Introduction to Sleep and Dr. Alka Patel

The sleep that you sacrificed in your 30s and 40s when you were building your success and following your dreams and living that ambitious life then shows up in 50s & 60s as early dementia, cancer, a heart attack.

Oh man, that's not good. And here's the thing, sleep does not begin in the night. Sleep begins in day. and I know this because Today we have Dr. Alka Patel!

Alright! Dr. Alka is the founder of the Million Hour Club and an award-winning longevity doctor. She was hospitalized, fighting for her life, and didn't know if she would see her children again.

That moment changed everything. Dr Alke now helps people take back control of their health and longevity. What we've seen from the research is on business owners and it found that if they slept for less than six hours a night, just for two consecutive nights, their productivity plummeted for the next six days.

whole week. Yeah. That can be a bit scary. Absolutely terrifying. Sleep apnea. How that affects sleep and what people have to watch out for if someone out there doesn't know they have sleep apneas.

I'm so so glad that you brought this topic up because it goes undiagnosed until you have a heart attack in the middle of the night. Oh boy. So let's talk about sleepapnea Is it the appropriate time to be sexually active before going to sleep?

People feel sleepy after sex, of course, so they think sex helps them sleep. So the first thing that I'm going to say is don't use sex as a sleeping pill.

Good sex takes time. Welcome to another episode of a healthy point of view podcast. I'm your host Sam Tahara. And as usual, we're bringing experts from all over the world to talk about health, wellness, beauty, and mindset.

Today's guests, We're going to be talking about sleep. How important sleep truly is. What should you do before or after sleep? What happens to your body while you sleep, Today we have Dr.

Alka Patel. All right. All right, Dr. Elka, all the way from the UK. Welcome. Thank you. I've never had a welcome like that. Hopefully this is the only one you get a welcoming like this.

You know, it makes us a little exclusive. So Dr Elke, It's a pleasure to have you here. And this a topic that we touch up on just a bit on the podcast, but we haven't done a whole episode on The Importance of Sleep.

And today, you know, for me personally, sleep is very important, right? I'm a data kind of guy. I wear my aura ring, which is important. But I am excited to get into the details of this so people can really understand that.

Before we get to any of that, I want people to meet you. I want to go back to your upbringing. How was life, how was health and wellness when you were a kid?

What was mom and dad like? Let's go way back so people can understand who you are and how you got to where you're at today. Oh, we're going way, way back.

It's a really interesting question actually, Sam, because quite recently I discovered a little notebook that my father had given me and I opened it up and inside was a speech that I'd written and it said in it, my name is Alka Patel.

I am seven years old and today I'm going to talk to you about food and health. Oh wow. And that was at the age of seven. And X number of decades still, I'm still talking about food and health.

From Childhood Interest to Lifestyle Medicine

So it's fascinating that somehow in my upbringing that was already there. And I remember my dad put me on a stage in front of a community, several hundred people to give a little talk about Food and Health.

That's awesome. I've been around the topic of health for a long time, but not because anybody in my family has a background in medicine or in health at all.

But I think it's been there for some time which is fantastic. So my upbringing, I was born in London and I have grown up in london throughout my entire career.

A lovely Indian family, of course. My dad was an entrepreneur. very much in the business realm as well. And so I've grown up around that too. I guess for me sort of becoming a doctor wasn't something that I really thought about, but it felt very natural.

My biology teacher said to me years ago, you're great at biology. It's like, oh, okay, let's develop that. Becoming a Doctor just felt like a very Yeah, that's awesome.

In the UK and London, how is health up there? How is Health in the U. K. and in London? I'm not sure that we understand health, not just in The UK, but really anywhere around the world, because the biggest conversations are around sickness.

So what tends to happen with health care, and I really see it as sick care disguised as health. Is that where we focused on waiting until you become sick.

Reactive. Right. And then once you're sick, that's it. You know, it's all out. We're trying to find a fix. So when you say what is health like in the UK, I'm of the opinion that it really doesn't exist in a way that needs to.

Right, right. Yeah, this kind of seems like here in the U. S. is the same thing, where everything is very reactive versus being proactive towards your health, or then it's just focus on disease based medicine, you know, versus lifestyle medicine.

Which I know you're really big into lifestyle. Medicine. I see you consistently post tons of educational content on your social media, which, I appreciate what you do by posting that content, because it could just be one person that sees it and you change the trajectory of their health.

Now, I know based off of watching your story, you had a little bit of a health scare yourself where you lost control of your health throughout the succeeding process of becoming a physician, seeing patients, et cetera.

So I wanna talk about that because we do have quite a few doctors in our network, over 5,000 doctors that listen to the podcast. And I'm more than sure some of them are in the same boat that you were before.

Sure. I think the truth here is, Sam, is that if you want to have the time of your life, you have to time in your live. And I mean, have time to take care of yourself.

So when I look back to my 30s as a doctor, as physician, what I realized was that is one thing that I wasn't doing. You see, on the outside, it felt like I had everything.

I have a thriving practice. Had a primary care practice as a partner in a practice, I've had three gorgeous children, a very loving husband, had the house and the cars and all the accolades and, all these letters behind my name.

It really thought I was thriving. But what happened was that on the inside, a bit that no one's really looking at, my body was starting to really disagree with me.

And it decided that it would arrive one day and give me a fever, the sort of fever that I should have been able to

shake off. Why couldn't I shake of a afever?

But by the end of that particular day, this was the 4th of June, 2011, that fever had taken hold and I was hospitalized. to the point that my kidneys stopped working.

They didn't want to do their job. My liver didn's want do its job either. And middle of the night, I'm cut open with knives. I have to have an emergency surgery.

Pumped full of drugs or to find the source of this fever. We talked about getting to that, the sources of health and the sauce of my sickness was very difficult to, to fine.

Um, and I distinctly remember a few days later, my children came to visit me in hospital with the words, happy birthday, mommy. And I just didn't know if I'd see them again the next day.

And, I think with that, time in itself took on a whole new meaning. Like I said, if you want to have a great time, in life, you have to find the time to really invest in yourself.

That was very pivotal for me, because what I had to do, Sam, is what you've alluded to earlier. I have had bring myself back to health. Here's the shocking bit.

As a doctor, I knew all about sickness and diagnoses and diseases and drugs, but I didn't know how to do health. So in my own journey to recovery, I had to discover what that was, which then led me to looking at my lifestyle.

how I was sleeping, how was moving, and how i was connecting. And I thought, you know, if I need this, all my patients need that. Absolutely. Where were they getting that from?

They were not getting it from mainstream medicine. So you were still practicing conventional medicine at that point? Oh, for sure. Okay. Yeah. I though that was my forever vision and direction because that is what I taught at medical school.

Right. But in my time of need, that didn't help me. So I had to pivot. And it's really interesting, you know, talking about time is that was also a time in my life when I started asking myself questions.

One of the questions that I did ask myself was, well, how long do I want? How much time do I want in this life? How long do want to live? Because I was at that point where it was almost snatched away from me.

I did have that end of life experience. It's, I don't know if people who've never been there understand it fully, but you know, when people talk about running towards the light, well, did run towards light.

There was a light and I running and it's as vivid as yesterday. And it the shadows of my three children that pulled me back. That can be a bit scary. It was, it was terrifying, absolutely terrifying.

But don't you, do you feel like that's what you needed from the higher power to actually see that, to make this change? There was definitely some, some vision, Some message, submission that I was meant to be on because that resulted in this huge pivot for me, asking myself the questions and then pivoting the way that practice medicine from no longer being reactive, but absolutely being proactive, going upstream all the way to look at what is health.

So no longer was I giving a diagnosis of diabetes and saying here's your pill, off you go, or saying you know you've got high blood pressure, here are your pills, it's the question to always ask is why?

Why have I got high blood pressure? Why do I have diabetes? Because it doesn't just arrive. All those signals have been there long before. We've just got to be able to tune in, in order to pick that up.

So my whole practice of medicine, my hole ethos really pivoted. And I decided that I wanted to live a million hour life. Mm, million hour life. And I've seen that on your pages and stuff.

What does that mean? It means that this whole concept was born of living a million-hour life and a billion hours is 114 years. Oh, okay. That makes sense, 113 years?

117 years, and I do believe this is the time that we can do that. We're living this most incredible time.

Health Scare and the Million Hour Method

So my model of medicine is really now based upon the times that were living in right now. Yeah. Well, we've got access to data. We've got access to devices, and these allow us to make decisions with absolute precision.

So that's my methodology, the Million Hour Method, using data and devices to makes decisions. I love that, The Million Dollar Method. Now, I'm going to take a step back because you said you had to pivot.

And for those that are listening and viewing the podcast right now, it's not easy to pivot as a medical doctor, right? You had to relearn things. So how did you make that happen?

Where did it go to start relearning things where it became more of lifestyle medicine versus this reactive medicine that we're so used to? Yeah, I remember this was many years ago now, before we were even talking about lifestyle medicine, let alone longevity medicine in the realm that we're in now.

This was before it became the buzzword. So you had to do a lot of research. Right, absolutely. And you know what, the first thing I had do was swallow a big pill.

That was a bit pill of courage and humility. Because none of my colleagues were doing what I was attempting to do at the time. And, you know, I really had, even my college was saying, what are you doing?

What do you mean you are moving away from a drug first model to a lifestyle first mode? How is that even possible? It will never work. And I had to dig deep.

So I read a lot, just read and read, and research papers, papers papers. And then discovered that actually, this realm of lifestyle medicine was one that was evolving.

There were a small number of people that were talking about it. As the American Society College of Lifestyle Medicine, the British Society of LifeStyle Medicine was in its evolution at the time.

some traction in terms of looking at what exists as existing methodologies. But in all of it, I really had to make this my own. Because you can read and you could research, but ultimately, the person that stands in front of patients now is an evolution of multiple different modalities of practices.

And yes, lifestyle medicine sits at the fulcrum of that. but it's evolved so much because, again, right now, how many doctors do I meet that use data in the same way that I do, that join the dots?

How many doctor use health tech and devices in their practice? I always carry my doctor's bag with me, which I have brought with, but if we took a look inside, you'll see some incredible wearables, incredible health-tech which are now part of my day-to-day practice.

Anyone that joins me. I run a million-hour club. as well. It's an online members club where we are testing and we're tracking. We are absolutely targeting health.

And I use data, I do testing, and I used devices in that practice. That's amazing. Have you heard of a platform called Heads Up? I have, yes. Yes. Heads Up Health.

They quantify all of that data onto a dashboard and medical providers can use it. Yeah. So it links all your wearable data and then allows an expert like me, because it still takes expertise, no matter sort of how much you're trying to interpret this data alone, joining the dots is the bit that comes from years and years of clinical practice, hearing so

many stories, seeing so may data points and being able to do that.

Absolutely. Now, Doc, one of the things that you mentioned earlier, you were talking about longevity, especially with the million hour, right? The 114 years.

For the listeners and viewers, I want you to kind of explain, break it down, the difference between lifespan and health span. Okay, let's do this. Lifespan.

Life span is quantity. How long you live, how many years you have. Healthspan is quality. What is the quality of those years? How good do they feel? how healthy are those?

And I've got one more word that I want to share with you. Give it to me. Which I have coined, which is called Youthspam. Ooh, what's that? And youth span is how vibrant and energetic and full of vitality those years are.

Oh, I like that. Because when you put those three together, Sam, when we put lifespan, health span and youths span together the intersection is what I believe longevity is.

It's living your longest life possible. with exceptional health that gives you vibrancy and energy and vitality because we are energetic beings. And you know, you look back at your youth.

When you were you, your most energetic self, if we can now reverse aging, which we, can which I test, what I love to do. Then of course you've got more years ahead of you.

You've, got, more lifespan ahead, of, you and you got. More health ahead. Of, view, because when we look at the hallmarks of aging. When we looked out the science of how we age, we know that we.

Can change that. We can reverse inner aging biological aging it's incredibly powerful. I. Love it. And that's extremely important. We're talking about vigor and vitality.

I always tell people it's like, who wants to live 150 years without the health span and without youth span, the vigor, and the vital. For me, I'd rather live another 30 years with good vigor vital, that youth spanned versus living 150 like a vegetable.

So all of these things are extremely Now, Doc, one of the things that I've noticed specifically here in the US, and I'm more than sure it's like this throughout the world, a lot of people, they don't even have doctors.

Even the insurance companies here, They don' even require you to have a primary care physician anymore. So what ends up happening, people really are not taking that proactive approach to their health.

And when they start getting sick, when something comes up, where they go to the urgent care or to ER. And what's happened in my opinion, my professional opinion working in emergency medicine as a firefighter paramedic for over 12 years, that became like the new primary care.

Are those things that you've seen in your career? Yeah, absolutely. Pitching up to an emergency care service is waiting too long. Right. This is what people do.

They wait for the symptoms They try and compensate for the symptoms. And then when they escalate, they turn up to what feels like the fast entrance. Where am I going to get my fastest fix?

But health doesn't work like that. Emergency care is not set up for that either. It's reactive medicine is great in an emergency setting. It can save your life.

Of course it can. Absolutely. But if you look at the symptoms, if we look the signals, we've got to go deeper than symptoms. I'm thinking of the kind of fire analogy now that you've said it.

The symptoms are like your fire alarm going off. But the data, the signals that you've got inside your body that we can now access, that's more like your heat sensor.

That's telling you that can act before the fire alarms get off. Because remember, without smoke there is that, you know, can't have smoke without fire.

You've gotta put the out first. And that is looking early enough to be able to do that. you'll know through your career, right? If you got blazing fire, like how difficult is it to put out?

Whereas if you actually got there when it was just smoldering, It's done. Right. So that's the important thing. It is, it truly is. Now you're talking about reversing the way we age, right?

And you mentioned biological age. What is biological and what do you compare that to? Oh, love this. This is like my favorite part of longevity medicine, which I love and my approach to it.

We all know chronological age Do you know how old you are? Chronologically, oh yeah, 39. Wonderful. You see, most people know, of course, they have a passport, have birth certificate, a driving license.

It tells you when you were born. That's your chronological age on the outside. And we know that every year there's one more candle on your cake. There's a linear pattern to chronologically aging.

Biological age is of course your internal age. It's the age at the level of your cells. I mentioned the hallmarks of aging. What's going on with the acceleration, the speed of ageing internally.

And all those processes, we've got things like proteostasis, epigenetics, inflammation, mitochondria, microbiome, autophagy, senescence. There's all these incredible hallmarks that we can now change processes biologically, internally, which means you can become younger.

And if you become young, you live longer. Because if think about it, the biggest predictor of how long you lived, what do you think that is? What's that?

It's your age. Okay, yeah. Because look, I mean, it makes sense, right? The older you are, the less years you have in front of you. The younger you, are the more years, you'll have it in from of view.

So the, more biologically younger, your you've got life span and health span, and youth span ahead of, Right, right. So we've got to get into reversing aging.

I do tests around the world. It's a very simple fingerprint test that comes to you wherever you are. You drop a few drops of blood on a card. We send that back to the lab.

And the one thing that I found from all the hallmarks, these processes I've mentioned, that sits centerfold is inflammation in your body. If we can get our bodies into an anti-inflammatory state as opposed to a pro-inflammatory state, we're reversing aging.

So the biological test that I do looks at that very specifically. And then of course, you know your number and then you can track your Because I mean, there's a lot of biological clocks that are out there and that we're measuring that sometimes becoming very commercially available to some that only through physicians.

And we have to look carefully at which clock are we measuring. Our whole body is governed by clocks and ribbons. But the clock that I like to test the most is the one that changes with your lifestyle.

Because you want to know, right?

Lifespan, Healthspan, and Biological Age

If you take on a new habit, say of sleeping, like we're going to be talking about, of getting seven to eight hours sleep a night, you'll want know that that's changing your ageing trajectory.

If suddenly start going into the gym more times than you're used to, if you change the way that you are eating, what you doing is actually having the effect that want, giving you the life span and health span that So that one number, that test, I use it as a marker of trajectory.

So in my Million Hour Club, for example, we test that every, magic number 114 days. You can use that to really track, love it. Wow, wow, yeah, those data points are really good.

Now with the biological age, that test that you're doing, is that an epigenetic test, or is it just a regular blood spot test? What is the test there?

Yeah, no, great question. So it is a bloodspot test but it's looking, as I said, specifically at inflammatory markers. And the markers that I use, we don't talk about these very often, but its a building block of life which is called glycans.

And glycans are like a protein and carbohydrate complex, which will have an effect on your immune system. And again, if you think about it, we are a defense organism from the moment we're born, and actually before that, from when we conceived, constantly having to defend ourselves against the world and your inflammatory state, your Immune System Regulation is a very, very big part of that.

So that's what we measure. We're measuring the activity of your glycans and whether they're over-activated, under- activated, what type are activated to see if you're in an anti-inflammatory or pro- inflammatory state.

Would you say that one of the primary reasons why people have so much inflammation is the toxic world we live in? Oh, hugely. I mean, there is so much in our environment, isn't there, in what we call our exposome, which we are being exposed to.

And when we use words like toxins, like what are we actually talking about? Yes, we're looking at the harmful chemicals that we putting in bodies as such, from our food, our ultra processed food from the things on the back of ingredient list that can't even pronounce and don't know what they are and yet we still call them food.

We need another word. This is food and this is not food but we But it's more than that as well. It's not just the substances that we're consuming, but it is also, I test for things like heavy metals, for example.

We are just exposed to those. I see them. actual toxins as such. But there's also things like relationships and stress and sleep that isn't designed to be toxic and yet we make it harmful to our body because of our relationship with sleep and our relationships with stress.

Mental toxicity. Yes, absolutely. Which creates oxidative stress in the body, which brings inflammation. This is all really good things that people need to take in consideration.

But I want to get into the meat and potatoes of today's podcast, which, you know, leads to everything that we've just been talking about for the last few minutes.

Let's sleep. Yes. Sleep, sleep, asleep. How important is sleep? I'm going to put it centerfold and top top. Number one, if you don't do anything else, prioritize your sleep You have to optimize sleep because there's a reason that we lie flat every night and are meant to go to sleep.

There is so much that happens. And I think we live in this topsy-turvy society. What we've designed in society, Sam, is we have designed a society that revolves around the day.

as opposed to roles around the night. So we have day here and we've got to do everything we want to in day and then we sacrifice sleep because we can't do anything we wanted to and so we sabotage sleep.

But what if we turn that around? What if said that my sleep is my non-negotiable because it has so many important functions that nothing is going to touch it.

I'm going get my say seven to eight hours of quality sleep And guess what? My day can revolve around that. That's what we need to reverse engineer. And then we will see how long we live and how well we lived and focused and productive and creative that we are as human beings.

We self-sabotage. You know, there's a biohacker, Brian Johnson, who has spent millions of dollars on all kinds of treatments, supplements, different data points.

And he says that the number one bio hack is sleep. Is that true or false? It's true. I've met him. We've had a conversation. And again, as I said, it is centerfold because when I talk about health, Sam, I talked about almost the sort of what I call the hierarchy of health.

So I described this as foundational, functional, focal. And what Brian Johnson is alluding to is that foundational piece. Sleep is a foundation and we have to pay homage to that and respect that.

And it plays out in so many ways. The trouble with sleep is though that most people don't see the immediate aftermath of what happens when you don' t give it the respect you need.

Because here's what happens, when you disregard sleep as being so centerfold, it shows up its effects not necessarily today, not necessary tomorrow, but in decades to come.

And then people aren't joining the dots, that the sleep that you sacrificed in your 30s and 40s when were building your success and following your dreams and living that ambitious life, then shows in 50s, 60s or 70s as early dementia.

cancer, a heart attack that you didn't want. Oh, man. That's not good. Right. Having those things. Now, when it comes to sleep, you know, it's more than just, hey, going to asleep for seven hours.

There's things that people need to do and consider when It comes asleep. So what are some of the things people have to be aware to make sure that they're getting good sleep?

Yep, great question. And here's the thing, sleep does not begin in the night. Sleep begins in day. As we've talked about, we are governed by clocks. And our biggest clock is, of course, our circadian clock.

That 24 hour, slightly longer than 24 hours, but that rhythm of light and day. Explain the circadian rhythm. Because I always hear this. The circadium.

Circadium. A lot of people that are listening to the podcast, they're probably lost right now. They're trying to Google, what is circadia? So break down the circadian rhythm for the viewers.

It's very simple in its mechanism. As I said, it's just light and day. We have the sunrise, we have sunset and our inner clocks, all our cells have got clocks.

They are governed by clocks your body innately knows went to sleep, it knows when the right time to eat should be, when to focus on creative tasks or logical thinking should for you, and we've just got to tune into it.

So the best example is probably if we look at something like cortisol, which is your stress hormone. And it's designed to be high in the morning when we wake up.

I prefer not to call it your stress hormone, I'd prefer to it our motivation molecule, your activation molecule because it gives you that get up and go.

So it is a bit like a car when you switch on that ignition, you have what's called a cortisol awakening response,

CAR. So cortisol shoots up in the morning, it's high.

And then it follows a very natural circadian rhythm, which is to then come down during the day and be at its lowest ebb during night and then rise again in morning.

So that's your circading clock following almost that pattern of light and day. But we do it again. When it comes to stress, as we did with sleep, we sabotage because we go, go go.

And so we don't let that natural cortisol curve happen. I know this because I test. You know I love testing. So again, one of the tests that I do, and I've got lots of people here in the US as well, is to get you to spit in a tube.

through the day, and when I've got those data points of your cortisol, which I can measure in your saliva through day and then at nighttime, I could see where you're overshooting on stress and where your undershooting.

Because I love stress, we all need stress activation, but too much of a good thing is not a thing. And back to what we were talking about earlier, when we're talking aging, stress speeds up aging.

Is there anything that stimulates that cortisol production in the morning? Oh, yes. Light, light, like we've got to love light again. You know, sun is beautiful.

Sunlight is incredible at the right time for the reason. So one of the things I advocate is to get out into the morning light. Because like I said, sleep begins in the day.

I have lots of what I call time-based biohacks because a lot of people that I see, Sam, they have got high ambition. high productivity, high net worth, and they are highly busy as well.

And it's the biggest, I say excuse that I hear, or not focusing on your health, which is I'm too busy. Which is why I developed what I call time-based biohacks, so that being busy does not have to be the excuse for not taking care of your heath.

We cannot use that as an excuse anymore. So the one that love the most is what call the 110. So what the 110 is? The 110, is to step outside for one minute every morning.

So you're getting that morning light. You're resetting your circadian rhythm. That's that natural blue light from the sun. Natural light, it's coming from from, the Sun, absolutely.

And then for 10 seconds, just ground yourself on the purpose of your day. Because also we know that people who have purpose in their lives live longer, right?

You add years to your life with purpose. There's some statistics that quote, seven years, you add seven to life. It's a little bit more complex than that, but here's the thing, if you know why your feet are touching the ground every day, and you've got purpose and your love, when you got gratitude in your day you will add ideas to a life, so do that.

Just do the one time every, get outside, harness the natural sunlight, ground yourself with purpose, and you will be adding ears to your life. Absolutely.

Now, are there things that will stimulate that cortisol production in other parts of the day? Because you were talking about the testing to see where it's at.

Are there other things to stimulate the cortisol in production where you really shouldn't have a stimulation of cortisol, let's say, at nighttime? Yes, okay, so there's two sides to this.

One is actually where you maybe do want to stimulate increased cortisol.

Inflammation, Stress, and Circadian Rhythm

Because I do the testing, I also see where people start to flatline as well. And that can happen when you don't have the activation. We talked about stepping outside to get the light, which is great.

I'm a real advocate of doing that during the day aswell. But sometimes people tell me they are just locked in work. You've got one Zoom call after another Zoom Call.

So we've gotta bring the Light indoors. And I have these wonderful blue light glasses that I use with my patients as well. And so in a lot of my programs, I will also send you the right health tech that is right for you, because a lotta people don't know what health-tech exists, devices that exist that can really help them.

get hold of the latest Gizmo and device and don't really know how to use it to its best ability. So I have blue light glasses, which I do send out to specific clients having looked at their cortisol curve, where you increase then your cortisol when it is going flat, when you know that you need more productivity in your day.

But also, I think what you're alluding to as well is that we can sabotage that with some of the things that were put in our bodies. And I'm talking here about caffeine and coffee, of course.

Because caffeine will change your cortisol response. Absolutely. So again, the timing of it is so important and it comes back to sleep aswell. It's because you also want your cortisone to be able to drop by the time you are ready to go to asleep.

What I see is when I measure that sort of 10pm level of cortisol, is I see people who are wired, but tired. And maybe you resonate with that, right? Do you want to go to sleep?

But this thing up here, this brain. It's processing the day, it's ready to process tomorrow, its building up on the anxieties of the days, all the things that you could have done, should have and didn't do.

You're talking too much to yourself. So when that level of cortisol activation is high in the night, That also shows up in other data points as well, and that's what you want to really start to reduce and minimize.

And caffeine, again, you know, that done at the wrong time changes the sleep pressure. It changes your sleep data, which now we can track beautifully with things like the aurora ring or the whip bands or other wearables that people are wearing.

Yeah. Now, what about some of these, like, screens, the phones, TVs? What does that do to your cortisol production? Yeah, so you're talking about blue light here, particularly when it comes to light.

So the blue in the daytime, in morning, great, it will actually increase and stimulate you, but only if you need it. It's not something that everyone should be doing with high intensity wearables and glasses, natural sunlight for sure.

But of course in evening we're having the opposite effect. The other thing that I measure as well is another hormone, which is called melatonin. And melotonin is the hormone that triggers sleep.

So you need your melatonin to be triggered, and it's triggered by light, but the differential between light and dark, which is why I say, please go outside into the natural light every day, because these lights that we have in our offices, they're a different type of lux, so we measure light in lux.

Outdoors on a beautiful sunny day as it is here when we're in Fort Lauderdale is about 100,000 lux On a cloudy day, it's even 10,000 lux, even a thousand lux.

You come indoors, It's 500, Even with bright light. So your melatonin isn't going to know the differential if you're only indoors in your normal lighting.

Right. It is triggered by the drop in light And caffeine can sabotage that as well. And blue light can do that, aswell. Now, can someone have way too much cortisol production?

And if they have too many cortisol productions for an extended period of time, what happens to that individual? Yeah, I see that a lot. This is one of the most alarming things I've seen on my testing.

Because people who have high levels of cortisol don't necessarily describe themselves as feeling stressed. passionate. They feel engaged in their work.

they love what they're doing. And so you mistake stress and passion. You mistake I love, what I'm doing to actually my body needs a little bit of time out.

It needs to oscillate. We're designed to isolate. So when I see high levels of cortisol, I know what's coming in the next decade. I can predict I, can see it even when you can't see, it you think you're thriving and It's a bit like my burnout story.

I thought I was thriving on the outside, taking care of my patients and my family and that go, go go of life. But inside, my stress hormone was telling me something very, very different.

And it's only when I started looking at my own data to that degree that I fully understood this. At what point does someone actually go into adrenal fatigue?

Adrenal fatigue. Okay, that's a very interesting term, because it doesn't exist in the medical textbooks. It doesn' exist as medical terminology. In fact, when we have adrenal fatigue, we are syndromes.

We have Cushing's when it's too much cortisol. When there's two little in a way. So we've got particular conditions, but adrenal fatigue in Social media world doesn't mean that at all.

But what I see on the testing is a shift of that curve to becoming non-responsive. We want to be able to respond to our day-to-day demands. You have to able do that.

And so adrenal fatigue is the sign that your adrenal glands are not getting the biofeedback that they need. So your ability to make the right hormone at the time is being jeopardized.

That can be experienced then from going from stress to going to burnout. Right. Yeah. And I mentioned that is, you know, when I worked at the fire department, the 24 hour shifts, right.

You know they give us 48 hours to kind of reset. But even that waking up in the middle of the night, going from your lowest heart rate where you're very relaxed to all of a sudden inside of burning building or a car accident on the interstate where you're extricating someone out of it and your heart rate's all the way up here.

And I actually experienced a point where I had adrenal fatigue and it got to a where it was almost irreversible. I wasn't producing much cortisol. And it wasn't until one of my business mentors, Dr.

Robert Willis, who was a former heart surgeon who went into functional medicine, world-renowned, he said, Sam, we got to work on you. And the first thing that he had me do is breath work and meditation.

And then other things, sort of supplementation, I started doing some of the IV infusions of high dose vitamin C, that helped a lot. And I was able to get myself back, but the side effects of what was happening with the adrenal fatigue, weight gain, loss of muscle mass, just extreme stress.

It's such a pivotal hormone. We've got cortisol, we've gotten another one called DHEA. There's a lotta hormones that start to interplay, insulin starts to to play a part.

Your hunger, satiety signals change, your weight will change. Brain fog is another word that comes up on the socials as well. And your ability to just function through the day changes significantly.

I'm so glad that you mentioned breath work. It's another one of my time-based biohacks as well. Oh, nice. I call it

the 660. So when you look at the research here, the magic number for being able to take control of your nervous system, and remember, cortisol, stress hormone, it's activating your sympathetic nervous systems.

To drop into that parasympathetic, that peaceful nervous, system you need to slow down your breathing rate. Right. And the number that comes up in the if you slow your breathing rate down to six or less breaths a minute, you've got agency of your nervous system.

You're into parasympathetic territory. Now that's interesting because, and correct me if I'm wrong, I believe in adult regular breathing is 12 to 20 times per minute.

So six times a minutes, You've done some really good work to get to that. We're all breathing too fast and we're breathing to shallowly as well. So we need to start to notice that as well.

Just notice what your regular breathing patterns are. And I'm not saying we, we needed to breathe at six all the time, because remember we to be able to oscillate from meeting the demands of our day to being able kind of restore and resurrect ourselves back again for when we're needed.

So the reason I call it the 660 is that every 60 minutes, on purpose, slow your breathing rate down to six breaths a minute. And you only need to do that for 60 seconds.

It's not that you've got to be in that state for the next half an hour. 60 Seconds of slowing down your breath. You've then got back control. Your body's been able to oscillate and then you're ready for.

The next part of your day. Nice. I'm actually going to start doing that more often. Thank you for that. Now, you know, everything we're talking about, how does everything that we just talked about right now gets the proper help through sleep, right?

When we talk about cortisol production and melatonin, and you see some people taking melatonic late at night, which I want to hear your thought process on that.

But what does sleep do to help correct some of these issues that are happening within your body? So let's maybe talk a little bit about sleep architecture then.

Yes. So in sleep, architecture, we have different phases of sleep and the listeners may well have heard of deep sleep on light sleep. And dream sleep at each stage of, sleep has a very, very important and very distinct function.

Hmm. If we look at deep, that real depth of that we get to is a time of repair in our bodies. And so much of our body needs repair. Our DNA gets damaged day to day, our gut lining is damaged as we're eating, just the process of digestion.

And, so, for example, if you're not allowing yourself to repair the lining of your gut, and now we know so more about the gut brain connection, the mind connection.

Of course, there's going to be repercussion on that. conditions like SIBO, for example, come up, small intestinal bowel, bacterial overgrowth comes up.

Leaky gut comes out again. This is terminology that we're hearing on socials, and it's increasingly making its way into medicine as well. And we've got to, again, start looking at what's triggering all of this.

back to what I was talking about earlier, inflammation in my body. So lack of sleep is doing that, not getting enough deep sleep doesn't allow that restoration.

And then we're getting into the dream sleep, the REM sleep rapid eye movement sleep. That in itself has a very specific function around memory consolidation and emotional processing.

So, you know, if you're someone who's woken up and you are a little bit irritable and emotionally labeled, then you thinking, why are you like this? Well, that might be because you haven't got enough of your rapid eye movement sleep, your REM sleep in the night.

And so we can see some of these behaviors play out. If you don't get enough deep sleep the next day, what some other studies have pointed out is that your looking for more glucose, you're eating more carbohydrates, your consuming more calories than you might ordinarily do.

And yet you not connecting the dots between, ah, that's because of my sleep. You're just thinking it's, because I'm hungry today. So there's so much that starts to pivot around sleep itself in your day to day function.

Although I said earlier, we don't see the effect of it for decades to come. That's the big signals. Those next day signals are there. from the emotions from how you're responding to food, from productivity as well.

So that sort of sleep quality, there is something important about sleep quantity as Well. And again, you know, magic number for me here is six. so I always talk about getting seven to eight hours of asleep.

Yes, but do not go below six because we know below six, your productivity starts being affected. And that's what a lot of people are more interested in, is how can I be my most productive, efficient, effective self every day?

And what we've seen from the research is that, in fact, there's a bit of research that was done particularly on business owners, and it found that if they slept for less than six hours a night, just for two consecutive nights, their productivity plummeted for the next six days.

Oh, wow. So you're not just affected the next day, literally wiping out your week. A whole week? Yeah. Yeah, that's not affordable for a business owner.

We don't want that. So, Doc, let me ask you this. What if, you know, I want your professional opinion on this, what if someone falls asleep when their body tells them to fall asleep and they don' wake up to an alarm clock, but they only get five hours of sleep?

The body naturally told them, says, hey, it's time to wake What's going on with that person's body? Or even if it's not five hours, let's say it four hours.

I know people personally that are like that, hey, they say, I don't wake up to an alarm clock, but I fall asleep when my body tells me to fall a seat, and I wakeup when body tell me wake me up.

And we're designed to have night wakenings. So nobody sleeps continuously through the night. We do have these mini wakinings and we fall back asleep again.

And most of our sleep cycle goes in 90 minutes-ish cycles. Yourself or your friends or colleagues who are waking up after four hours and thinking, I don't need more than four hour sleep.

Look at me, and they can get on with their day Yes, you can because your perception is also altered by not having enough sleep. So your conception of your ability is changed.

Remember the drop in productivity I just mentioned, You don't perceive that. You can't see it because we're also able to adapt to our environment. As human beings, it's one of our greatest strengths is that we are so adaptive, which means that, we can push through the day.

so you don' see the gap.

Sleep Architecture and Daily Sleep Habits

But like I've already said, It's going to catch up. Four hours sleep is going to catch up with you in your next decade

as the disease that you don't want.

And so you can feel fine. But what's really useful now is, of course, we've got access to data and information on our fingertips. I want people to use that.

They love data points, not so that they become hooked to knowing and understanding whether you slept well or not, only if your watch or your ring tells you, but just so they can become much more tuned intuitively to you.

So if you are only having four hours sleep, then I would really encourage you to think about what are you doing at that point of four-hours? Are you then turning and reaching for your phone and going, oh, I've had my four hour sleep.

I feel awake. Let me just scroll on social. Right. Or are use dropping into, do you know what I'm going to do? I just going slow my breathing down and I am going allow myself to get into another calm state to fall back asleep.

You don't want to be waking up after four hours. And again, thinking about what's keeping you, getting you awake. Because I see a lot of, I do see quite a bit of this and it's often anxieties.

You haven't processed the anxiety of the day. Again, you may not feel anxious, but just the data processing, it is the anxiety that's waking you up. I'd be very interested to measure your friend's cortisol level at four o'clock in the morning, because if that is spiking high, that also telling you you're not getting the rest that you are needing.

Seems like that person would truly benefit from meditation. Meditation, right? Yeah, for sure. Yeah. Very interesting. Now, when it comes to some of these data points, because, you know, You mentioned that multiple times and I use the O-Ring and that's the o-ring too, Right?

So let's talk about some Of these datapoints and truly how important they are when It comes too. Well, we're talking about the ring. So do you ever pay attention to your readiness score?

I do pay attention to my readiness score and I like what it predicts for me to a degree. So I don't just look at the score. And this is the important thing.

You can look the scoring on its own, the readiness school, for example, but you've also got to look a the data points that sit behind that one number.

that build that readiness. Exactly, that what's actually built that score. Because remember, and I've spent some time with the aura scientists and the data scientists, sort of got behind the scenes intel into this, is remember it's still very algorithmic based.

Absolutely. And it is personalized to a degree because it picking up on your own signals and it very, very good at doing that. I'm a real advocate for using wearables like Aura and Aure is currently my favorite.

But it's always important to look back at the personalization part of it for you and to interpret it in the context of your own intuition, of you own day and your lifestyle as well.

Right. So when we actually start looking at those data points that build up that readiness score or the sleep score, let's break it down. I guess let start with your REM sleep, your rapid eye movement.

What is that telling us? That is, that is telling us about that stage of sleep and how much time that you have spent in that state when your body is physically immobilized.

So it's picking up the lack of mobility in your, in, your movements, because when you've have rapid eye movement sleep, you're not, Your body's not moving.

Your brain is very active. and it's doing all the emotional processing, hence it is the dream state as well. And so you

want to be looking at how long is that when you're looking the data point on your wearables, is how is long that?

And the aim is roughly about 15 to 20% of your sleep. And again, it can vary with individuals, but that's what you want to be looking at. That's the optimal range.

Yeah, that the sort of optimal ranging. Similarly for the deep sleep as well. If it isn't there, look at the other data points to see what might be contributing to it.

So one to look out would be your resting heart rate. to have a look at what is your heart rate doing when you're sleeping. So your resting heartrate is you pulses per minute when your're resting and at night time it should be dropping to its lowest ebb.

so again if this is still high it's alright what was going on in the daytime. have I eaten food too close to bedtime? Is that alcohol not working for me when I come home from work and feel I just deserve it?

Have I got unprocessed stress from the day that I haven't processed? So it's really thinking about that. What is keeping that heart rate up? And then the other one, the data point that really love as well is your HRV, of course, which is heart-rate variability.

Which is the pauses between your beats. And that's a signal for your resilience, I guess, how adaptive you are to your environment as well. So if your HRV is very flat or very low or not showing signs of increasing, that is telling you again that you're not building up that stress adaptability.

Hmm. So the HRV gives you some data points to understand your stress levels throughout the day. Yeah. Now that high heart rate, because, you know, I love our ring and our wing will actually tell you like, hey, uh, probably shouldn't be eating so close to sleep because your heartrate didn't drop, where it needed to before you fell asleep.

And so when should people eat? Yeah, so this gets us back to circadian biology, timing. Timing is everything. So there's a lot of conversation about timing of eating, a little about time restricted eating.

Fasting, for example, but if we're looking specifically at sleep and how you can optimize sleep in that gap between when that last mouthful is to allow your body to then drop into sleep, the window is about three hours.

And I say this because the moment you put anything in your mouth and it doesn't matter if it's a big meal or if its that very last bit of dark chocolate that you have before you get into bed.

one mouthful of anything and you have to set off a whole sequence of digestive events. You've got to release the enzymes, the stomach's got start working, you've gotta move the bolus of food down into the intestine.

The whole system's gotta work. And for that whole systems to work is a two to three hour process. Is it so focused on digestion? Right, exactly. And we're not designed to digest when we are sleeping.

Right. It's that designed-to-digest when were awake. So if you're still digesting while you are sleep, then your sleep architecture is going to be affected.

You are sabotaging the point of sleep which is to rest and digest. Right? So to finish the digestion, allow your body to then rest and then to repair.

So you're not getting into that parasympathetic stage. You're allowing your vagus nerve, that nerve that the lungs never in your to really allow body, to get into a state of sleep so that it can then repair, so really think about the timing, you know, ideally no food three hours before bed.

So let me ask you this, the person who's listening right now says, wow, I love to eat my big meal right before going to sleep because that comfort food puts me to asleep.

Or where they say, i love having my Talenty seven layered ice cream because it just makes me so relaxed and puts to me sleep. What's the message you got for them?

The message is that sedation is not the same as sleep I like that. Sedation is not sleep. What's happening in their body when they do that? Have that big meal or have that big cup of sugar, ice cream, what's happening?

Of course, you're mounting a huge insulin response. So insulin is the hormone that's trying to get the glucose, the sugar out of your blood and into your muscles.

And it's having to work hard if you having that big bolus of food, particularly later in the day, because again, insulin, hormone itself has got its own rhythm and it is more effective in a day.

You can have that same meal Just before you go to bed, you can have that same meal at lunchtime and you process it differently. Fascinating. The science of that is absolutely fascinating.

How is it that the same food is then actually absorbed and digested in such a different way depending on the time of day that you eat it? But this again, you know, your insulin will mount a different response.

And then insulin and cortisol, again your cortisol is being activated as well. So you're mounting all these hormones that really aren't designed to be activated at that time of night.

What you want to do really is to move after you eat. So if you're eating, start moving straight away, right? If you can do 10 squats, what it will do is move that glucose from your bloodstream into your muscles where you could then utilize it.

And then it reduces the storage. So particularly around things like weight, for example, where, you know, people are very focused on weight modification and weight management as well.

Is that thinking about what am I doing after I eat this beautiful gelato too late in the night? Well, actually, If I really, really want it and nothing's gonna stop me having it, then please, please please move.

Go for a 10 minute walk, run around your kitchen, leave the dishes. You know, you go for your walk instead or do some squats. But ideally you wanna keep that window, keep the window clear.

And I know it's hard, like, even for me, Sam, as I grew up, my mom would always bring me breakfast in bed. From the age of 11 to 18, I had breakfast and bed And I like your mom.

I love my mom, but that became ingrained in me. Eating in bed became associated with the emotion of comfort and love and safety and security. And even now, I won't be shy to admit it.

My favorite place to eat is in my bed. And it takes me a lot of mental processing, being really intentional about it, not to eat in bed, because it's my go-to place.

But I know the benefit of keeping that window, and I will do that. There's also people around you in your home, they don't think they're sabotaging you, but they are.

And I'll name him out loud, he's called my husband. Every now and again, you will leave little chocolates on my pillow. It's a very loving thing to do.

But of course, me having that little morsel of chocolate just before I'm about to go to bed, it's not a great thing for my longevity. Right. So you got to tell them, husband, stop sedating me.

Yeah. Exactly. What about the person that comes up to you, Dr. Alka, and says, you know, I heard a nice glass of wine is good for your heart because it has the polyphenols in it.

and it makes them feel relaxed. What's truly happening when they drink that alcohol before going to sleep? Yeah, okay. First of all, let's not confuse alcohol with it's good for my heart.

I think we've debunked that some time ago when everything around resveratrol was being talked about. And resvertrol is a polyphenol. A poly phenol is the color that you get in plants, for example, that have got their own benefits.

But in order to get the benefits of the polyfenols, which is an antioxidant which fights inflammation, Which in theory then reverses aging, you would probably need to have a vat full of grapes and wine.

But you're going to get the negative effect of alcohol. Because again, most people think alcohol helps them to sleep. and it's back to the sedative effect.

Alcohol is a seditive. It is not supporting your sleep. Because when you look at people who drink before they go to bed and you at their sleep architecture, and maybe you'd like to do this, you know, put a video in front of your bed after you've had some drinks and video yourself at night, just to see how you sleep, not for anything else.

I'm not advocating you video anything, but video how sleep at nigh. And you will see that you move a lot You have a lot of micro movements, so your sleep is very, very fragmented with alcohol.

And also, when we talked about the types of sleep, the deep sleep and the REM sleep. It's the rem sleep that's affected more. So your dream sleep it's effected more and that partly might explain why the next day, often, you could feel more boggy and more irritable, more on edge because you haven't had that emotional processing going on as well.

So it's definitely affecting those systems. And what alcohol does as well is we talked about toxins earlier. So you're building up a toxin, which actually is a byproduct of alcohol.

It's called acetaldehyde. That's the toxins that is then building and causing damage to you, to your liver, your heart, etc. Wow. OK, so alcohol, the polyphenols that you would get in a glass of wine.

Sorry. You can get it at the supplement store without the alcohol. The alcohol is causing oxidative stress. It's messing up your sleep. Sounds like it's just harmful.

So people just need to stay away from it before they go to sleep or maybe just stay aware from completely if you can. Doc, now we're talking about sleep, what are some other things that can harm your asleep?

What are the things that can harm your sleep? So we've talked about stress. We've talked about caffeine, we've talk about alcohol. Those I would say are the three big ones.

If you can really zone in on that and your relationship to light as well. Let me ask you this. In our longevity centers, one of the pillars that we focus on is sexual health.

Sexual health is very important. When we talk of sexual heath, when people go to bed with their significant other, They like to be active, right? Is it the appropriate time to sexually active before going to sleep?

Oh, now that is a very, very good question. Because all I know is my heart rate does go up when I'm sexually. And I don't think a high heart rates good for sleep.

But I actually don' t know the answer to that. The other thing that I hear as well is that people feel sleepy after sex, of course. Right. So they think sex helps them sleep better.

So it's really interesting to dig into this actually. So the first thing that I'm going to say is don't use sex as a sleeping pill. Today should again.

Absolutely. Right. So there's more to it. What happens with sex? When we look at the hormonal side of it, you are releasing hormones. One of them is called oxytocin, and it's your bonding hormone.

It brings you that closeness.

Wearables, Recovery Data, and Eating Timing

And the other one is prolactin. And prolactin increases significantly and it increases even more with orgasms as well. And so some of the research points to, when we're talking about sleep and sex, is that where there is sex which is orgasmic, you're more likely to have better sleep.

But a lot of research, and I was looking at this quite recently actually, it's very subjective. People think they sleep better after sex. But what happens is exactly what you've alluded to is sex takes time.

Good sex. Takes time, right? Not the seven minute guy, not the 7 minute sex, good sex take time and because it takes. And you're having it at night. Then of course it's eroding into what would be sleep time because you adding that extra.

hour, let's say, of sex when you would otherwise be sleeping. So some of the research points to delayed sleep onset. And that's important to think about as well is, again, back to quantity, we do want to get at least six hours, ideally seven to eight hours of sleep.

But what's interesting here is that because of those hormonal shifts, what is also happening is the quality of this sleep is improved. So you are getting better deep sleep and you're getting a better dream sleep with sex and sleep.

But there's just not enough research. The research that is out there is based on questionnaires and people's remembering and peoples' emotional experiences.

And there has only been, there isn't much. I came across a few studies which have looked at specific data and then exactly as you described, the heart rate is going to go up.

So, you've got to think about Is that helpful for you or not? And there's also another difference, which is between men and women. is that men tend to raise an even higher prolactin response, so that hormone goes up, and that's the one that can induce then sleepiness afterwards.

So that soporific feeling, that feeling of sleepness, men are more likely to fall asleep after sex, whilst the woman is left scrolling on her phone, trying to falling asleep.

But here's a thing, right? Sex on its own is not going to fix sleep. We have to be very, very mindful of that, to not use it as a proxy. And when I say sex, you know, there's also masturbation to talk about.

Again, some people do use that as way to help them fall asleep, but it's not going to do that. So again, sex plays on the nervous system. state of your nervous system that you've already got.

So if you're entering sex in a stressed state, for example, just trying to have sex to please your partner, and then both thinking and fall asleep afterwards, it's not going to Have that effect, because you the sex is sitting on top of a dysregulated nervous System.

You're going To end up with a higher heart rate and an inability to fall Asleep. Interesting. So if you were to, as a physician, give your recommendation, would sexual intercourse with your significant other be best before going to sleep or when you wake up?

Oh, daytime sex for sure. Yeah. Daytime sex, morning sex. Again, you know, when we look at that kind of activation, it can be very stimulating in terms of raising that cortisol response as well.

It can give you that sort of get up and go, which might sound contrary to what I'm saying in it helping you to fall asleep. But again, it's basing that on that circadian rhythm as well.

And listen, you know, in terms of timing of sex, I think we have to bring the whole relationship piece into it. You know if you're having sex in the night, after a night out, with alcohol in in, the back pocket aswell, The impact of that is going to be very, very different on your sleep than it would if your in a very loving, nurtured relationship and both falling asleep together.

So I don't think we can be as distinct as to say, even though I have said daytime always is, you know, to think about what is the actual whole relationship looking like.

Yeah. And we're talking about overall health, not just that one night out, which then you're going to have to focus for the next six days, right? The week to fix up that bad sleep that you had.

Now, Other type of things that people are utilizing to help them sleep. People are taking certain supplements, like the melatonin that you talked about earlier, that your body can naturally produce, but people aren't taking these supplements.

Is that good or bad? I've heard a lot of mixed reviews on that. Yep. So we've got to get back to that hierarchy of health, haven't we? Foundational, functional, focal.

Get the foundations right. Be of the mindset that I'm not going to sabotage my sleep. Look at things like we've said, the light and the environment and what you're doing before you go to bed.

Then we got to get functional. What are your hormones actually telling you? Measure your cortisol, measure your melatonin, know what's going on in your gut, test your biological age, and then get focal.

And that's where supplements can come in and have a good part to play. they're the adjunct. You try and do that without the rest of it, the supplements aren't going to help.

So the thing, you know, things like melatonin, for example, melotonin has been incorrectly used. Because remember melotonin is the hormone that helps you fall asleep, but it doesn't keep you asleep.

So you might think you're sleeping because of it, but actually it's just triggering that initial onset of sleep and nothing else. The rest of your sleep may not follow the right architecture that you need for the deep sleep, and the dream sleep.

And also the dosages that are in the melatonin that can access and have on prescription as well, are very different to what your own body is naturally producing.

The other thing people look at when it comes to supplementation is magnesium. Magnesium is an important one. And because I test, I do see a lot of magnesium deficiency.

Any type of magnesia you would recommend? Right, again, this is where it gets very confusing and I see lots of people taking the wrong formulation. So what matters with magnesium is formulation, timing, dosage, duration.

Right. And it's magnesium glycinate, for example, that is going to have the better benefits on sleep. So back to getting focal, why are you taking magnesium?

Oh, because I want to sleep better. Right. Magnesium glycinate. Why are taking Magnasium? Because my gut's not working so well. I've got constipation.

right. magnesium citrate. so you've really got to think about the formulation for what you want it for. Other ones that I come across as well, things like adaptogens, like ashwagandha, which can help to give a calming effect.

And sometimes you do need to be in a calmer state of mind in order to then be able to sleep. Right. What about tryptophan? Tryptophane on its own. Yes.

A trypophan, interesting molecule, is a precursor to serotonin. Serotonine is your happy chemical. It's your happy neurotransmitter. So in some cases can make a difference, but ideally you wanna go to tryptophan rich foods.

You wanna be going to foods that can help you have that. Think about that last meal you're having and having colorful foods, we're talking about polyphenols earlier that will naturally contain the trypophas that we'll then help to sleep is going be a better.

But again, measuring these things, I measure these precursors and so we can really, really pinpoint in a very targeted way, is trypsophane going help or not?

Please do not just go out and buy a random bucket full of supplements thinking, oh, I'll take a bit of magnesium and a little bit tryptophan and bit Ashwagandha and I'd be fine.

Get your data, test, don't guess. It's my biggest mantra. And I say it for a reason because the reason health can also go in the wrong way, even though you've got the right intention to take care of yourself is because you're doing the long thing for your own body.

What works for you may not work for me. That's because we're unique. We're very different. I met a guy that he was eating turkey to go to sleep. Interesting.

Because of the tryptophan in the turkey. Very interesting. I don't know how that really worked for him, but maybe it was a mental thing. Other things for people to consider with sleep, especially if they're already using devices like the Oura Ring, and they see that their sleep is not going as well as they want it to.

I want to talk about things like sleep apnea. Yes. How that affects sleep and what people have to watch out for if someone out there doesn't know they have sleep Apnea?

Oh, I'm so, so glad that you brought this topic up because it goes undiagnosed until you have a heart attack in the middle of the night. Oh boy. So let's talk about sleep apnea.

What is sleepapnea, first of all? Sleepapnia is where you stop breathing, multiple times throughout the night to the level that your brain doesn't get oxygenation.

And because then your doesn' get oxigen, your body kicks in in this panic mode and your carbon dioxide levels go up because your oxygen levels are low, you're carbon oxide builds up and then that triggers you to take a breath to get a little bit more oxygen and again you drop back into not oxygenating.

So you are basically not breathing throughout And the net effect of that then is the next day, of course, your body will notice that you will feel drowsier during the day.

You'll be the person who could be watching TV and dozing off, not being able to read more than three pages of a book and wondering what you've just read.

drowsy driving happens, there's accidents that we hear about that momentary lapse in concentration, let alone the impact on your appetite and emotional regulation that that, we've talked about.

And then sleep apnea is also very strongly linked to blood pressure. So people who have got this condition of sleep Apnea, then also go on to develop high blood People are not testing high blood pressure enough.

When is the last time you put your arm in a machine and tested blood? People don't do that. And again, I'm a big advocate of wearables and what I often have in my doctor's bag and I send to my patients or part of my programs is a continuous blood-pressure monitor.

You wear it like a wristwatch, like you would wear a whoop even. or your Garmin watch. It's a little thin strap that you put on and it's continuously measuring your blood pressure so that, you know, whether your levels are up in the night or down in night, You do not want to be the one who has that silent heart attack at six o'clock in morning.

And you've got to start at the cause at, the root of it, hidden sleep apnea. And I don't know if you're somebody who sleeps next to a snorer at all, but snoring can be very irritating and you want that person to stop breathing.

Thank you very much. So I can get some sleep. But if your somebody, who's sleeps, next, to, a, snora, Or if you're somebody who the person next to you says you snore a lot, then please pay attention because it can be one of those symptoms, one sleep apnea because when you snore, you're not oxygenating where the back of your mouth, your oral pharynx, for example, is being blocked off.

Your nasal passages are being block off, so you are not getting air to circulate. So really pay attention. And then back to the wearables and the data, the one number you want to look at is your oxygen levels.

I had a friend as well, Sam, who got very inspired by me wearing my aura ring and talking to him all about it. But he said, right, I'm going to go out and get myself an aura wing too.

So he did that. I didn't see him for several months. And then when I did, oh, show me your data. Now his oxygen levels were dropping to 94, 95 percent at night.

OK. And he didn't really think to make anything of it. But when I saw it, for me, as a doctor who knows how to interpret data, big red flag to me. I said, but your oxygen level's dropping, what's going on?

He said yeah, you know, in the mornings, I've just always thought I'm not a morning person. This takes me a few hours to get going. It's not that you're not morning a person, it's that your brain's had no oxygen all night.

And then I went on to test him for sleep apnea, and there was the hidden diagnosis. Oh, wow. What are some contributors that cause sleep apnea. Right, yes, so thinking about that, as I mentioned, the snoring is a part of it.

So sometimes if you've got a big neck circumference, for example, that can be a giveaway sign. Or if have you got to a large neck size, because that kind of then affect how oxygen moves through your passages.

Weight in general as well can have an impact. Okay. Being overweight, having heart disease, high blood pressure in your family, those are triggers that you want to look at for yourself.

And snorring, So, Doug, you keep talking about this doctor's bag. We got to see what's in it. Let's get that doctor bag over here. OK, let's do that. Which one is it?

It's the black one on the wall. Yeah. All right. Have a look. Okay. My lovely doctor. Right. This is like old school, like the old-school doctor who comes to your house.

Oh yeah, you should always ask your doctor what they have in their doctor's bag, because you know what? We're living in the 21st century. We've got to have the most amazing devices in our doctor bag and really play into the data, the devices and what can help us with.

So, we were talking about sleep apnea. Well, I happen to here in my doctor bags, this sleepapnea device that I use. In my programs I send to my patients.

This goes on your finger. Okay. And it measures your oxygen levels.

Sleep Apnea, Monitoring, and Home Testing

While you're sleeping? While your sleeping. Okay This is on your wrist like a wristwatch and it's measuring your sleep architecture data and this is your chest whilst you are sleeping and its looking at movement and you put all of

that together and you will have an incredible amount of information about how you slept.

This is a sleep study that you can do in your own home with this simple device that in 24 hours, I will be able to give you a diagnosis, not just of whether you have sleep apnea or not, but also whether what's contributing to it is going to result in a very, very specific kind of treatment for you.

OK. And this, you can do this in your home. We used to have to go into labs and into sleep labs, and stay in strange beds every night with big moths on our noses.

Of course you're not gonna get it. And 10 people watching you. Right, exactly, like all the cameras on you- Like of course I can't sleep. Precisely, how on earth are you supposed to get a good night's sleep with that?

I now send this to her. What is that called? So this is a sleep apnea testing device. It's only physician available because it's so scientifically accurate.

And so this what I use for diagnostic purposes. So that's an important one. What else can I show you in my bag? Oh, there was something else that we were talking about earlier as well, which was talking food late at night and sugar.

I want to show one of these. Have you seen one these before? Is that a continuous glucose monitor? So from this, this is the device that you use to pop a glucose sensor onto your arm like this and then it pops onto arm.

And this is the sensor that comes out of it. So you have this. Is that the one that they're ordering partnered up with Stella Stella? No, no, it's a sim.

They're all the devices themselves can are all very similar. So when you look at the technology, the technolgy is a little monofilament in there. You can see that little filament.

Right. And that's in your arm and it is tracking your glucose just underneath the surface of your skin. Nice. I don't know if you've ever put one on your own, but real real game changer when it comes to understanding how sugar and glucose affect you and can change your behavior, your approach to food very, very quickly.

Because once you see for yourself what it does, it just changes the way that you eat. That's amazing. And what's really interesting, again, I do this with a lot of couples as well, because it's one thing to put the device on your arm.

It's another thing, to know and understand why it goes up and why goes down and what happens in the middle of the night. So what I, do with my programs, is I go through the data and I support you with the interpretation of them.

I and do, this a little with couples, as, well. Again, did this, with, my husband, we did, together, where both of you will wear the, device at the same time.

and most nights couples and families are eating the same meals right right and so look at the differences in your glucose response and it's fascinating everyone's different everyone is different um and i did attempt this i mentioned my husband again um i Did attempt, this with my, husband because i wanted him to drink less alcohol.

So I thought, you know what, I'll just get a sugar sensor on his arm and they'll see that the glucose levels go really high with alcohol and he'll decide that he's not going to drink much anymore.

Didn't work. Backfired. The glucose level did not go up with him, even though I've seen them go out with so many others of my patients. And I I think that's very telling, you know, it's so important to really understand what your body is doing.

But it is not just about glucose from the food that we get because your sugar levels can go up. when they need to. So for example, if you're exercising, you want your glucose levels to go up.

You want the fuel to be available to your muscles to, be made coming out from your liver and go straight into your muscle. See you, want that to show as a rise, but stress as well.

We talked about stress earlier, stress can cause a sugar rise as, well, so I get a lot of people who seal their, see their data, put the sugar thing on, the sensor on see, their sugar going up and then contact me to say, I haven't eaten anything.

Why is my sugar up? Why's my glucose up, because you're mounting a stress response. So it's again, hidden signals that we can now pick up. And speaking of stress, I've got another lovely device in my doctor's bag, which I would love to share, What's that?

You know what it is? So this is a vagus nerve stimulator. Oh, okay. So remember we talked about vagous nerves, we talk about stress and sympathetic system activation, and we've talked peace and your parasympathetic nervous activation.

Well, this stimulates your vaguous nerve, which is your para-sympathy system. It does like a Vegas nerve reset? Yeah so you wear it like a wristwatch with a strap or you can clip it on with the clip and I like to clip near my neck and it can be hidden you know you don't have to have see it and what it does is it stimulates your vagus nerve so a little bit like the breathing and sewing down your breathing, it simulates that so does this.

So what I do and this is so so interesting and how I make it so targeted is When I test your cortisol and we get your cortisol graph, you will know the exact points in your day when you need to pull down that cortisol level.

And most people I meet are busy and they don't want to go and meditate under a tree for four hours in order to bring that cortisone level down. Nobody has time for that.

You put this on your wrist or you put it on you neck, You can program it with an app to automatically start the activation, it will send the vibrations and the frequency, the right frequency to change what your nervous system is doing so that you can still be working.

You can be on your Zoom calls, you could still driving your car whilst at the same time having regulation and oscillating, which is exactly what we need to do.

So it's things like this that I absolutely love. I actually just bought a Vegas Nerve device. Having used it yet, I have to actually take it out, set it up on the app.

those around your neck. Yes, pulsetto. So it's in the box for like the last three months. I just got to set it up. Now that just motivated me to do it.

Amazing. And I say this with everything. Anything new that you do, track it! You have to track it if you want to hack it, because you can put this on and subjectively think, do I feel different?

But when you're getting some objective data, so start to look at your resting heart rate, look your HRV. That's the one to check here. Is my HRRV, my heartrate variability, and my ability to respond to stress being improved by actually this vagus nerve device?

Right. Anything else in that bag? Yes. What else have I got to show you? Of course I have. Right, what can I show? Oh, this is your light. This is my grip strength meter.

So what's important to know is what your grip's strength is. You literally hold the device, press start and then squeeze, squeeze squeeze. As hard as you can and you get a number for your group strength.

Why is this even important? Why's it even relevant? Because your grip strength is a proxy marker for your muscle strength. And we know that over time, as we age, we lose muscle-strength.

Sarcopenia, from the age of 30, several percentages, decade after decade. And then for women, particularly through the perimenopause and menopaus, that starts to accelerate.

So what you want to be doing is maximising the strength of your muscle and your grip strength is a very, very useful proxy marker for that. So and there are lovely graphs that are related to your age and your gender as well that you really want to start mapping yourself against not the chronological age that You are but the biological age That you want To be to really start to improve your your grip strength and and There's lots of ways of course of improving your group strength And the other thing I carry in my lovely doctor's bag, of Course are these which are grip-strength meters and So this is to practice how to increase your grip strength, not because you just want to get stronger at your wrists so that you can grip harder, which is important in itself.

So do this regularly. I have this down in the kitchen next to the hot water tap. Every time I go and get myself a cup of tea, I can do some grip strengthening.

Keep this visible, but also so you're then reminded to strengthen other muscles as well. So that's really useful. And what else have I got to show you?

Oh, no, I have another vagus nerve device as well. Oh and this one, might like this. This is a device which looks like a vape, but it isn't. You breathe into it and then out of it.

What it's measuring is whether you are in a state of carb burning or fat burning. That's, what's the company, there's a company. Lumen? Lumin. Right. Are they doing VO2 max on that as well too?

Not this device that I have here. But I do have a, funny you mentioned it, I've got a VO 2 max device in my doctor's bag. Is that still an RMR then, resting metabolic rate?

Yes, exactly. That's what it's looking at and it is measuring. And again, this is important. Again, I keep saying this, don't just go and buy the thing.

Know what you're tracking. Do it with someone beside you that's going to be able to help you interpret the data. The apps are great. but they're not personalized enough.

So it's the conversations that you want to have. You know, I do this all the time with my clients is let's start looking at the data, not just what comes from one device, but what come from multiple devices and start pairing it all up.

But I will also show you one of my favorite devices, which is this. And again, this is only physician led at moment. but you mentioned VO2 max. so your VO 2 max, what is that?

That is how efficiently you're able to use oxygen under maximal exercise. And that again is a very, very important marker related very specifically to longevity and mortality.

There are some beautiful graphs that show that if you have got an elite level of VO2 max, And you compare that to having a low level of VO2 max, your mortality difference is statistically very, very different, of the order of about a 50% difference.

So you really want to start increasing your VO 2 max. You want it to become an energy efficient human being. And one of the ways to do that, I'll give you another time-based biohack very, very quickly, which is I call the 220. So what that means is walking for two minutes and then sprinting for 20 seconds.

Walking for 2 minutes, sprint for twenty seconds, because what's that doing is getting your heart rate going. it's increasing that muscle stimulus as well.

And so that's a very easy way for, in an everyday, to increase your VO2 max. Of course you can go harder at the gym and if you're somebody who runs already, you want to be doing more than that.

But this device, Sam, I just put it on your chest, put on the app, and within three minutes, we have a reading of your vo2 Max. Oh wow. And again, it's been compared to sort of the gold standards, which are going into a lab, putting a mask on, getting on a bike, and really pushing yourself.

And it is a very, very good proxy. Which is why I love using it, because it accessible and it in clinic and easy to use. So, yes, now we have my doctor's card.

The one thing I'll say to the viewers and listeners is, what does your physician's doctor bag look like?

Doctor's Bag Devices and Longevity Tools

because I haven't seen many physicians walk around with a doctor's bag like that. So that's pretty awesome. I love it. Dr. Elka, right now there's a huge movement going on here in the U. S.

called the Maha Movement, Make America Healthy Again. What are your thoughts about this movement? Make American healthy again, I would go so far as to say, make every human healthy, again.

I think this is beyond America, right? This is about actually, we all have a responsibility to be healthy. And I love it. I it's a really important movement.

When it is positioned in a way that brings people together, I think that's the difference that is going to make the differences. I thing we all have one responsibility.

All of us, wherever we are in the world, we have all one responsibilities that unites us all. And that very, very simply, Sam, to take utmost care of this incredible vessel of life.

Absolutely, I agree. Dr. Oka, this next question I'm going to ask you, I want it to come from the heart. So take your time answering it, take you time thinking about your answer.

My question to you is, when it comes to sleep, what is the true problem? And based off of what you do, What is this solution? The true Problem, When it Comes to Sleep, is that we devalue it because we see it as inactivity.

And the society that live in right now doesn't value in activity. It calls it laziness. The badge of honor that wear now is the badge busyness. Being busy, being seen to be busy.

being seem to doing things, achieving things being things. And so we don't respect when we see that that isn't happening. And the problem is we've therefore corroded night and day.

We think sleep is a time of inactivity when actually sleep as the time the most activity in our brains and in bodies. So I want people to stop thinking about sleep, as doing nothing.

I want you to think about sleep as you being at your highest level of performance. And once we can change that mind shift that sleep is a time when I am doing and I'm allowing myself to be, that is what will make the difference.

Do you know what I say to myself every night before I go to bed? I said to my self, thank you. Say thank you body and thank your brain for doing everything that you've done for me today.

Now I'm going to sleep because we're going again tomorrow and we are going against tomorrow. And the only way we can go again, tomorrow is if we sleep.

Right. Amazing. So that right now, um, I want to have a little fun. I have one of my favorite podcasts. It's called The Diary of a CEO, and he came out with these conversation cards.

So I wanted you to grab that. You're going to take off that upper sleeve and then just randomly in the middle of that thing, grab a card. And I don't know what the card is going say.

you're gonna read the cards that you pick and answer it. Can I change it? What you picked is what it is. Oh. Picked a blank. Look at that. Oh, the joker card.

So, I guess you do get to pick another one. This is fun. We made it fun! Love that! Never done that before. Okay, let's go again. Here we go. What is the unobvious thing that you struggle with?

What's the one obvious thing? Okay. I know I'm gonna answer this. I wanna talk about drivers of health here. What drives you to do what you do? Because I do believe that inside of us, we all have a primary driver.

So the unobvious thing that I struggle with is, I'll call it stability. And I say that because what drives me is variety. So when I look at drivers, and you'll know if you've looked at any of my work, Sam, that I love acronyms.

They make it easier to hook actions on and to do things and understand things. So, when talk about drivers of health, it's D-R-I-V-E-S. And what I've discovered through all of research, remember I had this big pivot, I have to understand what drove people towards health rather than towards sickness.

And I discovered these drivers of behavior. And the one thing I realized as a very traditional GP at that time when I was very conventional was that the 1 thing, I never asked my patients was why I didn't ask them what drives you.

If I'd say to them, exercise more. I don't take time to discover why that mattered to. Hmm. If I'd give a diagnosis of high blood pressure, I wouldn't take the time to find out why it mattered that they didn't have that.

What was driving them? What's their motivation for life? And so when I look at drivers, one of the drivers that I've come across are we are driven by a need for what I call donation.

So to give and be part of the world and feel like we're giving and donating and giving back. And that's a very strong driver for our behaviors and what we do.

The second is relationships. So we are driven by the need to have really strong, meaningful bonds and that sense of togetherness. At the same time, we've also driven the needs for independence, autonomy.

Do things your way. be in control of the direction of life that you're traveling in. Then we've got V, D-R-I-V, which is variety, the need for things to be spontaneous and at times surprising, but also variety is the spice of live, doing different things, trying new things having new adventures, different challenges, putting yourself out of your comfort zone.

Closing Thoughts on Sleep and Health Drivers

Then we've got the need for E which is evolution, which has growth. Ultimately, you know, if we're not, we are not growing, We're stuck. We want to grow, whether it's the mindsets, physiology, physique, any of that, right?

You want be growing in life, learning, loving learning. Then, then we have the other R which recognition. And that for me means the idea that what you do is of value and is valuable.

Not, hey, look at me, I drive a fire's car, but no, what I'm doing is of value to you. And I want that to be valued back. Sense of recognition. Then the final D-R-I-V-E-S is stability.

So that sense of having rhythm and routine and stability, so when I looked at that question, What is the unobvious thing that you struggle with? It is surprisingly the rhythm in the routine.

And my children will attest to this because they'll see me start things when it comes to health routines. But then I want to change things up because I'm driven by variety, which is why I am here with you now doing something new and novel.

And I love having new experiences. So it's harder for me to stick to a forever routine. And yet actually, when you go

on the social medias and you know, on on, the internet, it is all about, we've got to have good rhythm and routine and I'm an advocate of that as well.

I do believe we need to think about back to circadian clocks and how our bodies are governed. And we need to think about the rhythm of the light and the Rhythm of The Sun and The timing of when we eat and chronobiology and all of that, and really step into that.

Fix your wake up, fix your sleep time, how long, you know, have the length of sleep looks. Have the rhythms and routines that allow that do the 660, do they 880, which is 80 minutes of no screen time to get your eight hours of asleep.

But at the same time The unobvious thing that I'd struggle with is exactly that, is keeping this very same rhythm. So I will have routines and I'll have rhythms, but I love to change my routines, and change rhythms.

But I always track and I was monitor to see whether my new routines and my rhythms are giving me the stability that I need, that are being helpful to me.

And that's where my data tracking and looking at my habits really comes into play through the testing that i do. What an interesting question. I have no idea that it was gonna take me that way.

It's important for people to recognize it the way you recognize what it is for yourself and how to address it and establish the data and make sure it works.

And also, if we come back to health with this, you know, If you're somebody that is driven by relationships, for example, and you really love being around people and notice that that's when you come to life and want to build a habit of exercising more.

then you might be the sort of person that instead of just going to the gym and doing weights, you wanna be doing group sports, take up tennis, play football.

That's gonna give you exercise at the same time as building relationships. Or if you're somebody, I think using those drivers really to think about how you then create those healthy habits and those health routines and rhythms for yourself is really important.

Again, if your somebody who loves variety, think about the food that you're having. You're never going to be someone who says, who's told by your PT, you've got to have chicken every day.

It's not gonna work for you if you are somebody who is driven by variety. you all gonna want more of a, varied foods and different colors on your plate.

So tap into that. I really would encourage people to just spend a little bit of time thinking of those DRI, VERS drivers that I've just shared, which one is it for?

And how can I use that? to live longer, get stronger, become younger, be healthier. I love that. And Dr. Elka, if there's someone that's listening to this podcast that really resonates with today's message, what's that last thing you can leave them off with?

Test, don't guess. The person you spend the most time with is you. So you have to get to know yourself the best. Know how your body's made, know how you're body is functioning, and know what it needs from you.

That's the truth. I always say, trust in God, everybody else produce data. Dr. Elka, it was a pleasure having you on a Healthy Point of View podcast. This was extremely informative.

And as always, my goal is to change at least one person with their health. Thank you, thank you Guys, this was a fantastic podcast. Sleep is extremely important.

As Dr. Elka said, you gotta make it a priority. It is the number one biohack. This is not just something that people are saying out here to get the views and the likes.

this is about your health. Tap into the data, follow Dr Elke. She talks so much about these different things on her page. We'll have all the links down below.

Make sure you subscribe, share this with some friends and family, and we'll see you for the next one.