Dave Asprey (00:00:00):

You are listening to the Human Upgrade with Dave Asprey and none other than my friend Max Luve. We're going to talk about dementia because Max cares a lot about dementia and actually so do I because dementia sucks. Max, welcome back on the show.

Max Lugavere (00:00:18):

Thanks Dave. It's great to be here.

Dave Asprey (00:00:19):

Alright, you just did a big documentary that just came out called Little Empty Boxes talking about dementia. Just from a really personal perspective, you and I have both been on Dr. Oz talking about Alzheimer's and mitochondrial function. You've written books, I've written books on this, and we both just don't want brains that are dysfunctional. Why is it a big deal for you?

Max Lugavere (00:00:47):

Yeah, well, first of all, thank you so much for having me on the show. It's always a treat to get to talk to you, and it's kind of a homecoming for me in a way, because you are the first big podcast to have me on back about 10 years ago now when we first launched the crowdfunding campaign for this documentary, which is now coming out 10 years later.

Dave Asprey (00:01:09):

Wow, that's so cool.

Max Lugavere (00:01:10):

Yeah, so I just want to say thank you for being an early adopter of me and my work and for supporting from day one. It's really special and this documentary means the world to me. It's really the first ever feature length film covering the topic of dementia prevention. So it's really, I think paying homage to the science of dementia prevention, which is still in its infancy I think, but very much in a place where we have garnered actionable insights that pave a roadmap in terms of how we might live, how we might eat to reduce our risk for this awful condition, which now affects 55 million people globally. And as you alluded to, for me, it's incredibly personal. The film captures what I went through with my mother over a span of four to five years, beginning in around 2015 where she started to exhibit the earliest symptoms of what would ultimately be diagnosed as a rare form of dementia called Lewy body dementia, which is akin to having both Parkinson's disease and Alzheimer's disease at the same time. And it was heartbreaking and traumatic to witness. My mom was the most important person in my life, and it was a film that really, I think it's the most intimate portrait of dementia that's ever been produced. And I think

part of that has to do with the fact that the filmmaker was living with it for five years with my mom. And I think anybody who's ever suffered from having a family member with the condition will certainly relate to it.

Dave Asprey (00:02:53):

My grandmother just passed a little bit over 101 just a couple of weeks ago and her last few years, she definitely had Alzheimer's and dementia. And it wasn't so bad that she didn't always know who you were. You'd go in and with a few reminders, she'd reconnect, but you could tell this is a woman who studied nuclear engineering and had an advanced degree in it and is really, really intelligent. And you could just see, it's like someone turned the dimmer switch on her mind and then every now and then you get a little bit of MCT oil or mitochondrial enhancers in, and then she would tell stories about her early career, about the family, and then it would fade and she would fade. And it's heartbreaking because the goal that we all have is that we want to live longer than we're supposed to, but only if our minds and our bodies are intact.

(00:03:52):

And so many people, when I say, how long do you want to live? I don't want to live that long because I might have dementia or Alzheimer's and I don't want to experience my body failing. But even more scary. I don't want to feel my mind fading. And I think the reason we share so much of an interest in this is what we see in our family members. But I went through a time in my twenties where my mind was failing. I had chronic fatigue syndrome, I couldn't remember anything. I bought disability insurance like man, I'm never going back. It was one of the reasons I wrote my big book on brain function, and we've talked about this multiple times just over meals. We've known each other for 10 plus years now, and I've also made a film and making a film is harder than making a book. I mean, it has so much work. Mine was on toxic mold, which is one of the contributors to Alzheimer's and dementia. And I look back on just the editing time, the recording time, and just, it felt like it was a much bigger project. So it's taken you a while to do this. How many hours do you think you put into little empty boxes?

Max Lugavere (00:05:01):

Man, I can't even begin to count. It's a film that in many ways I feel like I've been working on my whole life. The film has home footage, family footage of me in my infancy when my mom was walking me in a stroller essentially around a park near where she grew up in New York City. But I decided to do the film in about 2014 when my mom first was diagnosed with a neurodegenerative condition. And I realized three important insights that really compelled me to do what I could to move the needle on this category of diseases. And one of the insights was that this condition begins in the brain well before the onset of symptoms by some estimates for decades. And around 2014 is when I picked up the camera with the intent of creating a feature length documentary to on the one hand, memorialize and pay tribute to what it was that my mom was going through. But on the other hand, to gain access to scientists and research researchers who wouldn't otherwise give me the time of day because I was a civilian. I was a civilian. Although I did have media credentials because I had been a journalist. I worked for a TV network called Current TV and News and Information Network in the US for years prior to. That's how We first met.

Dave Asprey (00:06:31):

Do you remember that when you still worked for current tv, you came up to my upgrade labs on Vancouver Island in my barn, and we ran you through all the biohacking tech. I think that was the first time we connected in person, right?

Max Lugavere (00:06:42):

Yeah, yeah. And you cooked me this amazing meal, heritage breed pork and all kinds of delicious vegetables. And it was, yeah, it was amazing. And that was our, actually, I don't know if you know this, but the first time we connected digitally was you shared an article that I was featured in the Wall Street Journal and the headline was Dementia Prevention for 30 somethings, and you shared it on your Facebook page at the time. And that was an article that really, I think in many ways broke the news on dementia prevention as a really viable area of inquiry in science. And obviously this is something that you've been passionate about well before you and I met, but

Dave Asprey (00:07:29):

You're the only other person I know of who just says, Hey, if you're 20 or 30, take care of your brain now because you're not going to, like what happens if you don't? It is like a position of wisdom and you saw it happen in your family. In my case, I saw it happen in my own brain. I'm like, my God, this is horrible. But I've had a hard time getting people in their twenties to prevent Alzheimer's or dementia, but I've had more luck just saying, look, you want your brain to work better. It turns out the things that improve cognitive function when you're 20 are the things that prevent dementia when you're 70. Do you agree with that?

Max Lugavere (00:08:07):

Yeah, absolutely. And that was actually the impetus for my first book, genius Foods, where I realized that the same steps that you can take to batten down the hatches and buy yourself additional years, if not decades of cognitive health, also improve the way that your brain works in the here and now. And we can look to the burgeoning field known as nutritional psychiatry, which is showing us that a whole foods diet, a diet rich in healthy fats and fatty fish and the actually can improve mood, can reduce symptoms of depression to the point of remission in some cases. And so yeah, that was a very empowering insight and one that I essentially exploited to Trojan Horse, this concept of dementia prevention into the millennial zeitgeist because I figured the only reason why I care about dementia is because I'm seeing it in my family. But had my mom not developed it, I probably like other young people, would've continued to consider dementia as some far off abstraction that might affect me when I'm in my eighties. And at that point, who cares, right? But no, it's absolutely true that the same steps that we can take to reduce our risk today also seem to improve the way that our brains work, which is an amazing value add.

Dave Asprey (00:09:35):

I have shifted my language use around that based on my audience. And when I talk with people in their twenties, which is a big audience for me, here's the stuff that I wish I knew in my twenties, and you don't have to be tired at the end of your meeting. You can be the only one in the room who still has all your faculties at the end of the day, and you'll probably get a raise because of it. And it's almost like sink it, oh, and by the way, you won't get Alzheimer's. Right? But I just had a hard time selling it, and I like your documentary because you make it really personal. And it may be that for a lot of us, the first time we're going to use the information in little empty boxes is to show it to our parents and say, look, you got to do some stuff now so that we can help them. And as that happens, sometimes, at least in my case, if I'm want my parents to do something, I can say, you should do it. And then of course they're going to say, well, why would I do that? But if I say, well, look, I did this and it a major difference, then they're more likely to do it. Or I guess very specifically in my case, I can also just say, oh, it's not for you, and then they'll do it because reverse psychology does work on parents.

Max Lugavere (00:10:48):

Yeah, I mean, I made the film to be watched by anybody. I mean, it's a film that anybody will relate to. I mean, in fact, we've had a series of premieres, theatrical premieres at this point in New York, in Los Angeles, San Francisco, Chicago. And the people that show up really run the gamut in terms of demographics. I mean, young people, kids who are still in college studying nutrition, for example, or exercise science, older adults like senior citizens will show up to watch it, kids with their parents come to see the show, which is by the way, a very powerful watch to watch it with a parent, a loved one. So yeah, it is a film designed to really get under your skin and show you what having dementia really is like. And if that doesn't call compel a person to act, I don't know what will, I mean, once you see what dementia is really like, I mean, it is a beast of a disease.

Dave Asprey (00:11:49):

What's the incidence of dementia look like in the general?

Max Lugavere (00:11:53):

Well, today about 55 million people have it globally dementia. And within that most cases are Alzheimer's type dementia, which is the most common form of dementia in the United States. About 6 million people have an Alzheimer's disease alone. But I think the important thing to note is that Alzheimer's disease is not the only form of dementia. There's vascular dementia, Lewy body dementia, Parkinson's disease, dementia, frontotemporal dementia. And I focus a lot on Alzheimer's disease in my research because it is the most common form, and therefore there's the most research tends to be investigating why people develop Alzheimer's disease. There's a lot less research, for example, on the form that my mom had, which is called Lewy body dementia, although that research is starting to come out in terms of prevention, but a lot of people are experiencing it, a lot of people we're seeing increased

rates across the age spectrum, which I think is important to note that this isn't just that we're living longer, we're seeing higher prevalence across different age demographics. And so there really is an aspect of the modern world, the modern diet and lifestyle that does seem to be increasing our risk for this category of conditions.

Dave Asprey (00:13:21):

Alright, I've got to ask you something that's not related to this, and we'll get back into this. You spoke at the last biohacking conference, the new ones just coming up here, I guess biohacking conference.com. And at the time you were single and all the women in the audience were just like, oh my God, max. Max. So you have a large following. Are you still single

Max Lugavere (00:13:45):

Actually as we record this? No. I've met a wonderful girl and I've been dating her for the past six months, and her name is Stephanie, and she's amazing. And actually, it's funny, she's a huge fan of yours.

Dave Asprey (00:13:58):

Well, let's all go to dinner sometime. I'll bring my girlfriend too.

Max Lugavere (00:14:01):

She has mold sensitivity and she hails your documentary about mold as one of the most illuminating works that she's seen that really gave a voice to this condition that she felt really sort of isolated.

Dave Asprey (00:14:16):

Wow, that makes me really happy. I know how crazy you can feel when you have mold, because mold causes symptoms of dementia. It'll go away when you get rid of the mold. And even Dale Bredesen, I think is a mutual friend who wrote the book, the End of Alzheimer's, came on the show and talked about some of the causes including toxic metals like mercury and lead and aluminum, as well as toxic mold and things that involve your metabolism and all these other various, I think it has five things, but what comes out when you look at all the Alzheimer's research is that women get it twice as often as men. And that's why Maria Shriver has been on the show. I supported the Women's Alzheimer's movement. Why do you think that women are getting Alzheimer's more than men?

Max Lugavere (00:15:02):

Yeah, that's a great question. I mean, I've spoken to Dr. Lisa Mosconi at length about this, who is,

Dave Asprey (00:15:07):

She's been on too. She's great.

Max Lugavere (00:15:08):

Yeah, she is great. And I don't think that we fully know, although that menopausal change does seem to alter hormones in a way that does seem to present a threat to the brain. And as you mentioned, yeah, two thirds of Alzheimer's patients are women. Being female increases your risk by twofold as compared to men. And my mom was obviously she was a statistic, and it's really heartbreaking. I also think it's not because a lot of people have the misconception that it's because women live longer. That's not the case. I think part of the milieu that puts women at higher risk is that estrogen seems to be protective over the brain. And then during menopause, that rug is essentially pulled out from beneath a woman's feet. And for those who were vulnerable, a POE four carriers, for example, women who might already have preexisting insulin resistance, I think that that just presents a perfect storm for dementia risk. But yeah, that's an area of ongoing research, and we certainly don't have all the answers, but yeah, Lisa's research is fantastic in that regard.

Dave Asprey (00:16:29):

I always go back to mitochondrial function and around menopause. A lot of women end up gaining weight because of this estrogen change. And oftentimes because of thyroid changes, both of which affect mitochondrial function negatively. And this is why bioidentical hormone replacement in men and women, it seems to reduce, not seems in studies, it reduces risks of all kinds of things, including dementia and cardiovascular events. And that's for men and women, obviously different hormones at different amounts. Was your mom using hormone replacement therapy?

Max Lugavere (00:17:01):

She wasn't. No, she wasn't. She was actually quite afraid of it because of the early studies that seemed to link it to an increased risk of cancer. So my mom was not on any kind of hormone replacement therapy.

Dave Asprey (00:17:17):

I consider that to be sort of a crime against women because a pharmaceutical drug that's not actually estrogen increased cancer risk. When people use bioidentical hormones at the right doses, they still think about cancer risk, even though the data is that it reduces cancer risk. So it's like the old story sticks and the new research shows that when women go on bioidentical hormone replacement as soon as

possible during perimenopause, that the lifelong reduction of risks from all kinds of go down. But if you start it 20 years after menopause, you still get benefits, but they aren't as long lived and as dramatic. I think it has to do with that mitochondrial swing.

Max Lugavere (00:17:58):

Yeah, that's consistent with the conversations that I've had on my podcast. And yeah, I know that there are a lot of factors that go into that decision of whether or not to take it. But yeah, I mean, I would almost every man, every guy that I know is on TRT at this point, and there seems to be no stigma about that. And yet I think there still continues to be a stigma for women and HRT, and I think that's something that we need to actively work to unravel because we are living longer today and a woman spends more than 50% of her life essentially now in that post-menopausal state. So this is definitely something that we should be investigating, considering, and if I ever needed TRTI would without hesitation go on it if I ever wanted it. And I think women should feel the same degree of comfort about that decision.

Dave Asprey (00:18:59):

I'm happy you said it that way. I knew that some Luddite doctors swear about me. Well, Dave, you made TRT cool for men. I don't think I was the only one, but I will just say when I was 26 and I had lower testosterone than my mom, the cognitive effects of low testosterone that was driven by toxic mold and obesity and all sorts of other stuff, you don't have the zest for life and it affects cognitive function. And when women are low in testosterone or men, your tissues don't rebuild themselves as much. I feel like this is an important conversation. I'm glad you said that. There isn't a reason to be afraid. There is a reason to get your lab tests and work with a functional or a longevity doctor. I mean, a real one, if you're a longevity doctor says, I'm going to charge you a quarter million dollars and tell you you can't extend your life.

(00:19:47):

That might not be a real longevity doctor. And there are some people out there doing that. What I'm talking about is someone who says, well, at a minimum, let's make sure that you have health for a normal lifespan. But our real goal is like, let's give you a few more extra years and let's do our best. And I feel like anyone on that path, whether you're a man or a woman, whether you're 25 and having the symptoms of low testosterone, number one, fix your diet and your lifestyle, your sleep, all the biohacking stuff. And if it doesn't work, there's no shame in doing things to make your biology last as long as you want it to. And for me, I was interested in longevity as a young person. I'm a nerd, but I just wanted my brain to work. That was my first area of fear because feeling your brain go away is terrifying.

(00:20:38):

I'd been fat. I had arthritis since I was 14, but I just remember sitting in a meeting going, I wouldn't hire myself right now, and my career was just taken off and I got to do something. And so that was what led me down the smart drugs and nootropics and cognitive enhancement stuff, which led me to becoming active in the longevity movement may be, geez, in the late nineties. And it's been such a gift because I learned biohacking, including the brain and the body from my elders. And I just have this dream of women and men your mom's age who have their full mental faculties, but they have the energy that we have because imagine the wisdom. If you could go to any a hundred year old out there and like, oh yeah, I've seen that five times, and they're just so supercharged and willing to share it. And that's the dream

that I have is I want wisdom to return to the world. And you have to have a brain without dementia because if you've earned wisdom probably through a lot of suffering in your life, we all go through painful things and then you're not able to share it. You're too tired or you can't remember it, that's just wasteful in the worst way. I think your documentary is going to make a difference in that max.

Max Lugavere (00:21:50):

That's my hope. I mean, a lot of people feel hopeless about conditions like dementia, and we certainly don't have all the answers. My documentary doesn't present a magical diet. We try to paint with very broad strokes what prevention might look like from a really holistic standpoint. I mean, we do touch on diet because I think it's important, but we also mentioned, for example, the fact that people that have chronic surgeries putting undergoing undo surgeries, puts your brain at risk. And my co-director in the project, Chris Newhard, he began editing the project and just as he had begun working on the film, his mother-in-law underwent a surgery and she was cognitively healthy going into it, and she came out of it with dementia, and she had to be basically, she needed subsequently round the clock care. And so he, from one day to the next had had his own personal dementia story, and that gave him, I think, a passion for the film. That's evident when you watch it.

(00:23:05):

Yeah, so we try not to point a finger at any one single variable because I mean dementia, there are, it's a multifactorial condition. And I think for each dementia patient, there are likely unique causal players. For some it might be mold, as you suggested. For some it might be chronic exposure to air pollutants. We know now that exposure to air pollution, particularly fine particulate matter is a newly identified modifiable risk factor for dementia. Obviously, diet plays a huge role in terms of its ability to create other modifiable risk factors like obesity, like type two diabetes, like hypertension. We know that hearing loss is a newly identified risk factor for dementia. So there are lots of variables at play here, and we try to, with broad strokes, paint sort of a picture of how the modern world seems to be increasing our risk across the board for this condition. But there are no easy answers, and that's kind of what I want people to take away from the film. It's that we don't have a magic bullet solution at this point. I wish we did, but nonetheless, we are at a point where we no longer need to sit idly on our hands as we await whatever is in our family lineage or our genetic hand of cards. We do have a degree of a roadmap, and I think that's what's important.

Dave Asprey (00:24:40):

You made the decision as your career was taking off to kind of put it on hold and go take care of your mom. What drove that decision?

Max Lugavere (00:24:50):

Well, my mom was the most important person in my life, and I think I had just turned 30 and I was really timing wise in the prime of my career, or at least the point in life where I should be putting all of my focus on my career. But because my mom was a woman who she was just really, the disease really took a toll on her and she was scared. And any patient suffering the fog of war of chronic disease, which I

know you've experienced Dave, you go into these doctor's offices and you're frightened, you're confused. You only get about 15 minutes on average with your average physician these days. And so for me, I felt that it was really important to put my life on hold so that I could show up and support her during that time and become essentially her patient wingman.

(00:25:53):

And so I was living in la, I was kind of doing my thing, trying to make it as a on-camera journalist, which I had done previously for current tv, but there's nothing more important than family. And particularly when a loved one gets sick, your world stops. And I experienced that firsthand. And so I decided to pack up my LA life. I moved back to New York, and this is all documented in the film, and I started going with her to doctor's appointment after doctor's appointment in every instance with my mom because I'm not a medical doctor at that point. I didn't know a fraction of what I know now about this condition. I was just as scared as my mom. But I was an investigator of sorts having spent the prior six years as a journalist. So I knew that by going with her to these doctor's appointments, I could ask the questions that she was unable to.

(00:26:45):

And that proved really helpful for my mom and my family. But nonetheless, what I experienced in those doctor's offices, time and time again, I've come to call diagnose an adios. A doctor would run a battery of esoteric tests, titrate up the dose of a prescription, or maybe give her an add-on drug. And in fact, by the end of my mom's life, she was on about 14 different pharmaceuticals and it was really hard. And so that's part of the reason why I felt compelled to stand up and to learn as much as I possibly could as a citizen scientist, as a journalist, and to spread the information that I was learning. And I'm very grateful that I had a certain skillset and certain abilities that for one reason or another caused people to gravitate to the work that I was sharing. And I'm super grateful for that. But at the end of the day, the whole mission really was, it was actually quite selfish. It was about how I can better help my mom, better help my mom, support my family through this and provide solutions.

Dave Asprey (00:27:58):

As a science journalist, how do you respond when people say you're not a scientist?

Max Lugavere (00:28:04):

It's a really difficult criticism to receive because for one, journalists, they cover issues. We live in a world where health and nutrition, it's so polarized as with everything else today, seemingly in the modern world. But as a journalist, you're taught, you are trained to investigate. That is what you're trained to do. And in fact, being a journalist gives you, I think, an advantage because PhDs are obviously essential to scientific inquiry. But to become a PhD, you have to focus on these really small aspects of science, whatever it is that you happen to be investigating. Molecular pathways, for example, some PhDs, they earn their PhD by investigating and publishing on really minute mechanistic pathways that are, I would say often fairly useless to the general population, provide very little in the way of actionable steps that one might take. And so we rely on their research.

(00:29:14):

But in terms of actually providing a public health good today with today's public health problems, I think that they're fairly limited. Oftentimes what I find is that they're very prone to losing the sight of the forest for the trees. And I didn't come at this with any sort of preconceived notions. And as a storyteller and as an artist, I felt very empowered actually to be able to connect the dots between all these areas of silence that were science, that are to the average person and even to the PhD, to the average PhD, very siloed. They exist in these silos. And then medical doctors are very much technicians these days. They're trained to operate by script and alleviate the symptomology of these conditions. But most of them don't think scientists. And there obviously are exceptions to that. But I think that my position as a journalist and as essentially an outsider gave me a very powerful advantage. And I'm not forcing anybody to listen to me. If somebody feels compelled to only listen to people that have MDs or PhDs after their names, well that's fine, but that's not the person that I'm trying to reach.

Dave Asprey (00:30:38):

Wow, that was such a mature response. I get so to two groups when I lecture at the American Academy of Anti-Aging Medicine, I'm on stage in front of 3000 doctors and guys, just to be clear, I'm an unlicensed, I'm not a doctor. You guys know stuff I don't know. But it means that I can say things that are true that would get your license taken away if you said them. And then about a half of the room is like, this guy's a jerk. And the other half is like, oh, this is interesting. So it creates this dichotomy. And then online usually that's just a cheap shot from bullies. And I finally found the ultimate response to that. And I just say, your mom, because if we're going to do seventh grade bullying, I'm just going to go right there. And truly, if you look on my comments on Instagram, if someone's like, you look old and you're not a scientist, I'm like, that's not what your mom said.

(00:31:32):

And then the issue is solved because if we're going to be adults asking adult questions, if someone says, well, you don't have any scientific background, what makes you think this is real? Then okay, we have a conversation. But it turns out most of the time those are people who don't like cognitive dissonance. I think with your documentary, you're telling a story that really connects with people so that way they can be curious instead of experiencing that cognitive dissonance. And end of the day, you don't need a license to science because the scientific method is something we all learn in about sixth grade. You make an observation for hypothesis and tested, a journalist background is great for that. So I appreciate that you've just stuck with your guns. And there are people who will say, both of us are unqualified to ask questions. I would just ask them what makes them qualified to say that? And it turns out they don't have a degree in telling people they can't talk either. So it just becomes like an echo chamber. So I'm glad that we both have a way to respond to that because if the questions we're asking were easy, they'd be answered.

Max Lugavere (00:32:37):

Yeah, well, they're wrong. I mean, science is a method. Nobody owns science.

Dave Asprey (00:32:42):

I thought the government owns science.

Max Lugavere (00:32:45):

No, I mean as much as they love to proclaim or suggest that they do, right. No, and I find that many PhDs, again, there are exceptions to this, but most are terrible science communicators, and we do need to be thinking outside of the box with a condition like Alzheimer's disease because thinking inside of the box has just continued to fail time and time again. I mean, Alzheimer's drug trials, for example, have a 99.6% fail rate, and there's widespread fraud even in science. I mean with regard to Alzheimer's disease, we saw two years ago, news broke that one of these seminal studies that seemed to continue to perpetuate this idea that amyloid beta, the plaque that aggregates and clumps in the brains of people that Alzheimer's disease, one of the seminal papers that seemed to make that link and continue to funnel billions and billions of dollars down this funding pipeline for drug discovery was completely fraudulent.

(00:33:46):

And Alzheimer's disease, again, it's a condition that begins in the brain decades before the first symptom. And for somebody suffering with the condition, there are no tools to effectively treat the condition. So we do need to be thinking outside of the box. And I'm not saying that again, there's a magical diet or supplement or blueberry that's going to solve all of our problems, put an end to this condition once and for all. We're not there yet, but I'm very happy that we have forward thinkers in the field and out of the field to help broaden this conversation because to just have, continue to have a bias for pharma, I just think it doesn't serve the patients at the end of the day. I saw this with my mom, and yeah, we do need to be thinking about it differently.

Dave Asprey (00:34:40):

It's funny you said earlier, well, there isn't really any one cause you don't think there's one cause and that makes so much sense. If you think about it the way pharmaceutical companies do. Well, we're trying to figure out what causes bread. So we baked some yeast, we baked some water, we baked some salt, we baked some flour, therefore there is no bread. You're like, oh, you mean you need a recipe to make bread? Well, there's also a recipe for dementia, and in fact, there's probably a hundred thousand recipes for bread of all of its different types, and there's probably a hundred thousand recipes for dementia. And to think we're going to undo all of that with one super drug, the basis assumption that there must be one cause for something, most of the time it's just an untested assumption. And if you spend a trillion dollars research looking for a single cause without any evidence that is a single cause in the first place, maybe you're doing science wrong.

Max Lugavere (00:35:40):

Yeah, I mean if you ask most, I think medical professionals what causes Alzheimer's disease, they'll typically say there is one cause and that causes amyloid beta and the misfolding of tau protein. That's the cause. The same way that if you ask a cardiologist today, what causes atherosclerosis, it's LDL cholesterol, but what's causing the aggregation of LDL cholesterol in our arteries? What's causing the

aggregation of amyloid beta in the space around our neurons? That's the question that we need to be asking that gives us a window of opportunity to intervene. Right? I mean, once you've been diagnosed with Alzheimer's disease, you are essentially in late stage Alzheimer's disease. I mean, even at the very beginning, this is a condition that's been simmering in the brain for years prior to the onset of symptoms.

Dave Asprey (00:36:31):

It's funny, I've interviewed a few firefighters to ask what causes fire, and they're all convinced that smoke causes it. That's where we are with Alzheimer's right now. They're looking at things that are outputs of Alzheimer's and assuming they're the cause without any clear evidence that they are the cause.

Max Lugavere (00:36:46):

Yeah, I mean you might, as a non fireman, might be inclined to think that firemen cause fires, right? Because they're always there at the scene of the fire.

Dave Asprey (00:36:54):

It's a conspiracy.

Max Lugavere (00:36:55):

It Must be. It's a big problem. And I think from a dietary standpoint, I mean obesity we know is a risk factor. We know that type two diabetes is a risk factor. We know that hypertension is a risk factor. We know that diet and lifestyle can profoundly reduce our risk for those conditions. Obesity is a choice. There are genetic influences, certainly, and there are socioeconomic influences and the like, but obesity is something that you don't have to be obese. Just because your parents were obese doesn't mean that you have to be obese.

Dave Asprey (00:37:32):

Hold on a second here. Are you tell me that obesity is not a genetic condition.

Max Lugavere (00:37:38):

It's not primarily a genetic condition. No. Don't

Dave Asprey (00:37:41):

Tell any of the fat activists that. Okay, you might trigger them.

Max Lugavere (00:37:44):

Yeah. I mean, we live in a time where I think victim mindset is certainly encouraged if not applauded, and it's a problem. And we're now seeing that the brain is connected to the body, it's intricately connected to the body, and studies show that as your waistline expands now, there seems to be a correlation between total brain volume that a larger waist circumference seems to be correlated with lower brain volume.

Dave Asprey (00:38:14):

It's funny because there's another similar data point that goes the opposite direction. So the bigger your waist, the lower the brain volume, the bigger your booty, assuming it's muscle, the greater your brain volume and the more neurons you have. So it turns out muscle mass is a major thing that's affecting our brain positively. And fat mass is affecting it negatively.

Max Lugavere (00:38:39):

So you're saying thick thighs save lives.

Dave Asprey (00:38:41):

I saw it on the internet. It must be true. There was actually a study about it. Now brain atrophy is a thing, and it's something I was really worried about because my many years ago I went and I got a brain scan from Daniel Eman after his first book because I was failing out of business school and I was really worried about my brain and I knew it wasn't working right. And that fear was there. And I remember the psychiatrist when he saw his gov too, A tech bro wants Adderall. I know this thing. And he saw my brain scan when it came back and he just said, inside your brain is total chaos. You have the best camouflage I've ever seen. I dunno how you're standing here in front of me. And I was like, finally, it's not me just not trying. It's something going on in my brain. And I'm hoping that when people see your documentary that they understand this is a physiological thing. It's not an effort or a desire or a willpower or a moral judgment. It's a hardware thing that we can affect by anything that affects our hardware, even if it's a few squats, right?

Max Lugavere (00:39:46):

Yeah, absolutely. I mean, when you realize that the data tends to suggest that a certain way of eating, a certain way of living can reduce your risk for Alzheimer's disease, a disease for which there is no cure, then the question is what are you going to do about it? What are you going to do about that revelation that you can live and eat in a certain way that reduces your risk for this terrible condition? Then the ball is really in your court. And that's the empowering message that I hope to get across with my work ultimately, but particularly with this documentary, when people really see what having dementia is like and how hopeless a situation it can be, to me it's a really, I think, powerful call to action to do things a little bit differently. We live in a world where we have certain genetic risk factors, but most of those risk factors are not essentially they're that they pull you at increased risk, but they're not deterministic in the sense that for the vast majority of people who will develop dementia, Alzheimer's disease, that's not something that was written in your genome as destiny.

(00:41:01):

It's something that plays out over many, many years of exposure to the standard American diet and lifestyle, chronic consumption of ultra processed foods, for example, chronic sedentary lifestyle, chronic exposure to excessive air pollution. I mean, these are all factors that fall within our control. And I think that that's so crucially empowering. A lot of people when they develop a condition like Alzheimer's disease, Lewy body dementia, Parkinson's disease, they show up to their neurologist, and once they receive that diagnosis, the next question typically is, why me? And I'm not victim blaming here or patient blaming, that's certainly not what I'm doing. But if we have this insight that provides a roadmap for how to live in a way that can reduce risk, then the the obvious question is, why aren't you following these suggestions, particularly if the suggestions are safe. We know that ultra processed foods, every 10% increment in ultra processed food consumption increases risk for dementia by 25%, increases risk for early mortality by 14%, right? I mean, these are big increases in relative risk, and I get it. We live amidst a food supply that is by and large ultra processed. 75% of the items in your average supermarket today are ultra processed foods, which are making a lot of people a lot of money, but they are negatively, I mean, they pose a substantial threat to the brain and the body. And so these are just the questions that I think are really important for people to ask and talk about with their family members and the loved ones.

Dave Asprey (00:42:47):

If you had to choose between eating 25% ultra processed food every day for a month or smoking one cigarette a day for a month, which would you choose?

Max Lugavere (00:43:01):

Well, I wouldn't smoke because smoking is a risk factor, although I am a fan of the neurotropic effects of nicotine, I will say

Dave Asprey (00:43:08):

That. Me too. Oh, I just sprayed some. Yeah. Well, you have to pick here. So you'd pick the

Max Lugavere (00:43:15):

Food. I would pick the food, yeah. Really Well, I mean, 25% ultra processed foods, your average American today is consuming 60% ultra processed foods. So that is a big improvement. Actually, if my diet was 25% composed of ultra processed foods, that would be a massive improvement over what the average American is consuming in England. In the uk, they're doing a little bit better, about 50% ultra processed foods by calories. But yeah, I would not recommend smoking. Also, smoking is highly addictive and ultra processed foods are just as addictive as cigarettes. But I think there needs to be a little bit of nuance brought to the conversation about ultra processed foods because some ultra processed foods actually are not bad, are not that bad. I think as a general screening tool, we want to avoid ultra processed foods to the best of our ability, but protein powder might be considered by an ultra processed food. Yeah,

Dave Asprey (00:44:17):

I'm happy you said that because you can demonize the processing of food. But I'm pretty sure that we take the shell off the walnut and we cook our food and we chop it, and we blend it, and we preserve it, and we add herbs, and all of these are processing, they're just traditional processing techniques. And then ultra processing, well, you could actually remove something bad from a food via ultra processing. And you mentioned error filters, and you haven't mentioned it, but obviously water filters. So if you clean up your air, you clean up your water, but there isn't such a thing as a food filter. And food processing is a food filter. We ferment food to reduce plant toxins. We do different things to it. So some processing is bad and some processing is good. It becomes highly nuanced. But as a general rule, if it's been through a factory, it has a bunch of ingredients, it's probably not good for you. But I'd rather eat this whole pains me to say it, but I'd rather eat soy protein powder than a whole bunch of whole soybeans, less toxins in the powder, even though they're both to toxic, right? Yeah. Well, he might not even say soy is toxic, but I would just disagree with you if that was your position.

Max Lugavere (00:45:34):

Yeah, I don't know. I mean, look, I don't eat much soy, if any. I do enjoy the occasional tamari sauce with my, yeah,

Dave Asprey (00:45:41):

That's not a big enough dose to tomato and it's fermented. Right.

Max Lugavere (00:45:44):

Well, what do you think about nato? I enjoy nato. I think NATO is a, you

Dave Asprey (00:45:47):

Enjoy nato. Are you a masochist?

Max Lugavere (00:45:49):

Well, from a health stand, I do enjoy with o tamari sauce. But from a health standpoint, I mean, NATO is a pretty amazing food. Do you not agree?

Dave Asprey (00:45:57):

Yeah. So nato, if you're listening, you've never had it. It's a traditional Japanese dish, and I'm a huge fan of sushi. We've got out for sushi together and nato, it's like eating almond flavored snot. Maybe it is the worst consistency like boiled okra, but more crystallized, I don't know. And so I take NATO kinase, which is an extract of NATO that contains the health benefits of it. But if you like the taste of nato, you should totally eat it. And that level of fermentation takes out the oxalates and even a lot of the estrogenic effects of spice. So it's not like you can't have some that's processed the right way. It's just most of it's not.

Max Lugavere (00:46:37):

I mean, NATO to me is a, yeah, you're right. The fermentation, well, fermented soy and tamari is fermented as well. Fermented soy I think is actually not, I wouldn't call it a bad food. I think that there are potentially some health benefits to be derived. And NATO is a food that has, it's the highest, it's got the highest concentration of vitamin K two of any food. It's a rich source of nattokinase, which you mentioned, which is being studied for its anti-aging effects, and also sperm aine, which I've got a brush up on the research on sperm aine. But sperm aine also has some really interesting health benefits associated with

Dave Asprey (00:47:18):

It as well. It's a notable longevity compound. It's a post biotic that's formed in your gut or in some foods, and it's a fasting mimetic, and it's something that I take as part of my longevity stack for brain function as well. It's good for you. So I would just say with soy though, as a caution, if you're someone with allergies, allergies are correlated with Alzheimer's and dementia because you get inflammation in the brain from an allergic response. And soy, fermented soy anyway is one of the highest sources of histamine in the diet. And so you might want to steer clear of fermented soy and fermented fish sauce if you have allergies and you're worried about dementia, but if you eat them and you have no tiredness afterwards, no runny nose, no coughing or hives or any of that, you're probably not that sensitive and it's probably fine. And most people aren't going to know these nuances.

Max Lugavere (00:48:11):

I mean, the histamine thing, there are certainly people who are sensitive to it, but I've never been sensitive and allegedly avocados are really high in histamine, and I think avocados are one of the perfect brain foods.

Dave Asprey (00:48:24):

They're only high, high-end histamine if they have black spots. So just over ripe is when they're dangerous, but properly ripe and avocados aren't a particularly high risk. And it's funny because you can go down all these rattle holes and if you eat something, whether it's ultra processed or not, if you have cravings or you're really tired or agitated in the next two hours afterwards, it's a pretty good sign that something didn't work. And that choice probably moved you more in the direction of metabolic dysfunction and Alzheimer's and everything else than if you ate food that kept your energy stable. So end of the day, we can talk about mechanisms and theories and maybe provide good guidelines, but how do you feel? Do you have cravings and are you tired or do you have brain fog? And if those don't happen, then have more NATO and if you can stomach it.

Max Lugavere (00:49:13):

Yeah, it's not a regular feature in my diet, but it's something that whenever I see it, and if I could find organic, I think when buying anything soy related, it's God. Yeah, you certainly want to opt for organic to reduce your exposure to petroleum-based pesticides if nothing else. But yeah, I do feel like it's a food that has some pretty significant health benefits. Assuming you're not sensitive to histamine,

Dave Asprey (00:49:41):

Let's go back to your smoking habit max, the one you don't have. So I have never smoked. I don't think breathing, burning stuff is good for you, but when I started studying mitochondria in the brain, well, people who smoke, they get cardiovascular disease and they get cancer, but they don't get Alzheimer's and Parkinson's very often at all. In fact, there's a substantial protective effect from smoking, which is not something I would ever recommend. And I had call 'em Dr. Nicotine from Vanderbilt University on the show a while ago, and he published his first study in 1986 showing that pharmaceutical nicotine, apart from smoking, dramatically reduced chances of and symptoms of Alzheimer's disease. That wasn't the only paper he's been publishing for 30 years. That was one of the things that inspired me in my longevity book to say, look, if you're ever age 41 to five milligrams of pharmaceutical nicotine as a cognitive enhancer, as an exercise mimetic, something that makes your body get the compounds of exercise.

(00:50:57):

And as a neutropic, it's probably longevity and it's probably not harmful. You don't want to do exceptionally high doses of nicotine like that, but microdosing, it is something that I've recommended for people with Alzheimer's. Likewise, MCT oil. There is a phase two clinical trial I could not talk about

when I was at Bulletproof, and I dunno if you've heard, I've got nothing to do with the company. I don't own any of it. It's been bought by VCs and stuff, so I can say this MCT oil in phase two clinical trials prevents and or reverses Alzheimer's, especially early stage Alzheimer's via metabolic effects. So I'm like, there's these two things that if you're starting to get signs of dementia, those might be worth considering, but you'll never hear about them from big pharma. Are there any other hacks like that, that you're like, okay, you just felt the first effects of dementia, you put your car keys in the fridge, you went to the doctor and they said you've got some kind of thing just starting. What would you do first to get your brain back?

Max Lugavere (00:52:05):

Yeah. Well, the nicotine thing is super interesting. I mean, that's a rabbit hole that I've been going down recently because of one, I noticed some pretty profound cognitive benefits for myself. And I just want to be clear, I'm not suggesting that people go out and try it because

Dave Asprey (00:52:25):

Don't try nicotine or don't try smoking. Well,

Max Lugavere (00:52:27):

Definitely don't try smoking and nicotine. I think you've got to know if you have an addictive personality. It's not something that I would recommend because it's highly addictive, and so I'm just not suggesting that people go and try it. But from a research standpoint, we know that it activates these nyco acetylcholine receptors in the brain. There's lots of evidence on its cognitive boosting effects. And there was a paper actually that I tweeted recently from 2015 that has a really great synthesis of the research on how it might potentially help prevent potentially and to alleviate symptoms in Parkinson's disease.

Dave Asprey (00:53:13):

Yes,

Max Lugavere (00:53:14):

It was published in Frontiers in Aging Neuroscience 2015 beneficial effects of nicotine coating and its metabolites as potential agents for Parkinson's Disease. And I just thought that was super, super interesting because Parkinson's disease is like this big question mark. We have very little insight with regard to that condition, but it does seem to be the case that smokers have. There's an inverse relationship in terms of risk profile, which is so crazy to consider because smoking just destroys your body in so many different ways, but they seem to be protected against Parkinson's disease.

Dave Asprey (00:53:47):

I feel like we throw the baby out with the bath water like ultra processed foods, generally they're bad for you, but processed protein powder that removes some bad things, it's ultra processed, but it's not bad for you. So categorically speaking, tobacco is not good for you. It doesn't mean that a component of tobacco in the right dose at the right time couldn't have profound effects, and I may be a little bit more aggressive than you in that. Would I recommend low dose nicotine for cognitive enhancement? Yeah, I would. Don't vape. It's worse for you than smoking. Don't smoke, don't chew, it's bad for you. But if you're doing one to five milligrams, that's between five and 25% of what's in a single cigarette and you don't have a bunch of artificial sweeteners and things like that in it, and you're willing to stick to a dosing regimen, I think that the preponderance of evidence is that it's probably good for you.

(00:54:42):

The risk nicotine is addictive without all the crap that tobacco companies put in cigarettes, nicotine by itself has a three day biological washout period, same as caffeine. After that, it's all physiological, or sorry, it's all psychological addiction where you're like, oh, I just kind of reach for it. I like it. And what I found is I use one milligram for five years, one milligram a day. I'm starting back in about 2015, and then I said, I'm just going to do a little bit more than that. I like it and I use it kind of on an as desired basis, and if I find that I'm using it too much, then I go off of it for three months. And the fact you can go off of it for three months and then go back on it, you say, well, just because you can't give up an addiction, you could stop exercising for three months and decide to exercise again.

(00:55:34):

You feel better when you do it. And it's got physiological benefits. I just do my best to not have an emotional judgment about something. I want to look at the numbers, look at the science, and I know that I couldn't get my grandmother to do it because care providers aren't trained in this, but if she could have had a nicotine patch for the last five years of her life doing five or 10 milligrams a day, it probably would've improved your quality of life. And if you're already on that path, it seems like it's a good idea, but your mileage may vary. It's all we can say right now.

Max Lugavere (00:56:06):

Yeah, I mean, I definitely am optimistic and hopeful that it plays some role in protecting the brain, but I think to say with certainty, we definitely need a lot more research. But for me, cognitively, I enjoy it. It's stimulant, and I feel like it helps dial in my focus, and it's, I think importantly compared to caffeine, it has a much shorter, so the halflife of caffeine is about eight to 10 hours. The halflife of nicotine is like two hours, although it's metabolites stay in your system for way longer than that, but the metabolites don't seem to have any negative impact. Coine stays in your system for 16 hours. I think that the half-life is in the range of 16 hours or so, and actually studies have shown, animal studies have shown that it can help with fear extinction, which might play a role in helping fight PTSD, for example, and I could take nicotine in the afternoon and it doesn't affect my sleep because of the really short half-life relative to caffeine. So I think it's a fantastic tool, but I'm not recommending that people go out and do it. But to have it in your toolkit, I think it is an incredible win, especially now you have on the market all of these non-tobacco sources of it.

Dave Asprey (00:57:28):

Exactly.

Max Lugavere (00:57:29):

Clean products and the like. I'm

Dave Asprey (00:57:31):

A fan of a Lucy gum because it was the first, as far as I know, only brand that didn't have nasty sweeteners and at least some other flavors. I don't want to take aspartame or NutraSweet because that's not good for your brain. Do we know anything about artificial sweeteners in Alzheimer's? There

Max Lugavere (00:57:50):

Was a study published in 2017 that linked artificial sweetener consumption to artificially sweetened beverages to increased risk of dementia by about 30%. But I think that there's correlation doesn't equal causation, and so I would be hesitant to with certainty say that we know that artificial sweeteners can increase dementia risk.

Dave Asprey (00:58:12):

So you're not a fan of the Blue Zones diet apparently, because correlation doesn't equal causation.

Max Lugavere (00:58:16):

Well, that for sure I'm not, because I think totally those dyes have been completely mischaracterized and agreed, but I typically avoid artificial sweeteners. I just think I abide by what is called the precautionary principle. I just would much rather trust, put my trust in foods and supplements that are food derived that have been around longer than these kinds of synthetic compounds. I just think that's more of a value of values decision that I've made. But I don't know if we can say with certainty that there's a risk, although it depends who you ask. I had the authors of a new book, the relative of the daughter of Martha, Claire Morris, who pioneered the Mind Diet. I've had her on my podcast recently, and they have suggested that artificial sweeteners are worth avoiding from a brain health standpoint. But I haven't really seen any convincing evidence that it's something to be afraid of from the standpoint of dementia.

Dave Asprey (00:59:16):

I've definitely noticed the effects on my clarity. I remember in my, that must have been 23, and I was just finishing up on my degree and I was really on this health kick. I'm like, I'm just going to lose this weight. I went, I got a 32 ounce Diet Coke, and I drank it. It was a hot day. I'm sitting there trying to pay attention in class, and I'm like, something trashed in my brain, I cannot think. And I just went back like,

wow, I'm chewing 20 pieces of aspartame gum day and I'm doing these diet Cokes and that stuff is addictive. But when I dug in on the science until recently, the number one complaint to the FDA about adverse effects was from NutraSweet or Peram. And what happens is it, along with MSG in brains that are susceptible to this, and they're probably more likely the brains that are susceptible to dementia, these two compounds cause uncontrolled firing of neurons because they activate in the synaptic cleft.

(01:00:30):

And so by avoiding those two things, I dramatically increase my cognitive function and reduced food cravings, and it made a lot easier to lose weight. And then there's studies on microbiome. So you, I'm like pretty sure there's evidence that these are not good for us. And if you can do anything to move your needle towards the direction of health, it will also reduce the likelihood of dementia. It doesn't mean it'll protect you from it, you're just playing an odds game there. So I like to think those are a poor decision, but there are some people get very triggered by that. It's only about the calories you eat. And that's been debunked so many different ways that I just almost at this point rolled my eyes. It's not just about calories.

Max Lugavere (01:01:10):

I mean, it's not just about calories at all. And again, in full disclosure, I personally avoid artificial sweeteners to the best of my ability. But at the population level, when you see studies where, for example, artificially sweetened beverages are associated with a higher risk of dementia, there's always like what's called confounding or residual confounders and reverse causation. People with type two diabetes are more inclined to drink beverages with artificial sweeteners. And we know that having type two diabetes increases your risk for developing dementia by at least two to fourfold. And so those are always kinds of the kind of questions that you need to ask. And I would love to have more research to definitively causally link artificial sweeteners to dementia, but I haven't seen any. But nonetheless, I think with what we know about their impact on the gut microbiome and the oral microbiome, which we have yet to even begin to explore, which we know plays a role in systemic health, my take is that likely you're obviously better off drinking water and likely best off avoiding artificial sweeteners. But that's primarily influenced by just my value, the values that I have about who I'm more likely to trust with regard to the foods that I should be eating every day.

Dave Asprey (01:02:43):

One of the things I've been really interested in over the last four or five years as I've been talking about danger, coffee isn't actually coffee, which we could talk about with Alzheimer's, but it's electrolytes and cell hydration, particularly in the brain for cognitive function. Are you aware of any studies on dehydration or hydration and Alzheimer's or dementia?

Max Lugavere (01:03:12):

I'm not, but if you have any insight to share, I would love that. I mean, I do know that even mild dehydration can impair cognitive function. So I mean, hydration is super important, but I'm not aware of any connection to dementia.

Dave Asprey (01:03:27):

I'm not aware of any specific studies, but we do know that having enough hydration in the cells in your brain, and it's different, drinking water doesn't create hydration. It's getting water into cells that creates hydration. And we know that that will increase brain volume because you have more water in your brain. And there's an intriguing study, I want to say it was either in mice or rats of a compound that drives cell hydration called talose. It's an unusual structure of sugar and one that I've used for years in various things and talose in mice, really profound neuroprotective effects, but they haven't been replicated in humans. So there's probably something to do with hydration and almost certainly something to do with adequate minerals including trace minerals, things like zinc, potassium, magnesium, and having good functioning cells which are more immune to dementia. But we don't have direct studies that I'm aware of.

Max Lugavere (01:04:26):

Yeah, I mean, hydration is important and minerals are super important. I'm actually a big fan of danger coffee. I think it tastes amazing and it feels quenching in a way that regular coffee, although regular coffee is still great, and assuming it's mold free and the like, we see that people who drink more coffee seem to, there's a inverse correlation with coffee consumption and risk for dementia, Parkinson's disease, multiple sclerosis, cardiovascular disease. It's like an amazing elixir of life it seems.

Dave Asprey (01:05:02):

It kind of makes me laugh because you could say humans are drawn towards things that are bad for us, but historically we didn't have that many things that were bad for us and we weren't drawn to them maybe like we knew it, but humans have been using tobacco for a very long time, even though we know it's bad for us, at least in some ways, and we've been using caffeine forever. It's literally between tea and cacao and coffee. Those are, I would just say at this point, traditional foods that they do change brain function, and they seem to, at least in the case of coffee and chocolate, they seem to be good for you. And tobacco is very mixed where you feel good from it, but you get the long-term effects. And now I think the more modern ways remove all the negative stuff. But I kind of wonder why we've come to believe that things that are good for us are bad for us. Even things like eating a steak, the dieter, its plate. When you and I were not born yet in 1950, it was really straightforward. It was a piece of steak in two scoops of cottage cheese and a piece of tomato. It was a low carb, high fat, high protein meal. And people would do that and then they would lose weight. And this doesn't seem that hard, but now we believe all that's bad for us. Why do you think it's so backwards?

Max Lugavere (01:06:26):

Yeah, I don't know. And the thing about tobacco is that it probably was something that was primarily used ceremonially for much of our time on this planet. It likely wasn't something that people were just smoking cigarette after cigarette the way that they are today because of the ubiquity of cigarettes

thanks to big tobacco. But yeah, I mean, tobacco, I think, initially was used ceremonially, and it still continues to be used for that purpose. But there are just so many competing voices and special interest groups, and it's a real mess today. I mean, we see that some of our most trusted organizations, for example, the Academy of Nutrition and Dietetics, not only do they take gifts from the ultra processed food company, but they actually have stock in many of these companies. Our mutual friend, Ana Hot O'Connor, has done a lot of really important investigative journalism for the Washington Post recently looking at the strange bedfellows at big food and some of our most trusted and credentialed health experts make when there are dollars at play.

(01:07:43):

We saw recently that the American Beverage Association was secretly funding certain registered dieticians and even medical doctors on social media in a way that was very poorly disclosed to the degree that the FTC actually had to send warning letters to the health experts that were taking paychecks from the American Beverage Association to promote aspartame. Now, I don't have a dog in that fight. I'm not the research on aspartame. I get it. It's equivocal. But nonetheless, if you're going to promote aspartame to your millions of followers, they deserve to know who's paying you to make those recommendations. And we see this time and time again how big food is really underlies a lot of the messaging that you see now on social media about all foods fitting, all foods fit. Food is food. There's no such thing as a good or bad food. And I get that that message is therapeutic for a certain population. People who have struggled with their relationship to food, for example, but for the general population, a population that is now overwhelmingly overweight to the tune of one in two Americans being not just overweight but obese, do all foods

Dave Asprey (01:09:01):

Really fit? I'm sorry, but I'm not willing to lie to make a certain population feel better. It's wrong, and I'm just willing to say that. And if someone has emotional issues or orthorexia or anorexia or any of the other eating disorders, it's a mental illness and we can treat it, but you don't treat it by telling them that what they're doing is okay. And eating a lot of junk food isn't good. And feeling shame about eating junk food when you choose to do it isn't okay either. But pretending that all foods fit when some foods clearly cause obesity way more than others, and you just ignore that to sweep it under the rug to save someone's feelings. I won't be a party to that. And some people will get really mad that I said that, but I have empathy and compassion because I've been obese and I've eaten foods that I heard because of this marketing that I thought were good for me that weren't.

(01:09:59):

And I've also had emotional eating issues. Fasting in a cave for four days made that really apparent for me. I would eat when I was lonely. And so I just want the truth. And if the truth hurts, then I need to do work on my hurt versus do work on the truth to make the truth more palatable to me. And at the core, that's what's going to help us beat all the diseases of aging, including dementia, because we've got to look at facts. And so yeah, I worry about the all foods fit thing quite a lot, and I can't imagine telling that to my kids.

Max Lugavere (01:10:35):

Yeah, it's a rigged game. I mean, that's the issue. And it's gaslighting this idea that all foods fit what it does it blame from the manufacturers of these ultra processed foods. And it points the finger at the consumer and it says, you clearly don't have enough willpower to moderate your consumption of these chips and our ice cream and the sugar sweetened beverages that we're putting out the, it's up to you to moderate your consumption of these foods that aren't designed to be hyper palatable and the most calorie dense foods that human beings have ever had access to 24 hours a day. And that's simply bs. It's gaslight, it's gaslighting, it's our constant proximity to these foods. That is what is really driving the epidemic of obesity and associated chronic conditions.

Dave Asprey (01:11:28):

I love it that you called out registered dieticians. I've seen the rise of functional dieticians recently, which I just applaud so much. The registered dietician lobby, these are the people who make school food that makes our kids have a DD, and they're the people who make hospital food that I wouldn't feed to someone I didn't like in the hospital. And it's based on some very strongly held beliefs that are not backed by science. And every now and then you'll see one of 'em coming out as a troll. I'm a registered dietician. I'm like, congratulations. Thank you for recommending diet soda and hohos to my kids. But that doesn't give you standing. If we're going to have a scientific discussion, we're going to talk about individual ingredients, individual foods, and science. And at that point, you realize counting calories and saying all foods fit is just a way to sell peasant food to people as if it's healthy and to charge more for it.

(01:12:26):

And I'm just not okay with that. I would like us to just know which foods are good. So that's the food that we all demand, and that's then the only food that the big companies can sell. And I think when we do that, your mission to solve dementia is going to be a lot easier versus pretending something is true that's not true. And the way you go about this in your documentary of just telling a story, making it real and visceral and felt, it's an important part of what journalism does, and I'm really grateful that you put all this time and energy and love into this project and my film on toxic mold. It is something that people might not know that you'd want to pay attention to, but I think you just make it worth watching, entertaining, not in a superhero, entertaining, but entertaining. Like wow, it's a story that it grabs people. So I just want to say thanks for doing the hard work of translating not just science into advice, but a story that people can connect to so they can be curious about the science. And that in and of itself is a big act of service Max, and thank you.

Max Lugavere (01:13:34):

Thanks so much, Dave. Yeah, I mean, I've put my entire heart and soul into this project, and again, it's been a labor of love and I've been working on it for 10 years, and I'm so excited that it's finally out and that people can watch it@littleemptyboxes.com and yeah, I'm just so over the moon that my mom who suffered so immensely at the hands of this awful condition that her story is now going to live on in the hearts and minds of anybody who chooses to watch it. And in watching, you're going to learn about her. You're going to learn about the condition, but you're also going to walk away with some really actionable steps to institute in your own life and to share with friends and loved ones that I just think is, I mean, that's priceless.

Dave Asprey (01:14:16):

It's got a final question for you. If you could have the energy and health you have now or better, how long would you want to live?

Max Lugavere (01:14:26):

Ooh, that's a good question. I don't know if I'm going to say that I want to live forever, but I think I feel like I'm just getting started and I'm pushing. I'm about to be 42, so I feel like if I could at least live with robust health and stay jacked and be a centenarian, I mean that would be pretty epic to at least make it to a hundred. My mom passed away at 66, and so I don't really have a model for what longevity looks like, and that's really sad. And I know a lot of people are in similar shoes. So for me, if I could just make it, beggars can't be choosers, so I'm going to say a hundred and I'm going to leave it at that.

Dave Asprey (01:15:14):

Who's your oldest friend?

Max Lugavere (01:15:15):

My oldest friend, man, I don't want to call him out, but I kind of feel like Mark Sissen is maybe one of my,

Dave Asprey (01:15:22):

I don't know how old Mark is. He's definitely a generation before you or me.

Max Lugavere (01:15:26):

He's in his seventies. I'm trying to think if there's

Dave Asprey (01:15:28):

Anybody. Yeah, he's made a lot of change in the world, full respect there.

Max Lugavere (01:15:32):

He really has. Yeah, I mean, I'm a

Dave Asprey (01:15:34):

Little bit upset at him though.

Max Lugavere (01:15:35):

Why?

Dave Asprey (01:15:36):

Well, he has his new Toe shoe brand and he and I are both fans of toe shoes, but they don't make him in size 16, and I've got big feet, so I can't wear Mark SNS new shoes, mark brother. Okay, help me out, man. That's

Max Lugavere (01:15:47):

Hilarious. I wonder if he's going to feel flattered or I threw him under the bus by mentioning him.

Dave Asprey (01:15:54):

One of the things that happens with aging is people feel like they're losing mental stability or mental autonomy or bodily autonomy. It's a very deep fear that all humans have. And I'm working really hard to just say, look, being an elder is a sacred obligation. And if you can just have the brain function and the energy and a well enough working body to say, well, I've been around for a long time, that's a precious thing. The village elder is a role we always had. And I am here today. I'll just be straightforward about it because I stumbled when I was 26 into a longevity group where most of the members were 70 or 80, and I learned from them, and my friend Mike was 88 years old, and he was on the board of directors for this longevity group. It's called the Silicon Valley Health Institute, still running.

(01:16:52):

And Mike would call me at 1130 at night just full of passion and excited, all these ideas. I'm like, man, this guy has more energy than me. I want to know what he does. And these elders taught me what at the time was called Orthomolecular medicine and was the emergence of functional medicine and the longevity movement. I wouldn't have been able to do biohacking had I not just been fortunate to have friends more than twice my age, actually three times my age. So I just would encourage you, if you want to model for healthy aging, like going out with Mark or anyone else who's find someone in their nineties whose brain works like Eric Kde in New York, Nobel Prize winner for neuroplasticity, my God, the wisdom in one hour of conversation with that man, like, whoa. So this is a call for everyone. You need to not have dementia so that when you're a hundred, you'll be the elder and you will know so much cool

stuff, and you'll have suffered a lot learning all the things you learned. And every time you can tell someone who's 20, here's what's coming, and here's how to avoid it, that is one of the coolest things you can ever do. So sign up for that. That's why little empty boxes really matters to me.

Max Lugavere (01:18:07):

Oh, man, I love to hear that. Yeah, I mean, we're all in this together, and I think so, so far as we can continue to light a candle for one another in this weird time that we seem to be sharing a timeline together, I think that that's the best that we can do.

Dave Asprey (01:18:25):

I like it. Alright guys, little empty boxes.com, check it out. Totally, totally worth your time. And I have a favorite ask of you if you're listening to this on YouTube subscribe. And if you are listening to this on whatever podcast platform you like, just make sure that you follow the podcast and you're subscribed because it helps when the next cool episode comes out. And it helps me show other people that this show is worth your time and their time. So I truly appreciate every subscription.