Brain Fog, Forgetfulness, Difficulty Concentrating?

Learn How to Improve Your Brain Health & Reduce the Risk of Alzheimer's & Dementia

With Dr. Heather Sandison

Laurentine: Hello. Hello, Heather. Thank you so much. Thank you so much for joining us, and it's so nice to meet you because I've been following your work online, but now to actually have you here in the studio, it's really fantastic. So thank you so much for coming on.

Heather: Thank you so much for having me. It's a privilege to be here.

Laurentine: So, we, I would actually like to share a little bit about you and just so that the listeners can learn more about your story and what you do and why we're here talking about what we're talking about. So, Dr. Heather Sandison is a renowned naturopathic doctor specializing in brain health medicine. She is the founder of two clinics that specialize in a naturopathic whole brain, whole body assisted living care.

Dr. Sandison hosts the annual Reverse Alzheimer's Summit, which has reached over 80,000 people, and she's also researched an innovative approach to managing cognitive decline and are providing, she's providing hope for patients and families all around the world.

Hmm. I love what you do. So thank you so much for all the beautiful work that you do out there and all the research and the studies and the book that you're writing currently. And so let's start with a very basic 101 question. **What is cognitive decline and what are the main symptoms to watch out for?**

Heather: Yeah, really great question because it's one of those things. So many people are terrified of growing older and losing their minds, right? Especially those of us who maybe work in a space where we need to have that really clear cognitive function professionals and even teachers. And so, so many of us, if you were to ask, would you rather, you know, lose your mind or lose your body, you would say your body, right? So much of our identity comes with our memory, and it's terrifying because we're also told if you have Alzheimer's or a family history of Alzheimer's, there's nothing you can do about it. And yet it's at that time when you notice those small changes, that is the time to do something. Or if you know that you have a genetic predisposition that actually is this phenomenal opening to taking the action, doing the things that we know that you can do that are very research backed, that can help to optimize your cognitive function really at any stage.

So, cognitive decline is that memory loss where you go, Hmm, 10 years ago I would've remembered that neighbor's name. I would've been able to calculate that in my head. I would've remembered where I set my keys. This isn't the distracted, like, oh, I can't remember where my keys are because I was thinking about 10,000 other things that I needed to do at the same time when I set them down. It's really that noticing that your brain doesn't function the way it used to. It's kind of like that hangover feeling, right? Of like, oh, if I hadn't had a couple drinks last night, I would be, I would be sharper.

Now, not everyone who is on a cognitive decline path cognition for brain function, not everybody who has declining brain function is going to be aware of it. Some people are in denial because they've been told there's nothing they can do. So it's easier to just say, this isn't really happening to me. And for other people, maybe it's that part of their brain, that self-awareness part of their brain that's actually being affected, and they really don't have an awareness of the decline. They might think, oh, everyone has memory problems. I have normal memory problems, even though their family realizes that this is really a very different beast that they're, they're looking at that maybe their short-term memory loss, they're repeating questions or not understanding things, losing their train of thought. Maybe there's even changes in personality more easily overwhelmed, more easily irritated or irritable. And those kinds of things can also be a sign of dementia.

So dementia is kind of this umbrella term in which since Alzheimer's disease, frontotemporal dementia, which we saw Bruce Willis was recently diagnosed with, that actually is the most common dementia in younger people between 40 and 65. And hard to spot because it comes up as behavioral issues. It also includes things like Lewy body dementia, and there's often a lot of overlap between these that if there are Lewy bodies showing up, you also have some of the hallmarks of Alzheimer's beta-amyloid plaques or tau proteins, misfolded proteins in the brain.

So neurodegeneration is what we're talking about here. It's when the neurons, the cells in the brain don't function the way that they used to. And oftentimes these symptoms don't show up until 20 years, decades after the pathological processes have started in our brain. So this, there's this wide presymptomatic window where we can get in and prevent cognitive decline.

Laurentine: Hmm. Yeah. Well, it's a topic that is very close to my heart because my father also was diagnosed very early on in the piece with dementia, and he ended up dying of Alzheimer's and a very early on at 72. And when we started seeing some signs of it, we were dismissing it as a family. We're like, sure, that's, you know, that's something that, you know, happens to people that, you know, get older, but I could already start seeing it when he was 55. **So let's talk about what group of people we're starting to see these type of cognitive decline symptoms and how, 'cause we're detecting it a lot earlier now as well.**

Heather: Yeah, I think that there's kind of new hope around it because Dr. Bredesen's work. I hope that my work is contributing to this shift in the narrative because I'm sure that your dad, when he was 55, if he had any awareness of that cognitive change, he would've wanted to do something about it. He probably would've done anything to stop that decline and to make sure his brain was gonna be optimized and he was gonna live a full healthy life where he knew everybody's name and could engage with his grandkids.

And yet, so many people are told, there's nothing you can do that they mask it, they hide it, they cope with it however they can. And that lack of hope around something to do for it, and that lack of empowerment is, I think what contributes a lot to this disease process is the fear. So then genetics play some role. So the most common genetics associated with Alzheimer's are the APOE genetics. And just to kind of give everyone an idea of what this is,
you get one from mom and one from dad. So you have two copies, and the copy can be a two, a three, or a four. The normal population has a 13% chance of developing dementia in their lifetime. And if you have the APOE genetics, the APOE4, one copy of APOE4 one from mom or
or dad, you have a 30% chance of developing dementia in your lifetime. Now, if you have two copies, one from mom and one from dad, you have a 50% chance of developing dementia in your lifetime.

So this is not the early onset there, there's early onset dementia, which is associated with amyloid precursor protein, PN one and two. We're not talking about the dementias that are developed in your forties and fifties. We're talking about that later stage. Very classic. What we think of is Alzheimer's dementia, that's the most common form of dementia, and this develops in, usually in your late sixties and seventies. Now that being said, even though the risk with APOE status is higher, there is really exciting research out of Yale. A woman named Becca Levy has done research around this, and she has found that having a positive association with aging can allow you to reduce and even eliminate the risks associated with APOE4 phenotype. So super exciting stuff. What I imagine is just like channeling my inner Betty White, like that life just gets better and better and better as we age, and as long as we're doing all there,
there's lots and lots of things.

The Lancet, a very reputable journal out of the UK has published twice their commission paper on Alzheimer's and dementia, and they report that 40% of Alzheimer's worldwide and and dementia's worldwide could be prevented through modifiable behaviors. And so this is a really, really exciting time for me in the dementia space. So many people are aging, so many people are fearful of Alzheimer's. There's actually so much that we can do to fight back to not have to live that way.

And I, you know, I'm so sorry that your dad didn't have this information sooner. So many people I talk to, it's just heartbreaking. It's suffering that is needless in my mind. Right. And it's, we didn't know then, but for your generation, for our generation, we can make dementia rare.

Laurentine: Well, that is so beautiful to hear, because like you said, you know, he started forgetting birthdays and he started to forget how to start the car, or he would actually, he was, he went to get his teeth, checked and they asked him for his Medicare card, and he couldn't actually find it in his wallet. And he's like, no, I don't have one. You know, and so he would really, these little indicators were obviously at that time were could have been a great way for us to detect it and for us to start doing something about it. But at that time, I feel like his way and his lifestyle had already taken over so much so that it was hard for him to turn that clock around. Right. So I would love to learn, learn more from you in regards to the research. **On what ways that we can actually go to a doctor or a hospital that we can say, okay, we're really able to detect this now.**

Heather: Okay, now once it's been diagnosed properly or it's a precursor to, then we can start doing the, the changes in our diet and lifestyle. Yeah. So I think the, the best way to measure cognition is through one of a handful of 30 point questionnaires. They're essentially worksheets that are administered by either a clinician or a tech in a medical setting. And this can be the *MoCA, the Montreal Cognitive Assessment*.

There's also the slums test, or the mini mental status exam. And each of these are out of a 30 point scale, and they put a number on our cognition. So if you're 26 and above, 30 is a per perfect score, 26 and above is essentially normal. And then anything below that is measurable cognitive impairment. And once we're on that measurable cognitive impairment slide, things tend to go downhill unless we are willing to do something about it. And my mentor, Dr. Dale Bredesen, he's really, who's pioneered this research, who's pioneered this approach to reversing cognitive decline and reversing Alzheimer's.

Really, I have, I just like, I'll tear up if I, there's so many incredible stories of just inspiring human beings who have reversed even severe cognitive decline and actual diagnosed Alzheimer's. And they really, they get me up out of bed in the morning, because if that's possible for people with severe Alzheimer's, you know, what's possible for people who are just at those beginning stages, we could prevent so much suffering.

Laurentine: Wow. Okay. Well, so **please tell us what we can do if we are at that early stage of detection, what sort of diet and lifestyle changes could we make to avoid.**

Heather: Yeah, full blown dementia and Alzheimer's. So the foundations of diet and lifestyle are exactly where I start with people. So we recommend, and what we did in our clinical trial was exactly what I'm gonna explain to you. And in our clinical trial, just so you have a sense of how we did that. It was a feasibility trial, so it wasn't controlled yet. We're recruiting for Dr. Bredesen's team is recruiting for a controlled trial right now. But what we did, both his group and my group did two trials.

Theirs was a 25 participant feasibility trial that took people with measurable cognitive decline down to MoCA scores of 19. They took them through the dark, the Bredesen approach, the Bredesen protocol for nine months. And what they saw was that 84% of their participants improved their cognition measurably.

I did a very similar study about a year later, we published, we just published in the *Journal of Alzheimer's Disease* in August of 2023. They published last year, July of 2022, in the same journal. And what we showed was that in our cohort was 23 participants, and we took people with MoCA scores a bit lower between 12 and 23, and 74% of them, or 17 out of the 23 got better with a six month intervention. And so we had a tighter timeframe and more declined participants. And so we had 74% get better. They had 84% get better. And that makes sense because we had that tighter timeline, we were asking for a miracle, right? Asking for the reversal of cognitive decline. And now, had those people, had there not been an intervention, the expectation would be with that, they would have a two to three point drop per year in their MoCA scores or that cognitive status.

We also measured using *Cambridge Brain Sciences*, we use other research-based tools to measure their cognition, but we would've expected decline. That's the natural progress progression of that disease. So what did we do to turn it around? This is your question. This is the million dollar answer. So it's all in the book, the *End of Alzheimer's*, written by Dr. Dale Bredesen. And I'm not gonna be able to tell you all of it tonight, but I wanna lay the foundations. And those foundations are lifestyle. So what we did was an intervention of an organic ketogenic diet with lots and lots and lots of veggies, and only the smash fish, the low mercury fish. So lots of wild salmon, lots of the high, omega 3s, the good fatty acids, and then doing only grass fed animal products if you're doing animal products.

And then we did for exercise, what we asked people to do was just something more and something different. So if they hadn't been off the couch and they hadn't even walked to the mailbox, we had them walk to the mailbox, if they were runners, we had them start adding strength training. If they were going to the gym a ton and or playing a certain sport, we had them start a new one. So we did things that were new. So that engaged them cognitively and also started to either build muscle or help with aerobic exercise and conditioning to add variety to their exercise, because we know we get brain benefits from both, and then we optimize sleep. So we know that sleep is, when the brain does its rinsing through the glymphatic system, that's when we get rid of toxins. In fact, we've seen in the research that people in their twenties, thirties, forties, if they have even just one night of sleep deprivation, there's an accumulation of beta amyloid plaques in the brain in the morning that is measurable. So you can imagine if, if we're having sleep deprivation night, after night after night, over decades, that accumulation of misfolded proteins is going to have an impact on our cognitive function. That just makes sense.

So we optimize sleep,and we know that one of the biggest, most impactful things we can do is treat sleep apnea. So if anyone that I see patient coaching, anybody I am in involved with who has any cognitive decline, I ask them to get a sleep study right away. Even if they don't snore, even if they're not overweight, even if they're not the classic person gasping for air in the middle of the night, I still wanna know if they have any sleep disturbance or any sort of apnea, because that can make a massive difference in their cognition in the morning and how rested they feel, the quality of their sleep. So diet, exercise, sleep optimization, and then stress management is another really big one. So many times when people think about retirement, they think about kicking their feet up and having some cocktails and reading some novels or watching TV and really checking out, right, like, they've worked hard enough, it's time to relax, but this is a lack of stress.

We need enough stress, we need enough engagement to keep our brain making those new connections. So we highly encourage stress management. Yes, if you're, if you're under too much stress, if you don't know how you're gonna pay bills, if you're, you know, juggling too many things,there can be too much stress, but there can also be too little at this time of, in this time of life. So we recommend, there's meditation practices. The Kirtan Kriya meditation has a ton of research, meta-analyses showing the benefits on cognition that are really very impressive in terms of activities of daily living, actual cognition, and then also quality of life, not only for the person suffering with dementia, but also for their care partner.

So you asked who's at risk for developing dementia care partners are anywhere from two and a half to six times at higher risk than people who are not caregivers of developing dementia in their lifetime. So when they're taking care of someone with dementia, this can be highly stressful. They stop eating well, you know, they're not making time to exercise, they're not managing their stressors, they're not prioritizing sleep. And this is a recipe for developing dementia later on. And so we really talk I spend a lot of time connecting with care partners
and emphasizing how crucial it is that they do all of these foundational pieces as well. Then if you'd like, I can go into the medical side of things, which gets really exciting and into the nitty gritty of Dr. Bredesen's protocol without foundation, really, when I talk to patients, I'm like, if you're not doing these things first, don't waste the time. Don't waste the money on all of the medical testing and supplements and labs and all of that. Those foundations need to be set in order for us to get the most out of that investment.

Laurentine: Oh, wow. I mean, you're talking about these are people and patients that are in this sort of retirement age and that probably have the time to be able to invest in, you know a different lifestyle or a different approach. And they have, they can play tennis or they can spend some time meditating and they can go to a yoga class, you know, but what about those that are in still the younger years, you know, they're still working, perhaps they're working at a high level pay, high pay job, and it's very stressful. And it's not like you sit, you can just, you know,

go off and chill. Right. **What about those that age group and that generation, what would we do in regards to keeping our brain healthy and preventing all these type of, you know, going down the hill problems?**

Heather: Yeah. So what I would say is that if you wanna improve cognition and optimize productivity and your and life, the time to start is now, and it can be done. And putting it off, putting off exercise, putting off sleep, putting off me a meditation practice or a yoga practice, we can always put these things off, but the time to start is now it, because those the return on that investment of time is like, why not get it sooner? Right? It compounds, it compounds over time. And so you want to invest that today, yesterday, right? It's like planting a tree. When's the best time to plant a tree 10 years ago? The second best time is today. And that is those foundational lifestyle practices, the best time to start is right now. And this, I think, you know, I hear what you're saying, and I experienced that too.

I'm 40, I have a 4-year-old daughter. I run three businesses. I, you know, I just turned my book into the editor. There's so many things on my plate, so many things to do. I'm in a relationship. I'm moving. It's, I mean, the laundry list of things that happen in all of our lives, I'm not alone in that, right? Feeling overwhelmed by juggling so many things. And yet I wake up and meditate every day. And when I skip it, when I skip my 20 to 30 minute medi meditation in the morning, I'm less patient with my daughter. I'm less creative at work. I don't, you know, I don't listen as intently or as presently to my colleagues and the people I'm partnered with. And we really, that investment each day allows me to get so much more. I know that when I, when I'm not getting as much exercise because of travel or whatever's interfering, I don't, I'm not at the top of my game.

And I know that this isn't just true for me, right? I'm speaking from personal experience, but so many of us can relate to this, right? When you have the sleep deprivation of say, jet lag because you've traveled around the world or you, you know, you've come from somewhere we all have that feeling of like, oh, my brain's not on, I'm not as sharp, I'm not as productive. And so making sure that we don't live in jet lag, you know, in that same sort of depleted state is it has huge, huge, huge payoffs both in the short term and the long term.

Okay. So let's talk about, so this is the age group as well, like the, the 40 to 50 busy executives, perhaps like you're saying with being a parent and also having men managing the stress of having a job or a business, your own business, and you are looking to reverse cognitive decline. Because like, I wake up sometimes I'm like, I'm pretty much sure I now have dementia because I don't even know where I put my keys, or I don't even know what my to-do list was today. I pretty much rehearsed yesterday. And what, in regards to like brain health foods, what would you say are the things that we should go for and that we should go towards and what we should avoid at all costs in regards to diet and lifestyle for, for this age group?

Yeah, so the *Lancet Commission Report* on dementia, they listed, I think 14 or 15 modifiable risk factors. I think that they left one out that they're gonna add next time. And that's highly processed foods. So processed foods are something that I, you know, my opinion, I'm kind of dogmatic about this. You can push back if you want, but all humans should avoid processed foods. They are not good for us. And the more that we can eat whole foods, things that look like they come, came from the ground, straight from the animal, straight from the tree, that is really what our body is designed to eat, designed to digest, designed to assimilate. And so avoiding processed foods as much as possible. I think alcohol is another one that's on the commission report, is excessive alcohol consumption can, can be associated with, I mean, it can be associated with lots of things, but it certainly can be associated with cognitive decline.

Obesity, imbalance, blood sugar, blood pressure that's out of control. All of these things are modifiable risk factors. Getting sleep deprivation, as I mentioned, is also something that can lead to dementia. So getting enough sleep, managing your blood pressure, managing your blood sugar, and again, metabolic flexibility through a diet, like a ketogenic diet. Not being in ketosis forever, but going back and forth between you know, a diet that is maybe higher in carbohydrates, seasonal potentially, or, and then and then ketosis and getting that metabolic flexibility, that adaptability that's so good for our brain. The ketones, you can also just take ketones, and have ketones be present in the system without go doing a full ketogenic diet. And the brain prefers ketones over carbohydrates or glucose as fuel. It's more efficient, it burns cleaner. There's less oxidative stress. And it also puts us, when, when we do the ketogenic diet, we get into a fasting mimicking state that can create additional benefits potentially.

So depending on, you know, your bio-individuality that might be something to consider. It's certainly a place where we get the biggest changes, the biggest delta. So often the diet is where we see the biggest changes. Now, it depends on where you are, right? When I'm, when I'm talking to someone, I'm always like, what's an easy win? If you are feeling, you know, like, like you already have a pretty good exercise routine, can you add more cognitive engagement to your physical engagement and start pairing the two? So that might mean, like, I made the example of taking on a new sport. Pickleball is very popular here right now. So like, could it be taking on a sport like pickleball or learning to play basketball if you've never played before, is can it be, or, or something maybe even more strategic, like I, I can't even think, but like, I don't know, soccer. So taking on like a team sport or a new sport is a way to engage cognitively at the same time that we're engaging physically. So that could be one way to up your game. And you're already, if you're already playing a game, you wanna just, that's an easy win
to just change it a little bit, right?

And then the other thing is, look for the biggest delta. So if, you know, you've been someone who like only gets four or five hours of sleep, you're always operating on a deficit and you constantly feel tired, that is probably where you're gonna get the biggest change. Whereas somebody else who's like, oh yeah, I get eight or nine hours in bed every night, but I eat a lot of processed food,

that then diet is where you're gonna get the biggest change. And so the, the easy win and then the biggest change are where I would recommend starting.

Laurentine: Hmm. Thank you. Thank you. And so for the listeners that were not familiar yet with the concept of ketogenic diet or ketogenic, and so **could you tell us a little bit more about the ins and outs of that way of eating and also the research that has been done on a long-term basis to see how that could prevent cognitive decline?**

Heather: Yeah, yeah. So there essentially what we're doing it, the body is so incredible to me. It's like, essentially we're like hybrids, right? We can burn two different types of fuel. We can go back and forth between burning sugar for fuel and burning fat for fuel. And that ability, many of us have kind of lost it because we've had carbohydrates available 24 hours a day, seven days a week, 365 days a year, our entire lives. So we've always been in glycolysis or burning sugar for fuel. And that our bodies really are designed to go back and forth. And our brains especially really benefit from this. Our brain is made of a lot of fat, especially that myelin sheath that protects the neurons is very rich in fat. And so getting fats in, in a way that they can be metabolized and used efficiently. And as I mentioned with these really good high quality fats, they don't lead to a lot of inflammation. The Standard American Diet, right, is this combination of high fat plus high sugar. And that is really where we create a lot of heart risk, brain risk, inflammatory risk. But when we can reduce carbohydrates or even eliminate them temporarily, we get into this metabolic state called ketosis. And when we go back and forth between ketosis and glycolysis, we create adaptability or resilience. The concept here is the hormetic effect. I don't know if your listeners are maybe familiar with this, but you're stressing the system in a way that actually creates more resilience, more adaptability, which can essentially be a definition for health, right? How resilient you are to changes in the environment, how able you are to adapt is one way that we know how healthy you are. And so creating this kind of stress and a controlled and like designed way allows us to get the benefit of that resilience.

And then there's a litany of mechanisms that are proposed for, for why the ketogenic diet is so helpful. But essentially what you're doing is carbohydrate restriction and it's a fasting mimicking diet. Now we make sure that it's not, sometimes people think of like high fat, high protein and as no vegetables and just like bacon and cheese. And that's not at all what we're talking about. We're talking about a very polyphenol rich diet with lots and lots of veggies, lot very veggie forward, lots of greens, making sure that we're getting rich color blueberries and broccoli and all the cruciferous veggies, all of your leafy greens, green beans and artichokes. And I mean, you name it, there's a long list of things that you can have plus all the healing spices. And then, we, sometimes we have a little bit of dairy, not always, but depending on, on your version and what you, again, the bio-individuality, what your potential food intolerances are and stuff like that, we can adapt it. But this can be for temporarily the ketogenic diet.

People report of course, weight loss often, which some people want, some people don't. And it improved sleep, improved cognition, of course, reduced pain better energy levels, lots and bowel changes for the better, all kind. And sometimes for the worse. Sometimes we have to mitigate some of that, especially when you're getting into ketosis. But working with a provider or a guide to go through this process. What it is, I think of it like an experiment. Nobody should be on a standard American
diet for the rest of their life. No one should be on a ketogenic diet for the rest of your life. But experimenting with it and seeing how you feel. Am I sharper? Am I clearer headed? Do I have more energy? And then noticing what happens when you go back and forth, that is generally my recommendation, is like, you are an in of one, you are a study in an in and of yourself. And try it and see what your personal experiences and what resonates for you.

Laurentine: Hmm. Wow. That's really well explained. Thank you. Yeah, for me as well, I, I do believe in the importance of, burning good fats and good proteins to be able to stabilize our blood sugar levels. And it's one of the, the most important things that we, we talk about here in food matters as well. And we really understand the importance of good fats and good proteins. I'd love if you could, you know, we're talking about brain health here. If you could I'm sure that, you know, get your pen and paper out here. 'cause I'm sure that we're gonna be mentioning some good ones here. But if you could please, doctor, if you could mi mention some good brain health, good oils and good fats, and also some good proteins and some healthy proteins, that would be great.

Heather: Yeah. So just like foods, I, I mean, I'd love to so yeah, so fish, I think fish is a great one. Cold water, fish, the smash, fish, the salmon, mackerel, herring, sardines, anchovies. Those are high quality really good omega 3s. And they don't contain mercury, right? We, what we wanna avoid are those really big fish, certainly shark, swordfish, the tunas, those tend to concentrate as we go up the food chain. They tend to concentrate mercury. So we want to avoid those fish because mercury is a no neurotoxin.

All of the, so other, other good proteins are gonna be, are grass fed or we, here in the states, we get the heirloom chicken, conventional chicken has a lot of arsenic in it because it's in the feed, in the food. But if we're getting heirloom
or organically raised, pasture raised chicken, it's a good high quality meat. And doing thighs, getting more of the fat with it versus just doing the, the low fat like breast meat, or having the skin, having a bunch of it. Organ meats are another great way. If they're good, high quality grass fed, again, grass fed, organ meats; those are a great way to get in really dense nutrients.

And then on the, the dairy side, this can be so controversial, right? If you're lactose intolerant, skip this, I have an egg allergy, right? So I get into ketosis and I have to avoid eggs. Eggs are basically, I think, a perfect food, probably because I can't have them, but they are full of choline. Acetylcholine is, it's one of the ways that, conventional medicine helps to support people with

dementias. They actually stop the breakdown of acetylcholine. Now, those don't work particularly well, but we know that choline is associated with memory. And having acetylcholine in particular is the neurotransmitter, but the backbone of that, that neurotransmitter choline is very abundant in eggs. And so we wanna be getting a variety of foods. And then the leafy greens, oh, avocados, olives, nuts, seeds. I make this amazing keto oatmeal that is flax seed, chia seeds, and hemp hearts, which is high in protein, high in fat. And then I'll put a little bit of allulose in there and some coconut milk. it's so vanilla cinnamon, so delicious, full of fiber, full of good fat, full of good protein, and no animal product whatsoever.

And then the veggies, we rely super heavily on the veggies. I often will just create my meals out of veggies. One of my favorite things is to take the, we call them power greens. We have power greens. I don't know if you guys have these bags of kale and chard and spinach all mixed together. And I just take a handful of that. I put it in my 12 inch cast iron skillet and just fill it as to the brim, you know, 'cause it, it cooks down to almost nothing. And then I just put a little olive oil or ghee or whatever, I have, coconut oil and cook that for like 30 seconds, maybe 45 seconds. And it cooks down, shrinks down, stirred a little bit, and voila, it's like fast food in my house. So I, last night I had chicken thighs, my power greens and some broccoli in the air fryer. And that it takes like 10 minutes. I can make it so quickly. And it's not much to clean up. Super simple and very, very satisfying. I mean, I could keep going. I can talk about food for a long time, but I love, like this thinly sliced cabbage.

Laurentine: Well, tell us about what good oils are good for the brain.

Heather: Yeah. avocado oil, coconut oil, Ghee butter and olive oil if you're not cooking it too hot.
Laurentine: Amazing. Amazing. Yes. And MCT oil as well, right?

Heather: These are the ones that we like from coconut oil. Yeah, it's a little more processed, but that MCT oil is actually what's going to turn into ketones in the body the fastest. So of all of the foods that we could be eating, and there's Dave Asprey popularized this idea of like a bulletproof coffee or having, I drink matcha in the morning and add a little bit of MCT oil or a little bit of coconut oil to that. That's a great way to get it in, to get those fats and get those ketones in the morning.

Laurentine: Mm. I love it. You're making me very hungry. But yeah. Personally, I'm from, originally I'm from Holland, so when we would eat our breakfast, it's very cold country. Sometimes we have to bike to school in the morning, and it was like windy and icy on the roads, and mom would always have like, you know, a big porridge with a, like, clump of butter and some herring or some sardines, you know? And that was for most people. And if I tell that story to my friends in Australia, like, why would you have that for breakfast? But it's a very cold country, and we needed to, you know, eat brain to sustain our brain health, but also to sustain ourselves from the cold and to have fuels, foods that fuel and the, as the fuel to have fats and proteins rather than the sugar

and the carbohydrates, like the, you know, the quick burning, you know, pastries or, um, bread and, and like toast and jam that we would have here in Australia or America, for example, right?

So yeah, different cultures know about these things and it's been used. Right. Okay. So this is really good and, and very nice to hear that there is hope for people that have been diagnosed in the later years with cognitive decline, early onset dementia, that there are ways to reverse these symptoms. **Could you talk a little bit more about toxicity in, especially from perhaps mercury and what we can do about these when they show up, in our body, our blood and our system?**

Heather: Absolutely. So this is on the medical side. We look, and of course there are environmental considerations and decisions that you can be making in terms of reducing exposure. And that's really 75% of environmental medicine is, is identifying and stopping the exposure. So if you're eating hi, you know, fish that are high in mercury, stop, and your body does a good job cleaning them out, particularly if we're not adding additional toxins like alcohol and processed foods and things like that. But your body has mechanisms to get rid of toxins that build up in the body. Every cell has, you know, eats and has waste. And so we have these organs of elimination, including our bowels, our liver, our kidneys, our skin and lymph, and then our lungs. And so when we are talking about toxins, you know, it can kind of, we live in a toxic world and it can feel kind of depressing, but what I like to do I kind of celebrate when there's toxins present, it means there's something to do. We can figure it out, we can get rid of them, and then we can check that box and move on. And it, we're gonna really optimize someone's health because as my mentor, Dr. Bredesen says, he's like, if you think of your brain like a,
a country, my brain is done.

If you are fighting and defending, if you have to defend yourself against those toxins, you're gonna use a lot of resources. You're not gonna have resources available to build the new connections, right? In a country, it would be roads and schools in your brain, it's neurons and synapses and those connections between them that help you remember that person's name or remember where you parked your car. And so toxins, getting them out of the way can make a huge, huge difference. So in a medical setting, we test for three different flavors. I think of them like ice cream, I think of three flavors of toxins, heavy metals, mercury of which mercury is the most neurotoxic of the, of the heavy metals, but also lead, arsenic. Those things can come up too. And then we took look for mold, toxins or mycotoxins, the toxins that are made typically in water damaged buildings by microbes or, or molds, fungus in typically in drywall, but it can also be in other building materials. And then the third thing we think of is, chemical toxins. Things like pesticides, herbicides, petrochemicals, things that accumulate. typically they're fat soluble, but they're in, you know, they're in plastics and they're in fuel and they're in pesticides and herbicides.

Typically, those are where the most abundant number of chemicals come from. But they can even be off gassing from other building materials and furniture and clothing and all that kind of thing. So what we wanna focus on there is yes, we can test them, we can identify them, and then we can target them pretty specifically. If you're working with a provider who's well trained in that, if you're not, then I don't want you to lose hope. You can still look around, you know, read the blogs, look at, look to you guys for information about how to avoid toxins to begin with. And then you can think about those five organs of elimination.

Are you having a bowel movement every day? If not, talk to somebody about it and figure it out because you need to eliminate daily, at least once a day. Are you getting liver support? Are you eating good liver supportive foods? And are you avoiding things like alcohol, processed foods, things that we know tax your liver? Are you getting enough of the phase two liver support, supportive nutrients, things like glutathione and acetylcysteine, B vitamins, what might you be missing? Amino acids? And then three, your skin and limp. Are you, are you sweating regularly? Right? You're from like Scandinavian, Northern Europe, there's a big culture of sweating in saunas, partly probably because it's cold, but also because it's a very health promoting and there's data that supports that you reduce your risk of dementia when you sauna regularly. Also helps, I mean, it helps with so many things, but especially with mental health.

So we know there's a brain connection when we can get the circulation going that way. And also reduce the toxins. Lungs are often we forget about using our lungs as a detox organ, but you know, if you've ever been stopped for a breathalyzer test, you know that we exhale toxins. That's how police pick up when someone's been drinking and driving. We can use that to our advantage and we can do detox breath work practices that help us get rid of the toxins or our breath. And then last but not least, just drinking good, high quality filtered water, making sure we're not drinking from plastic, we're drinking from stainless ceramic or, or metal or excuse me, glass so that we're not getting the plastics in our body through water. Making sure that water is good and high quality, and then having enough of it so that we can filter effectively and efficiently through our kidneys. So if you are concerned about toxins, those five steps, like those are the place to start.
Just make sure that your, your body is working with you to eliminate them, that you're not creating a more of a toxic buildup by not having those organs open and flowing and, and working to your advantage.

Laurentine: Hmm. Really, really well said. Yeah. Thank you. And it's so important to use those detox organs in the right way. I mean, we've all been given them, right? It's so beautiful to have them working at optimum, optimum speeds. My father's story was a little bit more I guess advanced for those that, not necessarily dealing with this, but for those that do my father had a lot of mercury amalgam fillings and his like I remember when he would laugh, he would have a lot of, you know, I would see gold and metal all over his teeth, and it was something that they did back in the day.

I mean, luckily they don't do that these days anymore. But when I started to notice that, and especially the research that I know about it, first of all, I said, dad, we need to help you to remove them. And there's all sorts of ways that you can now work with a medical practitioner or a dentist that's a holistic dentist to be able to remove these in a very non-toxic way with rubber damming so that it doesn't go directly into the bloodstream. **But is that something that you see in your patients as well, where you still see a lot of amalgam fillings causing a lot of neurotoxicity?**

Heather: Yeah, it's hard to say. Like, this one thing is causing it, and we really, I know we wanna connect things so clearly in that way. I certainly know it's not helpful, right? Because we know me, mercury is neurotoxic, and if somebody has metal fillings still in their mouth, we know they were put there probably 20, maybe even more years ago. Because as you mentioned, thank God, thank goodness dentists don't use those anymore because actually as as they age, they can cause the teeth to crack. And, yeah, because it's not hard metal, it's actually kind of liquid, right? So it's very slowly like glass. It's almost melting and that can cause the cracking, but also there's a connection between those amalgams and, mercury toxicity. So yeah if I see them, which I do in my elderly patients, I still see them. I recommend they see a biological dentist or someone who's trained to safely remove them.

And then we use a product, a silica product, called Intestinal Metal detox. And that is the silica product. It has the sulfur components that allow it to bind specifically to mercury and arsenic. So in a very gentle way without needing chelation products or IV products or anything that's gonna strip minerals out of the system, we can use a product that in the gut doesn't get absorbed, but it just pulls mercury down a gradient. And then we can see over time that we are reducing the level of mercury in the system. Oh, I'm so glad you mentioned it. Thank you for sharing that part of your dad's story, because it's a really important one for a lot of people.

Laurentine: Yeah. And sometimes it's not picked up on either, you know. So in regards to, patients that are going to see their medical practitioner and are talking to them about cognitive decline and they get put on medications, **what are your thoughts on the medications that are available currently, in the general health setting and, and their effects on like, our decline and whether or not they can actually reverse the symptoms?**

Heather: So in *JAMA*, the *Journal of the American Medical Association*, and I think it was about December, 2019, they published an article showing that the use of, in the US it's Aricept, and NMDAR or Memantine, Donepezil or Memantine, their acetylcholinesterase inhibitors or it works on a glutamate pathway. There's basically two mechanisms and two primary medications that are used for patients with Alzheimer's. And the JAMA article found that after five years, the people who were on those medications actually actually had worse cognition compared to those who weren't. So I don't recommend starting them, but here's the most

important thing is if you're already on them, don't stop them because stopping them, what I've seen is that people hear that, people hear about that article, they hear about that news, and they go, oh, these medications are bad. Now, I don't think they're particularly good, but one of the worst things I've seen is people stopping them, especially stopping them cold turkey, and they spiral, they downhill spiral because you're getting off of a medication that has a big impact on your neurotransmitters, and if you take that away, that can cause steep cognitive decline that is very, very difficult, if not impossible to recover from.

So don't stop those medications. However, if you're talking to a doctor and that's all they have to a offer, you go find a new doctor, find a Bredesen-trained practitioner and who can help you navigate this process. It's individualized and it's somewhat complex. And I wish every day that I had a simple pill or an IV that would make the suffering stop, that would take away the torture that is cognitive decline for so many people in their families. But there isn't a simple solution. It's a complex disease, and it has a complex solution. And I, you know, I think that that's part of why we've been banging our head against the wall looking for this now is because we've, our research paradigm really supports a single intervention, and that is a simple intervention. It does not meet the complexity of this disease.

Now, there are new medications. These are Aduhelm or Aducanumab. Aduhelm and Aducanumab are the same generic name and the brand name there.These are the antibodies, the monoclonal antibody therapies. And you know, I was explaining in our research, what we found was that most people who were in these trials, now these aren't huge trials. This was about 50 people, right? And in the.. call it 80% get better over six to nine months. Now with these trials, they have thousands of people in them. And what they see is a reduction in the rate of decline. So they slow the cognitive decline process. Now, if you ask, most of my patients, if they wanna experience this process longer, they typically would say no. Right? And so this isn't adding a whole ton of value. Yes, it might slow the disease process, but it means you spend longer in this time of slowly saying goodbye to your loved one. And they spend longer in this time not knowing their grandkids names or not remembering who you are. And that, to me sounds heartbreaking and not particularly valuable, especially when we know that there are solutions out there that can actually prevent and reverse cognitive decline and improve quality of life, improve sleep, improve blood sugar, improve, metabolism and blood pressure and so, and mood and so many other things.

Laurentine: Mm-hmm, Yes, yes, yes. Thank you so much for sharing. And also so amazing that you've set up a clinic that you can actually help people with this actual, you know, physical way. So that's fantastic to hear. I'm sure that wasn't available, you know, 10, 20 years ago. So yeah, for our last question, because we're coming to the end of this amazing interview, and thank you so much for sharing so much of your wisdom and the research that you've been doing. **I think our audience would like to know one brain boosting recipe that you can recommend that you**

personally turn to as well, and that we would, you know, perhaps, you know, get our pens ready and just write down some of the ingredients that you would put in this amazing meal.

Heather: Yeah, so I mean, I mentioned what I made last night and that's kind of a go-to, but if I were making like a fun meal, I, I have this, this cabbage salad that I love as a side, and I know it's like that I'm starting with the side, but it's so delicious. It's like this beautiful palate cleansing this cabbage that I slice like hair thin and then just add olive oil and a little bit of lime juice and some salt. And if I've got a perfectly ripe avocado, I'll throw that on there.

I also love, I'm here in, in Southern California, so I love Mexican food
and we will make with like almond tortillas, some either chicken enchiladas or grass fed beef enchiladas and put all the cilantro, super fresh cilantro, and cotija cheese and yummy homemade salsas and all, all of that good stuff on it. And my family will eat that for days.

Laurentine: I love it. I love it. I love it. How good is fresh cilantro? I mean, I love it. Australians call it coriander, it's a bit funny, but, um, yeah, it's, it's got like really right flavor, doesn't it? I love it.

Okay, Heather, well thank you so much for your time and thank you so much for being here with us and sharing us this, like, this epic recipe. I feel like I'm gonna go and make that tonight as well. And if there's anything that you would like to share with the audience before you go, anything that we haven't mentioned yet? Anything in regards to brain boosting healthy supplements or any superfoods or any lifestyle tips?

Heather: Yeah, so the, I mean, supplements, if you're looking for supplements that support cognition, uh, my favorite nootropic formula is Qualia Mind, Q-U-A-L-I-A, Qualia Mind. It's a phenomenal formula formulated by some friends of mine who've just done a really good job, a very sophisticated, um, uh, stack of nootropics. And then I always recommend a fish oil, a probiotic, and some vitamin D, especially if you're not getting a ton of sun. So those vitamin D's a hormone and it helps with cognition in, in a few different ways. And so that's a good little stack to start with. That's usually beneficial for most people, of course, to check with your healthcare provider to make sure that that works for you. But that is where I like to start for most of my patients looking to optimize their cognition and then individualized from there.

Laurentine, it's such a pleasure to be here with you. I'm so privileged to have had this chance to have this conversation with you. Thank you. Thank you. Thank you for having me. And if anybody wants to learn more, you're welcome to sign up for our email at drheathersandison.com and we'll keep you posted about the book and anything else that we have going on.

Laurentine: Thank you. Thank you so much, doctor, and yeah, keep doing the amazing work that you're doing. We're gonna get it out there as best we can.

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