Summit Introduction and Dave Asprey Bio

Everyone, welcome to the Peak Human Advent, Anti-Aging and Technology Summit. I am Doctor Sanjeev Goyal and my guest today is the one and only Dave Astbury.

He is a huge inspiration to me and really the father of the whole biohacking movement and the genesis for this summit. Of course. So let me take let me tell you a little bit about him.

Dave Astbury is the founder and chairman of bulletproof. He's a four time New York Times bestseller, science author, host of the top 100 podcast called Bulletproof Radio, and has been featured on The Today Show, CNN and New York Times, Doctor Oz, and more.

Over the last two decades, Dave. It's like I said, is known as the father of biohacking, has worked with the world renowned researchers and doctors and scientists and global mavericks to uncover the latest innovative methods, techniques and products for enhancing mental and physical performance.

He spent over $2 million of his own money taking control of his own biology, pushing the bounds of human possibility of the name of science and evolution.

He is the creator of Bulletproof Diet, an innovator of bulletproof coffee, collagen protein supplements, and many more advanced commercial promise products.

His mission is to empower the entire globe with information, knowledge and lots of superhuman in everyone at any age. Dave, has maintained 100 pound weight loss, improved his sleep, upgrade his brain, and ultimately transformed himself into a better entrepreneur.

Better has been a better father. He's helped thousands and thousands of people perform at levels far beyond what they'd expect, and without burning out for getting sick.

In addition to Bulletproof Radio and a top 100 podcast, Dave is currently serving as a founder and chairman of six different world health and wellness and biohacking companies.

Head over to Dave. Ask beacon for information about the world of Dave Asprey. I hope you enjoyed today's talk with him. Just as much as I did. It was, it's pretty eye opening. Enjoy.

Hi, Dave. How are you? I am well, Sanjeev. I'm so glad you're joining me for this, summit. Where are you speaking from? I'm on my small permaculture farm outside Victoria, British Columbia.

Oh, wow. In Canada. Then I have a special kinship with you. That's awesome. Yeah, I'm American, but I've been up here for ten plus years. We just opened our upgrade labs and our, a new restaurant called Upgrade Cafe in Victoria. So.

Been here for a while. I when I come to visit you. So, anyways, you know, our summit is all about, aging and and strategies people can, can take to, remain useful and slow down that aging process.

You really been an a pioneer for this? We just talked about this for, like, ten years. But maybe just take us through.

From Chronic Illness to Biohacking

I mean, people kind of know your story, and and, but maybe tell us a little about that journey to wellness. Like, how did this this all began? I assume, like 20 years ago or something like that?

A little bit more than that. When I was, a teenager, I started getting fat. I was diagnosed with arthritis in my knees when I was 14. And I remember walking out of that doctor's appointment.

I thought that's what old people got. And I'm just a teenager, but, you know, it hurts all the time. And I had gut issues. I was on antibiotics every month for strep throat for 15 years, and, I had by the time I was in my mid 20s, I'd been diagnosed with high risk of stroke and heart attack.

I had cognitive dysfunction, chronic fatigue syndrome, and, let's see, pre-diabetes. And I'm probably missing a couple other things, but basically, my health was trashed, but it my career was doing okay.

And I just said, you know, my doctors, just like others, maybe try to lose weight. I'm like, I went on a low fat, low calorie diet. I worked out six days a week, an hour and a half a day for 18 months, and I'm still a 46 inch waist and I'm stronger, low fat.

I got a 46 inch waist. What's what's happening here? And it was pretty much you're lying. You know, obviously if you had done that you'd have lost weight.

Therefore you're eating Snickers bars. And I fired the doctor and I said, I'm a computer hacker. I'm just going to do what works. And what I'm doing doesn't work, so I'm going to keep changing it up.

I'm going to try the things that I'm highly skeptical of, and I'm going to measure them. And thus biohacking as a movement was born. Yeah, exactly. So that what what how did you do?

Well, how did you actually formulate that way of living? The whole, the bulletproof biohacking lifestyle? Like, how did that actually happens? That through personal experience.

I know some of these. You're on a journey to looking looking for solutions. And, you know, if you were to just go on personal experience, you would never really get very far.

Because let's face it, there's a lot of knowledge out there. So what I did is I was introduced to an anti-aging nonprofit research group, called the Silicon Valley Health Institute today, and I started learning from people three or more times my age.

And these are people are getting younger. And pretty soon they said, hey, Dave, can you be president or a board member? And so for more than ten years, I ran a group where we bring leading experts in what is now called functional medicine into the Bay area, and I'd get to interview them on stage.

And I learn from them. And most of the biohacking techniques came from the anti-aging field. But you got to if you go back 25 years, no one believed anti-aging was real.

If you were a college professor and said, I'm going to study anti-aging, they would take your tenure. They would make fun of you. Right? And it was only after, the billionaires like Larry and Sergey and Zuckerberg, about ten plus years ago started saying, I'm going to put a few billion into this.

And all of a sudden it became respectable. Before that, it was like, it's inevitable since it's inevitable if you study it, you're an idiot. And there was like a really strong bias.

And then it also meant, oh, plastic surgery is anti-aging. And no, we're talking about making your biology younger than your chronological age. For me, I was old when I was young.

I had all the things you expect when you're 60 plus before I was 30, and I reversed all of them, and I'm 48 now, and I have more energy and my metrics are better than they've ever been.

I have the average brain response time of a 20 year old, and this is something that declines linearly with age, right? It's called a P300. So my brain responds as if I was 20.

I have low visceral fat levels for a 20 year old. I have the arterial flexibility of a 24 year old. And I started out with like, not very good genetics and a terrible, you know, terrible health history to start with.

So if I can pull this off, I'm pretty sure that most people started out without the same, burden that I did. So I'm sort of the shining example of the canary in the coal mine who's still didn't get taken out.

Wow. So, just you're still you're still seeing this type of reverse thing happening. Like what? Basically your message is saying is that, you know, we can actually reverse aging.

Is that what we can reverse aging? And we can certainly slow aging. And I've been really public and I my big aging book hit the New York Times monthly bestseller list.

It was sandwiched between Homo Dos and Sapiens by one of my other favorite authors, which is a big honor for me and Twitter to have my aging book even hit the science category.

What do you mean, science? Aging is science now instead of myth. That's how big of a sign that our perceptions have shifted. So I said in the book, and I still stand by this.

I am planning to live to at least 180 years old, and most people recoil from that. They go, oh, I don't want to be old, because when you talk about being old, you think about transparent skin tubes, diapers, wheelchairs and not knowing your own name.

Anti-Aging, Longevity, and Living to 180

And that is not been the picture of aging throughout all of human history except for the last 50 years. It's not normal. What normally happens is if you don't die of an infectious disease or getting run over by a bull or something, then you live into old age and you are actually functional, right?

And we have this weird picture of that. So when I say living to at least 180, I mean with a working memory and a working brain, but the wisdom of more than 100 years of live life and the same type of energy that I have now.

Yeah. Let's. Yeah. Go ahead. Sorry. And then people say, well, how do you know 180? Isn't that ridiculous? It's actually very conservative. I just say that because anything bigger people don't believe.

Here's why. It's energy. You know, the oldest person documented today is about 120 years old, right? Right. Now, could we spell DNA when that person was born?

Had we discovered antibiotics? You know, could you go to PubMed and find anything that's ever been researched in medicine? Just about no. Right. Did we know what mitochondria weren't? No.

I mean, there was so much we didn't know. In fact, 120 years ago, we didn't have automobiles or airplanes. Like that's the scope that. So how much has the world changed in the last hundred years?

Just a little bit. All right. Well, what's it going to do over the next hundred years? And here's my supposition. If we can't do 50% better than our current best in the next hundred years, it's because either an asteroid hit the planet, or because we ran out of topsoil from all these dumb vegans walking around trying to tell us that animals are not a part of our ecosystem. It's one of the two.

Let's let's just jump right in. I mean, you're you're you have been an expert and, and fasting, and the whole thing about bulletproof, I think, really got everyone to understand that they don't need to take breakfast.

At least that they shouldn't think about it that way. But maybe let's just let's get let's. Do you have the book? I just came out fast this way. Let's talk a little bit about that.

I mean, I'd love to understand what it did to come about that and. And. Sure. What's the bigger message lasting for

you? In 2011, I wrote my first, blog post about the bulletproof diet.

And then the big book came out that sold globally in 2014, and it had these five big things because I tried every diet. And one of the five big things in the bulletproof diet was intermittent fasting.

And it was also, if it's not grass fed and it's an animal, don't eat it like you don't eat industrial animals. So I'm more in line with vegans than what I just had before.

So if I pissed off before, now we're friends again. Okay. It it also this intermittent fasting thing though it's one of the highest return on investment behaviors you can have for anti-aging.

And in that same year, in one of my subsequent books, I talk about doing 100 plus thousand dollars stem cell procedures and all kinds of really advanced, crazy anti-aging stuff so I can write about it.

But think about this fasting in the morning costs less money than having breakfast. It takes less energy and time than having breakfast. But then you say, but I would feel bad and I would die and I would get hangry.

But if you do it the way that I teach you in fast, this way you actually have more energy. Not less energy. So I feel worse. When I have breakfast. I'm more dialed in when I don't have breakfast, and everyone is.

When they learn to get their biology right. It's takes like 1 or 2 days and so you got paid up front because you don't spend money, you got more energy right away.

And if you do it several days a week over the course of a year or two, oh, I don't have pre-diabetes. And my metabolism got better, and they don't get Alzheimer's and cancer and cardiovascular disease.

Or at least I lowered my risk of this. So it's the thing you can do that's less than free. That has the biggest anti-aging return. And if you don't want to skip breakfast, you could skip dinner.

But most people don't like that. The point here is go for 12 to 16 hours a day. On most days without food in your stomach, you'll be fine. And if that's really hard for you to get started.

I wrote fast this way because when I weighed 300 pounds, someone said, David, you try fasting and I'm like, you idiot, don't you know that if you don't eat at least six meals a day, your body going to starvation mode and then you'll get fatter?

And besides, I would get hangry and then I would be mean to people. So that's just the stupidest thing I've ever. And I literally I had this the sense of abhorrence.

And now I look back on that and like, what an idiot I was. And lots of different ways because, well, if you do it with especially the tools, the universe getting started, you there's just no hunger at all.

Intermittent Fasting and Fast This Way

And I've now led 60,000 people through my fasting challenge, which is completely free. You don't have to buy my book or anything. It's fast this way. Dot com and the comments are almost always like this.

I can't believe I just went 24 hours without eating and I was never hungry. Okay, it's the end. I was never hungry. That's the part about intermittent fasting that makes it easy for anti-aging.

And the other reason that I wrote this book, I wrote a book on fasting. It's called The Bulletproof Diet to tell you what to eat, what not to eat. Like I've got lectins and fight Aids and all this stuff that have become big trans keto cycle keto.

It's all in there in a structured format, but it's a lot. But if you want it to be perfect, that's how you do it. With

intermittent fasting, the big risk is the same thing that happened since I, you know, shine that light on keto a decade ago.

It's that you can over keto and you say, well, you know what? I went on the keto diet and I felt great, so I just kept doing it. I did this when I was in my late 20s.

I was 50 pounds in three months on a keto diet, and the other 50 pounds took me ten years to lose because I had inflammation, because I was eating the wrong fats and the wrong proteins.

But what happens if something works? You do more of it because we're humans. But the way nutrition works is just because something's good doesn't mean you should keep doing it.

Sometimes you need to take a break. Well, intermittent fasting is the same as keto, so I see women and men who fall into the keto trap. More is better.

And then they say, okay, I'm done with that. I'm gonna eat some carbs because the keto didn't work. I'll try intermittent fasting and they go, oh my God, I can't believe I'm lit up.

I need less sleep. Everything's perfect. And then they say, I'll just eat one meal a day, and then I'll just eat one meal every other day, and they just keep doubling down on it until you get to this point where you hit the wall.

Women hit the wall before men. And I put this in the book. There's a whole chapter for women in this way because it's different, but for women. Step one after about four weeks of fasting too often, or fasting for too long, every single day without taking a break or fasting when there is emotional stress or when there's jet lag or whatever else are fasting on it. Really heavy lifting day.

First thing is your sleep quality goes away, so you wake up and you feel like you're in sleep. And the second thing that happens is your monthly cycle gets irregular.

And the third thing that happens is thinning hair. And it starts about four weeks in, guys. It starts in about 6 to 8 weeks. Same thing. Sleep quality It's weird. I'm fasting now.

I feel like my sleep quality isn't as good as it was last week. Or if you measure it with a ring or something, you you just notice it's not good. But then you wake up and there's no kickstand in the morning.

The way there normally is, and then your hair supposed to get thin as well. So I wanted people to understand fasting is a tool like exercise. If exercise is good for you, run a marathon every day.

Like oh wait, that would be bad for you. So comfortable. Medium. What I find is for women a 12 to 16 hour fast, at least three days a week is a great way to start.

And yes, there's studies that back this up that are specific to women versus men. And for men, it's oftentimes 4 or 5 days a week and sometimes more, but most people start to push it too soon.

You're teaching your body to be metabolically flexible for me, I usually do a 14 to 16 hour fast. I would say six days a week. Saturdays I intentionally have breakfast and usually lunch and dinner, or at least breakfast and dinner.

Because I don't want my body to get used to doing the same thing every day. And plus, brunch is fun. A bacon like it's not a bad thing. Yeah, I always thought about that.

If the if our metabolism gets used to, like, let's say eating less often and then, you know, that idea of potentially slowing down or starting to conserve, not burn off calories, is that something?

Has that what you mean by being metabolically flexible? Metabolically flexible people have mitochondrial metabolism that is fully capable of switching from burning fat to burning carbs without skipping a beat.

What that means is you can eat some carbs, but it's so great I know what to do. But if you fast all the time on your ketone all the time, you actually down regulate the enzymes required to digest carbohydrates so you get insulin resistant.

This is well known in the excessive low carb keto forever kind of crowd. And like oh no, that's a healthy state. I can't burn carbs because you don't need carbs.

Newsflash your body needs carbs. It doesn't need sugar, but it does need some carbohydrates. And it uses those to feed healthy gut bacteria. And it uses those to power parts of the immune system, including in the brain called the glial cells.

And my book on cognitive function called headstrong. I go into that detail the the neurons in your brain, you want those to last a long time for anti-aging purposes.

They prefer fat as fuel, and they're made out of fat largely. So you won't eat the right kinds of fat, and you want to use fat as energy, because when they have ketones, your neurons perform better.

They have the most mitochondrial density. But the other parts of the brain sort of the the disrespected part of the brain called the glial cells. These are the repair and maintenance group for the brain.

So it's sort of like you see the rock star on the stage. That's a neuron. But who are the roadies who put up all those speakers and cleaned up everything and did all the actual work other than singing?

Well, the show doesn't happen without those guys. Well, your glial cells, they will prefer carbohydrates or glucose to ketones. What does that mean? Cyclical ketosis.

It means you don't have to be on the zero carb diet all the time. When you're fasting. You might benefit from it doing that for 4 or 6 weeks. You can go carnivore for a brief period of time.

You could even go vegan, although you probably won't like what that does to your fatty acid ratios. You could do that for a month, but doing either of those for long periods of time is probably not advisable, given all we know about aging because of that interplay between high energy ketones from burning fat and glucose, which is useful and necessary in the body, and some people will say, oh, but you can make your own glucose via a process called gluconeogenesis, where your body breaks down protein to turn it into, into glucose.

So one thing we know about anti-aging, making the body go through really complex metabolic processes that require a lot of enzymes and a lot of minerals that you probably don't have is not really good for you.

Just because you can survive on something doesn't mean that that's an optimal state for living a long time. You know, we can live off all sorts of crappy foods.

You just won't live as long if you do. But it's better than starving right now. So we have these incredibly intelligent biological trade offs that let us eat all sorts of stuff that really, we probably shouldn't eat.

But hey, you know, there was a famine, so I did my best that you don't have to eat famine foods just to be like, you're a good person. The brown rice is actually worse for you than white rice.

As a prime example, why did you like. So you had written already this book on fasting. It already, you know, developed this whole thing for last, you know, ten years.

Why now? Did you expand on that? You know, I have some I read through the book I ate as you kind of went down some other areas, like, you know, the whole the science of autophagy and circadian rhythms.

And, but I found the whole piece was really interesting about the inner, the inner struggle and the like, psychological benefits of, of fasting. So I'd love to if you can expand those.

My publisher came to me and said, let's do a book on fasting. Like I already did a book on fasting. Yeah. You know, and then I said, well, here, let me tell you the outline.

Step one don't eat for a while. Step two, it's good for you. Here's some studies. Yeah. Like there's already five books like that I don't want to write one of those.

I only write books that I can't read somewhere else. Because why would I write a me two book? That's not fun. And it's not in the. It's a lot of work to write a book, and you don't make very much money to write a book, to be honest.

It's like the lowest hourly rate of anything I do is right. So like, why would I take time away from my wife and kids or from learning something to write a book?

But I thought about it. And it's the ROI. The return on investment for fasting is so high and it's so accessible. Even if you don't want to change what you eat, just change.

When you eat more, and maybe how often you eat. And people see profound changes. Since I wrote that first big book, there's been a whole bunch of new research on circadian biology and how important that is.

And the hardest part of fasting is that it sounds terrible. So imagine trying to tell someone, look, you're not going to eat. Meanwhile, there's this huge big food industry going, you can't eat just one.

It really satisfies, and all of these messages and pictures of food everywhere I went from the fat guy who would sit there in the conference room like, okay, I had a healthy lunch.

I did some solid by the way, salads never leave you full. But I had a salad for lunch, and then they put a plate of cookies out in the conference room.

I'm like, okay, today I'm not going to eat the cookie. And pretty soon the cookies are whispering, eat me like, no, eat me. No. And you have some brownies.

It's like a two year old, right? And finally, like, okay, I'll just eat half and then you have cookie and go. Kind of such a failure. I'll eat the other half.

Like, why did I do that? I'm such a bad person. Most people have stuff like that going on in their head. What's going on is very basic biology, and it's that the little mitochondria that run your biology.

So like, we didn't have enough energy. Things are working. Right. So you're going to eat the cookie and eventually they wear you down. Sometimes you'll win but usually they'll win.

And over the long period of time they will always win.

Metabolic Flexibility, Inflammation, and Autophagy

Because they can dial your energy down and down and down in your brain until the part of you responsible for thinking is underpowered. And then you'll do it.

So understanding that dynamic that that's, you know, a part of of what's happening with aging and all, I thought it was worth writing a book about the psychology of fasting, where the voice in your head comes from, and this connection between fear and food and how we switch between those two.

And this is new thinking that came out of my book on brains and mitochondria. There's an algorithm for life, and a lot of what we think is our conscious behavior is not conscious whatsoever.

And getting people inside their heads to understand the difference between hunger and and a craving crave and why the cravings happen, and then understanding the psychology behind it.

The comments I've had, there's been about somewhere around 125 250,000 copies of the book and 60,000 people in the fasting program. That's just a gift.

Like maybe I'll read the book just fast. This way to come. Just try it. And it's two weeks of teaching you all these different techniques. It the feedback has been very much so.

I, I understand the voice in my head and it went away and I've lost my fear of being hungry. And I was so afraid of this when I first did a fast. And I write this is the through line for the book.

I hired a shaman to drop me off in a cave in the middle of the desert in Arizona for four days with no food and no people, because I knew I hate when I was lonely, and I knew that if I didn't eat, I would be hypoglycemic and I would yell at everyone.

So if I'm alone in a cave, there's no one to yell at and there's no food. And so it's sort of a self enforced fast that way. All I had with me was water and I shouldn't have had to do that.

But it's because I was so afraid of being a jerk, and I was so afraid I'd be starving. And rationally, I knew that I wouldn't die. And for days I food.

I could go, you know, 60 or 90 days without food, without starving. But I felt differently. And it's that same voice in your head that controls that feeling.

It's the same part. If you lean on a hot stove, you'll pull your hand away and then go, good thing I pulled my hand away. But you didn't decide to pull it away.

Some other system decided to pull your hand away before you. That's. Do you think that's biology, or do you think it's cultural learning that we're so afraid of going without food?

It's mostly biology, and there is a cultural thing that's driven by biology. Here's the algorithm. And this the thing, the reason I know this is real is it works for plants.

It works for single cell by forms, and it works for us. And what we are at our core is we are a very big network of single celled life forms. Subcellular components like mitochondria are ancient bacteria.

Each of your cells is its own life form, with its own little decision making computational apparatus and because I studied artificial intelligence in my undergrad and I worked on large scale systems on on the internet and cloud computing, you see crazy emergent complex behaviors happen.

And this is proves mathematically. Stephen Wolfram did it. The guy who wrote Wolfram Alpha, the search engine. And so here's the rules for all life. Number one, run away from kill or hide from scary things.

Now, if you're a single celled organism, you probably make toxins, right? Yeah. And if you're a tree, you make spines or bark, or most plants make toxins that keep them from being eaten because they can't run away.

They have roots. And if you're an animal, you run away. You reproduce a lot. You have claws, teeth. If you're humans, you get clubs, whatever. But we do that and that gets ten times more effort and focus.

Because if you want a life form to live a long time, don't get eaten is your number one rule. So fear is ten times more focus and energy than anything else.

Step two eat everything. And you do this because famine kills most animals. Most of the time they run out of fuel. They starve to death. Right? So we have visceral fear.

Visceral means in your tissues, not in your conscious brain. Right. And that gets five times more focus than it needs, because you can know in your brain there's a refrigerator full of food, but your stupid cells don't know what a

refrigerator is.

They're cells. So you have a quadrillion cells going eat. And well, it's no wonder you open the fridge, right? It's it's not your fault. These are automated systems.

The third F-word. If we have fear and we have food, what would all life have to do, Sanjiv, in order to stay alive for multiple generations? That's enough word, but I.

I was thinking fertility man. Sorry. This is, and I apologize. I tricked you into saying that. I'm telling you so. Yes. That F-word. Right. Three times more attention than it really needs.

Because you and I know the species won't die if we don't have sex tonight or ever. Right. But it sure feels like the species is going to die if we don't have sex occasionally, right? Yeah.

Okay, well. It's okay. Amoebas are dividing right? You know, plants are pollinating. This is the the substrate of life. You don't have to think. You don't have to think about breathing.

You know, I'm thinking about being afraid, hungry or horny. Okay? This is life, right? And it is built in. It is below and before your conscious thinking.

So now you're going to sit there and go, well, look at me, I am going to not eat, which is going to trigger fear of starvation. That is a cultural teaching and it is going to trigger the actual hunger.

Right. And because most of us eat foods that drive profound cravings, we don't even know the difference between a hunger and cravings. Right? Hunger is a gentle feeling, like, oh, you know, I'm kind of sleepy.

I could go to sleep the next hour or two, but I could stay up and watch a movie. Okay. That's hunger, right? And a craving is. Someone just gave me a Valium.

I'm going to get knocked out. I have no self-control. Most people eat foods at every meal. The drive, cravings. And the other reason I wrote fast this way is to teach you that if you wake up and you're ravenous, it's your fault.

It's because you ate something for dinner that mess you up. So let's go back and diagnose what you did. Because when you eat the right foods for your biology, which might be different than your spouse or someone else.

But there's general rules for this. When you eat those right foods, you don't care about food for at least four hours. Someone can put cheesecake in front of you and you're like, I don't really want it.

I'm satisfied. I never get less. Cravings get less. They don't get less. They go away. Oh well, like someone can put a food in front of you and you just don't want it because you have enough energy in your cells.

For the first time ever. And that is a profound, freeing thing. And for me, as a former 300 pound guy who I like, I've lost at least 100 pounds of fat.

I've actually put some muscle on over the last year. Thanks, Covid, staying at home and eating all of my own food instead of restaurant food helps. But it it makes a huge difference to just never have cravings.

And I will tell you, never is a big word. There are times when I have a craving. Like right before the pandemic, I did a big book signing. If you breathe a Sharpie with those volatile organics for six hours while signing hundreds and hundreds of books, that is going to put a load on your liver and your liver is like, blah.

And it says, could you eat some sugar already? And I got a sugar craving because my body said, can I get some extra electrons real quick now to oxidize all these toxins you just dumped into me by breathing these toxic fumes for hours?

That actually happens. So sometimes there's an environmental trigger or I'm wearing my cool, true dark glasses. Yes, I'm the founder and I wrote the patents for this company.

Why do I wear these during the day? Well, I wear them under fluorescent or LED lights because if you put extra stress on the brain from poor quality light, I call it junk light.

It's like the corn sirup of lighting the LEDs that most people are looking at right now. They make your brain tired because they increase the load on the brain.

So the body says, can I have some sugar? My brain's tired and so you can lower the toxin load, you can lower the physiological stress load and those reduced cravings.

And I've had people reach out to me and say, Dave, every day I'm exhausted and I have a craving at 5:00 Monday through Friday. But I eat the same thing at home and I don't have the craving.

And then I got the glasses and it went away. It's because of lighting. So something triggers cravings, but usually it's your last meal and sometimes it's environmental.

People are going to live a very long time. They figure out how to lower the physiological stressor load that doesn't do anything. Those are chronic stressors and that can be bad diet omega six fats.

It can be plant toxins. It can be industrial animals and hormone disruptors, other pollutants. You lower all that as much as you can, which gives you more ability to do positive stressors called hermetic stressors.

And the intermittent fasting is a hermetic stressor. Hermetic means that if it doesn't kill you, makes you stronger. Many people believe that all stress is good for you because it makes you stronger. It doesn't kill you. That is a lie.

It doesn't work like that. Other people will apply things like hermetic stressors like exercising, but they'll overdo it the same as they overdo fasting send you if you know what happened to the first guy who ran a marathon.

No, I don't. I had a heart attack. I don't know what happened. He died. That's that's why we run marathons to be healthy. Because the first guy to run a marathon ran two marathon in Greece to warn of an army coming.

Psychology of Hunger, Cravings, and Fasting

He deliver the message and keeled over from a heart attack. That's why you see overweight, middle aged people running marathons to be healthy. Maybe too much of a hormone stressor.

So it turns out people who do endurance athlete athletics generally don't live as long as they would if they did a little bit less exercise. So that's an example of too much of a stressor.

So don't overtrain don't over fast, right. But reduce the chronic stressors that just float around so that when you do run a marathon, so that when you do a long fast, you have tons of energy.

And that's part of the anti-aging thing. Let's just jump right into that, because, I mean, the key concept I'm hearing from all the speakers is about the inflammation and cellular level is the causes of aging.

And and obviously, like you're saying, some of these stressors cause aging. And I know you mentioned in your book as well about that. So what what's your thoughts about what is the you know, how should we be handling inflammation?

Is this the benefit of intermittent fasting? Intermittent fasting will address inflammation via many different pathways. The biggest reduction, inflammation that people don't expect from intermittent fasting is when you eat less often.

You eat less inflammatory plant foods. It is astounding to me how many people say, oh, but I like that I'm going to

eat it. The number one inflammatory plant food is omega six fatty acids, these unsaturated fats that are never found in meaningful amounts in nature.

You eat a piece of grass fed steak. It's about 2% omega six fat. But if you eat a can of potato chips, it's almost all omega six fat. These are not biologically compatible with us in meaningful amounts.

They're essential, but in tiny amounts. So low oil is that like anything you mention that is canola oil, soybean oil, corn oil, all of those are are exceptionally high and really, really bad for you.

Not just a little bit bad for you. It's kind of funny. We can take a little capsule of fish oil, one gram official, and go. That changes our whole metabolism.

Yeah. Eat something fried, eat some French fries. They will create inflammation in the body for 48 hours. If you smoke a cigaret, you have eight hours of inflammation.

Literally. And this is not a joke. If you gave me a plate of French fries cooked in canola oil or soybean oil versus a cigaret, I'd smoke the cigaret.

I don't do either one right. They're both very, very bad for you. And people say, but I like French fries, I don't care, you might like heroin. It doesn't make it good for you. The fact you like it doesn't matter.

You could bake that same food and add a lot of grass fed butter afterwards and have a different biological outcome, right? So we've got to get these oils out of the diet.

But then you get other people go, you know what, I'm just gonna eat a bunch of bell peppers. A huge percentage of people cannot process the anti nutrients in that.

So in fact, this way I go through these five big categories of things that cause cravings, that also cause inflammation. So when you eat foods that digest cleanly and don't create an inflammatory response, you do very, very well.

And the other thing intermittent fasting does is it turns on autophagy. You remember the old, the old days when Las Vegas was not all LEDs. They had a bunch of light bulbs, and there were teams of people who drive around and find the bulbs that were dim or were out, and they'd get on a ladder and they'd take them out and put it back in.

Well, you have a quadrillion mitochondria. These guys are environmental sensors. They sense the environment, and then they either make energy, they make hormones, neurotransmitters or proteins.

So they're manufacturing plants. They're not just power plants and they're environmental sensors. They're the first line environmental sensors. Before you see anything.

They saw it and they decided what to pass on to you. Right. And that gets really interesting because if you don't have a team going around replacing the dim bulbs, replacing the burned out bulbs, because they're too busy worrying about donuts or inflammation or whatever else over time, that's a major cause of aging.

So intermittent fasting allows all the enzymes that would have gone into breaking down a meal to be turned around and go into breaking down cells in the body that need to be, they need to be broken down and removed.

So that process of autophagy is at the core of my anti-aging books and at fast. This way. And it's funny. What else turns up, autophagy. Coffee does. Yep. So you can have that during your fast.

That's something else. And in the book that really makes a difference for people, especially if you've got some weight to lose. You've never fasted before.

It's easy for, you know, a health influencer or someone who's in reasonably good shape like I am now, to say I just

skip breakfast. But if you're like I used to be, no way.

Like, are you kidding me? I have kids, they're running around the house. I have a job. I'll get brain fog. It's it's going to be bad. Like I'm going to bite someone's head off.

Okay? This is a real serious thing. So the other reason that I wrote fast this way was I want people to get autophagy and metabolic flexibility without turning into jerks.

So there's three things you can do during a fast that do not break the magic of a fast, but turn off cravings. Step one black coffee. And there's studies.

It suppresses hunger and it does not change the benefits of a fast. And I've reviewed this with lots of experts. I've looked at the literature and it makes the water only fast, the crowd very angry, the water only fasters.

They're saying, well, in the studies the mice only had water. Therefore I have to only have water. Make good luck with that. Do you have a job? Do you have a family? Do you have responsibilities?

It's okay to fast without suffering. It's just okay. And step two I'm kind of known for this. People lost 1 million pounds on it. Bulletproof coffee actually works.

It's grass fed butter a little bit and some MCT oil blended into your coffee. And I go through a ton of science in the book. Yes, there is a valid case that says you can have calories from fat and it will not change your autophagy.

So you're actually still doing this. And the reason is that if the body sees protein or carbs, it will turn off autophagy. But fat it gets it gets a pass.

And the third thing you can have in this also is this never been written about in the context of intermittent fasting. But it has been a big part of my anti-aging book, and it's pre biotic fiber, and you can actually put prebiotic fiber in your, coffee or tea in the morning.

It is a kind of carbohydrate that your body can't digest, but it feeds the bacteria that give you energy, and they actually convert the prebiotic fiber into a type of fat called butyric acid.

So tomorrow morning, anyone who listens to this, you know, I want to be younger. I want to try intermittent fasting. I don't want to suffer. Make yourself a bulletproof coffee.

Put in some prebiotic fiber. This is not that. Metamucil. Bulky sawdust. This is the stuff that dissolves in and and feeds the gut bacteria. It's not a bulking fiber.

You put it in there. And Chia tasted like I drank a latte. And I stopped caring about food for about five hours. Like, wait a minute. I had dinner last night at six.

I went to bed at ten. I got four hours for bed. I sat for eight hours. I was already 12 hours. And I woke up and I drank this thing. And now it's noon again.

Oh my God, I just did a 16 or an 18 hour fast and I didn't even notice. Like, and if I buy the brain octane or that we use every morning. So you know how it is, right? Sanjiv.

Every morning brain octane is the bulletproof brand of MCT. There are different strengths and types of MCT on the market. The Brain octane is the most studied by far.

You know, I'm the guy who made MCT oil $1 billion category, so that stuff works. But what's special about the brain upgrade? Because I'm trying to explain it to, let's say, you know, people come to me like MCT is a it's a chemical designation for four different types of oil, and every kind of oil does different things in the body.

So one of the types of MTD, the shortest one, it it causes severe gastric distress. So no one uses that one. And the most common and cheap type of MCT oil, is called C12.

And it's legal to call it medium chain, but it doesn't do anything special in the body. It's so cheap that they use it for fracking like they give it away.

And there are supplement companies who sell it. Oh, it's MCT legally, yes, but biologically no, that's called C12. And what's left is there's eight and ten chain fats.

And the studies show the eight is most ketogenic, four times more ketogenic than coconut oil. And coconut oil isn't very ketogenic at all. So what's left in the bulletproof brain?

Octane is it is only the eight chain, the rarest and most expensive MCT. It only comes from coconut, so we don't kill orangutans in the process. Like most of the palm oil, it's triple distilled, which no one else does, and it's filtered through clay, which removes other impurities.

So you get a pure thing that doesn't cause the same kind of gastric distress in the very early days of bulletproof, before I figured all this out, you'd buy some kind of street grade MCT and your throat would burn a little bit, and you'd run to the bathroom, but you'd have a ton of energy.

I don't like that. So no more disaster pants. But that's why brain octane is different than normal MCT. It's likely more ketogenic than what people are used to having.

Yeah. So the C8, the, fats, they don't break down unless we go to storage. Is that what you're saying? They get broken down to C8 and C10. Fats don't get stored in the body.

They have to get burned as energy, which is good, because if you put some of this even on your Cheerios, which I don't recommend. But even if you did that over time, the body's like, wait, I always have ketones. I always have fat available for energy.

I guess I should turn on my fat digestion pathways and they will stay turned on. And then when you fast, you'll be resilient during your fast. It's. It's fascinating.

You know, the part that I loved to, you talked about was the, the impact on on spiritual and mental health. So I wonder if you can kind of go into that aspect because, that's what makes it special.

Spiritual Fasting and Inner Awareness

I think, you know, there is such a thing as a spiritual fast, and there's a chapter in the book where I go through this in every culture has these every belief system has these.

And there's such a thing as a working fast. And not everyone has these. And I teach people, here's I do a working fast in the morning when you want to get stuff done, you have a life, but then you can do a spiritual fast, which is usually a longer fast, at least 24 hours.

You can use the fasting hacks from the book or not. But the idea there is you rest and you go deep and you journal and you go for a walk in nature. If you can arrange access to nature and you reflect so you can use it for meditation and healing and trauma release and all of that.

And what's happening there is, is unique and it's less about anti-aging. But we talked about these mitochondria in the body. Right. They're environmental sensors when they don't have food they turn outwards.

And if you're fasted and you go for a walk in the forest, you will see the forest and sense the forest differently than if you're full. And the reason is that they're tuned to help you find food.

You're a hunter and a gatherer, so your perception goes up. And if you're sitting in an ashram meditating and fasting, right, you're going to feel different than if you ate a peanut butter sandwich and you fasted.

And there's a bunch of bad things in peanut butter that would probably affect your cognition. But even if you ate a really good meal, your mitochondria are going to turn inwards versus outwards.

The other thing that happens when you eat. A certain percentage of your capacity for making energy, instead of going into thinking and sensing it, goes into digesting.

So it takes calories to turn food into more calories, right? So if you're not digesting and your stomach is empty, then the sensors turn out. And if you were to put a little bit of grass fed butter in there, the sensors still turn out like we have energy.

But there's nothing in here that we identify as a protein or a carb. So it's looking around, looking. I go, what's up? This is why fasting is a part of a spiritual tradition for almost every different thing you can find going back thousands of years.

It's because your sensors turn outwards, and because the energy that went into digestion is going into thinking and feeling. I think that, that cravings, you mentioned that go away.

You mentioned that, food cravings. But do you feel that there's other types of cravings in life that are also effective? But let's say someone takes up a fasting practice.

So other benefits and other aspects, if you have addictions, sometimes fasting can help with those. Quite often I find though more of a keto approach or so.

There's a lot of people with, addictions. There can be trauma and psychological things like that, but sometimes you're just low energy. And when you turn the energy back up in the brain, your ability to manage those states, it goes, goes right back up.

So that's that's a part of it. But just teaching yourself to be safe without food and there's also emotional things where, oh, I'm lonely or I'm sad. So I'm going to eat.

Those are learned. And fasting will teach you what's going on okay. Why am I feeling that's the role of a spiritual fast. If, however, you have chaos in your life and your.

Give me a second, no problem. I've got all kinds of palling around right now. No one. I forgot where I was. What was I saying? Whatever I, cravings. Oh.

So. So if you're having cravings, in your life that are not caused by what you ate, then you sit down. Well, you're doing a spiritual fast, and you journal or you meditate or you pray or you do whatever your practice practices.

And suddenly those things come into focus and you realize, oh, that's weird. I eat when I'm lonely. I'm not actually lonely. I wonder why I feel lonely, and then you figure out, oh, I have an issue with trauma.

Those are really common. Every adult has this. The reason that. Men. The reason I can say every adult has that is, is that I have a neuroscience company.

It's called 40 Years of Zen. Just. We've had more than a thousand entrepreneurs and celebrities or athletes. People like that, come through. And for five days, look at what's going on inside their head and let go of things like that.

Every adult alive has stuff like that running in there. Uncanny. Yes, processes and fasting can help you just become aware of the unconscious processes because stuff pops up.

When you're doing a spiritual fast, it won't pop up during a working fast.

Neurofeedback, Trauma, and Epigenetics

I see many people try to apply spiritual fasting techniques while they're working, and that doesn't work very well, so it's okay to say, today I'm fasting for performance, tomorrow I'm fasting for personal development.

They're just not the same thing for me. Let's go right into that. The I know that you're also at 40 years of Zen, and I know in some reports you talk about all the work you've done and mindfulness and, neuro biofeedback.

I'd love to if you could just talk to us about that. That's sure. One of the things that happens as you age is you're supposed to start forgetting things and your brain slows down.

And I mentioned at the start of the interview, that my brain has the responsiveness of a young person's brain and when I say responsiveness, I don't mean intelligence.

I mean when there is a visual or auditory cue, my brain picks it up like a 20 year old. And if you look at the average speed, it gets slower with every year of life.

It just the brain gets slower and slower. It doesn't have to happen. Why does mind do that? Well, in part because my mitochondria work, and in part because I've spent four months of my life with electrodes glued to my head doing the protocols that we do at 40 years of Zen.

So we've had to create new hardware and new software to do neurofeedback for advanced performance instead of to fix problems in the brain. And what we're doing there is we're taking a look at the state of your brain using something called EEG, where we measure your brain against an average brain to help you understand, here's my superpowers and here's my weaknesses, and we set that aside and then we spend three days teaching you a personal development process that's guided by neurofeedback, that allows you to stop wasting electrons on useless patterns that you don't even know you have. So you get to go in and edit your responsiveness to the environment around you.

And then the final two days, we take that quantitative EEG and we use it to performance tune your brain. It's like taking a car into a racing mechanic.

That's still my Toyota, but it actually accelerates now. And it turns and it stops. So you can you can increase the voltage in the brain. You can change neuron firing speed to make it faster or slower.

And you can organize networks. And the brain is an even more complex set of individual cells and networks then the rest of the cells in your body. But they are all integrated.

What, what you find there is that when older people do intense neurofeedback like that, they suddenly have brains that act like younger people's brains.

So they want to start companies. They want to, reinvigorate relationships, they want to go travel and things like that. And what's happening is sometimes it's like you kind of cleared the cobwebs out and over time, we develop, I'm going to call them traumas and patterns.

And usually they get set very early in life, but they just get reinforced over time, over time, over time. When you're doing something like intermittent fasting and you're eating the right kinds of fats and you're not eating toxins, you can turn on neurogenesis at any age.

So what we're doing is we're showing the brain grow these neurons. But in order for people to do the training, there's an executive chef and there's a whole set of supplements they take because they can't do enough training every day without energetic as in mitochondria energetic and nutritional support in order to do the work.

And then over the next 3 to 6 months, the brain goes in and reinforces the new pathways that they develop, which is pretty neat. Do you think that most people are, not aware of these patterns that are happening?

Like, I mean, I guess you can tell by the you can't be aware of them. They're by design, not supposed to be there. Right. So there are times when, you know, let's say someone cuts you off in traffic, right?

And you just get angry, okay. Why do you get angry and someone cut you off and drop it? Do you know why? I don't know, but you know, it happens, right?

Yeah, sure. Okay. So you're not supposed to know why, right? And so there's some voice when you were, like, five years old, some I know some teacher yelled at you or you felt disrespected, and that same emotional pattern is there, but you don't know why, right?

And for everyone who's been alive, I promise you, there was a time when your mom or your dad was tired and you nagged them and they told you, for God's sake, right?

And they yelled at you, right? And you went and you cried. There's a little switch in there, and you're not going to remember that, but it's still in there, and you can go in and turn off all the switches.

What's happening there is that your mitochondria, they believe that you are a petri dish that they control, and they're actually kind of right. And you believe that you're a single body that you control and you're kind of right, but you're both wrong and so you see the dynamics there.

The mitochondria are dumb and fast, and they get the information first. They run it through, threat detection, pattern matching system. But it's a poorly programed one because when you came into the world, you're a squirming infant, like, I don't know, we got this petri dish.

Let's program it as best we can to not get eaten, to make sure it doesn't starve, to make sure it reproduces. And that's all they care about because they are bacteria, after all.

They don't really have a consciousness like we do. So our adult life is largely set by earthly things. What's going to keep us alive? The number of entrepreneurs who are bullied is exceptionally high.

I will show you that I'm good enough by making $100 million, and then you'll love me. And it doesn't actually work like that. But that's I mean, I've had people directly quote that coming out of the program going, I had no idea that my, you know, that my pursuit of my career was driven by not feeling good enough from fifth grade.

Yeah. I feel like that's how dumb it is. Fasting can shine a light on that, but so can some of this trauma, trauma reduction stuff. And what you find is there's a lot of times when you're feeling lonely, you're feeling sad, and instead of your parents saying, oh, you're feeling sad, well, you know, here's what to do about that.

They go, here's a muffin. Okay, when you're an adult and you're feeling sad and you eat ten muffins, is it any surprise you didn't choose the muffins?

Your mitochondria said, oh, when we're feeling sad, eat the muffin. Right. It's those patterns that you can break up. What do you think about, the whole field epigenetics of turning off and on, DNA with discipline.

Perhaps these are similar processes that are happening. Where do you see this fitting? And epigenetics is at the heart of biohacking. So when I created the definition of biohacking, which is a new word in the English language, by the way, in 2018 they added it to Merriam Webster's dictionary.

And my name is there, which is cool. The, the definition was the art and science of changing the environment around you. And inside of you, so you have full control of your own biology.

It sounds an awful lot like epigenetics. And it includes epigenetics, which is saying, okay, the food timing thing, the light temperature, even stress levels, all of those turn genetic switches on or off.

Now you need to know, do you have the genetic switches to turn on or off? That's regular genetics and then you

layer in epigenetics. But even if you have all those, if you have poor pattern matching capabilities, so your body thinks there's threats when there aren't threats, that poor pattern matching will throw epigenetic switches and it'll make you act like a jerk.

So when you control that biology inside of yourself, there is a personal development thing. And a lot of it is not consciousness and what they'll teach you in a therapist offices or even in a, in a the Buddhist monastery.

Upgrade Labs, Light Therapy, and Recovery

So I feel the emotions washing through. You recognize that they're just emotions and they don't have any any validity. Yeah. Let it release and let it go.

Do you know how much energy and time it takes to do that? Well, what a frickin waste of time. Yes, everything. All of that is real. I have done all of that.

I've traveled to Tibet and learn meditation from the masters. What if the thing that made you feel that useless emotion that was not real? What if you turn that off so that instead of taking your energy and using it on, that, you actually use the energy to fold proteins more effectively.

So you could have longer telomeres so you didn't die. So it's your job to do the work to turn off inappropriate environmental reactivity because it is the source of epigenetic stress.

That's what I'm working on. Wow. That's a just to jump into that question is that where are you working on now? Because that you just told me something that blew my mind.

So that really our life is about working on how to go and change those things off and on how to actually make those changes instead of, you know, probably old time instead of just accepting them.

Well, most of our problems in life are that we accept things that we don't like or that we don't know about because we think they can't be changed. Right?

Every time anyone says something is impossible or permanent, what they're saying is that they're stupid, right? What they're saying is, I don't know how to do that.

Therefore, I believe it's impossible. Instead of saying no one's figured it out yet, but I don't know if it's impossible or not because that's a true statement.

So, what you what you can do there is, you can say, all right, I, I recognize that there's stuff I don't like. I'm going to go in and change it. And that's just entirely achievable.

So what are you looking what do you what are you working on this stuff? There's a couple big things. I am focused on being CEO of Upgrade Labs. This is a company that uses technology to help people recover from stress more effectively than they could in Mother Nature.

So we can put muscle on three times faster than lifting weights. We can give you 45 minutes of cardio in seven minutes without sweating. And with university studies backing this up.

And now that you've saved huge amounts of time like that, we actually can do neurofeedback for you at upgrade labs, clinics, as well as things like light therapy with very specific frequencies that are mitochondrial signals for anti-aging, and a whole host of other technologies that just didn't exist in nature.

They're taking advantage of pathways that are newly discovered in the human body. So we call it a human upgrade center. You come in and you leave better, stronger or faster, smarter than when you came in.

And it's a lot different than going to a spin class. So, that is franchising this year. I'm expanding 40 Years of Zen as

well. We've just spent a lot of, of energy on a new rev of our hardware and software for, human consciousness.

And true dark and true light, my light therapy and light filtering companies. Yeah. We have filed seven more patents on optical filters, and I'll just warn people blue blockers during the day are bad for you.

You need some blue during the day, but you're getting too much. So these are partial blue blockers. And at night, blue blockers don't work very well. You need four different colors blocked.

And there's other variables. And that's why the true dark glasses work way better than blue blockers at night. So you see a bunch of companies, you know I've got blue blocking this or that.

Yeah. That's been around since the 70s. But it turns out it's like it doesn't it's too much a day and not enough at night. So why would you do that? These are the daytime air filters from true dark.

And the nighttime ones are called sunset. And they work differently than blue blockers. But, man. Wow. I've doubled my deep sleep by controlling the light going into my eyes.

I know you're wearing an aura ring over there if you want to just, You know, I've have, Harpreet Ries, one of the other speakers. I've had some of how you're using this, a ring ring every day.

I have tracked my sleep for 15 years. I was CTO of of the first company to get heart rate from the wrist.

Final Takeaway on Radiating Energy

We saw that company to Intel for 100 million. So I know a lot about bio monitoring. It's one of the biohacker things I do. The aura ring is by far my favorite.

I'm an advisor and investor in aura, and I've got to say, if you were to just pick one variable for anti-aging, it would be look at your recovery score the next morning, or your readiness score is what they call your heart rate variability.

If that's routinely low, you have problems. If it's routinely high, you're probably on a good anti-aging path. So I look at my or a ring every single morning as just a part of getting going numb.

What's the lowest, the last message we can give our viewers to get from this? What's the one message they should take? But there's so much there. But what did it take from it? I would love to tell you.

You know, skip breakfast. You'll live longer, but that's too easy. So I'm going to quote Henry Miller on this. Sanjiv, he says the goal of life is not to accumulate power, but to radiate it.

And the reason it's relevant is you can store six seconds of ATP energy in your body, right? And then you die. So you are constantly making energy, and you cannot store and save that energy.

You have to use it and you can use it on stupid things like reacting to old traumas from when you were three and you didn't get your Cheerios, or you could use it to making the world a better place.

So really good power. That would be wow, that's an awesome message. Thank you so much, Dave. I really appreciate it. Today. You got it. Sanjiv. Have a great day. Okay.