Dietary Lifestyle Approaches to Treating Autoimmune Dysfunction and Disease Transcript

(Transcripts are generated by AI and may contain errors)

Introduction and Guest Background

Hi everyone. I'm doctor Sanjeev Goyal, and today we have Doctor Terry Walls, and you're listening to the advanced anti-aging and Technology Summit. Welcome.

Doctor Wells, how are you? Excellent. Glad to be here. Thank you. Thank you so much for your time today. I'm just going to take our, listeners on a little bit of, learn a little bit about your background, with your bio.

So if you can just, bear with me as I just, I just, read it. Doctor walls is an Institute of Functional Medicine certified practitioner and clinical professor of medicine at the University of Iowa, where she conducts clinical trials.

In 2018, she was awarded the Institute of Functional Medicine's Linus Linus Pauling Award for contributions in research, clinical care, and patient advocacy.

She is also a patient with secondary progressive Ms., which confined her to a tilt recline wheelchair for four years. Doctor was restored to our health using a diet and lifestyle program she designed specifically for her brain, and now peddles her bike to work each day.

She's also the author of The Walls Protocol, a radical new way to treat all chronic autoimmune conditions using a pen using paleo principles. Learn more about her Ms.

clinical trials by reaching out to her team. Maybe we'll put that in the in the notes, but, for the viewers. Pick up copies of her research papers at, Terry walls.com/research papers, slash and a one page handout for the walls diet at Terry Wahls slash.

Terry welcomes diet. So yeah. Thank you. So again, so much for, for taking the time today. So maybe just take take me a little bit of a journey to understand, your, your Ms.

journey and and and, and your pain due to trigeminal neuralgia. Tell me the story about that so our viewers can understand. Yeah, sure. So 40 years ago, during medical school, I started having the episodes of pain at my temple.

They had become, gradually more troublesome. More severe. 20 years ago, I developed weakness of my left leg and was evaluated. And, so a neurologist and he said to me, this could be bad, really, really bad.

I went, through a big workup. And he diagnosed me, did MRI, spinal tap and is diagnosed with relapsing remitting, M. S.. Now, I saw the best people, took the newest drugs, and within three years, my disease had converted to secondary progressive multiple sclerosis.

At that point, there's no more. So my case improvements, you anticipate the gradual, relentless decline. I, took, my own infusions. I took tysabri infusions.

I took, up. None of that helped. I continued, my relentless decline. I was too weak to sit up.

MS Diagnosis and Personal Recovery Story

Even in a regular chair. I could walk very short distances. Using canes. I had, severe general neuralgia. Has been to have great fun and, but I've been reading the basic science and industry health functional medicine.

I designed a diet and lifestyle program specifically for my brain and my mitochondria to slow my decline, because I knew recovery was not possible. Right.

To my amazement, my pain stopped, my brain fog resolved, my fatigue resolved, and I was getting stronger. I was able to sit up. I was able to walk again.

And one year later, I am biking my bike. In fact, I will do an 18.5 mile bike ride. This ride, which changes how I think about disease and health. It changes the way I practice medicine, and it radically changes, the type of research that I do.

Wow. So I, yeah, I'm pretty excited, very excited and definitely and interested to understand how could you do this thing. Because for medical school for my when I remember that we used to think that these things were permanent, like these were permanent lesions and, and the brain that caused em, you know, it and every neurologist that I saw, I saw quite a few in my journey.

They always told me it functions once was once you have secondary progressive, almost never come back. And so, my recovery was, quite stunning. Yes. It is.

Just hearing. That's very stunning. And I, I need to ask more questions to understand what. Okay, so what is it about the diet and lifestyle part that you, you, you designed for yourself that that caused your recovery?

I, you know, I focused on the micro environment for the cells, in the treatment for autoimmune conditions, including multiple sclerosis. They focus on the inflammation.

And so there are now very good drugs at turning off inflammation, and reducing the number of enhancing regions. But they're not very good at repairing the brain.

They're not very good at repairing myelin. They're not very good at stopping the rapid atrophy of the brain. My brain into how was I needed to focus on soil or nutrition, on the micro environment of the cells of correctly as many, the, pathways that I could and that was going to be and, you know, at first I focused on supplements and supplements to didn't really do much for me.

They they slowed my, my decline, but they lead to recovery. It was what I focused on. Food, on diet, on lifestyle. And I did all of that not to recover because I knew recovery wasn't possible.

As progressive. And as I did all of that to slow my decline. But, you know, to my amazement, not only did I slow my decline. We, you know, I still are getting stronger and stronger, in recovery.

And now we understand that, I was changing gene expression. I was changing the microbiome. I was restoring hormonal balance. I was changing the cytokines profile through this comprehensive diet and lifestyle program.

So. Yeah. So I just from your bio, is it can you tell me a little bit about the diet? I'm because it's the paleo diet or what is that. Well you know, interestingly enough, in my journey, I was two years into my diagnosis.

I adopted the paleo diet after, having been libertarian, a low fat vegetarian, for the previous 15 years. And the paleo diet, I read more ingredients work.

I, I made a good scientific case for it, so I, I made the change, but I still the. Next year I needed the wheelchair. And then I'm taking, you know, my research on tysabri.

I'm still declining every year. So the paleo diet was not enough. I was reading the basic science ad supplements, trolling my mitochondria because I decide mitochondria are the big drivers of neurodegeneration.

And that that slowed my decline. It reduced my fatigue, but didn't lead to recovery.

Diet, Mitochondria, and the Wahls Protocol

When I went back and looked at my long list of nutrients that identified as important for the mitochondria and asked a very important question where are those nutrients in the food supply?

And I went back to my paleo diet to okay I'm going to stress these food groups and redesigned my diet based on creating the most maximally nutrient dense diet.

And then when I changed my clinical practice, I realized I needed to come up with, simple, food rules to help my patients copy the way I was, the way.

And that was how I ended up creating the, food rules that I teach in the last protocol. Right. And it was protocol, right? Okay, so this is very customized.

It sounds like it's it's customized, but could be then you can these can be general generalized to another paper. So so I teach this in my clinic. And what I have a stepwise process in at the first the most basic level, I ask people to eliminate added sugars, greatly reduce them, you know, recommend they, eliminate gluten containing grains.

So as we primarily, and also ask them to eliminate dairy, because the dairy proteins or the gluten proteins cross react. And for, many people with a autoimmune condition.

There is unrecognized gluten sensitivity. And then a third food item that that can be problematic for many, are egg protein. So I have to take those three food groups out, and we add many more vegetables in the, green leafy vegetables.

So, lettuces, spinach. Kale, parsley, cilantro. And then, in the cabbage, onion, mushroom family, families. And then deeply pigmented things like beets, carrots, berries, peppers.

And then I ask about, what are your sources of protein? And, we discern, or clarify, is someone a vegetarian for their spiritual beliefs or are they open to eating meat?

And I have, a separate plan for the vegetarian. You know, a separate plan for the meat eaters. And so that's a level one. And my first level that people can do as the libertarian or as a meat according to their, preferences.

I'm just curious, because I'm a vegan myself, so I just just can't tell me what. What is it that that, the protein source looks like in a in a vegan? That would be anti lamotrigine or, so for those individuals, some people implement the vegan and vegetarian diet and don't bother to educate themselves about how to make sure they're getting sufficient protein.

So we make sure they know how to combine legumes and a gluten free, grain. I also, in, in because in the day I would take care of many folks who are vegetarian, probably many folks who are disabled living on food stamps.

We would also teach, legumes, in gluten free grains as a way to make all of this more affordable. Right. Yeah. And so, so it is shocking how many folks have chosen to be vegetarian or vegan, for their spiritual beliefs, but never learned, how to design a diet, based on vegetables or it make sure that having a sufficient protein that so you eat a lot of junk food.

But, not eating any major animal products. But this going only be diet that's very unhealthy for them, right? And we have many folks who are meat eaters who are eating a diet that's still very, very, very unhealthy for them for eating meat and a lot of processed truths.

Pastas. White breads, white potatoes, and no vegetables. So there's still this opportunity for a lot of diet education that needs to happen, in my clinics.

It sounds like that, like the type of diets recommending is one that, you know, most people are coming around that

this is, this is exactly what people should be doing in general. Right.

Like whether or not, yeah, there's any type of illness or not. So if you want to have a, healthy aging, you, you really want to have a nutrient dense diet.

You want to know how to maximize your vitamins, your minerals, your antioxidants, your essential fats. And unfortunately, unfortunately, many, no longer know how to cook.

They don't know how to meal plan. They don't know how to make a shopping list. They know how to design a diet. That gives their cells the best microenvironment.

And the result is that, you know, if we're deficient in nutrients, we're going to enter a disease free. Likewise, if we're zealous in some nutrients, that can also lead us to a disease state as well.

And so having a diet that is, provides all of those necessary components is really foundational to healthy aging. Yeah. You were mentioning about the mitochondria.

So is there a some specific nutrients that the mitochondria need. Like can you give me some. Yeah. So you have to think back to biology, which you probably took in ninth grade.

And you can sort of look back in your mind, there are these little popular, organelles with a lot of squiggles in the middle. And all of those squiggles are the cell membranes.

And so the mitochondria generate our energy, and the adenosine triphosphate, ATP. And all of those reactions take place in the membranes. So mitochondria need a lot of essential fats to have healthy membranes.

They also need, the violence they're going to need, minerals, zinc, magnesium in particular, a slim, as well. And, they'll need, some antioxidants. And our mitochondria are poisoned by heavy metals like, mercury, cadmium, pesticides.

And furthermore, our mitochondria are really ancient, bacteria that were engulfed by bigger bacteria several billion years ago that then, you know, would eventually become the, power plants of all of our cells.

And so when we take antibiotics, to fight off those infections, if we're taking those antibiotics for a long time, that can lead to some strain for our mitochondria.

So interesting. You mentioned about the cell membrane. And so I've seen, you know, some supplements like phosphate, alkaline phosphatase theory and all these, do you think these are that these are value transferred to ethanol?

I mean, they can be really very helpful. And so, in likewise, you and I, we cannot make, omega three fatty acids. We cannot make a mega six fatty acids.

We must consume them in our food. And so it's just critical that we have at least 3 to 6 fatty acids we could make, other phospholipids as long as we have those two, compounds.

But if the person's diet is low and these essential fatty acids, that's going to create problems with your cell membranes. It'll make problems for your brain.

Vegan Protein, Nutrient Density, and Healthy Aging

It'll make problems for your mitochondria. What do you think about, I mean, efficient take and concerned about heavy metals. You know, obviously there's an important an EPA and, well, fish, you know, I think we have to be concerned about the quality of our foods.

Certainly, all of our foods. And so, if we're having fish. Yeah. You want to have fish that's lower down on the chain. Fish that is higher on the food chain.

It's going to have more concentration of whatever, whatever has polluted the fisheries. So, shark, very contaminated tuna. Also contaminated swordfish, may be contaminated.

Herring, salmon, are lower down the food chain, much less contamination. Sardines lower down the food chain, less contamination. Okay. Makes sense. I guess we can't get away from complete.

We can't have anything completely safe in this world. So it's because, it's difficult to have anything that's completely safe. You know, it, I want people to have the highest quality food that they can realistically afford within their, family's financial means.

And so if you can afford organic, wild, con, grass fed, grass, finished meats, that that is ideal. However, I do want to acknowledge that, you know, in my clinics up to the, I took care of people, you know, living on disability, on food stamps.

And we taught them the principles, you know, the diet that we used, and they were getting their food, conventional food and small grocery towns, grocery stores in rural Iowa, rural, Missouri, Illinois.

And they still experienced remarkable health transformations. Could they have gotten those transformations sooner if they'd been able to have only organic food?

Yeah, probably. But I want your listeners to know that, yes, it's ideal to buy organic, but if that's not what your family can afford, just do the best that you can.

We would have them go to the environmental working group, and download the clean 15 of the Dirty Dozen to prioritize. We would teach them how to, grow their own food.

And, people know would do what they could and consistently, as they take more vegetables, less junk food, their health still improved and they look younger and younger and younger.

Typically, you know, by the time you're within six months, the is over five years younger, some sometimes ten years younger than one they had when we first met them.

So we started asking people to take photos of themselves at their first clinic. So, they could document that because they would they, couldn't anticipate how much younger they were going to look.

Well, that's so what about, the, something like fasting, as have you seen any impact? What do you think? Fasting. Fasting? So, if you think about our evolutionary history, ancient, mothers and fathers were routinely fasting.

They would have, a lot of, physical activity to go gather for food, whether it was for the long hunt or for long. Gathering, process. Bring it back and prepare the food to have a refill.

They would last a couple of days. The food supply, is depleted, and the cycle, repeats itself. And then when we left Africa and were now in the zones where you have winter, we again, or a drought or famine, we get through periods where we don't have food or the food supply is restricted, and we we're going through, natural, absence of calories.

This is physiologic. This is normal. This is how our DNA ball, and it makes us more robust, more resilient when we have this period of restricted calories followed by we feed it shifts a lot of our physiology, into a period of days.

It, releases more stem cells. And so I reassure people this is health promoting. It's anti-aging. And so we talked about this in terms of timely feeding.

Mitochondria, Fats, and Food Quality

We talked about it in terms of intermittent fasting, and we talked about it in terms of a periodic fast, and we let people transition into this at the pace they are comfortable.

Right. I heard that it's something like you need about two and a half days of fasting to get the rejuvenation or the topical use that. So if you if for autophagy, if you have at least, 14 hours of not eating, you'll get the beginning, get some recycling of the proteins in the cell.

Autophagy. Great stuff for us. If you go without eating for three days, you will also begin to release more stem cells from your bone marrow into your bloodstream.

And so you have more of these stem cells in circulation. And as we age, the the number of stem cells in circulation declines. So, periodically having this fancy will bump up the number of stem cells in circulation.

Great. For us, you want to be sure when you've had that, periodic fast? We have a refit, stage where I'm eating more calories. I'm into higher protein diet to boost the the production of those stem cells.

Okay. What about, sleep? Like, I know that a deep sleep I think is useful for helping lymphatic system to get, you know, and is there something does it have some impact I guess on an autoimmune illness like, like mass in the brain.

So, sleep is so restorative. And deep sleep is one our brain is most affected, clearing out those toxins. And as we age, you know, there's more accumulation of, toxins, in amyloid in the brain, which, ideally, you want to clear out.

And so you want to do that deep sleep in conjunction, you want to have, relatively low insulin levels and low blood sugars that will also help that clearance.

As well. Yeah. That's okay. I've had people tell me that, they had bread from like another like Europe or something and they didn't have the reaction that they have if they had like bread.

That's in America. Canada has their differences. Well there are a couple of, potential factors for, here in the United States when we grow, many of our crops are farmers.

So I identified that if I treat the crop with glyphosate, that is roundup. It kills the crop, and then I harvest it. And I get 10% more, grain or legume, out of that.

And so there a higher level of ground up in the wheat or in the corn grain or legume products. That higher level of roundup in those products made with those foods means that I'll have some of that roundup in my gut, which increases my mucus.

Of the gut, which makes it more likely I will develop, gluten sensitivity or food sensitivity for in Europe. Traditionally this this process of using roundup to kill all of the crop just before harvest is not an established, practice.

So we don't have that whole. In addition, there are different strains of wheat that are used in Europe and here in the US. Different strains. Yeah. Which may not be as allergenic or may not be as allergenic.

Plus you have less, of the roundup. Okay. Although, you know, that may be changing. I know, more of the I believe in Italy. They are now screening kids for, celiac sensitivity, because, the rate of sensitivity is increasing.

In Italy. So, this this may be changing.

Fasting, Sleep, and Vitamin D

Just be changing. Yeah. And, we always hear about vitamin D and the connection with Ms.. What are your thoughts of how important a factor is it, and is it part of your protocol as well?

Yeah. The evidence continues to build that vitamin D level. Appears to be very important, for increasing the risk for our immunity, including, yeah, if your level is quite low, less than 20mg per mil.

Then you have a much higher rate. Relapse, higher rate, of, more rapid decline, higher rate of cognitive decline. If your vitamin D levels are over 40mg per month.

So in the top quartile of the reference range, you have a markedly lower, probability of relapse and a lower probability of cognitive decline. So I think many more neurologists are, screening people for their vitamin D and giving at least 2000 units of vitamin D, more, moving up towards the 5000 units of vitamin D, and following the vitamin D levels.

You know, and my preference is to see a level in the top half of the reference range, right. When, when when people have a recovery such as yourself. Is there actual changes that happen on on when people do imaging?

Yeah. So if and I again, I caution people that, we have seen this, in people with systemic autoimmune conditions that they'll have enhancing lesions, on their MRI.

And often if it's a new lesion that is less than two years old and we put them on, the protocol, we can be very optimistic that those enhancing lesions will resolve if they have all the lesions.

And, the old lesions will likely that are older or older than two years old. Those lesions are probably going to stay. However, the brain is very plastic.

And so I'm much more concerned at that point. What is their functional stance? Are we able to, restore function, improve function, improve motor function, sensory function, cognitive function.

Right. Yeah. Go ahead. Sorry. Go ahead. Yeah, we certainly have, many folks in our tribe that have reported implementing the loss protocol. Their lesions have all, but, you know, nearly always these are, young lesions that are less than two years old.

What about, exosomes or stem cell infusions, I see, you know, people are asking about these types of treatments of taking, you know, umbilical cord blood stem cells or know, you know, there's a we so want to have a magic pill, a magic procedure that I could do, my magic pill, my magic procedure, and not have to give up my favorite foods to which I may be addicted.

My favorite behaviors, which I may be addicted. I don't want to be inconvenienced. And that's going to be very disappointing. We may find that you can do a stem cell, you know, for stem cells, for Parkinson's.

Looks like the mechanisms there is that we are, repairing brain structures, stem cells for autoimmune diseases. We're not repairing structures, but we do appear to be resetting the immune system.

If you don't get to the root cause of why that immune system became hyperactive, that reset will be temporary. Kind of. Got it. Yeah, that makes complete sense to me.

I interviewed, another doctor for the summit, and he's, an expert in a for resistant plasma exchange, which I think is being used for a number of autoimmune illnesses.

Have you heard about this from. Yeah. You know, again, that can be very helpful. But if you don't get to the root cause it's still a temporary problem.

It's still part of the magic, procedure or magic pill that. I could do that. I'll be fixed. I'll be cured, and I can continue my destructive habits, my destructive compounds, and then will be very disappointed that their magic procedure did not have sustained results.

Yes, exactly. And it's human nature. We're all like that, you and me. I assure you, we don't want to give up those

things that gave us immense pleasure.

Our brains are wired to seek pleasure and to continue those activities. So I don't want people to feel bad that, of course, you want to keep doing the stuff that feels good biologically.

That's we're all built that way. And so I don't want them to feel bad, but I want to acknowledge that if we if we think that we can find a magical or magic procedure that will cure us, you're going to be very disappointed.

This is a you have a genetic predisposition. You had an infection that that was another trigger. That plus all of your life events, all of your environmental exposures led to the automated process.

You got that? Yeah. And now it's we can manage it, with that lifestyle addressed in your microenvironment. And yes, you may get a benefit from a stem cell, but if we don't fix the root causes, that's going to be a very temporary benefit.

You may get a benefit from, a disease modifying therapy for a while, but we don't fix the root causes. You will develop another autoimmune disease in 5 to 10 years. Wow.

Imaging, Stem Cells, and Root Causes of Autoimmunity

So we want to help people address all of their root causes so they can have the best microenvironment, so they can begin to repair, and restore, a much healthier function for something like hypothyroidism, which is, I guess, the type of, I guess, autoimmune in this problem. Oh, yeah.

So, Hashimoto's, that's a common incredibly come I think it's one of the most common autoimmune problems. We have again, thousands of folks with Hashimoto's who we help with this protocol.

And have, greatly addressed. You made those co-morbid problems that synthroid that do not it does not address the brain fog, the depression, the anxiety, fatigue, the cognitive decline.

And so we're able to, resolve that because if you have the Hashimoto's and you take the synthroid so we, we can correct your thyroid hormone levels, but we don't get to the root causes.

They're likely to develop another autoimmune disease. Or a or inflammatory bowel disease and 5 to 10 years. It's why we have we see in the conventional world so many folks with multiple autoimmune conditions and multiple disease modifying therapies, which lead them to, you know, we're seeing symptoms that are poorly controlled.

We're seeing disability and ultimately inability to continue work. It sounds like a it's a must be quite, a challenge communicating this to patients and then to other colleagues as well.

Then your thoughts of how how does this, well, what type of patient is, you know, how successful is this with patients? What should we do very well with their patients?

We talk about my story, some example, cases for them, in and explain the role of the diet microbiome, toxins, hormone balancing, in line and bite them if they want to learn more and more with.

Because we're glad to have them. If this sounds too challenging, come back when they are ready. And then for my colleagues, I'll tell you, when I first started, when I changed my practice, the way I practiced medicine back in 2008 and 2009, you know, people didn't know what to think.

They were very, you know, I was getting sort of, the eccentric, I was, criticized, but I kept having remarkable success with my patients. And then the day by day to create the through lifestyle clinic, where.

And when I did that, I went to specialty medicine, primary care. And I said, get me the most difficult cases. Get the ones, you know, the, you know, people with with pain.

You can help. Let them know, I'm just going to use that lifestyle. And I had remarkable success. So then I went from having just a few patient referrals to having a deluge of patient referrals, again with remarkable success.

So now, 11 years later and I'm still doing the same stuff, where I used to be. So criticize like it. You can't use the same program for everyone. And I feel like, well, we all have cell membranes, we all have mitochondria.

I'm just working on the cellular nutrition. Now my partners I go around, I speak to departments across the health campus and my colleagues are saying, you know Terry you are a brilliant visionary.

I thought you were sort of the eccentric, years ago. But you are a visionary. It because it comes from results. It comes from the fact that I do clinical trials, but publisher trials?

I do grand rounds at, present our research. The results speak for themselves. Exactly. There's nothing no better way than the results to show, efficacy of what you're doing.

I've lost you sound. Yeah, yeah. Oh, you lost my sound. Okay. You better there, there. Okay. I'm not sure what happens is no better way. I'll just tell the listeners.

Patient Success, Clinical Practice, and Closing Advice

No better way for for, people to know the effect of what you're doing rather than the results. I mean, that's ultimately people can say what they want, but if you can't see the results, there's no point.

Yes. Exactly. So I think, yeah, maybe just an ending off. I'd love if you could just just tell me, viewers, what is the main thing they want? They should take from from today's talk.

What should they take? With them? There is so much that is under your control that can improve the macro environment of yourself. Some simple things that you can do.

Cut out the sugar, the added sugar, the processed foods. Eat more vegetables, have Ensure you have enough omega three omega six fatty acids. Come visit me on my website.

Learn more at her walls.com. But I want you to know that there is so much that is under your control. And begin by eliminating the processed foods and learn a few fun things that you can cook at home that stress vegetables.

That's perfect. So, I'm just going to tell viewers I'm going to be coming to this site because I want to learn more. Terri walls.com, walls spelled w h l s.

So, Terri, welcome. Please go there. And I think you'll learn more about, I think what we should all be doing, with diet and lifestyle. Thank you so much.

Thank you. Doctor. Well, thank you.