Introduction and Guest Background

And then our next discussion, we're going to be diving into the world of cognitive decline. And to help me do that is Doctor Heather Sandison. She's a New York Times bestselling author of Reversing Alzheimer's The New Toolkit to Improve Cognition and Protect Brain Health.

She's a renowned naturopathy doctor specializing in neurocognitive medicine and the founder of Salisbury Health Clinic, a premiere brain optimization clinic based in San Diego.

Actually right down the street from me. And also Marama, a residential program transferring, our transforming memory care, to memory recovery. Doctor Sandison is dedicated to supporting those suffering with dementia, and is the primary author of peer reviewed research published in the Journal of Alzheimer's Disease.

She is shattering common misconceptions about Alzheimer's teaching like, teaching lifestyle, changing protocols that keep your brain sharp at any age.

Doctor. Heather, welcome. Thank you so much for having me, Jason. Good to see you. We are neighbors. So we kind of run around in the same, same circles.

You could say, here in San Diego. So it's always lovely to have you on. And I really like bringing you on because you, You're a wealth of knowledge in this area.

It is something you've dedicated your career to, which is really cool. Because there's a lot of people, I think, struggling with this idea of dimension, dementia, cognitive decline, Alzheimer's don't really fully understand it.

And so that's really what I want to ask you about first is what are some of the sort of misconceptions about what dementia and Alzheimer's is and what is the sort of, new understanding, coming from the latest research?

Yeah. So dementia is an umbrella term that includes Alzheimer's and Alzheimer's is the most common form of dementia. So there's others that you might have heard, like Bruce Willis was, he was diagnosed with frontotemporal dementia.

Robin Williams had a Lewy body type dementia. So there are different manifestations of age related memory loss, which is essentially what dementia is.

It's our cognition. A declining and sometimes that looks like memory, short term memory, asking the same question over and over again. But sometimes early signs of this are falling victim to fraud or misplacing our keys more often.

And then there are other, you know, people ask me, well, what's normal aging? What everybody's going through this. There's actually no age related cognitive impairment or decline that is normal.

It's very, very common. But it is not normal. And we see this in different societies, different places.

What Dementia and Alzheimer's Really Are

I know you're very familiar with like the blue zones. You've done projects on that. What we see in places where our elders are revered, where people appreciate the wisdom and experience of the older generation, is people actually have better cognition as they get older.

It doesn't decline. And that's essentially what we want to create in our own society. Even if if, you know, we sort of appreciate youth more than in Confucius societies or in other ones in these other blue zones.

But dementia, dementia is this larger umbrella term for essentially age related memory loss or cognitive decline. And then Alzheimer's is the most common of that.

And Alzheimer's, what sets that apart is that it's typically this amyloid plaque, driven process. So that's the pathophysiological process. And people at the highest risk are women and people who are EPO for positive.

And that's essentially a genetic single nucleotide polymorphism. It's a very simple test that you can get. You can ask a doctor for this or medical practitioner for this, and you can do it through quest or LabCorp or the genetic tests that are available online.

So it's pretty easy to come by and understand if you have genetic risk. Some people already know I'm ApoE4 positive or maybe even have two copies for for, and that puts you at higher genetic risk for the late onset Alzheimer's, which typically starts after the age of 65.

But those pathophysiological processes can start happening in the brain sometimes decades earlier. So in your 40s, you can start having these changes in the tangles and the plaques associated with cognitive impairment.

You asked about misconceptions, and I think one of the big paradigm shifts happening in this field right now is discussing the cause of Alzheimer's or dementia, both really, and any neurodegenerative process, which includes Parkinson's and multiple sclerosis and other neuro ALS, other neurodegenerative, all of those all of those diseases, those diagnoses kind of fit in the same category of neurodegeneration.

Now, what causes them? I think that we can break that down. And it's multifactorial. The misconception with Alzheimer's is that amyloid plaques cause Alzheimer's.

So very simply they are correlated, but they are not causal. Amyloid plaques are a they are the response to something else, which is the cause. They are downstream from the causal level factors, which is what I'm excited to talk about today.

But amyloid we're good at getting rid of amyloid that there are medications that do that. But unfortunately they come with very high risk and they don't come with the reward of improved cognition.

So you don't get better. And that's really unfortunate. And we've we've put a lot of stock in terms of societally in terms of the research dollars, the time and effort into chasing this beta amyloid plaque hypothesis, when what we found in the research is that pretty much everyone from age 2 to 102 has some amyloid present, and there are people over the age of 65 with plenty of amyloid and perfect cognition.

And then there are people, of course, with dementia who don't have amyloid. So they're not that they don't equal each other. They're definitely related.

People with ApoE4 genetic risk are quicker to make amyloid. They do create more amyloid. But just because they create amyloid doesn't mean they're going to have cognitive impairment.

So there's a lot of nuance to this. And where I get really excited to spend time talking is about, okay, what are those causal level factors. And essentially it boils down to what creates imbalance in, you know, too much, too little in the wrong place at the wrong time in terms of toxins, nutrient imbalances, structural issues, stressors, infections and signaling.

And so when we when we play in that area, we have really the privilege, I have the privilege at Miramar and my clinic and Salisbury here in San Diego and in my coaching programs of hearing that people are better, that their cognition is improving.

Yeah. You know, it kind of reminds me of the cholesterol story, the arterial plaque story that we once thought, well, it's okay if you have arterial plaque.

Well, that's the cause of heart issues of cardiovascular issues. Well, like, no, that's that's kind of a band aid. In other words, these are what we're now recognizing.

These are the firefighters coming to the house that is on fire. And sure, when they spray their houses everywhere, that's going to actually cause some damage.

And, you know, it's not the greatest thing ever, but it's putting out the fire. And that's why they're there. And simply removing the firefighters isn't going to solve the problem right now.

Prevention Through Sleep, Exercise, Diet, and Social Connection

It's not a perfect analogy, but but that's kind of how I think about this stuff. And so, you know, and it's funny too, you mentioned, some of the places that we went to and I met with people that are 105 hundred and 201.

And what I noticed in these people was they tended to lose their hearing a little bit, like they don't hear as well. Right? They don't move as well. Right?

A lot of times their structure starts to kind of become a little hunched, like they just don't have this upright posture and like, but many of them didn't have any issues with their memory.

We were asking them about childhood. We were asking them about near-term things so they could remember they had long term good long term memory, good short term memory.

They had no issues really with cognition. And what I noticed in our society is a lot of older people, they'll repeat the same stories over and over again.

Right. Kind of going into more functional neurology, like the handwriting starts to go, you know, their gait, the way that they walk starts to go. So when we're starting to see these sort of breakdown in, in how the brain is functioning and in a really functional way beyond just memory.

And of course, I've dealt with, a couple, grandparents that have gone through this process of dementia, and it's a really just taking a very, non-emotional kind of objective perspective.

It's very fascinating to watch how it unfolds. It's it's kind of funny a little bit sometimes, especially in the early parts, you know, because we kind of just had to roll with it in a way.

Right? I would say like just like a coping mechanism. I guess as a family member, you're kind of just rolling with it and you're just appreciating because you kind of see them going and they're on their way out.

And, unfortunately in the kind of the time and the place that we were in, we didn't really have an ability to kind of recover it at that at that time.

So, you know, we kind of had fun with it a little bit. We enjoyed the time. And then it got to the point where it was just sad, like it just got to this point.

I'm very sad to watch. And you kind of felt was a pity you felt compassion, and a little helplessness too. And so it's a very difficult time, I think, mostly for the family members.

You know, I have, of course, no idea what it's like going through it as, as an individual. But but really, what I noticed is family members really struggle in that process of like, what do you do?

How do you proceed when it gets to that point? So to me, this really, ignited a passion to, bring awareness to how we can prevent this stuff. And of course, if it's starting to crop up, how we can mitigate it, how we can halt it and perhaps even reverse it if it's early on.

So maybe you can kind of walk me through some of the things that you like to educate people on how you live your life yourself. Before the symptoms start showing up, before we start even recognizing cognitive decline is starting to crop up, what do you like to do?

How do you like to approach brain health, cognition so that we can get to those 80s, 90s, and perhaps even beyond without any of these symptoms that typically associated with cognitive decline?

Yeah. So prevention is so much easier than reversal. Now we know that prevention is worth it because we see reversal right. So we know that it works. And that helps our confidence.

And if you are someone who knows you have genetic risk, either you have it in your family, like for you for example, and or you know, your opposed status and you have one copy of 4 or 2 copies of four, then the time to start is yesterday, right?

Or, you know, the next best time is today. And really, the foundations are most important. And those are the lifestyle foundations of good quality rest and sleep.

Getting enough sleep, getting good quality sleep is so crucially important. Making sure that you don't have sleep apnea, that you're really getting enough.

Not just enough sleep, but deep sleep and REM sleep and then exercise. Physical movement is so important to brain health, and we see that 10,000 steps a day reduces risk by 50%.

So that's remarkable. Yeah. That's remarkable. It really is. And when we're in, you know things shift. When we're in a reversal stage, 10,000 steps a day is not enough.

That risk reduction that is not reversal. When we're talking risk reduction, we're taking everything that, that I list here up a notch. But for prevention, you know, a lifetime of getting good sleep, a lifetime of being active and getting both strength and aerobic exercise, a lifetime of metabolic flexibility, making sure that you have insulin sensitivity, that you're not insulin resistant, that you're potentially going back and forth in and out of ketosis, that you have periods of fasting and periods of abundance and, moderation in between.

But you're getting a variety of foods, lots of different colors that you're getting fermented foods that you're getting tons and tons and tons of fiber and veggies and, and that you have, you know, that you're thoughtful about your diet.

I think that it's not about restriction so much as variety and thoughtfulness, and that you're, more of a kind of ancestral inspired diet. Right? Whole foods. Right. Like.

Right. Yeah, primarily whole foods. So whether it's Mediterranean or what you what have you like, there's different ways to do that. But it's an engagement.

So social engagement and activity and brain engagement. Right. So whether that's through sports or dancing or creativity, music, art, whatever it is, you find your tribe, you find your people, you have you have your network, your community.

We know there was a recent study. I'm sure you're familiar with this. It came out of northwestern. It collaborates the the Harvard study, that that book, The Good Life is, is, based on and essentially it draws the same conclusion that our social network, that our community, that the strengths and the qualities of our relationships is what determines how well we age and super agers as we define them as people who, at 85, have the memory and cognition of a 55 year old, of somebody 20 or 30 years younger.

And what they saw was that what all of them had in comment was not a supplement, was not an exercise routine, was not a medication, was not a cholesterol level.

It was this quality of their social relationships that they maintained good, high quality, interactions with other people. And they had actually a bigger the part of their brain associated with social connection was larger.

So you could see this on MRI, MRI's. And these tended to be people who of course are more extroverts rather than introverts. But that foundation of rest, diet, exercise and engagement, and particularly social engagement.

But I think also working, flexing that muscle of the brain, of staying mentally engaged, doing things that are challenging those those really are the foundations of setting up life so that those are prioritized.

I think it's the best prevention. Yeah. You know, you mentioned, kind of a diet, the dietary component. And I want to kind of what comes to mind there is, you know, referring to dementia and Alzheimer's and some of these neuro neurocognitive decline issues.

You've heard it maybe spoken of as type three diabetes, right? So maybe you can talk to me about how important blood sugar regulation is. Insulin regulation. Like, why is that?

Does that seem to be sort of this, this really important thing when it comes to, to dementia? So the brain only takes up 2% of body weight. It's about 3 pounds, give or take.

And yet it uses 20% of energy expenditure every day. And so what is energy? Energy in our bodies? It's primarily ATP. And most of us this day and age, in our modern society, we are burning sugar to create that ATP.

Whether that sugar comes in the form of pasta or Skittles, you know, wherever that comes from, for you, it's we're taking glucose and we're turning it into ATP.

Now, that is because we have abundant glucose, carbohydrates available in our society. Our ancestors had these periods of fasting. They had periods, you know, where they there wasn't abundant carbohydrates.

But right now we can get blueberries, 365 days a year, right? All of these things are abundantly available. And so we don't tend to go without. But we're designed to go back and forth between burning sugar for fuel and burning fat for fuel.

And as we age, regardless of our diabetes status, our brain is not as good at turning sugar into ATP as it once was. And even if we have a hemoglobin A1 C of 5.5, right, we're below pre-diabetes or diabetes.

We're we're on track. We don't have diabetes. Even in that state, our brain is not as good at turning sugar into fuel and not as good as allowing at allowing insulin to get that sugar into the cells.

But the amazing thing is that our body is essentially like a hybrid engine. We can use an alternative fuel source. We can use that for fuel and our brain.

It kind of unbelievably, it makes sense from an ancestral perspective that when we don't have carbohydrates available, that means for our ancestors that we couldn't find food.

We were potentially starving. And so it turns our brain on. Our brain actually does a better job. We think quicker, it's easier to find that word or to solve that problem, to find carbohydrates.

Right. If we are in ketosis. So when we're feeding our, our, our body, if there wasn't carbohydrates right there, it's flips the switch. After about 72 hours it takes about three days.

It'll flip that switch into burning stored fat for fuel. So we'll mobilize that stores this energy source and that allows our brain to turn on.

Blood Sugar, Ketosis, and Metabolic Flexibility

It also helps to reduce inflammation. It helps with detoxifying, fat soluble toxins that might have been stored for a while. And then for those who want it, it's a body composition shift.

And you can get rid of some excess weight. And what most people notice is that their mood stabilizes. They get off that blood sugar rollercoaster. So their mood is much more stable.

Their energy is much more stable. I personally notice I sleep much better. I wake up feeling more rested about an hour and a half earlier than I typically want to get out of bed, so I get more time in my day.

And many people have noticed they feel lighter, their head feels like, or the brain fog clears again, it's easier to find words. We literally have had patients who go from not being able to remember their grandchildren's names, to remembering all of their grandchildren's names, after they get into ketosis.

So it can be quite profound. And in this area. So if you look in the research, Dean Ornish did a trial. So Dale Bredesen has done a trial. It's done multiple trials.

I have done a clinical trial in my office using the ketogenic diet. We've used ketogenic diet. There's a several, well known researchers who use the ketogenic diet and show improved cognition in people with memory loss.

You'll also see that Dean Ornish, his diet is a vegan diet, and the vegan diet doesn't limit carbohydrates, but it goes more in a whole foods direction, and it can it can be very anti-inflammatory.

And I think that both of these diets potentially have a lot of benefit. And I think what the research will show us over time is that actually going back and forth between them is what's best.

It's not being in ketosis forever. I don't want anyone to take that away. And it's not been vegan forever, but it's going back and forth between those two diets that I think we'll put our brain in the best, in the best state to be resilient, to have enough fuel, and to, to thrive as we age.

Now, the reason why I really promote the ketogenic diet in my practice is because of how profound it can be so quickly, and I don't want to work with anybody who's suffering with any cognitive decline and not have them experiment with ketosis.

And it can be a little bit daunting and overwhelming, but it can. The results are so profound in many cases that I want everyone to at least try it, right?

Yeah. I mean, look, any any habit that we're changing can be challenging, right? So that's just that's just part of the process of of experimenting with new things.

You know, I think about it like, kind of, bilingual. We want our bodies to be bilingual, right? We want to speak two languages. Right? We want to be able to dip into this fat burning mode, and then we want it to be able to, to, to handle glucose so that when we do eat carbohydrates of any kind, our body knows how to use that effectively shuttle those to the various areas that need it.

And we don't have this, you know, insulin and blood sugar regulation issue. Right? So and so when I think about it that way is because if I'm bilingual, but I don't speak a my second language, like for 20 years, I'm going to be a little bit rusty.

Right? So I'm not speaking it enough to like I didn't forget it. It's still there. I can still access it, but I'm rusty with it and I until I go to that country or I start speaking it with, with somebody that's fluent, then then it'll come back.

Right. And so but if I speak it regularly, both languages regularly, then I'm going to, I'm going to stay up to date. I'm not going to be have any issues. Right.

And so to me this is the advantage of being able to be flexible metabolically. Can I dip into my sort of sugar based

metabolism? Can I dip into my fat base metabolism.

And so that's where these periods of both intermittent fasting, you know, and by that I just mean, you know, stop eating around 7 or 8 p.m. and start eating around six or 8 or 9 the next day. Right.

And which is pretty ancestral, which is what our grandparents, you know, usually did. So intermittent fasting of some sort and then occasionally doing some sort of fast.

And again, like we had doctor and tune on from people on the fasting mimicking diet. Right. So we can use these different strategies. Three day water fast, five day juice fast, then fasting mimicking diets.

And we can flip that switch back into this, this form of, of, of fat burning, fasting, sort of mimicking metabolism that allows our bodies to be flexible.

But for many of us, we haven't even dipped into that in 20, 30 years. Right. So it's going to be there. Yeah. If ever. Right. And so that's gonna be a little bit tricky.

And it can be a little bit uncomfortable for somebody that's, that's kind of wandering into that territory. But but I think what you've noticed, what I've noticed personally, is that once you start doing that, like, holy smokes, like the lights come on, you know, your energy comes back.

Your your ability to focus, think clearly, even if you're not compromised or you don't think you're compromised in that way, that the notices are I mean, it's the benefits are noticeable like it is is very apparent that something is shifted.

And so anyway, I think, I think that's kind of how I think about it is we want to be flexible metabolically. And the longer I can keep that, capacity to do that, I think the more that's going to benefit.

Agreed. Yeah. Well said. So talk to me. Talk to me about the, sort of reversal side. You work with a lot of people that have cognitive decline, of various sort of severities.

How do you walk people through? You know, you mentioned that you gave some advice around what we can do to prevent. We said it's kind of not enough for somebody who's already along the path of, of dementia, cognitive decline.

How do you have to approach it from that perspective? Yeah. So this I mean, this is a longer conversation. And that's essentially the book Reversing Alzheimer's talks through all of that.

And it can feel like a lot to bite off, but even going in that direction. So if you are someone who's already struggling with cognitive impairment, getting a continuous glucose monitor might be the first step towards an awareness of of your metabolism and what is happening when you consume carbohydrates or don't, or you sleep well or don't read.

It's not just what we eat that that affects our metabolism. So understanding that, you're, you know, going in, what do we do for reversal? Right. So there's a whole lifestyle and medical approach that we can take.

And again, the lifestyle is foundational so that all the medical pieces that the toxins and the nutrients and the stressors and the structures that that we can, that in the infections that we can evaluate through testing, any intervention we're going to use to help to correct those imbalances is going to work better.

If we have that foundation, that lifestyle foundation in place. Okay. But I'm going to be there real quick because the lifestyle foundation is foundational, right?

Like that must be there. But but it sounds like you're working in more sort of integrative functional naturopathic medicine, or you're including some functional testing.

You're taking a look at gut work, you're taking a look at, you know, maybe hormone levels. You're taking a look at heavy metals. If you if you suspect that or mold or that type of thing. Right.

Because these can play a major factor in the, sort of the, the, the progress of cognitive decline and the inability to move past it or reverse it. Right. Like these can be very harsh to, to your effect.

Yeah, absolutely. So systematically we want to go through that because it can feel overwhelming. Right. What toxins nutrient stressors structure signaling and infection.

So there's kind of seven categories that we want to evaluate. And we want to go through them systematically because they're not mutually exclusive. So you can have more than one and you might not have one.

And so we don't want to be wasting our time on that. Right. So but I think this is really important. I just want to like highlight this because I think what I see when people get this sort of dementia or Alzheimer's, or any cognitive decline label, they think that's it.

And there's a, there's a lack of awareness of like, oh, maybe there's mold that we have to address, or maybe there's something at the gut level. So like I just want to highlight that, that, that this can be a really key part of the reversal process is identifying these things.

Yeah. Without a doubt. And I you know, I used to kind of wait for patients to tell me, oh yeah, I've been in a moldy building or I want to test my gut.

And now I'm like, no, no, no. If there is a cognitive decline process happening, if you're in that we want to understand all of these pieces, right. And we want to be able to address them immediately because it only gets harder as this disease progresses.

And so, yes, we've seen people with very, very poor cognition who are nonverbal start talking again. People who stopped being able to read, start reading again like we have seen miracles happen, but they're miracles and we don't.

We can't. They certainly can't guarantee them. But we it's just harder. It takes more effort, more money.

How Reversal Works: Testing for Root Causes

And then by that point, you have to have a caregiver really making all the doing, all the decision making, doing all of the everything, right, all of the cooking, all of the support.

It's more than a full time job. And so what I'd prefer is that people get aggressive about it instead of just dipping their toe in the water and just doing 1 or 2 pieces, we say, all right, let's look at all the labs.

Let's get an understanding of where we are at baseline when we're getting started, and toxins. We're thinking about three, three things you mentioned some of them.

So metals mycotoxins and chemical toxins, things like roundup and phthalates and plastics and styrene and gasoline additives that kind of thing. So chemical toxins, mycotoxins or bio toxins and metals are three types of toxins.

And then we want to use binders that are specific to those. So this is where it's really important to work with a well-trained functional medicine provider, whether they're a naturopath or breeders.

And train provider is really best. They'll understand all these things and what the nuances are. And how do we get that particular toxin out, and where might it be coming from so that we can stop the exposure?

So that's toxins and the nutrients. There's kind of macro nutrients and micronutrients. Right. So part of it might be

understanding as there are too much sugar.

We talked about diet is there are you on your way to type three diabetes. You know, do you have insulin resistance and diabetes that might be creating inflammation in the brain and starving your brain of the nutrients that you need for it to function appropriately or do not have enough of something like B12 or magnesium, right?

One of these really essential nutrients that are required for neurotransmitter balance. Maybe there's not enough amino acids to be the building blocks of our neurotransmitters.

So we need enough nutrients, we need the right amounts, and we need, you know, not too much or not too little. And we can measure that to some degree.

And then, infections, infectious burden. We know that there are certain viruses that are trigger inflammation in the brain, like the herpes viruses. We know that gingivitis, there are bacteria associated with gingivitis can trigger amyloid plaque in the brain.

We know that the line spirit keys and Covid have direct impacts on cognitive function. So we're looking for those types of things. We're looking for structural issues.

Do you have sleep apnea. Can you is how is your blood flow. Have you been head over to day going right. That's your big right. Can you breathe right. Especially at night when you need to get like lymphatic rinsing of the brain.

One night of sleep deprivation can lead to measurable amyloid accumulation in the brain and people in their 20s, 30s and 40s. I'm not even talking about people in their 80s.

And then imagine what happens over decades if just one night of sleep deprivation causes a measurable increase in amyloid. If you don't get that rinsing of not just the amyloid, but like the mercury that you might have been exposed to when you ate some sushi, or yeah, it's the metabolic waste that happens from your cells doing what they do.

Right? I spend normal trash. You need to be able to take that out every day, right? So, you know, there's and to that point, you know, there's nutrients isn't just what you eat, but it's also can I digest and absorb and then eliminate what doesn't serve me.

Right. So that that digestive process, this is the stool testing that you mentioned or the gut testing that we do on. Pretty much everyone is asking that question do I have the right microbes?

Can I digest enough so that I can absorb the right things? Or am I having? Do I have undigested food in my stool? Do you know, is there inflammation in the gut that might be translating into inflammation in the brain? So toxins, nutrients, structure, traumatic brain injuries put us at risk for developing cognitive impairment.

And so looking at that, even if they're old, there are things that we can do about them. It's best to treat traumatic brain injuries as soon as possible after they happen.

Whether you're working the functional or allergy, neurofeedback, but also nutrients, red light therapy, there's a lot of things that we can do for TBIs, and many people show up in the emergency room.

Maybe they get an MRI and then they're told, okay, go home, get rest, and there's nothing like it'll resolve itself. Yeah, yeah. And there's so much more we can do to prevent the longer term sequelae.

And then, so stress stress is kind of this engagement piece. So again it's balanced too much too little in the wrong place at the wrong time. We don't want to be stressed right before we go to bed.

We want to be able to rest. But we also don't want to be a couch potato when we're retired. Right? We want to have purpose and meaning and get exercise.

We want to be challenged. If we don't use it, we lose it. You mentioned hearing loss. So hearing loss, vision loss, sense of smell. These things are related to brain atrophy.

And so we want to wear hearing aids get them tested. We we need that engagement. We need that sensory experience. Otherwise we are at higher risk for dementia as we age.

And these are modifiable right. These are treatable things. And so engaging like this is why cooking is such a great brain activity. Right. Because we see it, we smell it, we taste it.

We touch it, we hear it sizzling or we hear the chopping block. Right? That is cooking is such great, great brain engagement. So it's dancing. We hear the music where we have to know where we are in time and space, as and where a partner is and time and space.

Maybe we're getting cues from an instructor, we're getting our exercise. We're physically engaged in it. So pickleball, you know, any of the racket sports.

There's the we hear it, we see it. Hand-eye coordination, the social aspect. We're outside often. So all of these these engagement, the engagement of our brain is so crucial to us growing old.

Well, and I think you saw this in like, the blue zones. The flip side of that, though, is like the care partner for someone with Alzheimer's is anywhere from two and a half to six times more likely to be diagnosed with Alzheimer's later.

And that's because the stress is too much, right? It's affecting our sleep. We lose our identity. Maybe we're not taking care of our own diet and exercise routines.

We're not engaging with our peers because we are become a martyr to the caregiving role. So and this is really challenging to navigate, and it's not your fault if you're a caregiver. Thank you.

Thank you, thank you. You are a saint. And I mean, I've been so inspired by the just the love, the profound love and and the sacrifice, like the immense sacrifice.

Right. But it's like, that's where I think your reminders are really helpful. It's like you got to take care of yourself, too, right? Because I mean, again, it's like we're perpetuating the cycle.

Like that's the that's the sad part is that we kind of give ourselves to somebody else, which is an immense act of, of, of love. And, and yet we can then become the one that needs looking after.

Right. And it's like, so how do we how do we do that? And look at Sarasota. And this is something that we, we became aware of. It's like, the people with tbis, the people that just that needed looking after, it was often the caregiver that was so stressed out and had emotional dysregulation, poor sleep, you know, really crappy energy.

It's like their whole body was falling apart because of how much they have to give in that process. So I can I can I can certainly relate to that. You know, and it's funny, the in in Okinawa, I will never forget the, the nursing home that we visited because there was they had such an emphasis on this mind body play kind of, process.

You know, they did skits, right? So they were we were dressing up. I got pulled up on stage to, like, do this dancing skit. And of course, I can't even understand what anybody's saying, but I'm just playing up there. Right.

And it was this silliness. It was the movement. It was the creativity, the laughing, the fun, of course, being with people. Right? And it was just like it.

And everybody was just laughing, especially at the silly Americans up there. Right. And so, you know, and they did karaoke, they sang, and then they did these like, just like movement exercises for for those who, who didn't really move.

Well, they put a stick in their hands and they'd move it side to side. They move it up. They just they just follow this very gentle chair exercise. But I noticed that it was a such a focus for them on, on moving the body in structured ways and also in playful ways.

Music was another one that came to mind in, in, Loma Linda. I asked this 93 year old, I said, look, your husband's gone, your family's gone. Most of your friends have passed.

Like, what keeps you going? Why do you get up in the morning? And she said, well, you know, first you better Bible. But the thing that she said was, I have to learn this, song for the violin class on Wednesday.

And I thought, my gosh, like, what a beautiful answer, right? Because it's engaging the brain in such a beautiful way music is in. And just listening to music is really is really healthy.

Right? But then she's with her peers or perhaps a lot of people younger than her playing this and, and and it was it had meanings to her. Right. So and again she picked this up at like 91.

So she learned she picked up the violin at 91. And it was like she was learning something new, engaging new aspects, new parts of her brain in a very complex way.

Right. So to me, like I, I picked up so much from these people in that way that no matter how old you are, continuing to move forward, picking up something new, you know, exploring the world in hopes that you might fall in love with something, right?

And it can be so minor in a sense, but it's the thing that keeps you going. And I noticed that the people that lose that thing that lose that, that passion for life in the smallest of its forms, the most sort of meaningless aspects of life can we can we can create meaning, and they're the ones that seem to, to do well, the ones that can do that, on a consistent basis that can continue to engage in life no matter what it is.

Yeah, I couldn't agree more.

Lifestyle, Caregiving, and the Future of Alzheimer's Treatment

I ask every patient I have what brings you joy? Because when we talk through these things and particularly the brain engagement piece, but all of it right.

That will to live that you're you're describing here. What comes up is, you know, some people get into this really structured I right I have to take these supplements and I have to eat this way and I can't eat that assessment.

Yeah. And like it's so like they're holding it so tight and then and I think the people who do best, it's like I get to, I get to go do these fun things.

And that's when you see it sustained. Right. It becomes part of their identity that I get to go play golf. I get to go play pickleball. I get to go, oh, I have an 83 year old woman who she is in these, these she sings and dances.

She's in the psych troupe and she has so much fun with them. I mean, there's so much joy, and it takes it out of her. She's exhausted that after they have a performance, but she's like, I just give myself permission and I love it and it's so worth it.

And it's really inspiring and amazing. It's a it's a mindset of get to engage in these fun things and not if I tell you to go, go do these things and you hate it and like it's not the thing per se, right?

Oh, it's how you approach it, right? And you're not going to do it after a couple times because you hate it, right? I see this with like the brain games, the online brain games, like, oh, I'm doing my Sudoku online or I'm doing my crossword puzzles, I'm craving luminosity, but I hate it.

It's like a task, right? Yeah, but I check that box every day. All right? Like God is what he. What brings you joy, right? Sometimes I have someone say, like the horses.

I remember the horses when I was growing up. That brought me so much joy. Okay. How do we find a horse to hurt you and do you like brushing them? Maybe riding them, I don't know.

Yeah, yeah, but how do we bring that back so that you're looking forward to this just becomes your identity and you sustain it long after you finish hearing my voice, right?

Yeah. And, I kind of. It harkens back to my friend Paul Jack, who's who works with everybody. He's everybody he works with, no matter what their age and abilities.

He his number one thing is like, what's your dream? Yeah. Right. So whether you're 12 or 20 5 or 95, what is your dream. Right. And that can change and probably should change over the course of your life. Right.

We have an arc. And so to me that, was such an important thing that if you don't if you can't identify your dream, then that's your focus. You know, like, sure, we can go through the process and it's good.

Do the testing, go through some of the things. But like, as you're doing that stuff, don't lose sight of this fact of what is my dream? What is my dream?

Because that becomes your North Star, and it gives you the meaning and the purpose to do these sort of mundane tasks that are required, maybe to get better.

Right. And so, I guess what I'm what I'm taking away from this last little bit that we've talked about is that when somebody has dementia, cognitive decline of any kind, there's kind of a reason why, there's this perception of, of that, that it can't be reversed.

And then we have such a low success rate of any treatment protocol succeeding is because we're actually not most people are not looking where they need to look.

Again, you mentioned infections and toxins and, and metals and these type of things, like we're not doing the investigative work to figure out what are the barriers that are preventing recovery.

Right. Instead, we're just looking at, okay, maybe what supplements or what medications or maybe even just what lifestyle factors, which are great, but they may not be enough if we can't remove those barriers.

And so, but Doctor Bredesen has really pioneered what you have, kind of led the way on in such a huge way is this approach to look at, look under the hood, really take a functional, look at what's happening here that's preventing this reversal, this recovery, and that probably even, contributed to the decline in the first place.

Yeah, absolutely. I think that, you know, how come my neurologist isn't telling me about this or that common question that we get? And really, this is a big shift just in the past couple of years.

So, the research has very much been focused on the amyloid plaque hypothesis. And unfortunately, this is one of the saddest, most things that makes me most angry in the world.

There's a book called Doctored by Charles Piller that came out in 2025 and I think February of 2025. And it is the story of the fraud and the mismanagement of that money and the lying and cheating that has happened in the amyloid plaque, kind of mafia is what they were termed, because essentially, if you weren't studying amyloid, you weren't studying Alzheimer's for a long time, and they just created this narrative, basically.

And it's just like once we went down that road, it's just like everything followed, right? Yeah. And they kept doubling down on it with fraudulent data.

Yeah. It was like knowingly they were they were doing this in a very sort of sinister way for whatever reason. Right. That actually that doesn't even matter.

The fact that it was so fraudulent and so obvious, it wasn't just mistakes that were being made, right? No, it was. And it's so frustrating, right. Because we could have as taxpayers, right?

We could have spent that money in other ways. It's like all of the people suffering when we might have been able to figure something out that could have actually worked.

I mean, it's just it's a nauseating to even think about it. But we like letting that go. It is what it is, right? It is what it is. Moving forward in the last couple of like even over the summer, where we're recording this in October of 2025, just this past summer, at the Alzheimer's meeting, there was a, 2111 patients.

Participants were enrolled in a trial that was lifestyle focused to the Alzheimer's Association. It was like a $50 million trial. They've put another $70 million in it to keep it going.

And what they did was two lifestyle interventions. One were they just educated people and one were they had more specific coaching, they had more hand-holding.

It was more, not done for you, but there was a lot more support. And what they found, both groups improved. And the group that had more, strategic, more hand-holding, more more structure, more structure, more support, they got even better.

Yeah. So when you look at the medications that are available, people don't get better. The only research that we have showing that people get better is based on lifestyle intervention.

And the other piece here is is the effect size. So when you look at the Ornish paper, when you look at the bettison papers, when you look at, those interventions which were more specific, and there was even more structure to them, you see, even more effect size.

So you people, you see people getting even better when you look at the like the Poynter trial, there's these other lifestyle interventions that are not as specific.

People get improvement, but not very much. And then when you look at the like the beta amyloid, antibody therapies, these antibody therapies like the can be, can see those that are on the market right now.

They you get a best case scenario, you get a 30% reduction in the rate of decline. So you do not expect to get better. What you expect is slow down. Yes. Bad less quickly. Right.

So and with very high risk of brain bleeding and brain swelling, particularly if you are female and you're ApoE4 positive. Very, very yeah. I mean again, I think to me, the main message that I always want to get out is the fact that there is a way to reverse this stuff.

Naturally. It's just going to take a lot more intervention. Right? It's the same story with cancer, with heart disease, with these severe and significant chronic ailments.

You know, the farther down that road we go, the more intervention that's going to take place. And probably to some degree, the limited amount of recovery that we can get, right, especially if it gets super serious, right, like that, it just gets difficult.

Right, because there is a breakdown that's happening. But I don't want to discourage that. I mean, at the very least we can kind of halt it, right? And we can hopefully reverse right.

And like I think it's just going to take a very intelligent approach. It's going to take, a comprehensive, broad look at what's really going on. And then, you know, the reality is it's going to take you putting in probably some effort, like

it's going to be a big change.

And probably some help, especially if you're already down that path. Right. So it's not an easy road, right. Like I don't want to paint. This is something that's like, oh, we can reverse it.

And it's super easy and it may be challenging, but super worth it. And really trying to just throw away this paradigm of like, you're just stuck with this and there's just there's just it's a unidirectional road and you're like, that's it.

Like if anyone tells you there's nothing you can do for it to support your brain health, no matter what age, no matter what it stage, if someone tells you there's nothing you can do, they are uninformed and it's factually inaccurate, right?

Yeah. I mean, that's a good place to end it. Doctor. Heather, this has been fantastic. Thank you so much. Tell people where they can find more of your work, your book, of course, I'm sure on Amazon, anywhere else.

But but tell me where they can find you. Yeah. Doctor. Heather Sandison, Dr. Heather Sandison. heathersandison.com is a great place to start. We have our coaching courses, access to Salisbury and everything else that we're doing to support those suffering with cognitive impairment and their families.

Beautiful and Reversing Alzheimer's is her book. Definitely go check that out. If this is something that you want to prevent for yourself. If you're dealing with this in your family and it goes into a lot greater detail of what we what we cover today and, and gives you some, some very specific things you can do.

So I can't recommend that enough. It's a fantastic book. I think everyone should read it if they're concerned about their brain health. So Dr. Heather, thanks so much for joining me today.

Always a pleasure, Jason. Thanks for having me.