Uncover The Secrets To Prevent And Reverse Alzheimer's

David Jockers, DNM, DC, MS
with **Heather Sandison, ND**

David Jockers, DNM, DC, MS
Welcome to the Conquering Chronic Inflammation Summit. I'm your host, Dr. David Jockers. today I'm interviewing Dr. Heather Sandison. We're going to talk all about key lifestyle strategies to prevent and even possibly reverse dementia and Alzheimer's disease.

Dr. Heather Sandison is a Naturopathic Doctor specializing in Alzheimer's disease and related dementia. She is the founder of Solcere Health Clinic, San Diego's Premier Brain Optimization Clinic, and Marama, the First Residential Cognitive Care Facility focused on recovery. She is committed to advancing research and innovative approaches to Alzheimer's and cognitive decline management, providing hope for patients and their families. Her clinical trial: Observed Improvement in Cognition During a Personalized Lifestyle Intervention in People with Cognitive Decline, was published in the Journal of Alzheimer's Disease in August 2023. Her highly anticipated book, Reversing Alzheimer's, is out now, and you guys should check it out. A wonderful book called Reversing Alzheimer's. It summarizes her great work, her great research, and many of the case studies of the individuals she's been working with to help prevent and reverse dementia and Alzheimer's. We're going to go into that in detail in today's interview. Thank you so much for joining us. let's go right to it.

Well, Dr. Heather Sandison, it's always great to connect with you. Congratulations on this new book, Reversing Alzheimer's. I mean, that's a powerful statement. Bold statement. But it comes with personal experience and clinical research that you've been doing because, as we've been told for years, the best you can do. This is what Western medicine is: they've run up against this wall where the best they can do is try to slow the progression of Alzheimer's and dementia. But, there's a new group of practitioners, you, Dr. Bredesen, that I know you've trained with, that are leading this movement of saying, that's not true. Not only can we slow the progression and we could do it, oftentimes without pharmaceuticals, but on top of that, we can see a lot of progress and a lot of improvement, and possibly even this idea of reversing dementia and Alzheimer's.

Let's talk about how you got into this. then we'll talk about some of your research findings and patient care experiences.

Heather Sandison, ND
Sure. David. Thanks so much for having me. Just to put this into context, you said, this is a bold statement that we could reverse Alzheimer's. I was taught that we couldn't. I was told over and over by very intelligent people that there was nothing you could do. To suggest that you could or would harm would be to give people false hope. Yet, in that network of other doctors who have been trained by Dr. Bredesen, we now call it false hopelessness. This idea that there's nothing you can do is inaccurate at this stage. There has been a ton of research. The Lancet, a very reputable journal out of the UK, published in 2017 and then again in 2020, commissioned reports on Alzheimer's and all of the modifiable risk factors that there are, and there are no fewer than 12. Then you can add sleep in there that they discuss at length, but don't add a 13th.

Just in this past month, when it's May 2024, CNN has Sanjay Gupta's docuseries on CNN showing and sharing the stories of people who have reversed their dementia symptoms to reverse their Alzheimer's symptoms. These patients were seen by Dr. Dean Ornish on the West Coast, Dr. Richard Isaacson on the East Coast, and all of us providers. We all came to this with a degree of skepticism because we've all heard that refrain. Patients have heard it, and doctors have heard it. We've been trained in such a way that there's nothing you can do. I didn't believe it until I saw it, and I saw it a few times. Then I saw it more and more and more and more. You stopped telling yourself, I'm doing this wrong, or there's something wrong with me.

You start to realize that, as a provider, people are suffering unnecessarily. When I saw that the first time, I mean, the first thing that came into my mind was, of course, that I had done it wrong. I was like, could we do the testing wrong? Her husband reassured me, No, she is better. She's different. Then I thought, How could I not dedicate my life to telling as many people as will listen that there's something you can do and that there are, in fact, many things that you can do? It's a choose-your-own-adventure. Do as much as you can, but don't be overwhelmed. Don't get into that analysis paralysis of how do I do it. But more than that, just get started. Just get started going through these modifiable risk factors and modifying what you can from a lifestyle perspective to optimize cognitive function.

David Jockers, DNM, DC, MS
Yes, it's powerful when you start to see it. When you see real people changing, I mean, you have to get that message out because we know that Alzheimer's and dementia ruin and make life a struggle for the entire family. It's not just the individual that's suffering; it's the people around them—the caregivers, the family. Everybody suffers through this if there's hope, we've got to give that to them. Let's talk about your recent clinical trial that you published in the Journal of Alzheimer's Disease in 2023. It was called Observed Improvement in Cognition During a Personalized Lifestyle Intervention in People with Cognitive Decline. Can you tell us the parameters of this and how you went about basically doing this and getting it published?

Heather Sandison, ND
Yes. In 2018, I had the opportunity and funding to do a clinical trial. The reason that we wanted to do it was because I had lots of families; as you mentioned, they're all suffering. It's expensive. It's so much effort to take care of someone with dementia and to ask them to change their lifestyle, to change their diet, to exercise, to take supplements, and to do the testing. People would ask, If I do all of this, how likely is it that I or my loved one will get better? I didn't know the answer to that question. Essentially, the study was designed to answer that. What we found was that we took 23 participants through a six-month intervention. In that time, we saw that 74 of the 23 improved, or 74% of them improved.

All of these participants had MoCA scores, or the Montreal Cognitive Assessment, which is how we decided whether or not they would be in the trial if they were eligible, and they had to have measurable cognitive impairment. Their MoCA scores had to be measurably declined. Normal is 26 and above. Perfect is 30 out of 30. They had to be between 12 and 23. What we saw was that, as you might expect, as people, when people were younger, when they were earlier on in the disease process, it was easier; they were more likely to get better. But 74% of them still did get better. I also see in my clinical practice the people who can do it, who can make the changes, whether it's because they have the support of a family member or other caregivers or health coaches, or whoever it is, they're willing to do it.

If you're willing and able to make the changes, it doesn't have to be all of them. But if you're willing and able to make the changes, you're much more likely to get benefits than the person who's, for whatever reason, because of whatever constraint, maybe they've been hospitalized, or maybe they don't feel they can afford it, or they don't have the energy to engage those participants that we just did not get the benefit from. It only works if you do it, as you well know. That it was; it was amazing, though. It stunned me that there were so many that the numbers were as good as they were.

What we saw was that there was a difference in the mean scores at baseline and six months as well. They were statistically significant. There were improvements in memory and overall composite cognition. in those MoCA scores, we also saw improvements that were significant in sleep and quality of life. We saw improvements in every cognitive parameter that we measured, although not all of them were statistically significant in that small of a group. Yes, there's still a lot of research to be done, but that publication was in August of 2023. In July of 2022, Dr. Bettis my mentor, and his group authored the paper first CAcTUS. They published a very similar clinical trial. It was a nine-month intervention, whereas we had just done six months, but they took cognitively impaired patients who had MoCA scores down to 19. Not as impaired as our group, which was 12 to 23, but they went down to 19 and people had to have cognitive impairment. They couldn't be perfectly cognitively functioning.

In nine months, they saw that 84% of their participants improved, and they had 25 participants. very similar trial, very similar scope, similarly done. They got better outcomes. They had more people improve, but they had a longer intervention and fewer declined participants. We cooperated with their research and showed that this was replicable and that we could do it in multiple settings. They are currently recruiting for a randomized control trial that's happening across the U.S. at five different sites.

David Jockers, DNM, DC, MS
That's great that they're doing that study now. What is the feedback from, let's say, the neurology? From more of the West, or, as I know, the functional medicine community is excited about this because this is stuff that we've been talking about forever. We love seeing it get published. It verifies what we've been saying and what we've been witnessing and observing for years. But how about Western medicine, the neurologists that are still using more of a pharmaceutical model? Have you gotten feedback from them about the study and has it been recited? How have they used it as a citation for further research?

Heather Sandison, ND
That's such a great question. I mean, my finger is not on the pulse of that as much as it probably should be. My head is so down in it.

David Jockers, DNM, DC, MS
Sure. Yes.

Heather Sandison, ND
Patients, helping take care of the residents at Mirama, writing the book, coaching clients, and stuff. I mustn't end up interfacing with too many neurologists. But what I hear a lot of is what the patients who have just been to see our biologist tell me, and people are still being told there's nothing they can do. I'm going to have to take away your driver's license, or they don't even tell them that. They just send the notice to the DMV, and then their driver's license disappears, and they say, We'll see you back in a year or six months. there they're not offered much. There are a couple of medications that, there was a JAMA article, and I think it was December 2019 that showed people, patients who start Namenda or memantine or Aricept or Donepezil. These two medications are commonly prescribed for dementia, although they tend to do a little bit better initially, five years later, their cognition is worse than if they had never started.

From a pharmaceutical perspective, there aren't many of these new antibody therapies on the market. Unfortunately, they don't create meaningful improvement in cognition, which is what we care about. They reduce amyloid markers, and they reduce them by about 30%. They reduce the rate of progression. You prolong this torturous, exhausting process. it needs to be started when they have mild cognitive impairment in that earlier stage. What we liked about the patients that we recruited. I think we're both, Dr. Bredesen and I, we're also both working with

the Pacific Neuroscience Institute, which is under Providence and Saint John in Santa Monica, a very large medical institution where we are trained.

My goal in working with them is to model collaborative functional medicine. Plus, it is integrated with conventional neurology at an institutional level. If we can be successful there, I think that you're that. What you were alluding to. How do we collaborate with the existing medical infrastructure and what gets covered by insurance so we can reduce the cost and increase access and impact? That is my work in the world now. That is what we are trying to do certainly, Dr. Bredesen is as well. We meet with that group and review cases and talk about things that can be done from a functional medicine perspective to add to and potentiate what they're doing in a very institutional, conventional setting.

David Jockers, DNM, DC, MS
Yes. I'm glad that you're doing that. I think it's important that we get more media coverage. I'm happy to give the coverage to my audience. We need more media coverage. When we get real data and peer-reviewed, published research in big journals in the Journal of Alzheimer's Disease. We don't want practitioners, people in the media are just glancing at it and going to the next. It's you who need to get this out. We can do further research, create programs like Dr. Bredesen has, and get this out to the masses. You have as well. I think it's important that you're doing that. I hope to see that your study is cited in a lot of future studies, not just by Dr. Bredesen and his group. But by many different groups as we go through this. I think for many people in Western medicine, they get a lot of their information from pharmaceutical companies. That's where they get a lot of interest.

Many of you don't have time to read through all the journals. Then, on top of that, many of them have just lost hope in patient compliance. Because the reality of it is that functional medicine and natural health, it seemed from my perspective, a lot of it seems easy because I live it. But when it comes to lifestyle change, especially as people are older and if they have cognitive decline, the compliance level, or if they are very sedentary, the idea of going out and walking in their block, which is one of the best therapeutics that they can do, just seems intimidating. It seems overwhelming to them. I think that one of the great things that you do is have programs that help, encourage, and facilitate these processes, which I think is so important. I think a lot of practitioners just don't believe that their patients are going to be compliant if they tell them, to change their diet. Take these supplements, start exercising, and sleep better. Things like that. But you—that's where you have come in. You're showing that this can be done. That there can be people, caretakers, and things that come alongside and help encourage this.

Heather Sandison, ND
Yes. That was one of the surprising things about the trial. We didn't know it was a feasibility trial. The question that we set out to answer was: with a cognitively impaired group of people, a group of patients, can we get them to make these changes? Will that even work? What we found was, not only yes, but are they willing to do it when they're at home? There was this incredible

woman; she came in and, I tell this story, her story in the book, and many others. But when she came in and got enrolled in the trial, her goal was to be eligible to move into an age-in-place community where she had a couple of second cousins who were living there. She was living in San Diego. This place was in LA, but her husband had passed away. Her older siblings had passed away.

She had no children. She was terrified, there was an actual terror in her voice at the thought of growing old and demented at her home, which had fallen into disarray. She was surrounded by, like, stacks of paperwork; she hadn't done her taxes in years. She'd had a nursery with her husband, and it had gone. It had just gone feral. Her goal was to get her. She couldn't have any measurable cognitive impairment to be eligible to move into the senior living facility. It was you pay the same rate, but you can't; they're doing their calculation on the risk rate. If we bring you in and you already have some dementia, it's going to cost a lot to care for you over time. You wouldn't be eligible.

Anyway, she shows up. She was terrified. She's so anxious. She's worried it's not going to work for her. She has no support. I mean, we had my staff put aside time on Mondays to listen to all of the voicemails she had left over the weekend. We had someone on the phone with her at least once a day, reassuring her, coaching her through what to eat, what not to eat, how, what exercise to get, how to take supplements—all of these pieces. She needed both handhelds. Six months later, this woman walked into my office wearing her favorite blue dress that she hadn't worn in years. She's spinning around. She's telling me about the dates she's going on. She's telling me how she got her taxes done, how she cleaned up everything at home, and how she's going to these brain health groups. She met somebody, and now she's going thrifting with her girlfriend. By the way, her neighbor got cancer, and now she's cooking for him, too. it's not just about cooking for herself. She had zero interest in any senior living community at all anymore. She got her life back.

When people say to me, well, somebody. This was what was crazy about the health coach who was working with us on the trial because this woman, who was enrolled in the trial, called me and was like, I don't think her readiness score is high enough. I just don't think she's going to be successful. She was one of the most successful participants in the trial. She surprised us. I have learned so much from patients about things. There are so many people I have told with good intentions, but I have learned my lesson. I've suggested there wasn't hope that they couldn't get better. Then they proved me wrong. They showed me that they could. I think whenever we talk about it. It's so hard and you need so much support. I just think of this woman in her blue dress and like, or you don't. Some people just figure it out.

I think that as the narrative changes, my job, I see my job as changing the story. When people hear that there's hope, when they hear that there's a path, when they hear that there's guidance, and when they hear that there's resources and support, then they can decide. But when you're told over and over again that there's nothing you can do, it just creates, again, this false

hopelessness, this feeling of being stuck, of having no options. That's criminal at this. From my point of view at this point, at this stage.

David Jockers, DNM, DC, MS
Yes, absolutely. She had a big reason why she did not want to end up like that. If somebody has enough of the underlying motivation, they're going to do whatever they can. They're going to have relentlessness or perseverance. You said, that at six months, she had amazing changes, and so all people have to learn new skills, and it takes a little bit of time. But if you have that, that desire, that underlying desire, I always say, Why does that make you cry? A big why that inspires you to where you're like, you know what? I'm dedicated to doing it. I'm going to figure it out. If you have that, then all these interventions—all these I saw interventions—you're going to pick them up; you're going to learn them. It may take some hand-holding, as I did in this case, but she was able to get the success. that's awesome.

Let's talk about these lifestyle interventions and what you have found to be particularly low-hanging fruit. We can start with the things that are probably the easiest things that people can start to implement into their lives. Then we'll go into a little bit more complexity as we go on. But what have you found to be the most effective strategies for people to improve their brain health?

Heather Sandison, ND
Yes. The foundations are going to be the same that you've heard in other places: diet, exercise, sleep, and stress management. Then there's the medical part of identifying toxins, nutrient imbalances, stressors, structural issues, genetic issues, signaling issues, and infections. All of those things are icing on the cake, however. Starting with the foundations is important. As we talk through these, I invite people to listen to one, or two things. One is, as you said, what's the low-hanging fruit? What's easy? What am I already kind of doing? But I can make this small tweak, and I would get even more out of it. Listen to that. That’s going to be different for each individual.

Then the other thing is that big one. Where am I going to get the most return? Where am I going to see the biggest delta and the biggest change? When we talk through these things—diet, exercise, sleep, stress management—some of the pieces that come up in diet, you and I are both big fans of the ketogenic diet, of fasting and making that change, flipping the switch into ketosis as we have patients and not just one where they go from not remembering grandkids names to remembering the grandkids names. It’s a big difference in cognition. Many people will tell us that after getting into ketosis, they are remembering the words. They're remembering, of course, the names that they're able to engage with; they're present; and they're sleeping better. Their mood is more stable. They don't have joint pain, and now they can start exercising. Flipping that metabolic switch is usually a big ask. But it's a big delta. It's a big change from the baseline.

Then the other big one that we see that can feel a little easier is sleep. When we start sleeping better. If we do that, it's a chore sometimes. But if we get the sleep study and then we wear the CPAP and we learn to or we find that supplement or we figure out that sleep hygiene shift that we need to make that allows us to get better sleep well. Now there are so many things opening up. Because now we're rested in the morning, we make better dietary decisions. We feel less stressed. We have the energy to go get the exercise. It helps all of the foundational pieces. Sleep, and when we're getting better sleep, we need high-quality sleep. If we're having apnea, we're causing damage to the brain through hypoxia. These recurrent hypoxic events occur when our airway is closed off at night. Treating sleep apnea is crucial to brain health. We cannot miss this one. I have watched miracles happen. I've seen patients who have single-digit mucus scores so advanced dementia diagnose Alzheimer's, who recover, who double their scores, and who make huge improvements primarily because they start wearing their CPAP.

That's when you see the shift. This is something no one should leave on the table as an effective strategy for optimizing brain health. Addressing sleep apnea is one thing. But we need quality sleep, deep sleep, and REM sleep. Deep sleep is when the lymphatic system rinses the brain. We see in the science that after one night of sleep deprivation for people in their 20s, 30s, and 40s, you don't have to be 65 or 85 to have this happen. One night of sleep deprivation leads to a measurable increase in the cerebrospinal fluid of amyloid plaques that are associated with Alzheimer's. Over decades, this accumulates and creates big problems. We need to get that deep sleep so that we can rinse out not just the amyloid but also the metabolic waste that every neuron collects throughout the day. The potential thing that we inhaled during the day was the mold toxin, or mercury, that we ate with our fish. We need to be able to get that stuff out and it happens during deep sleep.

REM sleep is just as important. It's when we're consolidating memories. It's when we're taking the emotional bite out of anything that happens—stressful events—so that we can recover and have that resilience to stress. Deep sleep, REM sleep, and enough sleep to avoid apnea or other sleep disorders. This is. I cannot overemphasize how crucially important this is for the brain. going through the process. Many people say to me, Well, I know how important sleep is, but I can't get to sleep. I can't stay asleep. I've suffered from insomnia, so what do I do? There are a bunch of things. There are strategies for getting to sleep. There are strategies for staying asleep. There are sleep hygiene practices, temperature, sound, light, and all of these things that we can play with. I use an Oura Ring. I test and measure my sleep so that I know what's going on and how I'll react when my variables change, including the quality and timing of my sleep. I highly recommend that people do that. I can't give you everything in just this short conversation, but talk to someone who is well versed in this—a functional medicine provider, a coach, a naturopath—someone who can help guide you through this so that you get the benefits of that great sleep.

David Jockers, DNM, DC, MS
Yes, and I put out a lot of content on sleep. If you check out DrJockers.com or my podcast, we talk a lot about that because it is so critical to activating that lymphatic system and detoxifying the brain. I mean, even something as simple as sleeping on your side has been shown to significantly increase lymphatic drainage as opposed to sleeping on your back or your stomach. Even just the posture that you're sleeping in. I remember when I was seeing patients regularly, I would have a questionnaire, and part of the questionnaire was that they would fill out the images, how do they sleep?

One question we would have would be, do you have a light on or off often when you sleep? I was surprised at how many people fall asleep with their TV on. That blue light just, and most people are just not told basic sleep hygiene. Just good sleep hygiene, getting all the lights off, and making it as dark as possible—something as simple as blue light-blocking glasses at night—can make a huge difference. I've seen a huge, huge difference in people. You mentioned a CPAP machine. If there are so many people out there with sleep apnea, one of the fastest-growing conditions, it is it is an underdiagnosed condition because you have to go in and get a sleep study to get it.

Heather Sandison, ND
Yes. Although the technology has improved so much that there are at-home sleep studies, they're not the gold standard, and they won't rule everything in. But you can often find sleep apnea and it makes it so much. There's less of a hurdle to basically getting some tests that can then lead to treatment. We use a Watchpad. I ask your provider for that because I know so many people think, I have to go to this overnight sleep study. Although that is the gold standard, I would prefer if everybody did that. But I get it. You need to then arrange for somebody to pick you up in the morning. You lose that night of sleep, and so you feel like, for a day or two. How's it just such a big ask if we can get you that at home? One rule for sleep apnea is to first be able to treat it. That goes a little quicker. Your brain will benefit sooner.

David Jockers, DNM, DC, MS
Yes. Absolutely. The key is good nutrition. We also know you mentioned the ketogenic diet ketones. We know that when the ketones are elevated in the bloodstream, that's going to decrease inflammation in the brain. Inflammation goes down, shutting down the overall inflammatory-amplifying system called the neuroinflammatory in the brain. It also helps balance your gas pedal, the glutamate-to-GABA ratio gas pedal to brake, so you get a smoother drive to your brain, and it increases mitochondrial energy production, which is why you'll have a good, well-functioning brain. If you're able to think sharply and quickly, control your emotions, and have a good mitochondrial function. If you have cognitive decline because mitochondria are dying off, they're malfunctioning. They're becoming what we cell senescence. Ketones getting elevated in the bloodstream are key for that. I love those first two great strategies. What else can people be doing?

Heather Sandison, ND
Yes. Exercise is another one. Many people haven't heard about Dual-task exercises. Dual, as in two. What we're doing there and suggesting is that you engage cognitively at the same time as engaging physically. This might be as simple as walking and talking, or it can be a little bit more complicated, going to a class where you're cued by an instructor, yoga, Pilates, jazzercise, Zumba, or whatever floats your boat. Getting into a class where you've got to know, like, what's my right side? What's my left foot doing? Then you've got to keep up and maybe even memorize dance steps or some moves. This is helpful. What we see is that you potentiate the benefits of exercise when you engage cognitively at the same time. You get more benefits for your brain. There's been a lot of research in the stroke and traumatic brain injury space for balance. You are doing balance exercises while cognitively engaged.

I've had patients. I had a great, super-sweet patient. She was living, her granddaughter was living with her, and her granddaughter was very interested; she was going to nursing school, very interested in health and wellness, and would come to her visits. We were discussing this. Her grandma had always been an avid exerciser. She'd always gone to the classes, gone for her walks every day, jogged, done half marathons, and stuff that her whole life. But when her granddaughter heard about this, she took it and ran with it. The first few walks they did together, she would quiz Grandma on birthdays in the family and anniversaries in the family—things that were emotionally compelling to her and that she wanted to remember. Then this is dynamic. As she regained cognitive capacity, she started quizzing her on the names of all the neighbors and how old their kids were. Then they started identifying the trees, and then they identified the birds, and then they started learning their Latin names. so they just upped the intellectual ante. As she got better. They also started doing more hills. This is a dynamic grid.

As we increase our cognitive capacity and our exercise capacity, we want to shift the metrics. We want it. We want to stay engaged. We want it hard enough that we're into it. We're not checking out; I've been to the same Pilates instructor for years. I know what she's going to say before she says it, so I can be thinking about my grocery list and everything else that's on my plate for that day. We are not engaged in the cueing then, so if we want to avoid it, we need to stay engaged. then the other thing we want to avoid is giving up because it's too hard. Particularly if we are working with a loved one who has dementia. Sometimes we want to push. I've seen spouses be like, Come on, you knew this yesterday, and they're upset with their loved one when they have a brain disease. Having some compassion and engaging them at that sweet spot of 75% where they're engaged, but they're not giving up or frustrated. When we're under stress, we just don't. Our brain doesn't work as well. We want to have we want to be having fun. We want to be enjoying it. that was a big part of this granddaughter-grandmother duo because her granddaughter knew what Grandma liked. She had grown up in, like, northern Minnesota, in the woods. She loved the trees, and she loved the birds and of course, she loved her family. Engaging her in those things helped keep her engaged.

David Jockers, DNM, DC, MS
Yes, I love that. What a helpful strategy. If you're out there and you have a family history of Alzheimer's but you don't have cognitive decline now, you can start taking walks with your spouse or with a friend and have discussions. Having good intellectual discussions and having fun laughing together. Such a powerful thing, and coupling that with the movement. You're getting your exercise in while you're doing that. Good. I love that strategy.

Heather Sandison, ND
What pickleball craze has been awesome?

David Jockers, DNM, DC, MS
Yes. Pickleball.

Heather Sandison, ND
It's often outside. There's a strategy involved. There's hand-eye coordination. Ballroom dancing is another one. You're engaged with the music. You're engaged with a partner. You're spatially aware. You have to remember the steps. There are lots of different ways to do this. I invite people to just brainstorm and get creative with it. But think about that. How do I engage both cognitively and physically at the same time?

David Jockers, DNM, DC, MS
Yes, that's so good. What else can people be doing?

Heather Sandison, ND
Yes. Stress management-wise, there's great literature on meditation. Kirtan Kriya is a type of Sa Ta Na Ma meditation. It's a type of meditation that has been studied extensively for both people suffering from mild cognitive impairment and dementia and for their care partners. We know that caregivers are anywhere from two and a half to six times more likely to be diagnosed with dementia later on in their lives, compared to those who never serve as caregivers. We're increasing the risk. The stress of caregiving and the burden of caregiving are very real. When I have a Dyad come in a patient and a dementia patient and their caregiver, I always think of the caregiver as a patient as well. How do we meet them so they don't become patients?

Having both the dementia patient and the caregiver engage in care time, create a get-together to do this meditation that's just 12 minutes free. We found a video on YouTube and doing that every day, it changes. It changes immune function through changes in inflammatory markers. It changes glucose regulation, cognition, and, of course, quality of life. There's a ton of research on this particular type of meditation, but a prayer practice is a different meditation practice. Any mindfulness practice, a gratitude journal, or anything that can serve the purpose of taking time in your day to regulate your breath and become present.

I was listening to the book Breathe recently. I don't, but I'm sure you've got it. It's the James Nestor book, and he refers to cure time. I hadn't picked it up because I think the last time I read the book was probably years ago when it came out. I wasn't as interested in these things. we hadn't been using Kirtan Kriya at Marama or with patients. But he mentions that it's the rate of the breath when you chant these phrases; these phrases get you into this perfect rhythm of 5.5 seconds, 5.5 breaths per minute. We get better oxygen diffusion into the cells and, with better CO2 balance, and the acid-base balance, our pH in the system changes. There's a lot, and there's a pretty good understanding of why these practices have been around for millennia: because they're physiologically beneficial to the body as well as the brain of course.

David Jockers, DNM, DC, MS
Yes. Another simple thing people can add is just focusing on their breath. You talked about mindfulness, meditation, and prayer. I'm a Christian believer. I'm a huge advocate of prayer. My wife and I pray together. I pray with my kids; we do prayer walks. All of these things, yes, they bring gratitude. there's also a cognitive component that you're activating as well and they're reducing stress. Very powerful stuff.

Heather Sandison, ND
Very powerful. I think they're so simple. It's easy to say, I get to that tomorrow, or I'll do that another time. It's not that important. Yet over and over again, my personal experience is and then also what I hear from patients who say that is the best medicine: that daily prayer practice, that daily journaling, that daily meditation, whatever it is for you, doing that daily, even when it doesn't feel it's doing much. When you look back six months later, you go, I relate to stressors so much differently. I'm more patient. I'm more creative. Life is different. Life is more fulfilling because of that practice.

David Jockers, DNM, DC, MS
Yes, I love that. You've gone through some simple things there. Let's talk about maybe, let's say, a couple of supplements or other strategies that people can apply, especially as they start building momentum. They're doing a lot of this low-hanging fruit, cleaning up their sleep, reducing stress, and eating a better diet. What else can they do to help jumpstart things?

Heather Sandison, ND
Yes. The supplements that we started with for all of the participants in the clinical trial were a Nootropic stack called Qualia. Qualia Mind. That one has a little bit of caffeine in it. They have caffeine-free versions as well if you're sensitive. But that is a Nootropic stack that includes vitamins, minerals, and herbs that are known to support neurotransmitter synthesis, metabolism, attention, focus, and clarity. We see that that's helpful for people and that can make a big difference out of the gate. Vitamin D is another one. If you struggle with osteoporosis or bone issues, having it with K2, potentially as long as you're not on blood thinners, can also be very helpful. But vitamin D is a hormone that sends signals to our brain that promote

neurogenesis. We want to have enough vitamin D on board. We see that people with low levels of vitamin D are more likely to develop dementia.

Then omega-3 fatty acids, whether you get plenty of wild-cut salmon, sardines, or anchovies, are part of what your palate enjoys. Most people, even if they're eating some fish, benefit from getting a little bit of supplemented EPA, DHEA, omega-3, and especially DHEA for the brain. Getting some extra omega is usually about 3 to 4 g per day of EPA and DHA is where we would start. Then, we will often also add probiotics because of that gut-brain connection. But if you're not having a bowel movement, we'll add magnesium and get the bowels moving so you can detoxify. We might also consider B vitamins if there's elevated homocysteine. We have this structure for where we start. But then, doing the lab testing to say, is there a toxic burden? Is there an infectious burden? Is there a nutrient imbalance? Are there things that we can optimize at a metabolic level or a biochemical level so that you can recover faster you can stop fighting and defending and go into that regenerative mode?

David Jockers, DNM, DC, MS
Yes. You're saying there are a couple of things that most people who are coming up with cognitive decline typically are: they tend to be very deficient in vitamin D and probably need a boost of magnesium. Maybe there is a good-quality multivitamin there. Certain herbs, which I want to go back to, can be beneficial. But then there's also a personalized approach. Some people need more B vitamins, and some don't. You can do testing by looking at homocysteine, for example, to see if you need more B12, folate, B6, and zinc. For example, you can test plasma zinc levels and things that. You can get further personalization when it comes to the nutrient stack. Now, you have mentioned the Nootropic snack. What are some of the herbs that you found to be effective for health?

Heather Sandison, ND
Yes. I don't use any of these on their own. Typically, I will use some Lion's mane; some of the great medicinal mushrooms come up here. But I love putting these together because that's why we talk about the stack. Because using citicoline on its own or using coffee berries on its own is not going to give you as much benefit as when we add Mucuna, Gingko, Coleus, and Huperzine. When we start adding these things on top of each other, and we put in phosphatidylserine, phosphatidylcholine, and some of the others, bacopa, Rhodiola, and some tyrosine and taurine, we also add some amino acids. All of a sudden, they start playing together. That's what we want to happen, which is that we don't just think that this is one of the traps that we get into.

In the conventional paradigm, there's a single molecule that's going to fix us, but it's about balance. It's about creating a homeodynamic balance that is constantly changing. What's the right amount? But what we want is to balance the right amount at the right time and the right place; the right amount at midnight is different from the right amount at noon then the right amount in our 60s, which is different from the right amount in our late teens. We want balance in the system. That isn't usually about a single molecule. I mean, sometimes you hit one where

it's like, I got that magnesium three and eight, and all of a sudden I sleep better and life is better. Sometimes that happens, but that's usually just step one or like, one of the steps along the way to creating more balance in the system.

David Jockers, DNM, DC, MS
Yes, absolutely. Yes. You mentioned a whole bunch of different herbs and a whole bunch of different nutrients. There are a lot of good things that people can look for. You can go to drjockers.com. I have a lot of resources on all these types of things. Also, Dr. Heather Sandison has some great resources when it comes to a lot of these different nutrients that she mentioned. Some low-hanging fruit, vitamin D, helps optimize vitamin D levels. Yes, we heard a lot about that with the pandemic. Amazing for the immune system. If we had just focused on optimizing people's vitamin D levels, getting them up between 16 and 100 nanograms per milliliter, we would have significantly reduced them.

I mean, we wouldn't have had a pandemic. We would have significantly reduced hospitalizations and deaths and supported people's immune systems. it's very cost-effective. Of course, you can go out in the sun regularly and get it too. It's a great place to start. Magnesium, I know you and I have both seen a lot of people improve cognitively when they get magnesium. We say magnesium is to the body what oil is to a car. The more stress we're under, the more we're revving up our system. More magnesium. We need it. We need it for 600 different enzymatic functions in our body. Super key that's some good low-hanging fruit you could start with. Then, just as you mentioned, getting a good nootropics. There are tons of them out there. Different nootropics stacks that you guys can check out as well. With that said, let's talk about: You got your book coming out, Reversing Alzheimer's, here. What was your inspiration there? You've talked a lot about it. What can people expect from that book?

Heather Sandison, ND
Yes, the goal is to make this work accessible. It's to have a guide. The first couple of chapters talk about: if you only do one thing for this particular modifiable risk factor, if you only do it from a toxic perspective, just open your doors and windows every day. Open your doors and windows for an hour each day. Take your shoes off at the door and reduce the toxic burden that you're exposed to when you're spending time at home. With these simple little things, That's what I want people to pick up first from the book. Then, as you work through the book, you can make these bigger changes around diet, lifestyle, and exercise. We have reflection questions because what we've noticed with patients with residence at Marama and with coaching clients is that this path is different for everyone.

Again, we want to keep guiding you back to what's going to be easy and doable so that we have that win. We get that dopamine hit that helps us go get the next one and do that next piece to layer these on top of each other. Then, what's that big piece? What is that big thing that I can do that's going to change the trajectory of my health as I age? It's a compassionate perspective about how to do this and make it implementable. How do I make it doable? I think that people

get it often. People will come to my office with Dr. Bredesen's book, and say, I did it. I made a lot of changes. I've done as much as I can, and now I'm ready to put the icing on the cake. But other people who are, I get the concept that intellectually it makes sense, but I'm having trouble making it happen. That's what the book is meant to be. It's a toolkit, and it's a guide to help you put the intellectual, all of the things that matter, into practice.

David Jockers, DNM, DC, MS
Yes. It's great. I mean, this book is a book that gives a lot of hope. If you have a family history of dementia or Alzheimer's disease, perhaps a friend does, somebody that you care about, maybe it's dealing with that. It's a great gift to give them, and it's a great book to read. I think everybody should be reading some rain-based health books every year. Just remind ourselves of the things we need to be doing. Everybody should be investing some level of energy. I mean, you're listening to this interview here, which is great. Reading a book like this will give you hope and give you real-life, data-backed strategies to help optimize your health. Couldn't endorse it more. Dr. Sandison, great work on that. Reverse Alzheimer's. You guys can check it out. Amazon.com. We'll have a link in the show notes and any last words of inspiration here for the audience.

Heather Sandison, ND
Yes. One of the most surprising things from the clinical trial was that no one did everything. We've talked about a lot of different things. The people who got better, although they all did something, no one did it all. Not everybody got into ketosis. Not everybody took every supplement. I want to caution people against the feeling of overwhelm. But we've talked about a ton, and especially if this is new to you, it can feel so much. Yet it's tough, it's doable, and it is so worth a while to see. The reason I get out of bed every day is because I have patients who tell me, I got my mom back. I got my partner back. They're having conversations. We get this. We get to enjoy our anniversary or the next holiday in front of us. That's what this is about. It's about those relationships and those connections. so, don't get overwhelmed. Just get started.

David Jockers, DNM, DC, MS
I love that. I love that so many people have called me that. I have to be you to be healthy. I think that, yeah, that can be intimidating. You don't have to be perfect. Just start where you can. We talked about the low-hanging fruit. That idea of little things that can move the needle with minimal effort. As far as committing to. I think that's a great place to start.

Again, great work. Dr Sandison. You could check her out. DrHeatherSandison.com. Follow all the great work that she's doing and check out her book, Reversing Alzheimer's. Which is out now.

Thanks so much. There you go. If you're watching the video, There you go. She's got it. Great book. We'll see you guys all in a future interview. Be blessed, everybody.