

Dave Asprey (00:00:00):

You are listening to the Human Upgrade with Dave Asprey. Today's episode is about one of my favorite topics, brains, not just having a brain that works better but not getting Alzheimer's disease. If you followed my work in the longevity field, you know that there are big, if you followed my work in the longevity field, you know that there are four big killers you've got to avoid. And the first one is diabetes, which leads to cardiovascular disease, cancer, and Alzheimer's. And maybe the scariest of all of those is Alzheimer's because you're unable to care for yourself and you don't even know it. And if you've experienced that in a family member as I have, it's not the way most of us want to go. So what do you do to reverse Alzheimer's if you have it? Well, there's a new book and a new toolkit about that.

(00:00:57):

I want you to listen to the episode today, even if you don't have Alzheimer's because you don't want to get it, and I promise you that someone either has it or is going to get it until we solve this problem permanently. Our guest today is named Dr. Heather Anderson, and she wrote The New York Times bestseller, reversing Alzheimer's, the new toolkit to improve cognition and Protect brain Health. The title says it all to improve cognition even if you don't have Alzheimer's. This episode is for you. And if you read headstrong, my big cognitive enhancement book, half the Research, and it comes from Alzheimer's research, when brains stop working, how do you make them start working again? It's the same stuff that makes good brains and into great brains. Heather, welcome to the show.

Heather Sandison (00:01:43):

Dave. Such a privilege to be here. Thanks for having me.

Dave Asprey (00:01:47):

It's my pleasure. I just love that you're doing this work in part because women get Alzheimer's twice as often as men. It's why I was the largest donor to the Women's Alzheimer's project in recent years with Maria Shriver because this is a thing that affects all of us, but women more than men. What led you down the path of deciding this was worth your time and attention?

Heather Sandison (00:02:12):

Yeah, thank you. So I started looking into this at Baste. I was going to naturopathic school and very oriented towards health. Rather than focusing on the disease process and what's going wrong, my orientation has always been towards how can we optimize much like yours. Now, fast forward a few years, I had the privilege of seeing Dr. Dale Bredesen, who became my mentor, speak at a conference, and he put together this what really made a ton of sense conceptually, but what I had been programmed to believe wasn't true, right? I had been told over and over again like many, many, many doctors out there that there was nothing I could do to support someone with Alzheimer's or dementia, that to suggest otherwise was to give them false hope and to do harm. And so I kind of took that as gospel. But then when I heard Dr.

(00:02:59):

Bresson speak, he set up this stack in the biohacking world. This is a very well-known concept that we can have these stacks of interventions or a stack in a supplement, that we put all these things together so that we hopefully potentiate the benefit of it. And Dr. Bresson was describing just that essentially taking everything I had learned in naturopathic school and packaging it for those suffering with cognitive decline. So conceptually it made sense. I also knew I had the framework and the background to be able to execute on this, but I still didn't believe it was possible. I went to his training because I was so intrigued by what he was saying. And so then I had the credentials and I was on his list of trained providers and people were showing up in my office with way more confidence than I had. And I walked them through

the process not knowing if it was going to really help, because again, it had been ingrained in me to be skeptical. And then over and over and over again, people proved me wrong and showed me what was possible for those suffering with dementia. Even severe Alzheimer's, people weren't necessarily going back to work. They weren't a hundred percent better. I would never call this a cure, but people had significant improvements in their language ability, their ability to get dressed in the morning, their activities of daily living in their quality of life, and also of course the quality of life of their partner and their families.

Dave Asprey ([00:04:17](#)):

You said you'd never call this a cure. Is that because you're not good at your job?

Heather Sandison ([00:04:22](#)):

It's because the language I think is a little bit misleading if we say cure, right? So what I see over and over again is that people have to stay on this plan. It's a brain health program. It's a brain health lifestyle, and there's a resident who, I have this center called Marrama, and we've had people move in and then move home. And there's one woman who came in with a MOCA score, Montreal Cognitive assessment. Normal is 26 and above. Perfect score is 30 out of 30. She had a MOCA score around 10. She was pretty bad. As we get towards zero, it's getting worse and worse. Somebody with zero has no verbal ability. She was at a 10, which is where we are asking for a miracle to get reversal of the disease process, which her moca score went up to over 20. She was just a miraculous case.

([00:05:07](#)):

And so her family wanted her to move home. So she moved home and unfortunately, her son was traveling more than expected. She was pretty isolated. She wasn't getting the same diet, she wasn't exercising as much, and her MOCA score fell to a nine. So she moved back in with us and her MOCA score is now up again. So it's not a cure the way that we might think of a urinary tract infection or a pneumonia where you get an antibiotic, it goes away. You never have to think about it again. This is really about adopting a brain health lifestyle so that you can support neuronal health. Whatever stage you are in either cognitive decline or looking towards optimization.

Dave Asprey ([00:05:43](#)):

Dr. Dale Bresson's become a friend. This show, according to him, helped him hit the New York Times list with his first book. And I was so amazed to hear a medical doctor with great credentials say that mold are one cause of Alzheimer's. I've been saying for years, and no one believed it. And he put the evidence out, but it's not the only cause. It's all the other things that inhibit mitochondria, like heavy metals and other types of toxins and metabolic disturbances. And it seems like either preventing or reversing all of those is a good strategy even if you're 20.

Heather Sandison ([00:06:19](#)):

I couldn't agree more. And particularly if you have the genetic predisposition towards Alzheimer's disease, right? If you have the A-P-O-E-A-P-O-E genetics, if you have one or two copies of the A P O E four, then you are at much higher risk of developing Alzheimer's in your lifetime. And it makes a huge amount of sense to adopt these strategies of reducing toxicity, balancing nutrients of getting structural support, making sure you're avoiding sleep apnea, optimizing sleep, optimizing stress, getting enough and purpose and meaning, but not too much stress that it becomes toxic, having your signaling pathways optimized. And then of course, making sure there's not infectious agents that might be triggering that inflammation in the brain. Looking at all of these components of brain health I think is really important as we age, but particularly for those at high genetic risk of developing Alzheimer's,

Dave Asprey ([00:07:11](#)):

It seems like you might be a biohacker. Your toolkit is intermittent fasting, a ketogenic diet, detoxing, optimizing sleep, managing stress, and doing stuff with your brain. It's almost like if we all did those all the time, it's not meant to be a cure, it's just how you're supposed to be living to have a brain that works.

Heather Sandison ([00:07:33](#)):

Yeah. The other thing we call it is a naturopathic doctor.

Dave Asprey ([00:07:37](#)):

Exactly. Right?

Heather Sandison ([00:07:37](#)):

Right. It's living the lifestyle that our bodies and brains are designed for so that we get optimal function. It's common sense, just uncommon practice where we're in a society where we're swimming against the, it's easy to scroll, it's easy to get processed food, it's less expensive, it's more convenient. And so all of society sort of stacked against us, and we've got to work harder to do the things that help us to optimize our health.

Dave Asprey ([00:08:06](#)):

How much more expensive is it to not get Alzheimer's versus just eat junk food?

Heather Sandison ([00:08:12](#)):

So we can talk through the numbers here. Pretty straightforward. Memory care is going to cost you probably base \$6,000 a month for the most discounted in probably the lower socioeconomic areas of the country. Now I'm on the coast in San Diego routinely you're going to see memory care that starts at 10 or \$12,000 a month. And then as soon as you start needing one-on-one care, or you need extra help with your medications or you need extra help with any of these other long laundry list of things, they're going to add more cost. So it's very, very, very labor intensive to care for someone with Alzheimer's and dementia. And if you try to do that at home, you don't get the economy of scale that you do at a memory care clinic. Now you're paying for one-on-one care at home. This can get to be even more expensive than \$16,000 a month, \$17,000 a month in 20 20 12.

([00:09:05](#)):

My dad was caring for my grandmother who was at home and he was spending upwards of \$20,000 a month. When I asked him about that as I was putting the book together, I wanted to make sure I remembered that right. And he said, you know, Heather, I probably couldn't even get that care now. It's so hard to find caregivers that the cost of that is going up and up and up. It can be a very thankless job. And for some people it can be a dangerous job if people with dementia end up combative or violent. You can't often find someone to take care of them.

Dave Asprey ([00:09:36](#)):

My grandmother passed away a little bit north of a hundred years old, about 101. And the last few years, she definitely had Alzheimer's going on. You could see it coming in and out. And I looked at what they were feeding her at the care home. That was a block from my parents' house. It was all seed oils, grains, sugar, junk food. And if I was there and I just poured a little bit of C eight MCT oil in her food, we could have a conversation about what it was like at Los Alamos National Labs when she was working on uranium and things. And then the other time she'd just wash infomercials. And it's like, that's just a mild ketogenic agent, and it's one of all these different things, but finding a care provider who could even just

swap out some bad oils for good oils, much less get enough protein in or help with exercise, it was impossible.

(00:10:31):

And most of the care providers were really poorly paid. They were good hearted, they wanted to do good, but they couldn't even make ends meet. So it's a rough situation. That's why people who seem like you can't afford to eat healthy, well, grass fed butter is more expensive than regular butter or margarine, but not that much more on a calorie basis. It's cheaper than kale, which isn't good for you anyway. But the other thing is white rice more expensive than brown rice, which is full of arsenic? No. Is arsenic linked to Alzheimer's disease? What do you think?

Heather Sandison (00:11:04):

Well, having metals in general, and yeah, it's something that we screen for in everyone. And it's also quite simple to get rid of arsenic and mercury. You don't need fancy chelating agents. There are binders that are specific to that. What

Dave Asprey (00:11:16):

Are the binders for mercury and lead?

Heather Sandison (00:11:18):

I use the IMD for mercury and arsenic IMD product from Quicksilver is a silica based product that binds it in the gut so that you don't need a chelating agent for lead. You do need a chelating agent. EDTA is the only thing I've found that will help with that. However, lead I worry about less. A lot of that is stored in bones. It's less neurotoxic than mercury. So we're always kind of battling that. Most of my patients, as you mentioned, are women are postmenopausal women. And so the bone risk to brain health, that risk benefit ratio, we're always navigating whether or not we should use EDTA either orally or by iv.

Dave Asprey (00:11:54):

It's a bit of a risk there. EDTA is something that in my life, in my mid to late twenties, I had very high blood levels. Who the heck knows where from? And my skin was kind of this gray color and I was obese, had chronic fatigue that was more mold toxin related than lead. And I got my first EDTA intravenous treatment and I came home and my partner at the time said, oh my gosh, your skin is pink just from one treatment. And we know that any amount of lead in your blood especially increases your risk of cardiovascular things.

Heather Sandison (00:12:28):

Reduces iq.

Dave Asprey (00:12:29):

Yeah, reduces iq. There's that. And we're looking at, okay, let's say that you're a young person. You're saying, all right, maybe I should avoid heavy metals and maybe I should occasionally get rid of some. And you can use that. What is it? I-M-D-I-M-D?

Heather Sandison (00:12:43):

Intestinal Metal Detox. Yeah.

Dave Asprey (00:12:45):

And Quicksilver on the founder of Quicksilver has been on the show it, it's a good company. They have a push catch protocol that's also really good. And so we can all do that, and we can do that way before we get Alzheimer's to reduce our risk and to perform better today, which is really important. When people come to see you with Alzheimer's, how do you know which of the types of Alzheimer's it is? How do you know what the cause is?

Heather Sandison ([00:13:11](#)):

So we do a precision based functional medicine, naturopathic medicine workup. So we're looking at these six components of brain health. Again, they're toxicity. And we're looking even taking that step back, what we want to put this in the framework of, is imbalance too much, too little in the wrong place at the wrong time? That's what we're looking for, right? There's a homeodynamic state that we're optimizing for in the brain. There's a diurnal rhythm, there's an annual rhythm, there's a monthly rhythm. There are all of these changes that happen, but we want them to be within this optimal kind of up and down. We don't want things too high and we don't want things too low, but we want them to change over time. So this is a complex system. It's complex system science is applied to the brain. And so we go back to these six components.

[\(00:13:56\)](#):

They're causal level components, right? There can be inflammation. Sometimes you'll hear people say, inflammation is the cause of chronic disease or inflammation is the cause of Alzheimer's. What caused the inflammation? Just like amyloid plaques, right? Amyloid plaques as the cause of Alzheimer's. It's a way to simplify a complex process, but it doesn't work when we get rid of the amyloid. We don't resolve the Alzheimer's. We don't resolve the cognitive decline. So what we want to look for is what are the things that are going to trigger an inflammatory response? What are the things that are going to trigger a reaction in the form of beta amyloid or tau protein? What can we do to stop that cascade? So we want to go to the causal level factors. And again, it's toxicity, its nutrients, it's structure, it's stress, it's signaling and its infections. And when we can look at those things, so the lifestyle factors at the foundation for this, right?

[\(00:14:52\)](#):

Before you even go see a doctor and spend all the money on testing, are you getting a non-processed diet, getting in and out of ketosis, potentially maybe going plant-based when you're not in ketosis, some diet that above all else eliminates processed foods. And then are you getting enough sleep, at least seven hours of sleep, aiming for 90 minutes of REM sleep, 60 minutes of deep sleep, getting that good restorative sleep where the brain can rinse amyloid out of the cerebral spinal fluid where we can get the toxins like mercury and lead and all of that out of the brain, all of the metabolic waste that's created every day. Do we give the brain the opportunity to do that at night? And then can we consolidate memories also a really important part of sleep and brain health. So diet, sleep, exercise. Are we getting at least 200 minutes a week of exercise, a combination of vigorous aerobic exercise, strength training, some sort of dual task exercise? We typically recommend we like exercising with oxygen, potentially contrast oxygen. If you're in the optimization space, if you're in prevention and not frail,

Dave Asprey ([00:15:56](#)):

Come to upgrade labs. We do that.

Heather Sandison ([00:15:58](#)):

Yeah. I know I use an OT at your place when I was at 40 years of zen. So stress that speaking of 40 years of zen stress management, are we getting enough? Do we have purpose and meaning? Are we getting that hormetic effect potentially from fasting, from exercise, from contrast, oxygen, contrast, hydrotherapy, those kinds of things. Are we using that to optimize our cognitive function? Or are we kicking our feet up and saying, Hey, I'm retired, so I'm going to have happy hour cocktails every day and drink plenty of

alcohol and soda and indulge in cookies and cake. That is some people's version of retirement. And that is not how we're going to optimize cognitive function. So foundationally, we've got to have balance in what we eat, how much we move, how much we sleep, the quality of our sleep, and who we engage with.

(00:16:47):

Are we socially isolated or are we engaging with others? Those foundations are absolutely crucial. And if I'm going to test for metals, if I'm going to add supple, supplemental supplements are supplemental by nature. We want to add those to the foundations. And so then once we have that foundation in place, or sometimes these are parallel tracked, then we start looking what are the toxic levels? Are there metals like we just discussed? Are there molds? And I thank you for the podcasts you did originally with Dr. Shoemaker and then Neil. Nathan has added a lot to that conversation, and I've studied with both of them. So understanding, have we been exposed to the mycotoxins? Are we getting them out? Are we out of that? Are we currently being exposed and pouring in more to our body than we can get rid of? And then also chemical toxicity. Glyphosate has a big effect on the nervous system. So do PCBs, phthalates, petrochemicals. These are things that we can measure. We can identify exposures, and then we can help to get rid of infections. Same thing we can measure for them. We can understand if they're part of this inflammatory process in the brain and we can resolve them so that then we free up resource to focus on regeneration.

Dave Asprey (00:17:58):

I love that. I was a little surprised to hear you recommend a plant-based diet for elderly people. Do you just not like bone density or is there some other reason for it?

Heather Sandison (00:18:10):

It's because of the Ornish trial. It's because Dean Ornish published in June of 2024, a trial that showed the people in the treatment group improve their cognition in five months using a vegan diet. And so I think that what this does, I'm attached to the ketogenic diet. I think the ketogenic diet is the best diet for brain health, but not everybody's willing to do it. I find especially people from South Asian cultures, they want a vegetarian diet. And if they're opposed to doing a lot of animal protein or animal fats,

Dave Asprey (00:18:42):

You can do vegetarian just fine.

Heather Sandison (00:18:44):

Yeah. Vegan. No, I don't recommend vegan keto. I think it's too restrictive.

Dave Asprey (00:18:49):

No, it creates fatty acid imbalances, destroys your myelin and introduces massive amounts of oxalate that poison mitochondria and actually cause brain dysfunction. So when you say plant-based, okay, eat some plants. I'm with you, but I just want to be sure for listeners, Dean Ornish is an absolute radical. His diet killed Steve Jobs. Steve Jobs was on the Ornish diet, and I called him out on it and he said, well, I told him to get the surgery. I'm like, yeah, you caused him to need the surgery. And he didn't want to come on the podcast for obvious reasons, but Dean Ornish tests meditation and exercise plus a wacky diet and says, look, you get the same results as meditation and exercise. And that's the whole basis of the Ornish diet. So his recent trial, you got to be a little suspicious around the Ornish stuff because he's also in the pay of PepsiCo so that they can sell corn syrup because it's fat free.

(00:19:41):

So I consider him to be not that reliable, but I'll give him huge credit for the fact that he was, if not the first, one of the first credentialed big university doctors to say that lifestyle has an effect on your health. So big courage there. Just wrong approach on the zero fat thing. And that said, I've seen over and over, if you're willing to go on a very high starch, extremely low fat diet like that and overexercise and all the other things that almost no one's willing to do, you can lose weight on that. It's just really unpleasant and you're hungry all the time. Versus a cyclical keto approach, which supports bone density in a way the OR diet doesn't for god's sake. If you want to be a vegetarian, eat some eggs, have some dairy protein, you'll be fine if you're not allergic. But I see these, a lot of my contemporaries people entrepreneurs, fifties and sixties, oh, I heard I'm going to go vegan. And they always, you wait six months, they're all puffy, they had to buy new pants, their faces are not looking good. And when are you going to find out it's not working guys? And they add protein back in. So what is the role of high quality protein in Alzheimer's? Is there a connection between those two?

Heather Sandison ([00:20:52](#)):

Well, I want to back up real quick and just respond to what you've just said. Basically, my dietary recommendations are based on ancestral diets. What if we evolve to eat? And what, when I think about an ancestral diet, the consistent thing about them is inconsistency. We did not have carbohydrates available all the time. We did not have meat available all the time. We did not have abundant fat available all the time. This day and age, we have plenty of high fructose corn syrup available at any given moment, as much as we want. And so this is a very, very different diet that we're typically consuming that, and probably not your listeners, but many people out there are typically consuming and it is driving chronic disease as we age and in children as well. So stepping back, I don't think that anybody should be keto forever. Agreed. I don't think anybody should be plant-based forever. Agreed. But I think that there are benefits environmentally to a plant-based diet. I think that there are benefits to changing your diet.

Dave Asprey ([00:21:48](#)):

Oh my gosh. You don't like soil. Okay, I hear you.

Heather Sandison ([00:21:51](#)):

So what I think people should do is mix up their diet and make sure it's not processed.

Dave Asprey ([00:21:58](#)):

Okay, let me ask about that. Isn't cooking food and processing it?

Heather Sandison ([00:22:03](#)):

Yeah. Have you read highly processed people?

Dave Asprey ([00:22:06](#)):

Yes.

Heather Sandison ([00:22:07](#)):

Yeah. So I loved that book. It changed the way I ate. And essentially if you could have it in your pantry, if you can make it, if it's mal dextrin, gorg gum, you don't have in your pantry, you don't cook with that. But yes, cheese is highly processed. I still am a fan of goat cheese and sheep cheese. I think that that can be helpful for many people. And you asked about protein, protein, I think, and also you mentioned satiation. Very important. I'm super pragmatic. And I think that what makes these diets accessible is when you can quickly simply get access to them and some sheep cheese or some goat cheeses.

Dave Asprey ([00:22:43](#)):

I mean, for an elderly person, if you take some sheep yogurt or maybe Greek yogurt, if they're not sensitive to cow's, milk, grass-fed, ideally pour some MCT oil, moins ketones, mix it up, toss in some blueberries, which are good for the brain, and they were going to eat something for breakfast. But there they got their protein, they got some fat, they got some ketones, they had some carbs in the blueberries. No animals were harmed. In fact, I promise you, having been a sheep farmer, that sheep really wanted to be milked. So everybody wins on that deal, including the elderly person because they feel better. And instead you give them granola with skim milk, which is what they're likely to get. I feel like I have Alzheimer's. When you give me that, I cannot pay attention on that kind of diet. That's peasant food.

Heather Sandison ([00:23:30](#)):

Yeah. Well, I mean, watch a child and they end up with they can't focus, they can't learn. So I think that we're in agreement.

Dave Asprey ([00:23:38](#)):

We are. I'm just teasing on all this stuff, by the way. I just like to ask inflammatory questions that put words in your mouth because that's my sense of humor. So if I'm offending you, that means you need to get a therapist.

Heather Sandison ([00:23:48](#)):

I think what happens is it gets confusing. No, no, no. Not offended at all. But the dietary advice is really confusing. And again, my audience, the people, the patients I see, they're women over 65, and so they were fed the garbage of that food pyramid. And so we're fighting against that and having to convince people that fats are actually good for your brain. You want fats and not all fats are created equal. And so which fats are good? And what about this one? We're having a lot of these nuanced conversations about what to eat and how to do it, and we're thinking about new ways to shop and new ways to cook, and it's nuanced and it's complex and it's time consuming. And I think that some of the rhetoric around diet is inflammatory. And it does get confusing for people. And what I'm trying to do is just stay simple.

Dave Asprey ([00:24:34](#)):

Yeah, you want it to be simple and less processed is good. If you have to prepare it, that's probably good. And I like the rule that's worked really well for me in the cognitive enhancement is don't eat foods that won't spoil and don't eat foods that are spoiled because that means they put a bunch of stuff in it to stop it from spoiling. And there's quite a lot of times where you're eating foods that really ought not to eat because they have mycotoxins or they have histamine because they've been stored improperly. And food companies, they'll hide old food with flavorings and they'll hide cheap non-nutritious food with flavorings. And if you realize, oh, I'm just going to eat food that's relatively fresh that isn't unnaturally preserved, then you'll be better off. And it's not that hard. But it is hard when someone says, well, I heard that if I eat this Peruvian peasant food called quinoa that it's somehow going to give me superpowers. And well, the Peruvian peasants who can't eat that anymore are probably not happy with you. And the fact that you didn't pressure cook it the way it needs to be cooked for you to even digest it, is it any wonder that your gut is shredded and your brain doesn't work? And so it sounds like it's complex, and if you're not sure if it's new and fancy, it's probably dumb. And you should look at what did your grandmother eat?

Heather Sandison ([00:25:59](#)):

And you mentioned foods being made to taste better or hide that their older restaurants are another big place where this happens. So eating out, the more you can eat at home, this is that inversion of the typical right. The richer people are, it used to be that their health would improve. Now the more money you have,

the more you eat out, and actually your health declines compared to those who have less money but cook and eat at home. And this is because restaurants, again, like highly processed, packaged, profitable food, it's there for profitability to make a corporation money and restaurants, there's a bottom line. In order to stay open, they've got to be looking at that. And so they're going to look for margins by reducing the quality of their food or using things that might be over their best buy date. Right?

Dave Asprey ([00:26:48](#)):

It's such a big thing in restaurants. I started the first all grass fed restaurant, grass fed butter, grass fed meat, wild caught fish, organic veggies, and ran it for about eight years. And now you can get grass fed meat at hundreds of restaurants in la. That was one of those, no, people will buy this. What makes me super happy is a lot of former vegan restaurants are now regenerative ag, grass fed and vegan. This is a societal change that we need because regenerative meat actually does build soil because I built a farm and did it. And unless you're going to go to a restaurant like that, you save a ton of money and time cooking at a home and people say and time think about driving to the restaurant, ordering, waiting and all that stuff. If you get basic cooking skills, you don't have to have a fancy five course meal.

([00:27:41](#)):

You can take a hunk of protein and some kind of add some kind of veggie and maybe some carbs like rice or something. It's just not that hard to do it. I do it every single night. And the funny thing is, I've been gone for about six weeks, all but two or three nights. I was doing some stuff with each of my kids for the summer. They're teenagers, and that means I wasn't with my girlfriend. And she's like, my stomach isn't very happy when you're gone because she's eating out more. And just notice the difference. Yeah, I cook dinner every night, it takes me 10 minutes to cook, and I'm eating food that would cost a hundred plus dollars at a restaurant that cost less than \$30, and I'm eating really good food, and it could cost less than \$10 if I went for cheaper cuts of meat. So for anyone listening, you don't want to get in your car to go to dinner having restaurant food delivered to your house if you knew the endocrine and brain disrupting effects of the coating on the plastic. They're putting that in,

Heather Sandison ([00:28:39](#)):

Especially styrofoam. We measure styrene in human beings and it is high and it's higher in people who get especially hot food delivered in that food packaging.

Dave Asprey ([00:28:50](#)):

What I just heard you say is that you should get sushi takeout. Is that correct?

Heather Sandison ([00:28:54](#)):

So I worry about parasites probably more than most doctors. So no, that is not what I said.

Dave Asprey ([00:29:00](#)):

No, that's not what I wanted you to say. Alright. If I was going to eat sushi, what I've been teaching people for years is take some chlorella to absorb the mercury that's present in especially tuna, but in a lot of the fish, I actually noticed a difference in my balance. I used to do advanced yoga, eyes closed one-legged stands. If I ate sushi the night before, I'd fall over. If I didn't eat sushi, I wouldn't. Chlorella fixes that. But then there's the parasite issue. I just take some parasite herbs when eat sushi and just not worry about it.

Heather Sandison ([00:29:32](#)):

Well, I think that we get exposed to parasites a lot more than most people want to acknowledge. And so there's medications that are actually very well-tolerated. I'm a fan of Alinea. I am a liberal prescriber of it, typically with patients, if I have concerns, if they've been traveling, if they've been eating sushi. But you can get it from a salad bar. You can get it really from many, many places. I think

Dave Asprey ([00:29:51](#)):

Alinea

Heather Sandison ([00:29:52](#)):

Alinea, yeah, A-L-I-N-I-A. So that's a well tolerated. It was designed for kids under two. It treats protozoa, things like Giardia, it's on label for Giardia. And then you asked about herbs. So if I want somebody, if they've had a chronic complex parasite load, then I'm probably going to choose Alinea first over things like jugglins, black walnut or artemisinin that does have liver toxicity associated. So we can do those short term, but I wouldn't want somebody on those for more than a couple of weeks. But mimosa, pica, diatomaceous earth, those are potential herbs that can be used as well for, and there's a whole bunch of them out there, but working with a provider to sort through those is important.

Dave Asprey ([00:30:37](#)):

Yeah, a lot of people listening are going to say, I'll work with the provider, but since I'm not sick and I'm going to eat sushi tonight, what do I do? I kind of like diet tenacious earth, which you mentioned. This is something that I feed to my chickens, at least I did when I was running the farm on Vancouver Island, and you put it in chicken feed and it's microscopic shells that are from millions of years ago, and they cut open worms, so the worms can't live. If you put it on anthill, the ant will stop coming around because it cuts their feet too. So it's this non-toxic thing that you can feed down animals, you can eat it yourself, just get food grade and you take a little bit of that. So if I was going to eat some raw fish, which I do on occasion, I like that for sure. What about things like femazole?

Heather Sandison ([00:31:22](#)):

The azoles for antiparasitics, generally, they're not as well tolerated as Alinea. Flaggy is one that I completely avoid because of how awful it makes most people feel. But typically there's per mycin, there's ivermectin, there's albendazole I will use, there's a bunch of course, ivermectin and hydroxychloroquine in the antiparasitic category.

Dave Asprey ([00:31:51](#)):

There's a case for that, but it's also bad for the environment. If you feed that to animals or you feed it to yourself and you poop in the woods, all the soil where you poop will have no more nematodes, which we need for soil. So it's a complex thing. I will say if you look at the cancer research, which is different than Alzheimer's, clearly on the anti-parasitics like Femazole or even Ivermectin, they have anti-cancer properties because there's some mysterious connection between parasites and cancer that I don't think we understand, but it seems like there's something. What do you think about that?

Heather Sandison ([00:32:23](#)):

Yeah, you see that with antifungals too. They get this resurgence to look into them as anti-cancer agents. I mean antibiotics, if you look at a stack of chemotherapeutics, typically there's an antibiotic in there. And so this connection between bugs and cancer I think is clearly established, although not clearly understood, but it makes sense to me that they would add some antiparasitics to the list of antimicrobials that might support cancer therapeutics. I don't know much more about it than that.

Dave Asprey ([00:32:56](#)):

It's funny though, because when we get to Alzheimer's, you said something earlier that Dale Bredesen also said that some of this is caused by a brain infection. What are the types of infections that are associated with Alzheimer's?

Heather Sandison ([00:33:10](#)):

And I wouldn't even say a brain infection. I would say just an infection. So infections in our body can stimulate the inflammatory cascade that can lead to amyloid plaque production. So for example, herpes simplex one and cold sores. If you get recurrent cold sores and you have a risk for Alzheimer's, if there's genetic risk for Alzheimer's, I highly recommend that you aggressively prevent those, whether you're using lysine and lemon balm and maybe a little lithium salt, or if you're using valacyclovir or acyclovir at the first sign of prodrome, treating those aggressively is important to preventing Alzheimer's as you age. Maybe even doing that prophylactically once a month, or again, working with a provider to figure out what makes the most sense for you, but keeping that under control. Another bacteria associated with Alzheimer's is P gingivalis, which is the bacteria associated with gingivitis. So gingivitis increases the risk of cardiovascular events of my myocardial infarctions or heart attacks.

([00:34:11](#)):

This is part of why if you have a fake joint, an artificial joint, you might be given some antibiotics before a dental cleaning. This is because as those bacteria get introduced into the bloodstream, they can create infections elsewhere. They can also affect heart valves. This is well-known that we can have this increase in vascular inflammation. After a dental cleaning, we'll see markers of lpp1 a two go up, and if I see that repeatedly elevated and not associated with the dental cleaning, then I start wondering if there's an infection in the mouth that might also be triggering inflammation and then beta amyloid in the brain. We know that both of these infections, both herpes and IVs have been found in the amyloid plaques in the brain on autopsies as have the Lyme spirochetes. So we know that beta amyloid is antimicrobial by nature. It's there to protect us. It's not there to give us Alzheimer's, it's there to be protective. And so what we want to do is make sure that the total body burden of infections is as low as possible. So we're not in that fight defend inflamed mode.

Dave Asprey ([00:35:20](#)):

I love that idea. This means something like a water pick or flossing could potentially reduce your risk of Alzheimer's disease. Right?

Heather Sandison ([00:35:30](#)):

Flossing is something I review with every single patient because it is that important, right? Health starts in the gut, but the gut starts in the mouth.

Dave Asprey ([00:35:36](#)):

Yeah, I'm torn. We have these mouth washes like Listerine and all that, kill everything and also kill all the good bacteria in the mouth and are associated with problems with making nitric oxides or cardiovascular problems. Even erectile dysfunction from your mouth isn't unheard of. And reductions in blood flow in the brain are associated with Alzheimer's. So clearly mouthwash might not be the thing to do, but if you have bad bugs in your mouth, shouldn't you take a chlorhexidine or a peroxide rinse or something to kill the bad guys? How do you solve that problem?

Heather Sandison ([00:36:15](#)):

Well, so coconut oil I think is a great path for that. It's mildly antimicrobial and doing some oil pulling. This is in an Ayurvedic tradition that's been used for millennia that I think is a great option for some people. But seeing the biological dentist to look for latent infections for something potentially underneath a root canal or in a cavitation. I've had patients with recurrent sinus infections and it ends up being an infection beneath a root canal that they didn't know was there because the root is gone. That's the nerve that would tell us that something was inflamed or out of sorts. We're not aware of it because we're not getting the pain signal. So I do think I'm a fan of biological dentists, and again, I refer to them liberally because they've become really important partners in helping people achieve optimal health and particularly brain health because the mouth, I mean just geographically, right? The mouth is so close to the sinuses and so close to the brain that there's an interplay between them and it's easy to have infections trigger inflammation in the brain if they're coming from the mouth. And sinuses,

Dave Asprey ([00:37:16](#)):

You talked about sinuses. I had chronic sinus infections and strep throat for about 15 years when I was younger. If you live in a house with toxic mold and you have recurrence strep throat, it's caused by the toxic mold in your environment forcing the bacteria to make a biofilm. And I don't have them anymore. It's exceptionally rare because I learned how to do that. But so many people have biofilms in their sinuses right next to the brain that are making lipopolysaccharides, which are bacterial toxins that cause inflammation in the glial cells, the immune cells in the brain. How would listeners go about reducing the risk of something in their sinuses, making their brain dysfunctional, whether or not they have Alzheimer's?

Heather Sandison ([00:38:01](#)):

Yeah, so two pieces here. I'm sure you've had James Nester on the show.

Dave Asprey ([00:38:05](#)):

Absolutely, it's a good friend.

Heather Sandison ([00:38:06](#)):

Okay, refer back to that episode because that is nose breathing rather than mouth breathing is crucial to sinus health.

Dave Asprey ([00:38:16](#)):

I think most listeners by now at least have heard of mouth taping or they do it. I've been doing it even before James Zester came on the show. Even one of my teenagers does it. She tried it once and she's like, dad, this is much better. And I'd send her rolls of mouth tape, it looks like this, and she does it regularly of her own accord. She's like, I don't like having bad breath in a dry mouth. Not to mention the breathing through the sinuses. So guys, if you're listening, you want a cheap biohack that's going to have systemic effects. Close your mouth when you sleep.

Heather Sandison ([00:38:48](#)):

Yeah, breathe through your nose all the time as much as possible. And then same thing in my household teenager who loves melt tape because less anxiety, clearer thinking, fewer allergies, hear that from patients as well all the time. So melt taping cheap, easy, so simple. And then for the sinuses, if you have recurrent sinus infections, I'm a fan of the neomed. It's a silicone rinse bottle that you can use. I recommend using in the shower. Do it like you brush your teeth, do it regularly. What we want to do is get allergens out. So if we inhale allergens, they can stick to the mucus membranes and our sinuses and

our nose, and then they can start to accumulate day after day after day. And if we rinse them out, we get a reduction in that trigger of an immune response by getting those allergens out.

(00:39:31):

Now, there can also be microbes in there. They can be biofilms and biofilms look like mucus, right? So when you get that mucus out, you're getting out biofilms and potentially all the bugs that can be living in there. And I love the neomed. You can do it on its own with distilled water. With warm water, you can add some saline to it. That tends to be very soothing. We also sometimes add some silver, some argen and silver, a little bit of that, just drop doses or we'll use Biocidin sometimes some antimicrobial agents. And we'll also use a little bit of xylitol. They have the X clear, they have the rinses that you can buy prepackaged, and then a little stevia. Adding a drop or two of stevia is a biofilm disruptor. And so what I typically start people on is very small amounts, get it going through your sinuses and then rotate those because they're going to get at different bugs.

(00:40:18):

And then after a couple of weeks, add the stevia. Add that after you've gotten that first layer of bugs out. Now the other really important part of this is go get some kimchi juice. You can get the \$6 kimchi juice that's at the grocery store and get the least spicy one that you can find. And then take a Q-tip and put that in the juice and then put it in your nose that kimchi juice has the particular bugs. We think of the good bugs that go into our gut. Well, the sinuses are no different. We don't want to clear out everything and have sterile sinuses. We actually want those good bugs in there. And so you want to inoculate with those great bugs. I'm here in San Diego surfers who have had chronic sinus infections every year after surfing and after the rain goes away completely resolves. They don't get them anymore. So this can be protective and you can prevent future sinus infections, making sure you have the right sinus bugs in there.

Dave Asprey (00:41:08):

Wow, I've never heard of putting kimchi on my nose. That seems unpleasant. But inoculating your nose with the right nasal bacteria, it's important. I believe it. Same thing. If you look at the vaginal microbiome, which is something a company called EV does. It's amazing what's going on in the intermix of bacteria and yeast or fungus. We just don't have enough science, the nose. And we have a good amount of science from a company called Vial. I'm an investor and advisor there. Naveen's been on the show many times where they're looking at the oral bacteria to tell you whether you're likely to get throat cancer. And it's FDA approved. It's 95% accurate even at very early stuff just by the ratio of bacteria. So my biohackers, get rid of the bacteria, but then repopulate with good stuff. And I am pretty convinced at this point that what I'm doing today is I will use iodine, a weak solution and salt and I'll irrigate with that, and then I'll replace it with a ion lozenge that has oral bacteria. So then I'm basically mowing the field and planting the good seeds. And it's definitely made a difference. I have really good oral health in general, other than two spots where I have too much pressure on a tooth, I'm going to get fixed. But why do I know all this stuff? Because if you want to live a long time and your teeth are trash or your gums are bleeding, it's not going to work. It's that big of a deal, right?

Heather Sandison (00:42:41):

It's a huge deal. Again, health starts in the gut, but the gut starts in the mouth. And we see that as people age, people with good dentition live longer. And then so you go, oh, well, did they have good dentition because they took good care of their teeth or because they were healthier anyways? And I think it's both, right? Good dentition allows you to eat better, chew your food as you age, and then when you make good decisions, you get to keep your teeth longer. So it's both. And

Dave Asprey (00:43:08):

I don't think listeners thought we'd be talking about oral hygiene in an Alzheimer's episode, but it matters. What do you say to people? This is overwhelming. You tell me, I have to eat right? But it's not really clear what that is, but okay, less restaurant food. I can do that and you want me to sleep and you want me to move? And what's the minimum effective dose? Most people aren't going to do everything. Give me the stack rank most important to least important in order.

Heather Sandison ([00:43:33](#)):

Yeah, great question. So what we saw in the clinical trial that we had the privilege of doing in my office was that most people improve their cognition. 74% of our 20, it was a feasibility study, just 23 participants, but 17 of them measurably improve their cognitive function after six months. Not one of them did everything, but every one of them made some significant change.

Dave Asprey ([00:43:56](#)):

You don't have to be perfect to fix Alzheimer's or to be a good biohacker. You just have to do the things that are in the amount of time and money and energy that you have.

Heather Sandison ([00:44:06](#)):

Exactly. And where we typically coach people is one pick, get a win, get an early win. So what's easy? So if you already are limiting your carbohydrates and kind of going in the direction of ketosis, just get metabolically into ketosis. The CGMs are available over the counter of this week. So grab one of those, get a keto mojo and get into ketosis and see how you feel. Sometimes in three, it takes about 72 hours to metabolically get into ketosis, and it's like a light switch for some people. So try that on, see if that gets you a quick win. Now sleep is another one where everybody wants more sleep, better sleep, or most people could get benefit from that. And so the mouth taping, mouth taping is such a quick, easy win. And if you wake up better rested now you can start making better dietary decisions.

([00:44:55](#)):

Maybe now you have the energy to get that exercise. So pick an easy win. For some people, they're already doing something social, but they're mostly isolated at their computer generally during the day. And they can maybe pick up one more hobby or one more activity where they feel really engaged socially or physically. So pick up that one thing. Just add one small thing. Maybe it's a meditation practice or a prayer practice that you're kind of already interested in, but make a small change so that you have the momentum and the dopamine head of success, and then you can add to it. So that's one direction you can start is that easy, simple win. The other place that you can go is where there's the biggest delta. So if you have a standard American diet or if you have a really awful sleep and you can't remember the last time you woke up rested, put in the effort and change it.

([00:45:43](#)):

Make today the day that it changes. Or if you have been sedentary for a year, today's the day, make a move. Call the personal trainer right now. Put us on mute or pause. If you need to call the personal trainer and make it happen, put it on your calendar. Do what you need to do. Stop by the grocery store. If you're in the car, make that turn so that you go to the grocery store and you get what you want to eat. Dave meal, right? Your steak and broccoli, and you didn't tell us exactly what you eat, but some kind of good fats, good protein, and some veggies.

Dave Asprey ([00:46:18](#)):

Think of it as steak and arugula. I minimize, but don't completely eliminate oxalates and lectins and all the other stuff. So if you were to come over here, you're probably going to get some derivative of white rice, grass-fed steak and arugula and avocado or related. And broccoli is just fine if you don't have sulfur

issues. So there are people who will tell you all veggies are toxic. I don't think that's true, but I do think eating way more veggies than would've been natural is probably not good for you because veggies don't like us to eat them anymore than animals do. Animals try to run away and then you catch 'em. Plants can't run away, so they just cover themselves in things that steal your minerals as you age so that you won't eat too many of them. And if you do, you can't have kids

Heather Sandison ([00:47:02](#)):

And variety. Variety of spices. Add spices, make it flavorful, make it fun. But today's the day make the change today because it really is about these choices that we make, what we put in our mouths, the movement we get, the time we go to sleep, the people we surround ourselves with, that's what changes the trajectory of our life as we age, the trajectory of our health. And so whatever, pick somewhere to start and that I get it. It can feel overwhelming, it can feel complicated. And yet what do you choose? What do you want to choose? How do you want to choose to age? These are decisions that are within our control. They don't rely on a doctor, they don't rely on someone else to do it for us. We get to make these. We have the power to make these choices.

Dave Asprey ([00:47:46](#)):

We do have the power to make them. And your idea there, just do something. And I'll say, you don't have to go to the grocery store. You can actually for very, very cheap, have someone go to the grocery store for you if you're too busy. I use Instacart, and this is not a plug for them over any other grocery delivery. Support your small local grocer if you can. And I do just through Instacart, but I've saved 500 hours of going to the store that I use to record episodes like this over the last year and a half. So if it feels like a burden, then remove the burden. Same thing said, call a personal trainer. We know, in fact, this was a big topic in my last book, if you have to self-motivate to get up and go to the gym every morning, your mitochondria are going to say the couch and the cheesecake are sexier than the gym.

([00:48:38](#)):

And sometimes they'll go, and sometimes you won't make an appointment with someone and you'll always go, because now you're accountable. These are not terribly expensive things. And if you don't want to hire a trainer, make an appointment with a friend, all you have to do is remove yourself from the decision loop and make it easier to cook what's in the fridge than it is to go to the store or than is go to the restaurant to the point now that when someone says, Hey, you want to meet a restaurant, I just think about, actually, why don't you just come over? I'll throw an extra steak on the grill. We'll eat better food and we'll have a social time and you can help me do the dishes. We can change that very easily. And I say this as the guy who ran a restaurant for eight years. I don't eat a restaurants unless I know what's happening there. And there's places learn. I'm like the, well no bad oils and all that. It's great. I'll go there. But for 99% of people listening, 99.9% of restaurants, it's all the same stuff that's processed that sauce you're getting. You came out of a bag or a jar, it wasn't made at the restaurant unless you're spending a hundred bucks on your dinner. And if you're doing that, kudos to you. But that's still about my budget if I do that every single night.

Heather Sandison ([00:49:42](#)):

Yeah, agreed. I think that what we want is for this to feel really accessible because that's how the impact is amplified. And life is set up for us to do easy things that make other people money. And so we have to work at it. And it does require work. And so this isn't for everyone, right? And I think this comes up a lot in our conversations with clients, with patients. This isn't for everybody. And if you're trying to convince your mom or dad or spouse that they need to take this on, do what you can. Give them the data, put some science in front of them, send them some great podcasts. But ultimately, if that feels like you're hitting your head against a wall, don't give yourself the traumatic brain injury. Turn that effort back on yourself

and put it your own health and healing, right? Put it into your own cooking, exercise, sleep, stress management routine so that you get the benefit and you become the model. And hopefully over time, that will convince your loved ones when you look younger at the next family reunion, younger five years later than you did five years before that convinces people that this works. And so show up as the model rather than the one beating somebody over the head with the information.

Dave Asprey ([00:50:54](#)):

Very, very well said. And when it comes to things like Alzheimer's, you can help your parents to the point that they don't have to be in a home. If you're paying for your parents to be in a home, which a lot of us do, that's priceless. You're probably spending as much money as you make every year just trying to support your parents when you're going to quit your job, take care of your parents, it's a solution where it doesn't work. So fixing their food to the point that they can be independent is really affordable compared to the options. And when you do that, who's going to notice all your other friends, all of their parents. And I had this question from a vegan guy when I was speaking at Google years ago. He said, I want to be a food activist. What should I do?

([00:51:44](#)):

And I looked at him and I said, shut up and eat. And people started clapping. I said, seriously, you can't be an activist. What you can do is you can eat in such a way that you're abundantly healthy and wait until people ask what you did. And that's when you've earned the right to tell people what to do. So fix your own Alzheimer's, fix your parents' Alzheimer's, and start talking about what's possible. And this is how grassroots change happens. And that's why I'm a fan of your book. Say, look, it's not impossible. In fact, it's not that hard. And most importantly, no one in your study did everything you recommend. They just did a bunch of it and they all of 75% anyway, got results.

Heather Sandison ([00:52:23](#)):

Yeah. And Dr. Bison did a very similar trial and 84% of people got results, but that they had nine months and people were not as far progressed. So the majority of the time, people are improving now. Don't wait. Prevention is so much simpler than reversal. And when you mentioned people having to have their loved ones be in senior living facilities, when you are figuring out which one, call and ask, do you serve a brain healthy diet? Do you have brain engaging activities? What is the social life like there? Ask the questions. Do you look for toxic mold? Do you use toxic cleaning products? What kind of oils do you use for cooking? Ask these questions because consumers can change this industry if we're not willing to pay for the bottom of the barrel seed oils, parents' food, when we're spending tens of thousands of dollars a month, potentially ask for that. Tell them that it's important to you and they will respond. They will make new options available. And so I think that that's a way to be an activist, right? As a consumer, ask for what you find valuable.

Dave Asprey ([00:53:27](#)):

There you go. And I know people who run care facilities. Food is a very big budget item. And if you listen to the common press, you can save a ton of money by providing the lowest grade of peasant food and promoting it as if it's healthy. And this is highly processed. It's mostly devoid of protein or it has low quality soy protein and things like that. And you say healthy plant-based diet. And we're using canola oil because it doesn't have cholesterol, which even the American Heart Association says eating cholesterol doesn't matter. And I see this all the time and it kind of drives me crazy because my research on longevity says that when you're over 60, you need another 0.2 grams of protein per pound of body weight just to stop your bones from breaking down. And if your bones break down and you break your hip, it doesn't matter if you have Alzheimer's, you're probably still going to die. If you look at the stats, you can heal

from that too. It's just much harder. So there's some kind of element of kindness to our elders that it feels like is missing and it starts with food. It starts with social activity and the basic quality of life things.

Heather Sandison ([00:54:41](#)):

Yeah, I couldn't agree more. And I think ultimately it'd be nice to keep our elders amongst us, right? Contributing to the next generation in the fabric of our communities. Still working if they want, but raising the grandkids and the great grandkids, being involved in all of that, not shipped off to senior living, and so doing this at home as much as possible ahead of time so that they can be contributing members of society, not relegated to watching TV and eating cake and cookies. There's so much I think we're missing as a society, so much value in that segment of the population that I think and I hope will shift with time.

Dave Asprey ([00:55:17](#)):

I believe it is shifting and I have absolutely snuck good food in for my grandmother on occasion. One of the things we haven't talked about when it comes to Alzheimer's and just general cognitive health alcohol and there's at least a billion dollars in alcohol industry spent on telling us that it's good for us. What do you think?

Heather Sandison ([00:55:39](#)):

Yeah, with any cognitive decline, I recommend eliminating it completely. It's one more toxin, right? This too much, too little in the wrong place at the wrong time. Most of us, by the time we're 65, have a toxic burden. We live in a toxic world. Not everybody has a bowel movement every day. Not everybody sweats anymore because we go from our 73 degree house to our 73 degree car to our 73 degree office, and we never get outside our comfort zone literally in terms of temperature. So we don't sweat anymore. We shut down our monies or our organs of elimination in order to not have to pee too often or not have to sweat. And so then we don't get the benefit of those detox organs and we accumulate toxins. Now, if we choose to add alcohol at the end of the day or at noon, whenever it feels socially appropriate for you to start drinking, then we're choosing to add more work for our liver, more work for our detox organs, and in this case, when we have that choice, so this is something we have control over, we can't always control how much petrochemical we're breathing in.

([00:56:39](#)):

You can get an air filter and you can choose to buy a house further away from the freeway, but some of us, we can't move. We're exposed to that. We've got to commute to work, whatever it is we get these exposures we have no control over. What we want to do is focus on the modifiable risk factors. And alcohol is absolutely one of those that we have complete control over. We

Dave Asprey ([00:56:58](#)):

Do, sorry guys, if you think, but I like alcohol. You probably like junk food. You probably like staying up all night. And who knows, maybe you like heroin. It doesn't matter if you like it, it's either good for you or bad for you. And if you're going to drink, acknowledge it's bad for you and you're doing it anyway and maybe it was worth it. It was a birthday and you wanted to do it fine. Telling yourself that I'm just going to do it a couple times a week because it's good for me. That is called self-deception. And the evidence is so clear that you really don't want to be drinking once or twice a year. I don't care, have a drink or two. But if you're doing this on a very regular, even once a week basis, I don't care if you're 20, it's still going to affect your brain. You don't need wine.

Heather Sandison ([00:57:45](#)):

Well, and pick your poisons. I talk to ladies that want to get their hair dyed and the hair dye is clearly very toxic. Other people going to get their nails done twice a month. That's really toxic stuff. Other people want to have a cocktail. I think consciously understanding this is my poison, and so I'm going to do extra to support my liver. I'm going to do extra to support a bowel movement every day. I'm going to go, I'm going to get in the sauna and I'm going to drink clean filtered water. I'm going to make sure I get this out of me. I'm going to have extra glutathione. Make sure that you are offsetting that in some way if that's the poison you choose. Some people get on planes every other day, right? And they're breathing jet fuel, especially if you sit up front, you're just breathing a ton of jet fuel. So pick your poison.

Dave Asprey (00:58:31):

I get on planes way more often than is smart. And there's benzene in there and there's something called a fume event where you breathe JA fuel. And I used to travel with a charcoal N 99 mask, and during the pandemic, they wouldn't let me use that one. The one that actually filters things. They wanted me to use a piece of Kleenex over my face. Like, guys, you're so stupid. So bottom line is, yeah, I do that because it's worth it for me. And do I do everything you just said? And do I detox from all that stuff? Yeah, I do. And it's not the best thing for my health, but it's worth it. So perfection not required knowing what's good and what's bad, choosing to do bad things and then countering it will most likely stop you from getting Alzheimer's over the long term. Glutathione, I think is critically important.

(00:59:19):

I've been talking about that since very start of the biohacking movement. I've done countless IVs of it and just had a guy on who makes glut roll. It's a topical glutathione that raises your cellular levels as much as an iv. It costs two bucks to do that versus \$200 for an iv. I'm like, okay, we can mostly afford to do that. Even if we don't do it every day, do it three times a month. The cost for all these bioactives go down once we know what they are. And so I'm more hopeful than I've ever been, to be honest. It requires knowledge and truth, and I think your book is full of both of those. I appreciate you taking the time to share on the show and in your book. The book is at reversing alzheimer's book.com, which is really easy to remember, guys reversing alzheimer's book.com.

(01:00:08):

And you can read this because you have someone in your family because you're worried about it yourself. You know, have a PO genetic mutations that make you at higher risk. Or maybe you read it because you're saying, I could spend pennies now to avoid this down the road. And literally, if you want to join me on this living to at least 180, not getting Alzheimer's, not getting cancer, not getting diabetes, not getting cardiovascular disease, you do that first because not dying is step one. But people who focus only on not dying, you might not like having paper thin skin and having a very low quality of life. So it's how do you do both? So getting on this bandwagon early is very cheap. Getting on it late is more expensive, and that's why you should all read this book.

Heather Sandison (01:00:57):

Dave, thank you so much for having me. And thank you so much for the work that you have done over the years and that you continue to do to move this forward and help us all age gracefully.

Dave Asprey (01:01:07):

You're so welcome. And this is, I think we're up at about 1200 ish episodes. I do two week, I have for more than 10 years. I'm always learning in our conversation about parasites and things like that. I don't know where the interviews are going to go, but I just appreciate that you really treat patients and look at all the possible causes and saying you don't have to do just one thing to make it better. That's precious knowledge. So back at you.

This transcript was exported on Sep 06, 2024 - view latest version [here](#).

Heather Sandison ([01:01:30](#)):

Thank you.

Dave Asprey ([01:01:31](#)):

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