Dr. Jennu2019s Personal Introduction

Welcome back. It's Dr. Jenn. I have someone really, really special to me with me today, and she doesn't know why. So this is going to be the first time that she is hearing this story.

In my eyes, she needs no introduction at all. But I'm going to tell you what my exposure to her was. So as I was going through my functional medicine training after getting diagnosed with Grave's Disease and really at a time really too sick to be operating as a surgeon as I was.

And so I'm about 15 years into my surgical career. I get diagnosed with Graves Disease. I'm very, very ill. I learn about functional medicine, and I start to attend the Institute for Functional Medicine.

And this woman comes on the stage and starts to tell her story about her battle with MS. And I'm not going to tell you the highlights of the story, because I really want that story to come from her.

But that alter what had happened to her is that she's at the height and echelon of her career gets pregnant, us gets as sick as you can get, and then figures out how to restore herself to full health.

So she's telling the story and I'm so moved that even though I wasn't sure if MS was part of my picture at that time, I had some strange things happen to me.

I woke up with a numb phase. I had numbness in my right hand, which as a surgeon is not great. And I had been back and forth with the neurologist who said, like, we just need to wait and see.

So her story really resonated with me. And so I bought her book and learned all about her protocol. And so one day I'm in office hours and a 19 year old woman is coming to see me for a breast mass.

And she comes into my office. She's in a wheelchair pushed by her mother. My office was about 30 feet from the elevator, and this 19 year old young lady had such progressive arms that she couldn't walk the 30 feet from the elevator to my office, and she's coming to see me for a breast mask.

But of course, I just met this woman with this unbelievable story. And so I am bubbling with excitement. You can hardly contain me. I'm like a giddy child wanting to share this experience with this woman.

And I'm going on 4 minutes about how the disease can be reversed and you can change the trajectory of your life. And after a few minutes, she put her hand up to me and said, Are you going to do my biopsy or not?

And it's at this moment that I realized that I can no longer continue to operate, no pun intended, within the confines of traditional medicine. And I actually quit my surgery job that day and set out to start my own practice.

And Dr. Terry Wahls it's all because of you. Wow. That's a story. You know, it does happen when you've been transformed.

Terry Wahlsu2019 MS Diagnosis and Decline

You can't see the world the same way anymore. Now you can't. You can't. It is a bell that you can't unring, but you also can't ring it for anyone else.

And I. I have learned that that that was the main thing that I learned that day, was that I get it that not everyone wants to do the work right, that there are plenty of people that just want the pill but just want the night, just want the drug.

And you know, it's not one or the other. For the vast majority of the time. It's both. The vast majority. Yeah. But that you have to be willing to do your side of it and I decided that day that I didn't want to work with the people that didn't want to do their side of it.

Right? Like I didn't want it to be all on me. So I did not do your story justice. I was just kind of I wanted to give you a background as to who and what you are to me, because as far as I'm concerned, you inspired me to completely change my life and as a result, change the lives of millions of women with breast cancer.

Now, you know, I've ruined a lot of doctors lives wait, you didn't ruined mine who are conventional docs in their conventional systems, universities, and they can't do it.

That way anymore. And then they have to find their new way. And for some, they're able to do both. And so for years I was able to do both conventional medicine at our City VA Hospital and at the University of Iowa Hospitals.

And then eventually I had to quit my clinical practices in both those institutions because I couldn't do that anymore. And I just did do research and do my own private practice because I just could no longer operate in those systems.

Well, I, I totally get it, as you well know, but I would love for the people that because people are primarily here to learn about breast cancer and what their options are to improve their lives.

But I want I want to take them back so that they understand your journey, because ultimately, we are we are talking about things that people think are irreversible.

Right. I mean. And I believe that the. World was concerned your MS. was irreversible. You know, my all of my neurology physicians taught me, and my teaching was once you converted to secondary progressive illness, my disability as it accrued would never reverse.

And so at at my worst and I'm going to tell you a tell a story in real time. Does it take that long? So in 2000? No, I would love it. I develop weakness in my left leg.

I go see my neurologist who says, Terry, this could be bad or really, really bad. It goes through the work up the next couple of weeks and I'm thinking about the fact I've already had 20 years of worsening electrical face pain, my dad's third year history of his terrible neurologic problems.

And I know I have a progressive disease and I would rather die than become disabled. So I am praying secretly, secretly for a fatal diagnosis. I hear multiple sclerosis.

I do my research. I find the best MS. center in the United States, see them, see their best physician, take the newest drugs. Three years later, I hear totally recline, wheelchair, because I've relentlessly been getting worse.

My general neuralgia is relentlessly worse. My ten year old daughter hugs me. It's just tears stream down my face. I take my disastrous and then Tysabri nothing helps.

I'm relentlessly worse. I go to PubMed and I begin reading the basic science and I started experimenting on myself. And I decide mitochondria are the driver of disability and I create a supplement cocktail for my mitochondria.

My disability slows. I'm very grateful I discover a study using electrical stimulation of muscles. I asked my physical therapist, Could I try that? He calls it Easterby says It's for athletes.

It gives me a test session. Hurts like hell, by the way. It's very painful. But when it's over, I feel great. And we says it's because of the endorphins and we add the stem to my physical therapy.

I discover that same time the Institute for Functional Medicine, they have a course on neuroprotection. I take that I learn more basic science. I have a longer list of mitochondrial supplements and I add them.

Then I have an AHA. And actually I'm quite embarrassed by how long it took me to have this. Aha. Because I'd already been at adopted a paleo diet five years earlier, so they're already grain free, legume free, dairy free.

So this was, this was when, when you started to make those dietary changes. So I started making the dietary changes in 2000 to 2003. I'm in the clean wheelchair.

I'm continuing to go downhill, but at least I'm doing something. I had supplements in 2004 electrical stimulation 2007. Now at my worst, I am so weak I cannot sit up.

I can sit up only 10 minutes and in longer than that I just can't function for about 48 hours. So you're living in a zero gravity wheelchair? Zero zero gravity chair.

I have one for my office, one at home. I'm in a recline wheelchair. I can take a few steps with two walking sticks and begin the brain fog. My Chief of Staff.

But I think rightly so, he assigns me to the Traumatic Brain Injury Clinic. I'm going to start there in January because know basically he's trying to force my hand into medical retirement.

He describes a job. I know there's no way in hell I can do that job. I'm very, you know, upset about that. But, you know, what are you going to do? I just tell my wife that.

Okay, we'll go January 9th. I can do it or I can't and I probably can't. And I'll have to apply for medical disability. Two weeks later I discovered the article, the the research study using DSM.

I add the stem that same time, but discover the Institute for Functional Medicine. I take their course of neuroprotection, which is actually pretty tough because there's a lot of a lot of biochemistry in that, and I begin to have brain fog.

So I really had to work through that. So I have a longer. Association with that of course is tough for a sharp, right? Yeah, that was tough. But as a lawyer, lots of supplements, I add them and then I have a really big aha.

What if I redesign my paleo diet based on this list of supplements? Because after all, food is much more complicated. I'm probably going to get more things that are really good for my for my brain and my mitochondria.

And I do that and I start this new way of eating. Dec 26, 2007. At that time, I can take of just a few steps. I cannot sit up in a regular chair like I am now.

I begin to have brain fog. My trigeminal neuralgia is much more severe and much more difficult to turn off.

Diet, Supplements, and Functional Medicine Recovery

And so I realize that I'm likely going to become bedridden by my illness, demented by my illness. And it was clear that I was on track to have my trigeminal neuralgia turned permanently on in that, you know, even the high dose.

So your mother would not turn it off. And when that's on light, sound triggers this intense electrical pain. A breeze triggers electrical pain. Speaking triggers the pain.

Chewing triggers the pain. Swallowing triggers the pain. So I had rewritten my medical do power of attorney in my living well, such that if I quit speaking and talking, there'd be no IV fluids, no feeding tubes, because once the pain turns on, if I see me like that.

So I tried to talk, you could just get just it's it's unimaginable. Couldn't talk it. So, you know, there was a pretty grim future and yet so I redesigned my paleo diet 26 I in January comes I go to the traumatic brain injury clinic the first two weeks I just watch how you shabbily just watch the third week in January I have to start seeing patients and on Monday I have to get up and I do my exam, sit back down, write my notes to the next exam, and I come home that

night and Jack asks, You know how to go on.

Like, Well, I guess it wasn't too bad. And then on Friday after, you know, where I had done four clinics, like, I think I can do this, and my physical therapist says, Terry, you're getting stronger.

I'm going to advance your exercises. And then at the end of January, I tell Jackie, I want to try. Can we bring the usual chair? I want to sit in a regular chair for supper, and I, instead of sitting in my zero gravity chair, I sit in a regular chair for supper with my family.

And then in February. So it's like three weeks. Well, for okay, for four weeks, I'm strong enough. I can sit up again at least, you know, at least for supper.

And then in February I, I decide to start walking a little bit in the, in the hallways of my hospital with my walking sticks. And people are like, oh, my God, two walls. You're walking.

Are you on that new drug, Tysabri? I go, No, no, no, that didn't work for me. It's just what I'm doing. I show them my esteem device. I in, then I'm walking everywhere in the hospital without my wheelchair, and then I'm walking with one walking stick and then no walking sticks.

And then I'm walking around the block with first with my two walking sticks because that's a longer walk. And then you go down to one and then yeah, and then on Mother's Day we have an emergency family me because I want to try riding my bike, which I've not got in six years.

And you know, Jackie tells my 16 year old boy who's six foot five, Zach, you run alongside of the left. She tells my 13 year old daughter Zab, you run alongside the right and your father and I bike around my block.

And that big six year old boy, he's crying. The 13 year old girl, she's crying, Jackie's crying and I cry reliving that moment because it was that was when I understood that the current understanding of secondary progressive mass is incomplete, and who knows how much recovery might be possible after that.

Every day I bike a little bit more. I'm doing, you know, my physical therapy. And in October, Jackie says, Let's sign you up for the courage. Right? It's 18.5 miles.

And so we do it's longer than I've ridden yet so far. And when I finish that run across the finish line overall crying again, you know that my kids are crying, Jackie's crying, I'm crying.

And this fundamentally changes how we think about disease and health. It will change the way we practice medicine. It changes the focus of my clinical research.

And so I've made it my mission to teach people with M. S. and other complex chronic diseases that there's a whole lot you can do that can change your disease course.

I mean, it's a chilling, amazing story. I have a couple of questions. The first is why no grains? Okay. So if we look at our evolutionary history, which spans billions of years, from single celled organisms to multicellular to animals to mammals to primates, and then we separate from primates about 6 million years ago, and we separate into our Homo sapiens, homo genus 2 million years ago, and to our species, Homo sapiens, 250,000 years ago, for most of our evolutionary history that we separate from primates, we were eating greens, a fair amount of dirt, some tubers and gradually more meat products.

Only 10,000 years ago, however, we'd been eating grains. Only three years have we been eating sugar in white flour. That's new foodstuffs that are microbiomes that used to that we're not used to.

And I posit that our health has completely gone off the rails since we particularly in the last hundred years, since we added all these processed grains.

We have a much stronger evolutionary history not eating grains. And furthermore, if you just remove the grain and the processed foods and eat more vegetables, meat, you'll be in much better shape. Yes.

So I am a huge proponent of grain free living and it's like the first question I get all the time. So I was just curious to hear your explanation. Mine is very similar mostly that grains are the seeds of grass and we are not grass eaters.

So yeah, sawgrass eaters and we just, we really do not have the digestive tract that it's capable of extracting the nutrient out and dealing with with it.

And furthermore, that even the, the horses and the cows, they're not well equipped to eat the seeds either. They do well on the on the grass themselves.

But as soon as you start feed them a lot of grain, you get metabolic health problems for the cattle, for the horses. And so grass fed, you know, eating greens, maybe, you know, the green leaves might be okay.

But for some of us, the antigens, even in the grasses, are a problem. So I recommend these radical things known as vegetables. Right. So I, I know that prior to your diagnosis, I know that you were a vegetarian 20 years.

Yeah. So talk to me about what what primarily changed in your diet when you made this shift? Well, you know, at that time, I was eating a lot of whole wheat bread, and I had a lot of beans and rice and a lot of vegetables.

So we would consider that to be a very heart healthy, great diet. And for some people, it will be. And I certainly understand that there are people who are vegetarian or vegan for their spiritual beliefs.

And so I've created dietary plans for them. But for me, the gluten was a big problem I have. If I have any gluten containing grain, it will turn on my traditional neuralgia in about 6 hours, and I will go from being fine to having incapacitating levels of pain, of pain and about 4 hours.

Wow. So. So I always carry enzymes. So if I'm away from home, I digestive enzymes and also carry a pregnant zone. So if the pain starts, I'll, I'll escalate my dose of of gabapentin and I'll start taking practice.

So I have to do that about once a year. And while we're on that topic and I do think that there are a lot of people with gluten sensitivity, did you have any indication before you started to make these changes that you had gluten sensitivity?

Well, so in retrospect, you know, I had thickened skin over my elbow, so I had some mild psoriasis. Mm hmm. In I certainly had histories with migraine headaches.

As a child, I had reactive airways in exercise induced asthma. And I was beginning to have to take prednisone first for asthmatic flares. I had I have a home nebulizer prismatic flares.

Now, mind you, since adopting a gluten free diet and creating the walls protocol, my skin is fine. There's no more thickened skin on my elbows. I've I haven't used my nebulizer in about 15 years now.

I don't have migraines anymore. So those were all clues that I didn't know. And and I'm a physician that my primary care doc, my neurologist, didn't know to say this is a factor.

So being a physician and being a fellow physician, you know, we're simply not taught this drug. We don't know and we're not taught. And I, I unfortunately think in the AMD system, I think there are a little better in the dose system.

But in the AMD system, we're really raised with this bias of thinking that if it's not taught to us, it's neither important nor true. And, and we do, we do operate from that mindset throughout our careers.

Returning to Mobility and Challenging MS Assumptions

Unfortunately, until something like this happens, that opens our eyes to other possibilities. And we we learn a lot and new ideas don't come easily to us.

And we may have to get exposed to that new idea multiple times until we finally accept it. And then if we happen to have the opportunity to have our own health transformation, that speeds up the learning and the willingness to say, maybe there is another way.

Yeah, yeah, agreed. So I know in the beginning you were kind of trying all the drugs out there and we talked about for this journey, this healing journey.

For most people, it's not an either or, it's an end. So. Correct. What are the patterns that you're doing? So why so traditional treatments? Do you still have incorporate it or do you not have any?

So you did? Well, I walked into my neurologist office, you know, nine months into my healing. He was stunned to see me. I said, Yeah, I'd really like to taper and get off it.

I was on cell slept at the time and he said, yes, that makes sense. You're at that time. I'm 52 that the so he tapered and I was off the cells about four weeks later and I and I still get surveillance MRI sleep and beautiful ever since I still have a very young working brain and I've not been any disease modifying drugs.

I've tried it off my gabapentin. I cannot I can get to a lower dose, but if I try to go off my face pain, it turns on probably because I have some residual scars in you know, at my attorney general.

I think was probably that was the first symptom that you had. You had that. But in retrospect, that was the first symptoms. Yeah, yeah, yeah. And now the thing that's interesting, I've had difficulty with optic neuritis, I have difficulty with low contrast vision.

So skiing or hiking in snow is very hard. Driving at night, very hard in what I've noticed is over time my low contrast vision is improving so I do better in snow.

I do better driving at night. And my neuro ophthalmologist says, Well, your optic nerves are continuing to improve. So they're very pleased with that as well.

They feel about your recovery because, well, I think especially in the cancer world, medical oncologist are very uncomfortable with people that get better without them.

You know, I was condemned by the MSK specialties for years band as a speaker so I'd go speak were I was invited I did my clinical trials. I got them published first in low impact journals, then higher impact journals in higher and higher impact journals.

And then the and I did my TEDx talk, did my wrote my books and the AMA Society saw that their constituents, because they monitor social media that they're talking about the walls protocol, the walls diet.

And they held a wellness conference invited me. They had I told them I had unpaid Mr. Speaker, which they did. And as a result. Is only fair. It's only fair. And they did agree to make wellness a research priority and started funding little pilot studies in diet.

And that funded my study comparing the low fat swank diet to the a modified Paleo diet whilst diet, which we published in 21. And so we now have like 26 peer reviewed scientific papers about M. S., almost 50 peer reviewed papers in PubMed.

And now I am being recognized as a really important player in the diet in my research world. Last week I was at the Consortium AMA Centers, which has 2000 scientists, physicians, nurses and other health professionals that take care of those patients there.

And in lecture after lecture, we were talking about the molecular biology of the processes from us. The pictures were saying, you know what, diet really does matter.

We got to help people improve their diet and people were citing our research and they thought it was so remarkable. And walking around and the neurologist was stopping me to ask some questions, say, you are you talk to us.

Yeah. And so we had a little conversation and then they whip out their phone and say, you know, would you be okay if I if we got a fad by a nurse, take a picture of you and me, because my patients would so love that.

So I've gone from crazy and dangerous to brilliant and visionary. And it took 15 years, though I think it'll be another 15 years before this becomes the standard of care, but it will be the standard of care.

That diet really matters, and there are probably several diets that will work, stuff that's going to be just one diet. Yeah, but the one diet, those terrible is the standard American diet.

Yeah, we're all agreeing on that. Were the Antidiabetic diet. Yeah. They're both partly dangerous. Yeah. And I'm still, I'm still in the crazy and dangerous state.

Yeah. It takes, it takes a. Lot longer to be there, right? Right. Because I know that I'm on the right side of history. And for now, I deal with people calling me a quack because I know that time will tell the truth.

And we just have to go where people want to hear a message. In my case, because I do research like, okay, if I want to change the standard of care, we have to have peer reviewed, published research.

So I started doing clinical trials, you know, we did our first trial and we have, you know, really amazing results. It took me two years to find a journal that that could publish it.

And then, you know, the next one it was I took me a year. And so gradually it gets easier and easier to publish our studies because we consider earlier studies in there are more people, there's more understanding that if we're going to improve health, we have to address diet, stress reduction, exercise, improve sleep I and that rehabilitation is about doing all of those things, not just one.

Right, right. So we started to talk about M. S being a mitochondrial disease. Yes. And I am often quoted as saying that cancer is also a mitochondrial disease.

Oh, absolutely. The two have a tremendous amount in common. So let's let's first establish for people what are mitochondria, what do you mean by mitochondrial disease?

What causes mitochondrial disease? So mitochondria are really ancient bacteria that were eaten up, engulfed by bigger bacteria about two and a half billion years ago.

And because those mitochondria were more efficient at using oxygen, they were able to thrive in this new atmosphere atmosphere. They had more oxygen.

Why Grain-Free and Gluten-Free Matter

And over again millions of years they would develop multicellular organisms. And eventually, of course, us, all of ourselves rely on these mitochondria to generate the cellular energy that we used to run the biochemistry of life.

And if your mitochondria not working well the job assigned to that so doesn't work as well. So if you got a brain, then your brains are going to think as well.

Your eyes won't see as well. Your heart won't work as well. And we know now something called the Marburg effect that cancers are very good at burning sugar.

They their mitochondria not working very well. So they they, they rely on sugar metabolism. And because we changed our diet to have so much sugar, so much processed food, high glycemic index food with high blood sugars, that really drives the development of cancer.

If we'd had a diet that had more of a ketogenic diet, more fat burning, people would have less, far less cancer. And if we would have more of a ketogenic diet while I'm going through cancer treatment, I would have far less adverse events from the cancer treatment, and my cancer cells would be far more vulnerable to the effect of the chemotherapy or the radiation therapy.

And you know that that was established by Otto Warburg in, you know, 1932 or something like that. Yeah, it's. Wonderful. Why do you think it's still not being readily adopted and discussed in cancer centers?

I mean, there are sterile there's still boost and insure available at every cancer center in this country. Yeah, I think that's fascinating. All new ideas meet enormous resistance.

You have the innovators who are condemned. Then you may have a few early adopters and then late adopters, and you have to reach a tipping point. And fortunately, Otto's never did.

I am sympathetic that it's very hard for all of us to accept new ideas. So, for example, if you have you have a romantic partner, it would be very hard for you to accept that your romantic partner no longer loves you, cheated on you.

You have to have a lot of a lot of evidence before you say, well, maybe there's a problem. And you'd finally realize, oh, my goodness, there is a problem now.

Oh, my goodness, this person really is having an affair with someone else. Science is like that. My understanding of medicine. I spent a long time building and accumulating, and it will take a lot of evidence for me to abandon that in. In order to abandon it, we need to have the evidence built.

I slowly there are more centers that are willing to use ketogenic diet. I know here at the University of Iowa radiation oncology lists are finally using ketogenic diet, and I'm very excited to see that.

And unfortunately, that is usually after people have chemotherapy. So that is. They missed a huge missed opportunity. You know, this opportunity, doctor, the choice here.

Longo Yeah. Bolton Longo does some really brilliant work with his first American diet and putting people into a Q genic state before the onset of their chemotherapy, radiation therapy and the fact that that he's interested in this investigated makes me hopeful that our medical oncologist will begin to embrace this.

Yeah. And his program out of the University of Southern California is is truly innovative, but it's so simple, and yet it meets so much resistance. I mean, they are there's so much stronghold to what you eat.

Doesn't matter. And it is crazy. That's not just I mean, I think the cardiologists recognize that what you eat matters, but then they don't. Or they on the other hand, they don't know how to tell people what and how to eat.

Through. Improve their physiology. And you know what you're doing? What I'm doing is so important. So teaching the public now that there's more that's under our control.

I vital now I'm in sort of a unique position that I teach the public. I teach clinicians and I do the clinical research and present our findings. And I'm thinking of the consortium, AMA centers.

Five years ago when I was there, our research poster was the only one talking about food. This year we had five research posters talking about food in an oral presentation, and we now had a three hour symposium about diet at Mass.

So we are making changes. How this can be accelerated is teaching the public so the public will demand it. And the public says, you know what, I am going to use diet and lifestyle as part of my treatment strategy.

Medicine, Resistance, and Changing the Standard of Care

I am going to explore ketogenic diet and fasting strategies and I'm looking for clinicians who will support me in that. So that's a very important piece of finding physician, scientist, researchers that will do the trials so we can get them in peer reviewed public meetings.

So I end in manuscript so we can show up at the meetings because I'm sure there is an oncology equivalent to what I just went to for the M. S. world, and it's a long process.

I tell my medical students, my postdoc, people who are in my lab, that this is a 30 year process. I'm 15 years into it. The first ten years I was banned.

There are all sorts of terrible things said about me and my family. People said that I faked my illness. I spent four years in a wheelchair faking it like, oh my God, yeah, that I never had.

M. S My neurologist here at the University of Iowa said, I'm so glad you went to all these AMA centers. So I can keep saying, Look, I was the one who diagnosed her.

You know, all these other people diagnosed I treated her. We treated her very aggressively. So a lot of the things that you did are similar, if not identical, to the work that I do with my cancer patients.

So can you talk a little bit about why changing those same things that led to the reversal of your M. S. that leads to the reversal of cancer? Like what does breast cancer, what do breast cancer and M. S.

have in common? So it's so the dysfunction, the mitochondria are not working well. So we have to improve mitochondrial bio energetics so the mitochondria can generate energy more effectively.

We have to improve the nutrition of the organism. So that means vitamins, minerals, antioxidants, sufficient protein, the correct mix of fats. So you can do the chemistry of life.

It means you got to have the right microbiome. And so I like to say you poop in logs, rocks, snakes, put in your teeth, and you want to have, you know, ideally snakes that are not getting into your pants.

And so we talk about fiber and fermented foods to get at that. Just because life is self-correcting chemistry that keeps all of our nutrients in the not too high, not too low range that are compatible with life.

Yeah. You know, most of most of our patients have broken bones. I have lacerations, I've skinned my knees. But in my DNA are the instructions to fix, to repair all of that.

In our DNA are the instructions to kill cancer cells and to rebuild the damaged tissues, we have to have appropriate nutrition to let those instructions work.

We have to rebalance or hormones to let those instructions work. We have to reduce our toxins to let those instructions work. And if we do all of that, we discover that the autoimmune processes you have begin to unwind and reverse.

And many people in my in my clinical practice have not one autoimmune condition. They have several and they have several autoimmune processes. The same. Is that.

Well that's that's because our immune cells can either create too much oxidative stress, too much inflammation. And at the Sutter level, that drives us down the autoimmune process, which will depend on genetics, lead to autoimmune diagnosis one.

And then in five years, autoimmune diagnosis number two and then another five use autoimmune diagnosis number three. And this is mostly because no one's intervening on the cellular level.

On the cellular. Level, we're not doing anything to change the trajectory of the disease. And most of most of our treatments, the traditional treatments, they're not aimed at correcting the imbalance.

Yeah. You know, the drugs that are developed for autoimmunity and we're getting really very good at creating drugs that can interact with a particular receptor, a particular biochemical pathway.

But life is a very complex, interconnected hub of biochemical processes. Drugs will never solve the problem. You have to address the as much of the lifestyle factors as you can.

So step by step we can rebalance all of these biochemical pathways. Yeah, absolutely. I couldn't agree more. And I know that when you when you search, there is an overall sentiment that autoimmune disease, which is for a simplistic explanation, is it's an over response of the immune system.

I actually think it's more on the on that terms of our confused response. Yeah, I think that's probably correct. Confused is better. But when we think about cancer or we think about an underperforming immune system.

But in my experience and I've treated thousands of women for breast cancer over my career, I actually think there's a huge connection between autoimmune disease and breast cancer.

I don't know if you've had any experience with that or you've seen that. Well, certainly there's there's an overlap of disregulated, autoimmune immune processes and oxidative stress that increase the risk of both.

So, yes, I think there's considerable overlap. Yeah. And it's it's mostly due to that same environmental trigger or whatever it is for you.

Mitochondria, Cancer, and Shared Root Causes

If it is not remediated, for lack of a better word, then that stimulus is going to be there. And just like you manifest the next autoimmune disease, you also can manifest the next thing like cancer.

And if you treat cancer one successfully, you don't get to the root causes. You'll develop cancer too. Yeah. For skin cancer through the. In cancer. For exact same way in the beginning we talked about your research that you're working on.

So yes, love for you to share what so is for those people that are in a situation where they have symptoms or a diagnosis. Yes. So how can they participate with you?

So we're comparing a ketogenic diet, a paleo diet to usual diet for people with relapsing remitting multiple sclerosis. We follow you for two years. We're very excited about this.

We do expect all three groups to improve because we know the usual diet group are going to improve their diet at least somewhat as well. You come to Iowa at about zero month three and month 24, and we would love to have you.

You can learn more about this at terrywahls.com/MSstudy again. That's terrywahls.com/MSstudy terrywahls.com/MSstudy Yeah. And I'll make sure that that gets in the notes so that people have that because the work that you're doing, I don't need to tell you, is so tremendously important.

Is there anyone who you don't think their health can be improved like it, or are there people? Only the dead people. Yeah. So no matter where you are on that MS spectrum.

Yeah, absolutely. Work on improving your diet and do it at the pace that you and your family can you can

accommodate if you're open to being part of our clinical trial, we'd love to have you.

Even if you are not with relapse, you would be a mess. Go to that website and complete screening survey so you can be part of our patient database because we have new studies that we will be writing for and we will notify you when we have new clinical trials.

Yeah, amazing. And how hard is that diet to maintain? Well, people are thin. We work very hard to help people make this work for you and your family. So, yes, for everyone, adopting a better diet takes some work.

But we've been very successful with having people enrolled for a year. We've not had anyone drop out yet. So amazing. That's amazing. Yeah. And same thing for for the cancer world.

I think that if you're going to be healthy, you need to learn how to cook. You need to learn how to eat at home, and you need to learn how to eat real food.

And we've been so conditioned, we are like dying of a diet of convenience and the truth is that once you adopt a whole food diet, I don't have to tell you this, like your life changes and you don't want to go back to that.

You know, when you've been exposed gluten. I know when I've been exposed to gluten. And not only that, but just processed foods, it just it's not what our body was meant to consume or meant to eat, grow food.

And it's it's having gotten away from the way that we're supposed to live, that we saw all of this development of disease. And it's it's only continuing because we're getting further and further away from our evolutionary origin.

So I just want to sum up what you said today, because there was so much good stuff, but this really ultimately is about changing our environment. You can't continue to do the same thing and expect a different outcome.

Clinical Trial Invitation and Closing Reflections

And changing that environment means dietary changes, means movement, stress management, prioritizing sleep, reducing. And you do advocate for a paleo healthy, fat based, no grain diet.

And we talked about all new ideas meet enormous resistance and you are about halfway through your course of changing the landscape of medicine. And I'm so very grateful to that, knowing that there's so much more that is under your control than you know or understand.

Change is a 30 year process, and the things that breast cancer and MS have in common are they're both mitochondrial diseases. And when you heal the mitochondria, you have you restore cellular function and then you restore systemic function.

You have to have a working god. I actually didn't even realize that when I asked people to describe their coop. And frankly, we all need to just get comfortable talking about poop, right?

Because it's how we eliminate the vast majority of our toxins that we have to be comfortable talking about it. We have to be comfortable doing it. But I never knew where I got that rocks like snakes putting our tea from.

And now I realize. You know, oh, it. Looks like my time is up. But life is a self-correcting chemistry. I love that. Words to live by. That was wonderful.

Thank you for this great interview. Thank you so much for being here. You are my hero. I am so very grateful for you ruining my medical lives. It's just as you said, you didn't ruin it. You made it.

All right. Take care, my friend. Thanks. Bye for now.