accepted.

And then we had a case series where the similar sort of process a year to get it written up another year to get that home for that. Uh And we had at that same time we'd finished our uh the 1st 10 people that had done the 1st 10 with secondary progressive M.

S. That had used my protocol. Uh and they had really great results. So now we have to try and find a journal to get it in Uh and that takes us about a year and a half. Um and that comes out in 2014.

We had presented it uh in a conference in 2011. We presented those findings in 2011. We presented again in 2012. Um We we have been presenting every year at the university of what we were doing. We had these amazing videos of the gate changes that people had uh that we're achieving. Um So we we published in a very very very low impact journal um but we got published and we paid the extra money so it could be open access. Uh And we get into uh the next journal uh slightly higher.

Um uh and we have several more papers that come out from that study. Um uh And then we have the study that was funded by the National M. S. Society, really much much larger study uh And that is now published in the Multiple sclerosis journal Experimental translational clinical M.

S. J. E. T. C. Uh That's a pretty high impact journal in the M. S. World. Uh And then I'm so excited about this. We have a paper uh that my postdoc. So he's a PhD student that we've had now for three years and he's um analyzed the dietary intervention studies that have happened uh Uh that had been controlled since 2014. And that was when we first started getting published data. Uh and he's analyzed all of those in that analysis is going to come out in neurology. So that is one of the highest impact journals.

So um it's immensely immensely gratifying that our work is being quoted by other scientists have gone from being gender dangerous to being considered. The grandmother who found the way of doing dietary intervention studies in the setting of M. S.

I. And you know the concept that what we talked about the paleo diet, the Mediterranean diet, the low fat diet, uh the fasting strategies, the ketogenic diet uh They're no longer being called dangerous.

They're being called like there's promising research to support their use to improve fatigue and quality of life and that someone needs to do a long study that includes M.

R. E. S. Which we are doing. – [w] That was actually my next question because one of the times I heard you speak a million years ago when you were still using a cane, you talked about that the the you still had the lesions in your brain.

What has there been change in that? – I still have delusions uh in You know when when I walked into my neurologist's office in 2008, you know and I was a oh this was probably a mischievous streak. I called my – [w] you're you're a radical vegetable eater by the way. – Yes. So so I called my neurology office and I said you know there's been a change I think I should be seen.

We'll see you today said, well Friday's more convenient. So I convinced him that it was I was fine to wait till Friday. So I'm in the waiting room. Cindy's staying there.

Looking around. I realized oh she doesn't recognize me because I'm not in my wheelchair. So I stand up and I go hey Cindy over here, this is Dr. Wahls and I get up and I and I walk over.

No no cane nothing. Uh And so I I see my doctor, Dr. Shivapoor, he's so thrilled. He's can't wait to get the M. R. I. And we go get the M. R. I. We go down to look at it together, goes everything's still there.

You know, of course there there you've had these lesions that they haven't really changed in seven years. Of course they're going to be still there. But clearly you have rewired around them. Uh And so I tell that to my patient that clinical function always trumps what you see in the M.

R. I. So if you have recent lesions you can probably turn those off. If you have new enhancing lesions, you can turn those off. I've not had enhancing lesions uh for very for Since 2003 actually 2002 I've not had any enhancing lesions.

And now, interestingly enough, my most recent M. R. I. My neurology just said, you know, you're healing the lesions in your spinal cord and those are the hardest place to heal because they're deep and yours are really really old.

So I just think it's interesting that um that that is beginning to occur as well. – [e] So what do you like you said you went to the best M. S. Centers in the world or in the US. – In the world.

– [e] What do they say? – Well you know when I got into the into my client wheelchair traveling in the air was so difficult, I quit going to them. So I just said you know I just stayed here uh and my neurologist said what you're doing is amazing. Uh He was part of my research team in my first for clinical trials. Then he retired.

So now we have other neurologists that are part of our research team. Uh and I uh write grants with the neurologist at the University of Iowa and we practically present to their neuro immune group.

Um My my colleagues here at the university uh in uh 2000 11 12 13 that I was still pretty controversial. Uh There were people who thought that what I was doing should be shut down that I shouldn't be doing that research fortunately the chair of medicine uh Paul Rothman who had watched me become disabled, get out of the wheelchair and become the dean of the College of Medicine.

He said no no I like what terry's doing. And I wanted to do this research so I didn't get shut down. Uh And then um we started getting our research published and then I started going around to various departments lecturing and including these these amazing videos that we have uh before and after where, you know people, I mean, just remarkable uh improvement in clinical function.

Research, Publications, and MRI Findings

So it's gone from eccentric oddity, maybe a little dangerous, certainly very eccentric, too brilliant, visionary that now the Department of Medicine is incredibly proud of and now the department of neurology is incredibly proud of my work and the university thinks, you know, I'm one of their shining stars for how they get money because the research I do so far, DNA still is like, they want to do single molecular pathway research study and you learn a lot of physiology that way you don't create health, but you learn a lot of physiology.

And the university continues to be amazed. Like the people who have funded my work for these last 15 years have been private individuals whose whose lives we have transformed, who then say, you know, I like what you're doing, I'd like to help fund the next study. Um and so we've been getting progressively larger gifts and they've had no one else. I think that's probably still true.

They have never had uh the university get a cold call from someone who wants to make a six figure gift uh to support a research project. Usually that is is a conversation that evolves over many months to many years to be on the size of the gift.

– [w] Can we give it a little bit because it's I think that you have, you know, you're very methodical. So is there a way that you could talk about, it's not only food or what kind of evaluation are you doing for people?

– Well this is sort of radical. – [w] Oh well the vegetable eating is radical. – So at the V. A. I mean the ranger clinic I get zero laps but I get 20 minutes Every six months with people. So those people got no evaluation and only had 20 minutes to chat with them. – [w] Do they already have a diagnosis?

– Well there there how you got into the ranger clinic was you had a blast exposure sometime either in the military or after being in the military and you have current neurologic or psychiatric symptoms that got you into the system and I come in and I'm like okay, so let me tell you talk to me about your environmental exposures and you're eating in your exercise and we're gonna do that in a five minute conversation and then I sort of reflect back like, okay, so if you want to be doing things that are under your control, we can either work on diet, we can work on stress management or we can work on exercise and if you're really energetic we can do all three at once. Um but given your story, I think most likely you've got an off and most often it was toxic exposures due to burn pits uh for the people I was seeing. So okay so you probably have a large burden of toxins that we should deal with.

And you may have unrecognized gluten and dairy sensitivity. So if you're open to it, let's do a paleo diet. If you're not open to that, we can talk about more vegetables or a gluten free more vegetables diet and see if you'll do that

for a couple of weeks and see what happens.

And because you've been suffering for a long time, Are you are you ready to do a two week experiment? And you know I was pretty good. I got half half of these ladies and gentlemen to do a two week experiment at the end of two weeks. It's like okay go back to what you were eating and if you feel worse then go back to the experimental diet.

And that would be the 20 minute conversation I'd have for them Then in primary care. The residents would do whatever they were doing for their primary care visit.

And I have now a five minute conversation. So I don't get 20 minutes now I have only five minutes. And now I'm going to try and convince them to eat more vegetables and clean up their diet.

And again I was still about 50% of those vets. I could get to do that. And I wasn't ordering any new labs than what the reservoir were already after several years of that.

It was probably about three. then maybe it was two years. The chief of medicine called me into his office at the V. A. Told me he was pulling me out of primary care.

And what he wanted me to do was to start my own clinic. And we and I said well we have to get the chief nurse the chief of the staff. So the chief of the medical uh of the physicians and the chief of the hospital to agree to this new clinic and I wanted to know that I have a dietician that could work with me.

I could design the clinic, they made clear I could not order any fancy labs, I could just order whatever was available to primary care and I could only order basic supplements that was available. So b complex um A cod liver oil, vitamin D. To 2000 multi byte and that so that was it.

But I could have more time so I could structure my my clinic around having more time. And I went to primary care. I went especially medicine, I went to pain clinic and said give me your most difficult people who have fatigue and pain that you aren't helping they need to know they're just getting diet and lifestyle and a few vitamins for me and that's it.

But I predict that I'll have a huge impact on their quality of life. So we got a handful of folks and we turned them around And then suddenly I got a whole lot more and then a whole lot more. So 2013.

And then I kept having to re imagine my my clinic as group visits, larger group visits and finally classes because I we want to let people in. And I had invited the staff, nursing staff and the medical staff to come observe what we're doing.

So they feel comfortable sending people to us. Then the next thing at home. So this is probably 2016 D. A. Central office calls up and says we're gonna come see waltzes clinic.

And I think oh boy am I gonna be in? Is am I gonna be in trouble now? Uh And what what happened then? Uh they were very impressed with our success, what we were doing.

They incorporated a lot of the concepts we were using in the whole health clinic. And that's been expanded to uh across much many more of the V. A. Clinics across the nation.

So the testing that I do vitamin D. Um B. 12 folate, homocysteine, lipids, insulin, C. B. C. A. S. T. Creating no A one C. O. A. One C. Yeah. And and that's it.

Yeah there's no uh toxin testing. Everyone's toxic. You've been through the V. A. You live in Iowa your live in rural Iowa you're probably toxic. – [e] That's what I actually want to ask.

Is is there any specific protocols used for toxicity or is it just vegetables? And just. – So if you read if you read my book the Wahls protocol uh this is really a great detox protocol. Um I assumed that toxins were a big part of my uh

journey. Uh and I talked about this in my book.

So I'm two years into my recovery. I've been walking biking. I feel great. I'm two years into my recovery and I think you know, I wonder how toxic I am.

So or how toxic I was. So I do a doctor's data challenge uh urine test 24 hour urine collection. And I'm very toxic. I am profusely toxic across everything. Everything.

I think there's only one thing that I was not um wildly toxic and I can't remember what that was. And I had like 100 times the upper limit for gadolinium. Of course.

That's not surprising all of those M. R. I. S. You're kind of right like I'm pretty intense. So so I continued my detox process and keep in mind I designed the Walls protocol as a detox process.

I continue that.

VA Clinic Model and Detox Approach

And so two years later now four years into my recovery and I repeat a challenge test using doctors data and I'm completely clear and there was no ivy calculation um I I still use the target supplements that I that I talked about.

It's probably the same uh similar protocol that you guys use? Um and I think we can presume our our patients consuming conventional food living uh in rural Iowa or rural America. – [W] Living on the urban America living on the earth.

Let's start there. If you're alive, you're human and you live on the earth, you've got toxins. – You have a considerable toxic load. You have to really work at avoidance and you can work at detox.

I don't think people need regulation. I think relation is indicated for acute toxic exposure. Um It may be beneficial for chronic exposure but it's a high risk proposition because you can inadvertently shift those toxins from your fat to your brain if it's not done correctly.

So my advice to my patients is take your time do it orally. And use the protocols that we describe. – [w] You have a new study right? We only have a few minutes left. But we wanted to maybe if you could give us a minute or two because you are you recruiting patients for your next study?

– We are still recruiting will be recruiting for another 18 months. Its efficacy of diet on quality of life. It is two years and we want people with relapsing reading M. S. You'll have to come to Iowa for months zero month three months 24 will get MRI's without Gadolinium.

Um At baseline. And at month 24 will have walking hand function. Working memory vision function test will have quality of life tests will save some saliva and some blood for future analysis. We have three arms a ketogenic arm, a paleolithic arm, and a usual diet arm.

The usual diet arm will get monthly tips from us on things they can do to eat more vegetables and reduce the sugar and processed added foods. If the people in the usual dad arm actually follow the suggestions we give them, they'll do probably just as well as my two intervention arms, it is critical that you have a control arm for all randomized controlled trials.

If we're going to change the standard care, we must have a control arm. The control arm is vital and we're giving them the tools to just as well. So we don't want people to feel disappointed, like, oh my God, I didn't get the intervention arm, that's going to be a failure.

I won't improve. I think in fact all three arms will improve because most people who are in dietary intervention studies really want to improve their diet. So in fact, I'm predicting that even the control arm will improve their diet

and we have some dietary measures to know do people improve their diet? And what kind of diet All three arms are following? We will be measuring brain volume.

And one of the hypotheses I have is that the diet will let people because when you have M s. The brain volume loss is three times as as fast as a healthy aging. Uh And one of the things that I'm hoping we can show is the intervention arms will get people back to the rate of brain volume loss that matches healthy aging. And I'm hopeful that my control arm will also improve their diet uh following the tips that we're gonna give them.

And so that they too can get back to healthy aging.

Current Trial and Closing Reflections

Uh And though our primary outcome is about quality of life that secondary measures related to brain volume are in the end I think will be incredibly important and exciting as well. – [w] I think it'll be amazing.

– [e] So I want to really acknowledge you first of all, because this is like I want to acknowledge you for your generosity of spirit um that you had a transformation on your for yourself is amazing. It's a miracle a miracle like unheard of and what you've done with that, it's just it's out of this world and really want to truly acknowledge you for giving back to the world.

So thank you. Like truly bottom from my heart. Like it's profound what you've done and what you're doing and what you continue to do and what your story gives to the world.

– You know, in in 2007, I was coming to terms with that. It's going to be Bedouin probably demented. It's probably going to have my trigeminal neuralgia turn on so that um a breeze light sound talking swallowing would trigger this horrific electoral face pain. And I changed my um durable power of attorney.

My medical power of attorney in my living will such that if I stopped swallowing and stopped speaking there would be no I. V fluids and no team food. and I figured that I would die secondary to intractable pain and as you know, fortunately that is not what happened.

But I need to have everyone else understand that they can have hope that they too could recover. – [e] Unfortunately, I think it's that time. – [w] It is. So Ed said it better than I could.

So I won't repeat myself except to say to you Dr. Wahls. Thanks for coming on this episode of the environmental toxicants, auto immunity and chronic diseases summit because our I think we share all share the goal that we not only prevent but reverse existing disease so that people can live long live well be vital, vibrant, healthy, able to be an interested in intimacy until at least 100 or more depending on how we do with that. And so really thanks for joining us for this episode. And I'm assuming if people have listened this long, it's because it made a profound difference.

You know, especially how hard you know how quick things move. This has been over an hour and and it's been riveting for us. – [e] So thank you, thank you.