Effecting Fasting & Detox On Brain Health

Wendie Trubow, MD, MBA, IFMCP with Heather Sandison, ND



Wendie Trubow, MD, MBA, IFMCP

Welcome to this episode of the environmental toxicants, auto immunity and chronic diseases summit. I'm your host, Wendie Trubow, MD, MBA and I'm so excited to have my friend on today to talk to you. Her name is Heather Sandison, ND. She's the founder of Solcere Health Clinic and Marama, the first residential care facility for the elderly of its kind. She's driven by the potential to not only prevent but reverse Alzheimer's disease and focuses her energy on bringing this approach to life every day. Heather. It's such an honor to have you here. I'm so excited we're going to talk about this because I think you and I are both on the same page that there's one type of aging that we're doing now and then there's what most people do and it's leading to an epidemic of breakdown. So first off I glossed over a lot. Is there anyone you want to add around your background, your credentials or anything or you want to dive in whatever you want? It's fine.

Heather Sandison, ND

Let's just jump into it. There's so much fun stuff to talk about and it's always x exciting and fun to talk to you because we have a blast. But the idea of just like reimagining aging and as you sort of alluded to that there's this kind of normal way that people do it and I'm reading right now. Becca Levy's book about this idea that the way we imagine ourselves as we grow older has a ton of impact on our genetics and what our potential is. So when we, when she looks at cultures that revere the age, like in japan and in china and even the american deaf community, there's a lot of reverence for the elderly in that community. And what you see is all of the genetic, all of the genetic risk associated with like an ape O E four status. That puts people at risk for developing dementia, It's completely gone. It's incredible.

Wendie Trubow, MD, MBA, IFMCP

Let's talk about that. Because we were talking to joe persona at one point, not on the summit separately and he said your genetics are 15% of the game, the other 85% is modifiable. Risk factors. Life factors sounds like what you're saying is you could make your genetics practically zero with the right set up.



Heather Sandison, ND

You hear this analogy a lot right? Like genetics load the gun. How do you live a life where you never pulled the trigger?

Wendie Trubow, MD, MBA, IFMCP

Never, never

Heather Sandison, ND

Never pulled the trigger. So one of the things that you can do is have a positive association with aging. And it was funny because I went out to dinner with friends the other night and we're sitting there chatting and I, one of them has genetic risk for dementia. She has a positive before and I was telling her about this book and you know, so just explaining to her like, okay, if you have a positive association with agent, you can completely negate any of the risk that you think imagine is associated with having this to put your wind down, well not even the wine, what we did was we, we basically call the time out every time somebody at the table said something that was like negative about getting older, it happened over and over and over and we had just brought this to the forefront of our minds, but it was something like, oh well we want to travel now because we're not going to be able to do that when we're older, you know, just like quick, oh, I don't want to be single later because you know, it's gonna be hard to do attract the right mate or whatever. So all of these silly, not silly, you know, they're just part of our culture and they're so pervasive in our culture that life is going to go downhill when in fact there are cultures choose and decide that life is only going to get better.

Wendie Trubow, MD, MBA, IFMCP

This legit drives me nuts honestly, because I mean, you know, our philosophy is that you're meant to be vital, vibrant, healthy, able to participate in and interested in intimacy and sex until you're at least 100 and that every decade gets richer and better and more vibrant. So when you say that people's beliefs are all about essentially Going downhill and being decrepit of mind and body what by 75 essentially it's like nails on a chalkboard to me. So I don't, I think you and I are on the same page and Betty white. Yes and you know something you said that's so important that I don't think people really think about is the future that you see for yourself is what determines your behavior now. So your future goals inform your present actions. And so that belief.

Heather Sandison, ND

If we have this idea that we're going to retire and be able to just sit around on the couch or in the recliner all day then and somebody's gonna wait on us or you know we go on cruises and eat whatever we want and we can indulge as we retire and and not really have to do any work or engage the way that we used to, we can kind of put it in cruise control. Well then that is what we get right. If we don't use it, we lose it. And so yeah the the invitation, it's like fully engage and activate in life and expect that it's one of those things that you hear that you're getting older, you



hit a you hit maybe a, You know your 70th birthday or 65th birthday or something and you go, okay, well now I'm not gonna be able to do that. So then you exercise a little less or oh I can't climb that mountain or I can't do this. I used to be able to do that when I was younger. But now I can't and so now you do less of it instead of instead of kind of right into it and pushing through and and seeing what's possible, we start to assume that we can do less and less, which then perpetuates this idea. Now we're capable of less and less because we've been doing less.

Wendie Trubow, MD, MBA, IFMCP

And less to self fulfilling prophecy basically. So what you believe is what will you do and then that will feed forward. So you mentioned food heather, What role does food play? Well, this is such a stupid question to me because I'm like, well, it's everything. But talk to me about the relationship between food and healthy aging and optimizing cognitive function. I know there's a lot in that.

Heather Sandison, ND

Right. So what I you know, I'm open to changing my mind. But what I have seen clinically and what I have, what I'm seeing more and more than the literature is that a ketogenic diet going in and out of ketosis is very helpful for cognitive function. And it's kind of like watching a wilted flower like bloom and perk up again when I see some of my patients switch, that metabolic switch flip, That metabolic switch. So you can either be in ketosis or you can be so which is burning fat for fuel or you can be burning sugar for fuel and our ancestors, our hunter gatherer ancestors, they went back and forth because there wasn't abundant carbohydrates of Available 24 hours a day, seven days a week, 365 days a year the way there is now and a lot of our convenience foods right there, high in carbohydrates, imagine this is like cereal for breakfast, sandwich for lunch, pasta for dinner chips and crackers in between. This is ice cream and soda and you know, sweetened beverages that are abundant and cheap there and they are easy to come by and they are easy to consume. And so most of us end up in glycol hoses are burning sugar for fuel 100% of our lives or the vast majority of our lives unless we intentionally restrict carbohydrates and go towards a fasting mimicking diet, like a ketogenic diet and then our brains prefer to burn ketones for fuel. So in the research studies in the trials where they have manipulated the brain where there's both ketones and the carbohydrates available to burn its fuel, the brain will preferentially burn the ketones.

Wendie Trubow, MD, MBA, IFMCP

So the brain, like the brains are happy when it gets ketones.

Heather Sandison, ND

Yes, brain. And you can imagine, so, imagine you're a hunter gatherer ancestor and you couldn't, you were, you couldn't find carbohydrates, you couldn't find the next tuber, the potato or like whatever, the fruit berries or whatever was going to raise your blood sugar, you couldn't find it. And so what needs to happen, your brain needs to turn on, you need to be able to go find more carbohydrates, more food and so you're if you're fasting, you want those ketones to kick in, you



start burning your stored fat that is stored fuel. And your brain turns on. The other thing that's interesting is that as we age there is a tendency for us to have less sensitivity to both glucose and insulin. So glucose we don't sugar glucose. Carbohydrates kind of use those interchangeably. That's essentially the fuel of that turns the wheel of like Wallace's so we turn carbohydrates into a teepee or that fuel ourselves run on in the mitochondria. So when we are constantly there there's constantly abundant sugar available. And then insulin is a lot of people who are familiar with diabetes will understand how insulin is a peptide that I think of it like the key that goes in the lock that opens the door so sugar can go from the blood stream into the cell and turn into A T. P. Well that key gets sticky as we have a lot of insulin around because we have a lot of sugar around. Now we have a lot of insulin around and now that key doesn't work as well. It's like it's been copied over and over and over again and you can't get that door open.

So we have now abundant insulin in the system which drives its own inflammatory process and we have abundant glucose in the system because it can't get into those cells when it does get into the cell it doesn't as efficiently turn into a T. P. As it used to. And so what's amazing like the body is so incredible to me. It just blows my mind that we can just say hey like why don't we switch fuels? Why don't we just switch to ketones and when you do that? It is like I mean it is like watching a flower blossom, it's so cool to see and people, I have patients who like couldn't remember their grandchildren's names, who then just starts feeling names um correctly. You know, I couldn't remember the names of farm animals and then all of a sudden it's back there incontinence resolves things that I would never have thought were associated with fuel to the brain. All the sudden people are capable of executive function again like planning a meal, cooking a meal, cleaning up after a meal, right? That these things that help us maintain independence as we age, our that are so crucial to you know, staying in our own homes and having a fruitful like positive experience as we get older, those things become much easier, much easier because the fuel is there, the energy is there to do the work.

Wendie Trubow, MD, MBA, IFMCP

So it's so interesting because you know this is the environmental toxicants and it sounds like when we're looking at brain health, the worst toxicants we can really put in our body when in regards to Alzheimer's and dementia is sugar and carbs which we I don't think a lot of people think of as an environmental toxicants per se. But it's food. So food is an environmental potential toxicants depending on how your body experiences it.

Heather Sandison, ND

It's really no doubt about that. And um you know we can talk about, I'm a natural path. You know you just mentioned Joe Pizzorno so we can talk about toxin toxins as well. The glucose pieces. Sometimes Alzheimer's you'll hear it called colloquially type three diabetes. But this is like toxicity. So it's when the glucose levels get so high that it's almost like caramelizing your cells and that yeah, it's extremely detrimental. Lots of oxidative stress. There are many, many



mechanisms by which this causes uh cognitive dysfunction but all kinds of other issues as well. Um And then the toxins. So do you wanna is that where we're going?

Wendie Trubow, MD, MBA, IFMCP

We are eventually. But I think first, what I'd like to say is you're participating in a study right? That looks at the impact of lifestyle and food on cognitive function. And I will say on a personal level I have a family member who you know, I would say when the road ahead gets shorter people get a lot more interested in maximizing the quality of it. So I had a family member for whom that happened and that person got much more interested in their food, their exercise, their sleep. And what was so funny is we have been noticing some cognitive, I'll call it cognitive decline. Just not being as sharp and forgetting things, messing updates. And as soon as the diet and the lifestyle changed and the sleep changed. It's been a year almost since, since they changed everything and they've improved. Yeah. And it's shocking because that wasn't their goal. They didn't really even recognize that they had a problem. Right? That was just a by product for us that we noticed.

Heather Sandison, ND

Well, so I clinically I was seeing that similar to what you just described. I was seeing people were coming and I have been trained by Dr. Dale Bredesen. So I was on the list of trained providers and so people with cognitive decline were showing up in my practice and I was seeing that they were getting better kind of despite my skepticism around this. And we were measuring it. We used mocA scores of the Montreal cognitive assessment, a 30 point scale, 30 is perfect. If you start losing points, it shows that you're declining cognitively. And we were measuring people's mOCA scores and watching them get better with these interventions. And so I was super fortunate that I had a patient come in who had a good experience and asked how he could help and if he could find a clinical trial in my office. And so we took 25 participants through, we recruited 34 I think. And then 23 finished six months of pretty aggressive intervention. They all had measurable cognitive decline. So moca scores between 12 and 23 so anything above 26 is normal and then 23 like this is measurable cognitive cognitive decline. So we recruited these participants and everybody was encouraged to go on a ketogenic diet. 30 31% of participants got on into ketosis.

Wendie Trubow, MD, MBA, IFMCP

You're measuring them. You're having them do either urine strips. So how are you having them measure this?

Heather Sandison, ND

Yeah. So we use the Keto Mojo, which is a blood. It's like a just like measuring your glucose for diabetes. You can measure glucose and ketones with a finger prick. And then a drop of flood. And our goal was ketone levels over 1.0 mm per liter. And mild ketosis is like .52.9. And so in total, there were another 30% of our participants who got into mild ketosis. And then 30% of



participants who got up over one at least once in that six-month period. And then another 30%, you know, a little bit more than that, who never got into ketosis at all. Well, many more than that got better. Right? So they exercise, they took supplements, they did bio identical hormone replacement. You know, they were they treated traumatic brain injuries, they reduce their stress and and prioritize sleep. Kind of like you're saying we did much more than just the diet. But the other thing that we saw was so you can get better without getting into ketosis, I want to say that you don't have to be perfect, right?

Wendie Trubow, MD, MBA, IFMCP

We all think, oh, if I'm not gonna do it perfectly screw it, I'm not gonna do it. And what we're saying is something is better than everything is better than nothing. And perfection may or may not be achievable. So don't let that be the goal.

Heather Sandison, ND

And we saw that people who achieved ketone levels of two and three and four had even bigger changes in their moca in the positive direction. So we have people who went from 22 moca of 30, those people had, they had ketone levels above two. So that big change, that big reversal of cognition of cognitive function. It's much easier to get if you get those ketone levels up and you can take exogenous ketones, you can kind of, you can kind of, you know, manipulate this a little bit with, they taste like gasoline in my opinion. Um but you can you can I just drink them really quickly. Um You can kind of artificially inflate those ketones. It's still, it's helpful for your brain by just swallowing the powders and the drinks.

Wendie Trubow, MD, MBA, IFMCP

It's kind of like the uterus, the uterus doesn't care where the estrogen comes from. And it sounds like the brain doesn't care where the ketones come from, it'll use it. Okay, so food is a huge potential top exposure. Very impactful ketosis, the more ketosis you get the better, but you can have improvement even if you're not perfect, which is really amazing. Okay. Talk to me about the environmental toxicants that you see associated with dementia. Alzheimer's recognizing that, you know, you have another commitment and this is a huge topic. I mean we wrote a book on it. This is massive.

Heather Sandison, ND

Massive topic. So what I love about toxins is it's totally doable to get rid of them. It's really doable to identify them. And then once they're gone, you can kind of check that box, right? This isn't like there's some forever kind of maintenance. Like we want you sweating and having a bowel movement every day. Maybe a little bit of binders. Um some liver support that you could probably get through food like artichoke and beets and good, you know, dandelion greens. Um but when we identify that there's high mercury or high glyphosate or high levels of mold toxicity, I'm like, okay, cool, we have a project, let's let's get rid of it and then let's see where you land because this mercury, especially highly neurotoxic glyphosate is called Roundup is glyphosate



and the active ingredient in Roundup is glyphosate and it's in our non organic foods, but it's also sprayed on sidewalks and of course is, yeah, we can be exposed to it in a lot of different ways, even if we're eating an organic type. But glyphosate sounds like glycerine and that's because biochemically they're very similar and so glycerine is very active in the central nervous system and it can help to calm the system and it's very concerned. So it's used all over the central nervous system and when we substitute glyph estate for slicing, things can go awry very quickly. The highest life estate levels I have seen in patients when I measure them are in people with active ALS with Lou Gehrig's or very detrimental. Um and torturous neurodegenerative disease or autism or severe dementia. And so I have seen anecdotally in my clinical practice that those high high levels of glyphosate are associated with a lot of with severe disease processes.

Wendie Trubow, MD, MBA, IFMCP

You know, I love glyphosate. Like this is one of my, this is one of the things I talk on and as I prepare my presentation for these things, I talk on it, I almost had to stop periodically because it's so horrifying. But one of the coolest things about glyphosate is it's actually water soluble, so mercury is not water soluble, It's stored in your fat, You're born bones or organs, but glyphosate is also stored, but it's because it's so highly water soluble if you stop filling the pump and improve your liver's ability to mobilize it, it'll come out of you pretty easily. That's the nicest thing, as long as you stop your exposure, which is the hardest part for people because that's the food. Unless you live on a golf course, you know, my dad bought a house on a golf course and I was like, okay, you have a house on the seventh hole. Alright. I'm not gonna say anything because he already bought the house. It's like take your shoes off at the door.

Heather Sandison, ND

Don't track that stuff inside.

Wendie Trubow, MD, MBA, IFMCP

Yes. Yes, definitely don't spray your own lawn. And you know, if you have a landscaper don't let your landscaper spray your lawn. That's what I think a lot of people aren't thinking about is what is your landscaper spraying to make your yard look so perfect?

Heather Sandison, ND

Right. Right. And what's happening in the way that you you may or may not have control over how I think take your shoes off at the door. Don't track that stuff inside, open doors and windows because the solution to pollution is dilution, right? Like just get that pressure flowing through. That's an old Ukrainian bless his soul. Um and you know just do your best right? Like we can't, what we don't want to do is paralyzed people with fear. We want to we want everyone to feel empowered that they can make good decisions to reduce that toxic burden. If you're not having a bowel movement every day, talk to a good functional medicine doctor and figure it out because that is how when we're hanging on to things that we can't let that should go that starts to accumulate and starts to call a cause cellular dysfunction. So and and all of us have toxins in



the system every cell eats and poops right, we have to be able to get rid of the normal metabolic waste. But if we're not and if we're not and we're exposed to additional toxins from the environment then these just start to accumulate and accumulate and accumulate and cause more and more dysfunction and sometimes just getting rid of those. Just reducing that burden is enough to help cognitive function certainly. And so we talked about glyphosate which again comes from food parabens, PCBs. There's a lot of things that are in the water. So I am of the opinion certainly in southern California where I live we just are kind of at the end of the river and there's military bases and upstream there's a lot of big ag that has pesticides and herbicides and organophosphates and all of that are getting dumped into the rivers and so that ends up in the groundwater it ends up in the city water.

And I just don't think that there is a filter that works well enough to get that out. And so what I have decided for Marama the residential care facility that I started for seniors and at my clinic where my patients drink the water where my staff drink the water where I drink the water we get spring water delivered in glass. So making sure that you know this is kind of one of those depressing things. I'm like I hope that my child has access to good clean water when she grows up. Um, we have access now. It's not always inexpensive, but there is, I like the Mountain valley spring water. It comes from Arkansas, it's bottled at the source. So it comes from above where those contaminants downstream can get into it. So instead of filtering, you're going to the source above where the contamination happens. And I do think for my, for myself and my patients, I do think that that is the best option these days.

Wendie Trubow, MD, MBA, IFMCP

Yeah, I mean it's so poignant because I'm from Massachusetts, you and I are on the opposite coast and I'm so happy that we have this relationship where we can play even even with across the time zones in the distance, but but in 1989 heather and a Massachusetts study estimated that one in every six deaths was from water or air pollution. So it's pervasive so that anything. So I think what I want to say to the listeners is if you're in a place where you can't necessarily get the water bottled delivered, you do want to filter always make a better choice. Right? And and if you have to make one choice today, it is eliminate don't use stay away from water that comes in a plastic bottle because the plastics get into the water their endocrine disruptors, endocrine disruption not only impacts brain health, but hormone health risk of cancer, risk of autoimmune disease. I mean it's pervasive, so eliminate those single use plastic water bottles because it's not good for you and and it harms the environment and whatever harms the environment ultimately will circle back to us. So we are really in a circle of this. What else? What else do you want to add? Because we've talked about, so we've talked about water, we've talked about glyphosate. Do you want to talk about the mycotoxins and heavy metals?

Heather Sandison, ND

Yeah, let's save into mycotoxins because I think this is what I'm really happy. There's a conversation around this and I really give credit to Ritchie shoemaker Dave Asprey and Neil



Nathan for starting these conversations and helping people wake up to this idea that mull toxicity in their homes and their work environments can be causing disease processes and particularly neurological disease processes. Part of the reason why these are kind of hard to identify is because two people, husband and wife co workers, you know, siblings who are living or working in the same environment may have very different experiences when they're exposed to the same toxin. And so that makes it a little bit harder to realize that it's environmental. The other thing is that it's very you know, it's one of these things that affects every organ system. So unfortunately I've seen patients who have been sent to gastro because they have G I symptoms, they've been sent to neurology because they have new neuropathy and cognitive changes. They've been sent to psychiatry because they have mood changes, they're getting sent to sleep medicine because they can't sleep anymore, you know, so they're getting bounced around to different specialties without anyone ever being like, hmm, I wonder if there's a common denominator here. I wonder if there's something causing all of the symptoms that you're experiencing.

And so when we, when we and many of these symptoms are, are odd and variable and they come and go. And so it's, it can be challenging to identify that it's coming from a mold toxicity. And what I encourage patients to do is just when you leave, you know, and this doesn't have to be expensive. It doesn't have to be like, sound like, you know, really expensive vacation to the Bahamas or whatever. It can be just going camping or just staying at a friend's house. That's not moldy, you know, from one another, but just spending sometimes 34 or five days in a tent or even I have some patients who feel desperate enough, they just put a tent up outside in their neighborhood in their backyard and they see if they feel significantly different in a different environment. And if you get that hit, wow, I'm already feeling better, you know, it might not be 100% better. But if all of your symptoms are significantly better when you change environments that's like Ding Ding, Ding, Ding Ding, there's some environmental toxicity here, that is important and probably contributing to.

Wendie Trubow, MD, MBA, IFMCP

I had a patient who was working on her mycotoxins and I kept saying, so, okay, let's back up a step, dorm rooms, schools, old buildings, buildings with water damage, buildings in wet climates. All of those places are very moldy. Let's start with. That's just the platform. So if you went to college, lived in a dorm, grew up, went to school, live in a warm climate, you're building, had water damage, you're at risk for mold. So let's just start there. So it's huge in terms of exposure. So I have this patient, she's a teacher and I'm convinced that she's getting exposed in her school and she's like, I don't know, I don't see it, I don't feel fine when I'm there. And then she had a period of time when she wasn't in the school for six months. Normally, you know, summer comes, she's not there for three months. She had six months out of school and she went back to school and she was sick. So sometimes for people, it really takes a while to be out of it and it's not even what you're currently being exposed to my home doesn't have mold, but I went to school, grow, had dorms, lived in places with moldy basements, water damage. Like there's a lot of ways,



especially when you're as old as I am, that you've accumulated exposure and so you can have an exposure from 10 years ago because the mycotoxins live in your body, it might not be a current exposure. You want to think about, what were you exposed to?

And I say to my patients, if you feel like a million bucks, you don't need this conversation. But if there's any room for improvement, we should probably do the basics, the gut, the adrenals your food. And then if you're not a million bucks, we're going to do your mycotoxins because there's a progression in a cadence to making sure that you're healthy. So mycotoxins are massive. Yeah, it's really shocking. And I will say for myself that I didn't expect my gut to get better when I started treating my own mycotoxins. But I had five strains that were identified not halfway kind of girl. And I got less sensitive to gluten after treating the mycotoxins and I never eat gluten. But when I would get exposed to it, my reactions would be devastating. And now I'm like that's inconvenient and I don't like it. And I don't want to do it, but I can live through it and I'm not not laid low. So it's really perfect.

Heather Sandison, ND

Interesting. My style is to start with the toxins. So you know, you're like, we start with adrenals and gut and this and I like we want to do all of it in my opinion. Like let's just do everything because I don't want to be and I work with dementia patients primarily and a lot of mull toxic patients. And so I, you know what I don't want is to start working with the dementia patient and 12 months later we go, why don't we go mycotoxins you mentioned as we age, we do have, you know, this is an age bias, but it's the reality is that we've been exposed to more environments just because we've been around longer. And so I test almost everyone. I test everyone who is willing for mycotoxins, even if they have no known exposure because there I want to know so that we can get rid of it so that we can check that box and move on. And especially the gentleman that I work with, you know, they're like, no, no, I feel fine, I feel fine. Um, and then when I see their mycotoxins come back and they're all elevated and we get rid of them. They're like, oh, I didn't realize I can feel like this.

Wendie Trubow, MD, MBA, IFMCP

Yes. Just to clarify, we test everyone, but we go in stages just because you know, you send someone home with eight kids and they're like, what am I doing here? But you know, we test everyone like I'm, I'm all about detox. Um, so talk to me about what can people do. You know, in an ideal world, everyone would come to you for anyone with a loved one would go to Myanmar, but what can people do at home that will allow them to prevent Alzheimer's reverse mild cognitive impairment, what can they do? Because I know there's a lot people can do.

Heather Sandison, ND

And I actually want to push back a little bit on that whole premise. So the way I think of what we're doing at Marama is it's like triage, right? We're taking this this like pretty crappy situation right? Like right now when we have people loved ones in our lives who are getting older, it's very



common to sort of relegate them to the senior living facilities where they're parked in front of TVs. They're told not to move because they're a fall risk and they're fed cereal cake and ice cream um, all day long, like literally walk into a lot of those facilities and there's soft serve on demand and there's 18 tv is blaring and you know, this, I think from a societal perspective is just like we got it wrong. And so right now, Marama is what I hope is a beacon of, okay, how do we take this kind of crappy scenario that, that's people's realities right? Like I can relate to the daughter of someone with dementia who's got kids to raise. She's got a full time job. She's got a house to manage and now she wants the best for her parents, but she can't drop everything to cook keto and get them engaged in activity and exercise.

Plus there's all these dynamics because mom picks me off 25 years ago when she didn't pay for college or whatever it is. You know, we all have these stories and like these dynamics with our families. And so my goal was creating Marama is to create the best alternative, the best version of a senior living facility. And what's there is community engagement. You have a peer group, you have people cheering you on. You see people who are doing better than you, You help the people who are just arriving who are struggling and you get that sense of community. The food is done for you. So you don't have to worry about that. You don't have to cook. You don't have to shop, You don't have to clean up all of that is provided. And then the entire day is programmed around engaging you cognitively, making sure you get your supplements and medications that are going to support you getting the exercise and getting that cognitive engagement and meditation, everything that we need. And then what I really love. So this is the triage this is like, okay, we have a broken system. How do we make the existing system a little bit better? Re really my my goal and what I would like to see in my lifetime is that we don't put our loved ones and senior living facilities that we create communities where they stay home, they stay in their community,

They work and there's a general intergenerational wisdom transfer that occurs when our grandparents and great grandparents are spending time with the newest members of society right with the the youngest among us. And that I have. Um so I've created a Marama at home course which people have access to and then we do some coaching as well to help people implement all of the different facets of caring for someone with dementia or preventing dementia yourself at home. And my hope is that for my generation um we Alzheimer's becomes a rare disease as dr Edison says. Or at least I think it's highly preventable. The Lancet a very conventional you know very well respected journal from the U. K. Had a 2020 report on Alzheimer's and dementia and they report that 40% of dimensions worldwide are preventable. I think it's closer to 90-95% are preventable and They talk about things like social isolation and air pollution and cigarette smoking and diabetes and heart disease. These things all are modifiable risk factors and I put them in slightly different categories and I think it's bigger but the fact that the Lancet is saying that 40% of dementia are preventable means there's a lot of room for a lot of people to not get dementia. And so the Marama at home course is essentially taking you holding



your hand through the process of creating a non toxic environment and home helping to create habits of brain engagement, giving you ideas for activities.

Giving you recipes for foods, helping to make sure that the caregiver in the relationship is caring for themselves because caregivers based on a study out of Utah care If you're the spouse of somewhat dimension, you have 600% increase in risk of developing dementia in your lifetime. So right. You don't want to become the patient. You need to put your oxygen mask on first. And so making sure that the caregiver is is doing the diet, getting the exercise, getting the sleep, treating, sleep apnea. You know, there's a bunch of components taking care of their dental oral health. Um All of these things are so critical. Um And so what? But it's also work takes its hard work. What's nice is that the side effects of this intervention are your diabetes goes away? You look better because you're exercising and you're happier mood. People are able to get off of antidepressants and get off of benzodiazepines because they're less anxious and less depressed people sleep better. Yes, of course, cognitive function is what? Why we kind of get into this. But the side effects of some of the other chronic comorbidities resolve.

Wendie Trubow, MD, MBA, IFMCP

Well, they're all tangled up right? If you have diabetes, you are significantly more likely to get Alzheimer's if you're looking at Alzheimer's as type three diabetes. So it is all intertwined. But it really sounds like what you're saying. So there's two tracks, right or three. You have significant cognitive decline. You need more intervention. You have maybe mild to moderate cognitive decline. And we need to get you into the Miramar at home into a supported coaching program so that you can start to untangle this and your caregivers can untangle this. And then there's us where I don't ever want to walk down that path. And so the first thing I would say is what's your motivation? That's that's so far out in the future. That draws you forward today to keep you on track, right? Because you know dinner happens after dinner. My kids are like let's have dessert. I'm like we don't have dessert desserts for special treats. So we don't have dessert. So so what are those things that in the moment when you develop hand mouth disease, which is what happens after dinner where your hand has to go into your mouth with sugar or candy hand mouth? What's what's big enough to prevent that? A and then the things I've heard you say are go for keto keto light have add endogenous key external keto ketones in so that you can support brain function. Move your body, manage your stress, optimize your sleep and pay attention to your body and make sure that you care for your mouth, your belly, your your south of the border parts so that everything is is healthy and optimized. Did I miss anything?

Heather Sandison, ND

No, I mean and there's all of these elements. And what I don't want to do is overwhelmed people, right. It's just about getting started and then we can, as you get more energy because you are, you know, you've gotten started, you're getting better sleep, you're getting better food and getting better fuel. You're exercising as you get more energy really where we start with the courses, like how do I organize my week? How do I make sure I can prioritize these things?



Because that's what we run into. So often. It's we're also busy, right? And how to, how to create time so that we, because it takes effort and it takes time to shift our lifestyle. So how do we do that? And, and really my goal is to be able to create the easy button so you can just like get everything that you need to make that as simple as possible. So we're, we're certainly working on that. You, I want to, I want to go back to something you mentioned and it's like it's the why, what why do people do this? So, um, there's this great patient who I have who came into me um with cognitive kind measurable cognitive decline and the reason she showed up was because she has no kids. She has no living siblings.

And she was terrified of growing old alone, realized that she was losing some of her cognitive ability felt very overwhelmed. Couldn't get her taxes done, couldn't keep her house together, couldn't keep it clean, couldn't keep the yard together. And she has two cousins who live a few hours away and they're in a senior living kind of community in order to get into that community. She could not have any measurable cognitive decline. So she wasn't at this point, she wasn't eligible to move into that community. And she felt stuck. She was like, where am I going to go? Because I don't have anybody that's going to take care of me. And if I can't be with my cousins, like what am I going to do? So she was kind of staring down the barrel of this horrific future of being feeling very alone in the aging process. So she got on the program. And if I had talked to her, my staff had talked to her, we would have said her readiness score was like a zero. Like she was not prepared. She like we did not think she was scattered and confused and we did not think that she was gonna be able to do this on her own. And she didn't have support, shouldn't have anybody else like a daughter or a friend or anybody showing up with her to be like, okay, the doctor said this and this is how we're gonna do it and this is what we're gonna do. She didn't have all that support.

And this woman, I mean she still blows my mind. So she has, her life is completely transformed, her cognitive function, she completely regained it and she got her taxes done, got her house cleaned up, she's taking care of her neighbors, somebody in her neighborhood that ended up with cancer unfortunately. But she brings them food and I mean she is like back in it. She no longer wants to live in that senior community. She's like dating again. She wants to find her person that she can grow old with. So she has this entirely new perspective on what the rest of her life is going to look like. And she's kind of lost a little motivation because before she was motivated by this fear of growing old and there was this very clear line, she could not have measurable cognitive decline in order to get into that to have that option available to her. Oh she's like I'm feeling good, I want to indulge like I'm gonna go back to some ice cream and sure she sees her cognitive function kind of drop and she's not doesn't have as much energy in the morning. And so she is in this place of like reorienting to what is going to drive her what her why is to stay in it to stay on the program because her friends aren't doing a ketogenic diet. You know there when she goes to a party, there's cake and cookies and brownies and all the normal stuff that that most Americans will bring to get together right show up with our loved ones with just like sugar and alcohol? Um So backwards and so she is she's navigating what to make, what to



make it about, right, so that she can stay in it. So I think you just brought up such a good point. We need to have, you know, whether it's our kids or grandkids or that future vision, like, what is it that we're doing this for.

Wendie Trubow, MD, MBA, IFMCP

And I did a lot of work that I did a lot of training and development at Landmark Education and they have some great programs with why. And and so it's it's not, I have a family member who their goal was to lose weight for my wedding and they did, they lost like 100 pounds but once the wedding was done that, why was used up just like your patient, once, once she got to know no measurable cognitive decline, there's no more. Why? So you have to make a y that's big enough to sustain you in those when you're like, wait, why am I doing this again? It has to be big enough and long term enough that it'll keep you going or short term with something behind it. That's really critical.

Heather Sandison, ND

Yeah, that awareness of like, okay, I've got an update that.

Wendie Trubow, MD, MBA, IFMCP

Right, Right. And actually I always think about how do we bring this into patient care right? Like what's your why? Okay, if you know you wanted to get rid of your irritable bowel now, what what's a bigger goal that we can create for you? So I think that's a good place to leave people is have a powerful why manage your food, move your body, have great relationships, avoid hand mouth disease for things that make you sick and hold the view that you're meant to improve every decade as opposed to decline. These are really powerful things. So I know people are gonna want to follow you heather. How can people find you?

Heather Sandison, ND

Yeah, so Marama experience M A R A M A, Maramaexperience.com or Solcere S O L C E R E. So like light Ceri like cerebrum or shining light on the brain, learning more about how to optimize that cognitive function, creating solutions for brain health. So, so sorry, SOLCERE.com or um Maramaexperience.com. And then there's also Marama at home, if you're interested in those online courses that you can take from home. So it's just M A R A M A A T H O M E for uh for that. And then of course you can email the clinic Solcere, email Marama, I have the best team ever there. Such rock stars and they are, you know, most of them are health coaches, they know this stuff inside and out. They've seen what is possible with those suffering for those suffering dementia. And they can answer so many questions and and really share some of the stories of what we've seen. If you have any questions.

Wendie Trubow, MD, MBA, IFMCP

That's fantastic Heather. Thank you and thank you all for joining us to another episode of the environmental toxicants, auto immunity and chronic diseases summit. My guest today was



Heather Sandison, ND And you can check out everything that she's done on the site she's mentioned and have an amazing day.

