



THE

FATIGUE

SUPER

CONFERENCE

How I turned around Multiple Sclerosis

Guest: Dr Terry Wahls

Alex: Welcome to The Fatigue Super Conference and I am super excited for this conversation. I am talking with Dr Terry Wahls and she has an incredible story of how she has been on a journey with multiple sclerosis and although this is a little different to ME, Chronic Fatigue, Fibromyalgia, Lyme Disease, Adrenal fatigue those kind of pieces that we are primarily focused on here, there is significant crossover. But also the protocol which Dr Wahls has developed has enormous relevance to the communities we are looking to serve and support with this conference so apart from her amazing story I am also incredibly excited to learn more about the approach.

Just to give a bit more of a formal background Dr Terry Wahls is a Clinical Professor of Medicine at the University of Iowa. She is the Author of the 'Wahls Protocol of How I Beat Progressive MS Using Paleo Principles and Functional Medicine' and the cookbook, 'The Wahls Protocol Cooking for Life: The Revolutionary Modern Paleo Plan to Treat All Chronic, Auto-immune Conditions'. I also came across a third book, which wasn't listed in the bio I was sent, which is 'Minding My Mitochondria' which is a recipe book. Dr Wahls also hosts the Wahls Protocol seminar every August, where anyone can learn how to implement the protocol with ease and success and I am sure we will touch on that a little bit towards the end.

Dr Wahls thank you so much for being with me I really appreciate you making the time.

Dr Wahls: Thank you so much. I love teaching the public about this.

Alex: I would love to start with a bit about your story because you were working as a doctor in a traditional way with the usual kind of stresses and challenges that come with that but in time it became clear that something much more significant was going on with your own health. Tell us how that unfolded.

Dr Wahls: I am a Professor of Medicine here, I had just taken a new job with the University of Iowa, where I am teaching residents and helping manage primary care clinics for the VA. During that time I began to have problems stumbling and would ultimately get evaluated by a neurologist, and I had MRIs of my brain, spinal chord and spinal tap, a slew of blood tests and nerve conduction velocities and my physicians noted that 13 years earlier I had had a problem with vision in my left eye, I now had weakness in my left leg and I had abnormal spinal fluid and several lesions in my spinal chords, so I probably had optic neuritis 13 years earlier. They said I had relapsing and remitting MS, Multiple Sclerosis, so as an academic professor of medicine I knew I wanted the best treatment, from the best people.

So I did my research and the Cleveland Clinic was doing medical research in the mid-west. They were really the premier multiple sclerosis center. I went there and figured out who their best physician was. I saw her and started on the newest drugs and over the next 3 years I had one episode of weakness involving my right hand and so had I been in a drug trial that would have been counted as a huge success but the problem was I was getting steadily weaker and I was beginning to have more trouble with fatigue. Now my Cleveland Clinic physicians told me about the work of Loren Cordain, I read his papers, his books, read about lecturns and I embraced the no grain, no legumes, no dairy and made a huge change in my diet. I had been a vegetarian for 20 years. I re-introduced meat but I continued to decline.

The next year I needed a wheelchair, I was advised that my disease was now secondary progressive MS, no spontaneous recoveries would be anticipated, functions once lost would be anticipated to be gone forever. And so I took mitoxantrone, a form of chemotherapy, I continued to decline, I took tysabri when it was first available, I was very excited, I was thrilled to get to take it but I continued to decline and then I switched to cellcept and that is when I am like I have to do everything I possibly can.

I go back to reading the basic science and begin experimenting and I decide that mitochondria are the big driver of disability for MS and so I devise, again using animal studies, a supplement cocktail to support my mitrochondria. And I figure out that helps my fatigue a little bit because I do better when I am on my supplements, worse when I am off.

It may be slowing down the speed of my decline, but I am still declining. I am thrilled now that I am learning stuff that my neurologists and my primary care doctor don't know to tell me about and so I am really fired up about reading. I am on the Institution Review Board, viewing research for safety for the university and I say give me everything related to the brain and human

studies so I got more and more comfortable reading studies and beginning to experiment on myself, my supplement list was growing.

By the summer of 2007 my disease had progressed enough, the University and the VA had re-designed my job, so I was supervising residents and working on the Institutional Review Board. I had a zero gravity chair in my office so that I could recline back, my knees higher than my nose, I had another one at home. I could walk very short distances, about 10 feet using two walking sticks. I had trigeminal neuralgia that is getting more severe and more frequent visits to the pain clinic, higher and higher doses of gabapentin, and I was beginning to have brain fog.

That summer I think it was June maybe early July, my chief of staff pulls in and says he is assigning me to the Traumatic Brain Injury Clinic come January. There won't be any residents I will be seeing patients as part of the multi-disciplinary team and he described the job that physically I did not think I would be able to do. So that was upsetting, so I tell my wife that at that point either I can do the job or I will have to take medical disability, or at least apply for it if I can't.

But God works in mysterious ways because just a couple of weeks later a research protocol that I am reviewing talks about electro stimulation of muscles for people with traumatic spinal chord injury so I convinced my physical therapist to let me try that and he fortunately he used that as part of his athletic rehabilitation programme. So I did that in clinic intensively for a couple of weeks and then he got me a home going device and I am so weak I can do like five minutes twice a day. That is where I am starting from.

And then at the same time I discovered the Institute for Functional Medicine. They have a course on neuro protection, which I take, I work my way through that, I have a longer list of supplements and lets say a deeper understanding of what I could be doing. And not a lot is happening yet. But then I had this really big aha moment and thought what if I re-design my Paleo diet to maximize these nutrients in the intake of the food. So that is more research and I get that worked out and in December 2006 I start eating this new way and then January I go off to clinic and in the first week I am just watching. So I should be able to do that, just watch. The second week I have to start examining these patients and at the end of the week, I am like, you know that was not too bad. And the next week, I am beginning to think, you know, my mental clarity is a little bit better and my energy seems better and my pain is less. And so I think, maybe I can do this job.

Now at the Traumatic Brain Injury Clinic my partners were telling these guys and ladies, well you had a terrible concussion, you are going to recover or not,

we will give you psych meds to deal with your rage and pain meds to deal with your pain. And you will just either recover or not. And so I am doing the primary care for these folks and I am getting stronger and then within three months I am beginning to walk using a cane, and people are stunned to see me walking around the VA. And then in six months I am walking without a cane and I am beginning to talk to my Traumatic Brain Injury vets no there is a lot you can do, we can talk about your food, your meditation, your exercise. So I need to change my practice and talk a little bit more about diet and lifestyle. I want to remind everyone, when you have a progressive condition, for which there is no cure, part of the adaptation process is you accept life, one day at a time, you don't know what anything means, what is going to happen and so I have had remarkable recovery, I am able to walk a little bit in the neighbourhood, I can walk around my hospital but I still don't know what that means.

It was on Mother's Day in 2008 that I decide to ride my bike, we have a family pow wow, so I get on my bike and I am able to bike around the block. My kids are crying, my wife is crying, I am crying, if you could see me up close I am crying now, because that was the moment I realised the conventional understanding of multiple sclerosis, progressive MS, isn't complete. We don't understand how much recovery is possible when we address diet and lifestyle factors. So that is at nine months into this new way of eating. At 12 months I am able to do an 18.5 mile bicycle tour with my family.

And so at that point how I practise in my primary care and how I practice in the Traumatic Brain Injury Clinic has radically shifted. I am now focused on diet and lifestyle I am not very interested in changing drugs. I am very interested in teaching people why diet and lifestyle matter and I am having remarkable success and the Traumatic Brain Injury Clinic you can tell who I saw, their pain was better, their fatigue was better, their vision was better. Their ability to get along with their family and co-workers was markedly improved. And of course this would ultimately change the focus of my research. Originally people thought I was a nut job, a little too eccentric, but as time has gone on and my research has come forward and lets say the basic scientists and my scientific colleagues are paying attention to my research I have gone from sort of bad to brilliant, to visionary and I have more and more opportunities to collaborate with other researchers here at the university.

Alex: It is an incredible story and I want to come back in a moment to how your clinical practice has evolved as a result of this. But I just want to touch one other thing a bit more as well it is really the attitude that you took to the circumstance that you found yourself in. Because a diagnosis of MS is a diagnosis which is fairly widely accepted to be something that yes one can do certain things to manage some of the symptoms and consequences but I think

part of the reason why it was so emotive for you beyond just your personal experience when you realised that you were fundamentally going against the grain of what should happen was the realization of what this meant for a much wider population of people.

I am curious that you know for example one of the things you touched on and I have to say made me laugh out loud reading your book was that you were looking at research that had been done on mice and you were extrapolating doses to apply them to yourself. And that is a certain kind of attitude of curiosity and of willingness to try things and I wonder where that came from. What do you think helped support that attitude and that mindset?

Wahls: I have two young children so when I was first diagnosed my son was eight and my daughter was five, they are growing up and I am getting more and more disabled. And so I decided I have to try and keep doing everything I can to get to work because I need my kids to see that when life is difficult you don't give up. So I could not teach them perseverance and resolve doing athletic and wilderness travel the way I had planned but I still could teach them perseverance and resolve by my daily choice of getting up, going to work reading the research, doing my little workouts, even though they were steadily declining, they saw me every day doing my little workouts, every evening doing my little workouts and they understood that I was reading the scientific literature. So I wanted them to know that I understood my job was to do everything I could to make me functional to support the family.

Alex: What you are describing is an act of love in opposed to an act of rage and frustration, which is I think what can often be the driver in that situation.

Wahls: Well I certainly went through my period of anger and bargaining before I was able not to display any of that but certainly in my head I went through that process and then I got to acceptance to okay here is my reality. And as I was doing all of my reading and experimenting I completely accepted that recovery was not possible, that functions once lost were gone. I was doing all of this in an attempt to slow down the decline and I could tell I was slowing the steepness of my decline because what limited function I had was incredibly useful. To still be able to feed myself, to work cognitively, to still be able to take a few steps, incredibly valuable so if I could hang onto that for an extra year or two doing all of my reading made it very worthwhile.

Alex: There are so many more questions I would love to ask about this but I am mindful of time so lets explore how this impacted upon your clinical practice. There was obviously a journey that your colleagues went on, as you said. But say a bit more about how you work now as a physician in a

somewhat conventional medical environment using this new protocol and this new way that you see things.

Wahls: The first thing that transformed was, in my primary care clinics, was I spent a lot of time with the residents asking them what they were eating, their stress practice, how much movement they had, we would talk on toxin exposures. Then I would relate how that impacts running in the biology of life in their cells and how the best way to improve their health was to address these diet and lifestyle factors.

Now mind you I could only do this in a 20 minute encounter but I learned how to do that speaking the same language and metaphors that my veterans would understand. A lot of farm talk, a lot of basic farming concepts but that is very effective because people understood that you cannot get prize winning animals or prize winning corn feeding the corn and the soil and the animals crap. You had to nourish them well. We have got to take just as good a care of you as you would of your livestock or your soil. And that would resonate very quickly and then we would translate that into specific steps that they could take.

I was also mindful the people in my clinic, I might have people who were living off food stamps, who had very difficult financial means, so we were extraordinarily successful at getting people to go on this journey. But the first steps were help them understand what they wanted their health for and connecting the environment to how the chemistry of life happens in their cells and then showing them concrete steps they could take.

Alex: So before we come a bit more into some of the details of your protocol. Maybe to say a little bit about the headline pieces. If you were to summarise the Wahls protocol in a few kind of short statements how would you do that.

Wahls: So there are excluded foods, so things that are extremely inflammatory we get things out of your diet, things that are really helpful we ramp up in your diet. So we remove gluten, dairy and eggs and ramp up vegetables, particularly greens, the cabbage family, onion family and the mushroom family and deeply coloured beets, carrots and various kinds of stuff. And then I have different strategies for vegetarians and meat eaters and a different strategy for those who need to be in ketosis. So there are three big plans and then on top of that people who have not responded well, or who have an autoimmune issue with joints I have a more restrictive diet, it is a little more of a challenging diet than the Wahls elimination diet, that we guide them on.

And I really help people begin where they are at and work incrementally in making these changes. They really have to understand why to begin to go through the work of giving up foods to which your family and culture have

valued for a long time. And to which, frankly, they are probably addicted. So we have to be sure they understand why mechanically this change will make such a big difference.

Alex: Maybe that is a good piece to open up a bit more. Maybe one of the ways to do this is I want to explore more about the role of microbiome in this. Maybe that is a helpful way to come into this more.

Wahls: Well you know when people have livestock they begin to understand that when the microbiome gets altered the animals can go down very quickly. We go through explaining that. We are shocked to understand that how we run the chemistry of life, how we make all the molecules that we need for our immune cells and our brain cells to work, we rely on the microbes in our gut to make some of those molecules, those steps because we don't have the genes any more and so when some of those microbes are missing we can't make all of the molecules we need to make for our brain and our immune cells to work properly. And to have the best diversity in your microbes you need maximum diversity in the food you eat so we have to have lots of different kinds of food.

I give them the challenge of 200 different plant species in a year and if I can get people fired up about that now they are much more interested in trying new foods because they are working on their list and trying new teas and new spices because all of those things count to their 200. And I explain that even I, who really believe this, I have to really work at it, you know the first couple of years my goal was 200 to really pay attention to these things.

Alex: Maybe also just to touch a little bit on around how the microbiome relates to autoimmune issues for example how it is a factor in MS.

Wahls: So, it was early theorized that intestinal permeability, or leakiness of the gut, opens up the gates that lets bacteria fragments like lipopolysaccharides into the blood stream, that ramps up our immune systems in general, at the in aid immunity, it really ramps up the inflammatory molecules. It makes all the autoimmune processes running hotter and harder to cool off. Another problem that can happen when these gates that are opened letting incompletely digested food proteins into the blood stream, we get immune cell response to these proteins and if these proteins are structurally similar to any proteins on our cells when we attack those food proteins we also attack our own internal structures.

So gluten, for example, is similar to some structures in the brain, in the cerebellum, and so we can begin to have some damage to our cerebellum, we can begin to have damage to brain proteins in general and so you are more likely to develop mental health issues, psychosis, movement disorders and

multiple sclerosis, which of course I am very attuned to since that is what I suffer with.

The thinking is such that when you develop this leaky gut it is one of the early steps that must occur to develop immune dysfunction, which if not reversed will then go onto auto-antibodies attacking organ tissues. Again you will have several years of that going on and then if it is not addressed then you have enough organ damage that now you get specific diagnosis. Again if you don't address that every 10 years you are going to get a new autoimmune problem. So if I look back at my story as a young person I developed exercise induced asthma. Then I developed severe menstrual pain, which I just thought that was life. Later on as an adult we discovered I had severe endometriosis and infertility. By then I am also have neurologic symptoms so now I have another autoimmune dysfunction. Now I also have some mild psoriasis as well.

Now all of these things went away and are beautifully controlled with a therapeutic diet and lifestyle. And none of them were well controlled using a conventional pharmacological therapy.

Alex: Is it your experience that if you correct and heal the leaky gut and balance the microbiome that these kind of inflammatory auto-immune conditions start to self correct or are there also pieces necessary to help reduce inflammation and work on that more locally.

Dr. Wahls: It really depends on the individual. At the very root you want to fix the gut, lower the inflammation, lower the leaky gut and that will cool things off. You might want to do some very targeted supplements but really ratchet down the inflammation in terms of gene expression level as well. And you certainly want to lower cortisol levels so having a stress reducing practice can be very helpful. And then I am also increasingly committed that at the root of everything we do has to be the patients meaning, understanding of the illness, their relationships, they are wanting to do the work that it takes to change behaviours and change diet because we are asking people to develop new daily routines, to give up foods and patterns that have been successful in their lives and their family and socially that is a phenomenally huge ask. And so we have to help them develop the belief and the interest to understand what they want their health for so that they are willing to go on this journey. Otherwise you are just like a conventional doctor say do this and I will see you later and that tends to not be very effective.

Alex: Given that you still generally have 20 minute windows when you are working or has that evolved.

Dr. Wahls: So that has evolved. I did all of this in 20 minute windows in primary care and my Traumatic Brain Injury Clinic then the VA's were like oh my god you have these stunning results let's get a clinic that you get to run the way you want. So then I was pulled out of those clinics, we created the Therapeutic Lifestyle Clinic and I got to design it the way I wanted and as I was designing this I had huge demand so we restructured this into group classes. So there's an introductory class for an hour that the veteran could come with themselves and a family member to hear the story in the context of functional medicine, they could complete forms themselves then they could work individually with a nutritionist who would help them or come to the next step, which would again be a series of group classes. A little smaller, we could have 10-20 in that group and ones a half-day class where we'd dive deep into functional medicine, the rationales and help the vet complete a number of forms themselves. So it's really educational and a crystallization of the protocol to them. Then they'd have a couple of hours with the dietician to help them understand how to implement the various diets that we discussed and help them reimagine their food. Then after that initial half-day class then they come back once a month for group classes where we might explore life's meaning, the hero's journey, cooking classes, meditation, mindfulness classes, movement classes and we'd also have another once a month support group where they just talk about their journey, their success, their challenges and would get support from the group and that might be up to about 10 people.

So they have a chance to see us twice a month, once for skills and once for group support, we'd do that for the next six months. We have a few basic primary care labs in there but this is really a diet and lifestyle and we had stunning success with a wide variety of issues. You know many of which are the kinds of problems that your people have, because the most common symptom was fatigue, pain, brain fog, regardless of the underlying disease states. The kind of diseases we would see would be fibromyalgia, chronic fatigue, we saw a lot of autoimmunity with a wide variety of autoimmune issues of which pain and fatigue was the main disabling symptom. We saw the sickest of the sick, we just said give us your most difficult patients, just let them know they're not going to get drugs from me they're just going to get diet and lifestyle. So we in fact saw the sickest of the sick and because we were having such success we got more and more, we had a big waiting list, we got noticed internationally, they started expanding the staff and then ultimately I handed all that off to my colleagues so I could spend more time doing exactly what we are doing today, which is talking to people around the globe and travelling around the globe teaching these concepts.

Alex: I want to just back up to something you were saying about the importance of purpose and meaning and, I might have this wrong because I

was prepping a couple of interviews last night, but I think it was in your book I read about the reference to Victor Frankl's book 'Mans Search for Meaning'.

Dr Wahls: Ah yes.

Alex: That's confirmation that it was in your book. As you were talking earlier telling your story that was kind of in my mind and what's so powerful about Victor Frankl's book, for people that don't know I'll let you perhaps tell the story, but just perhaps why that's important and how you help people find that?

Dr Wahls: You know Victor Frankl is a psychiatrist who was imprisoned in the death camps during World War II so he watched incredible acts of cruelty and incredible acts of love and faithfulness in the most terrible circumstances. So his main premises was that between every event in your life and your response to it there's a space and in that space you make a choice and that choice defines your character. You can choose a loving, supportive choice or you can choose a hateful choice and so as I was having to reimagine my life as a more and more disabled individual I kept thinking about my kids and that what was most important to me was teaching them to be emotionally successful and financially successful adults. That meant they had to see me not give up, to continue to be functional and I decided the message I can convey to my kids is yep life's difficult, it's not fair and so what, just do the best you can anyway.

And then both my kids at various times, you know, would get really mad that they had all these chores and responsibilities in our family life that none of their friends had and I'd go yeah, yeah, that is so unfair I can see why you're angry and upset but this is your job. You know it's really unfair that I have MS and I can't do it but I just have to go do work as best I can and life's not fair.

Alex: I think that's beautiful how you turned the circumstance into a lesson rather than something to be a victim and frustrated about.

Dr Wahls: You know we actually talk a lot in our meanings classes like there is a gift in your circumstance, you may have to struggle a lot to find that gift, and we talk about our cancer patients that we've taken care of who know they're dying from their illness and still find a tremendous gift because it lets them define their closing days, heal relationships, set priorities and say the things that they want to be sure got said to the people that mattered to them. So they were still grateful even for their cancer that was going to kill them because it gave them focus and direction for their closing days.

Of all the classes that we taught it was these meaning classes that were the most popular, the most profound for my vets and so I began to move those classes earlier and earlier and earlier in my curriculum because I saw how powerful they were. And actually I talk about this in my introductory lecture, we explore deeper in some of our classes, but we talk about purpose, meaning and Victor Frankl's very important premise that we have a choice how we respond to the events in our life.

Alex: I imagine people are willing to hear that from you in a way they might not be willing to hear from some others because they realise that it's a lived, breathed, felt experience as opposed to just an idea.

Dr Wahls: Yes, yes and our vets really loved when we would talk about our realities. So everybody in my clinic, all the staff, we talked about the difficult realities of our life that we had to deal with and the truth is Alex we all have difficult things. We're taught in our training to never talk about your personal life but our patients understand that life is messy and difficult and hard and unless you are born into incredible wealth and privilege most of us have had to deal with disappointments, frustrations. When we talk honestly about that it creates a profound connection with our patients and our clients.

Alex: I'd love to maybe broaden this piece around maybe dealing with psychology and emotions to also explore pain because I think pain is something that there's an inflammatory piece to, there's often also psycho-emotional elements to that so I'd be curious, particularly for those who are watching and listening to this that are suffering from fibromyalgia, for example, where there's a strong pain element to their experience. What are some of the key pieces you look at when you're working with the pain element?

Dr Wahls: So I tell people that I have trigeminal neuralgia, so that's when the neuropathic pain gets turned on, and I have these electrical jolts of pain across my face and they get triggered, once an episodes been turned on, by increased inflammation because I got exposed to toxins or gluten. The reactivity turns on and light, sound, a breeze on my face, swallowing, talking, triggers this electrical pain and it's really quite horrible. So I finally understood that if I can turn the inflammation down the pain does not happen, I might need steroids at the time I got triggered so I can get things quiet, but as fearful as I was of my pain and the years of intense suffering that I had I now see that trigeminal neuralgia is this tremendous gift because it gives me a barometer of how clean is my environment, how inflamed is my brain. If I'm beginning to have a little bit of that early twinge I now that I have to stop, look back very carefully, what was the trigger to the inflammation, and address that.

So we talk to our folks with pain and let them know this is their barometer to how clean their environment is, how much inflammation there is, how much oxidative stress there is. And we can't change our genes, we can change gene expression by our diet, lifestyle, we can often reduce the nf kappa b and the other signaling molecules that drive inflammation and we do that with attention to diet and lifestyle factors, toxic exposures. And so we spend a lot of time talking about recognising that pain is your bodies cry for attention and help and the more deeply we listen and the more deeply we address those environmental factors to turn off inflammation, turn off oxidative stress. Again for most of our patients with a wide, wide variety of disease states they would come back and say my pain's beginning to abate, my pain's diminishing, my pain's manageable, my pain is controlled, now I can see the triggers that ramp up the pain.

It is a process but very typically by the end of this journey, the end of the six months of working with me, my patients now have a very different relationship to pain. They see pain as a friend, it's a barometer to help them understand how well the biology, the chemistry, is happening in their cells and they've learned how to create a steadily more healthful cellular environment.

Alex: What you're describing is also I think a great example of working in a multi faceted way in a sense. Of trying to deal with the root causes but also there being an appropriate place to bringing down inflammation if it's acute, being steroids or whatever that may be, but also looking at the other sources of inflammation. So it really is I think a great way of highlighting the way that you're working in lots of different levels and I suppose it opens up a curiosity in me around when you're working with people, am I correct in my understanding, it sounds like what you are doing is there's a kind of starting point of addressing the fundamental that everyone needs to have in place and that's the kind of group work that you're doing, there's a gradual focusing towards the more personal specific, is that right?

Dr Wahls: Yeah what's really interesting, so when people are in their support groups, so there's the intake and then there's the classes for skill building and then there's support groups. And in support group people come in and leave, there's a staggered mix in that group, some people are new to that support group and then you'll have folks who have been there several months and so there's a lot of peer to peer interaction with the more seasoned support folks telling the new folks, yes your pain will get better if you do these things. Your pain will diminish, your energy will improve, if you begin to adopt this stuff and the peers can often help them understand how you can have treats for your grandchildren without sugar. How to talk to an in-law about your dietary needs or strategies to deal with these kinds of social environments.

What I see is this peer to peer group discussion is vastly more effective than my telling them what to do, or you telling them what to do, but when they hear from a peer oh yeah I did that, I suffered that way and here's how I handled it, and this is a way that I think you could try talking about it. That gets heard in a way that a conversation from you and I will not get heard.

Alex: It's interesting we started doing group workshops as it were about 12/13 years ago and actually originally we started doing it because it seemed to be a more cost effective way for people to be able to access the work we were doing and that was the primary thing for the benefit of the patient. We then quite quickly discovered exactly what you're saying which was that people would be able to hear things from peers that they wouldn't be able to hear from us, or things would land more deeply or with more practical implementation steps.

It's interesting what you're describing and I think sometimes people coming into groups can be quite reluctant because they can feel shame around their condition or they can be used to being disbelieved or misunderstood by people around them. What do you notice helps people open up?

Dr Wahls: When we began to have different levels of expertise in the peers, so in a mixed group you'd have people that had been coming to group for five sessions and someone who is just starting, so you have experts of experience within the group. Over time these newbies began to see the modeling of the more senior peer mentor and they grow into becoming a senior peer mentor to the next newbie that follows them. It's sort of like the family camp that we used to go to, church camp, that I watched my young children being mentored by these older kids in a very loving way and then over the ten years we went to camp I saw my children become the peers in being very loving and nurturing to the younger children.

I think that's something that humans like to do, it brings out the best in all of us and repeatedly we would see that happening. People could transform their own health journey into a positive mentoring experience for the newbies that followed them.

Alex: I know one of the things also, you touched on it a little bit earlier, that you pay a lot of attention to is that people can often feel put off by a functional medicine approach because of the cost and the fact they are having to change their eating and change their lifestyle and I know that you have a very passionate position that money shouldn't be an obstacle and actually there are ways to make these changes which are accessible.

Dr Wahls: Oh absolutely. So my clinical practice for 17 years was at the Veteran Affairs Hospital so many of the people that we saw are living on fixed incomes, living on government support or food stamps, so financial means are extraordinarily difficult and so we worked with their reality. We gave them a lot of cooking classes teaching them that if you cook with ingredients it's much less costly than if you buy processed food or even fast food. So we had to teach them cooking and of course we would use some vegetarian meals with high pressure cooking to make this more affordable and we would talk about growing their own food, foraging my folks loved to go foraging for wild food so that was a very popular class. And here in the mid west most folks have access to friends who are hunters and so wild game, terrific nutrition and also it tends to be very accessible.

You know my vets taught me that once they really got this they're going to farmers markets and going up to the vendors and figuring out who has little or no pesticide use and would go up to these vendors and say 'OK now at the end of the market, what's the best price you would give me for everything that's left'. And so they were able to find ways of getting access to food very inexpensively. So it was not uncommon for people, and again there would be a lot of older peers to newbies teaching them these concepts, so it was very common for people to come in getting frozen food, canned food, struggling, learning how to cook and then by the time they're done they've figured out how to go mostly organic while living on food stamps.

Of course this means cooking, scrambling, being a bit innovative, and also prioritizing that the quality of the food matters. In my introductory classes I reassure people that we'll work with you with the foods that you can buy in your small town grocerer in the middle of rural Iowa, rural Wisconsin Illinois then show you how to improve the quality of your food within your financial reality.

Alex: I guess you're also staying quite seasonal then in terms of the actual foods that are around, right. .

Dr Wahls: Oh absolutely.

Alex: So I'm mindful of time but I'd just love to touch on a little bit the research that you're doing, I know that it's something which has been a key piece from your perspective and I was mentioning before we started recording from our point of view as well it's a challenging but crucial process. But just tell us where you are at with that?

Dr Wahls: So I've done a number of pod studies using diet and lifestyle with progressive MS, great results and then with relapsing/remitting MS again very

nice results. We have some amazing videos of the before and after showing these remarkable changes in walking ability. Then we've done studies with ketogeneic diets, those results are being written up, again exciting results, and then we now have a study funded by the National Multiple Sclerosis Society.

Alex: Wow.

Dr Wahls: With relapse/remitting MS, we're monitoring fatigue, quality of life, motor function, vision function, changes in the microbiome, changes in nutritional profile and I'll be analyzing that data next year and submitting it to research meetings so we'll probably be getting it out to the public I would say in the fall of 2020, so about a year from now we'll be submitting all this stuff, it will be incredibly exciting.

Of course we're writing more grants, the next proposal we're looking for funding from philanthropists because we've raised a lot of money and we're very close to being able to launch this study. We'd be comparing newly diagnosed multiple sclerosis patients who would be using therapeutic diet and lifestyle only, so they've declined drugs they're just doing lifestyle, and we'd compare them to a cohort of folks that are just doing standard drug based therapy, with or without diet and lifestyle. The question is, is a therapeutic lifestyle without drugs, what happens and is that harmful or can people get control of their disease just as well as using drug based therapy. To get that study going is a philanthropy based study.

So we're very close, we have to raise a half a million dollars and we are well passed half way point so I'm very optimistic that we'll be launching that study probably in October/November this year.

Alex: That's incredibly fascinating and that's very, very cool. Just from one person to another I know how challenging, I imagine some of the ethics of that has been quite challenging as well in terms of getting approval.

Dr Wahls: Yeah getting approval and getting funding, this is all challenging. The other thing that we've done I'm really excited about, we have done this deep dive nutritional analysis of the Swank diet, of the Wahls diet, and we've published it in a high impact nutrition journal so when people are saying 'OK the Wahls diet this is not nutritionally sound' we actually now have a scientific peer review high impact journal publication that has looked at that and said well you know what it is nutritionally sound.

I think this is vital when we're doing these therapeutic diets that someone take the time to do the nutrition based research that analyses the nutrients and sorts out are there nutritional deficiencies that we have to think about, do

we have to restructure the food rules to be sure that there are no deficiencies. That's the work that my research lab does, we do the intervention studies, we do the deep dive nutritional analysis studies.

Alex: Dr Wahls I wish we had more time but I'm mindful of time. You spoke earlier about how your role has transitioned from less of the focus on the day to day clinical and more around the awareness and the research. So for people who want to find out more about you and your work talk a bit about what they can find on your website but also I know you have your summer retreat that you run. So yeah tell us about that.

Dr Wahls: So if you just want to get our research papers you can go to terrywahls.com/researchpapers and you can download copies of our papers and you can get access to those videos that show the before and after gate change. Dramatic, dramatic stuff. If you want a one page summary of our diet you go to terrywahls.com/diet, great one page summary to get you started. If you want to learn, either as a patient or as a practitioner, come to our seminar and we've got information about that at terrywahls.com you get three days of intensive lectures, it's a lot of skill based practices, we have a beginners track an advanced track and then for the health professionals we have another day of additional case based learning and interaction with other professional colleagues and then you have a chance if you want to take an exam that will qualify you as a Wahls Protocol Certified health professional. If you've got a health profession license or certificate then you're eligible for that exam. We have virtual trainings for the health professional as well, so that's really expanded, we have many more folks in Europe and Africa and Asia who are taking advantage of the virtual programme.

Alex: Amazing. I have to say it's an incredibly inspiring story but I love the fact that it's so practical in terms of the execution and the strategy beyond just your personal experience of what this actually means for the people you're supporting. So Dr Wahls thank you so much for your time, I really do appreciate it.

Dr Wahls: Thank you so much.