Cardio is not effective for weight loss.

Why isn't it helping me this way?

It seems like a bit of a head spin.

There are two reasons.

Number one is...

That's bad news, isn't it?

That is bad news.

Dr. Phillip Lottie.

The world-renowned heart doctor.

Has conducted over 3,000 heart surgeries.

His book, Stay Off My Operating Table.

Providing you to make America healthy again.

When you were 40 years old, you described yourself as being morbidly obese.

I was 100 pounds heavier than I am today.

I was going to end up on my own operating table.

I came to realize the true root cause of our health problems.

Sugar is more addictive than heroin.

Processed food is addictive.

88% of adults are not healthy.

And 600,000 people die from heart disease every year.

If we don't change the course in the next 50 years,

we're not going to have a society left.

A very young woman and a 30-year-old

ended up on my operating table.

And I had to go tell her young children,

I'm sorry that we weren't able to save your mother.

Was her heart condition preventable?

Yes.

The surgeries that I do shouldn't need to be done in the first place.

I want people to be healthy again.

Dr. Ovedia.

What is the diet that's going to keep my health intact?

That's really the million-dollar question.

So...

Dr. Ovedia.

Tell me the mission that you're on,

and also tell me why you chose to pursue that mission.

So I am on a mission to normalize health.

I want people to be healthy again.

And it really was my own personal journey

that set me off on that mission.

I found myself at a spot that I was a very unhealthy heart surgeon.

And that's going to sound pretty surprising, I think, to people.

You know, they think that here I was,

here I am, a heart surgeon,

in many ways at the pinnacle of medicine

and trying to get people back from the brink of death.

And yet I was headed down that same pathway myself,

and I was so unhealthy myself.

And I had to figure out how to save myself.

And that has really opened my eyes to how much we need to save society at this point,

because we are a very sick society, and we need to be saved.

When you say you were an unhealthy heart surgeon,

give me a picture of what that looks like in reality.

Yeah, so I was morbidly obese.

I was 100 pounds heavier than I am today.

I was pre-diabetic, and I was in my late 30s

and realized that I was going to end up on my own operating table, so to speak.

I was walking the same path that so many of my patients had walked down.

I had family history.

My grandmother died of heart disease.

My father has had heart surgery,

and I knew the path that I was headed down,

but I didn't know how to change that pathway.

And that's the problem that I'm really trying to solve for people,

to get them to realize how they can change

what many of them see as their destiny.

When you think about our destinies, we often look at our parents

and think, you know, that's probably the clearest indicator I have of where I'm going.

Because of, you know, genetic and environmental factors,

when you look to your parents, what did you see?

Yeah, so my parents were both overweight,

had both struggled with obesity their entire lives.

and as I mentioned, my father had developed heart disease,

and I was under that same impression that there really wasn't much I could do

because it was genetic.

But I think that's one of the biggest myths we need to dispel around medicine today.

Very little of the sickness that we see so prevalent in society around us is truly genetic.

And the reason that we know this is because human genetics don't change that guickly.

Yet in the past 100 to 150 years, we've seen this explosion, this epidemic of chronic disease,

things like obesity, diabetes, even heart disease,

the very condition that, you know, I have spent my life treating,

was relatively rare, was almost undescribed 100, 120 years ago.

And so we know that human genetics don't change that quickly,

yet we see these diseases developing so quickly.

And that should tell us that it's not genetic.

Yet almost everyone, when they go to their doctors and they ask why did this happen,

the common answer they're going to get is because it's our genetics.

Was there a moment, like a turning point, a fork in the road,

a moment where you looked yourself in the mirror and thought,

today is the day where I have to make a change?

You know, there were many times during my life when I told myself that.

And I would make changes and I would have some short-term success.

I would change what I eat, I would try and do different activities, I would lose some weight.

But like many people have experienced, it didn't last over the long term.

My turning point really came a little bit unexpectedly for me.

I was actually attending a medical meeting, a conference of heart surgeons,

and the speaker, one of the guest speakers was a journalist by the name of Gary Taubes.

And he had just written a book at that time called The Case Against Sugar.

Prior to that he had written good calories, bad calories, and why we get fat.

And as I sat there in that audience listening to Gary talk,

and Gary introduced some concepts to me that I really hadn't heard before,

that the types of food that we eat may be more important than the amount of food that we eat.

It made a lot of sense and it sent me down a pathway where I started to think differently about my health.

And so I read Gary's books and I eliminated sugar at first and started changing the foods that I was eating.

And I had the same short-term success that I had had before.

I was able to lose a bunch of weight and I said this is great.

But I realized that something was different because month after month, year after year,

I was able to maintain it and I was, as I learned more as I walked down this journey,

I came to realize what is at the true cause, the true root cause of our health problems.

And understanding those true root causes of our health problems is what has now led me to the long-term success.

And I can sit here now, you know, eight years later and say that I know that I have truly tackled my health challenges.

And now I can help others to be tackling their health challenges as well.

What was the approach that led to short-term but unsustainable success?

Usually it was the counting calories. It was eating less, doing more.

It was eating a low-fat diet. It was all of the advice that we have heard our entire lives.

It was everything that I had been taught in school, in medical school about, you know, how to educate people on being healthy.

And yet what I realized in retrospect, and I didn't really recognize at the time admittedly,

but I realize now, is that it wasn't working for me and it wasn't working for my patients.

But I had fallen into, I think, one of the common traps that we fall into.

And when we give people advice and the advice doesn't work, we just assume it's because people weren't following our advice.

And we as individuals, but certainly we as the healthcare system, are not very good at considering that maybe we're giving lousy advice.

You're not just giving advice as a medical profession, you're also giving medicine.

What's your perspective on medicine and how has that evolved as you've learned more about what I guess you define as metabolic health?

Yeah, I think my view now is that medicines should be necessary a lot less often than we use them.

When we look at our health, we shouldn't really have the baseline assumption that we have today that if someone's in poor health, it's because they're lacking medicine.

It's because we haven't figured out the right treatment for them.

Usually pharmaceutical based treatments, maybe it's going to be a procedure or surgery.

But there's almost a sort of assumption built into that, that the human body is destined to become ill, that we're destined to develop these problems.

And that the only way that we are going to be able to manage and head off these problems is by advancing science, by coming up with more pharmaceuticals and more surgeries to treat the problems.

Instead of considering the fact that it might be something we are doing to ourselves.

There's a book in front of me that says Stay Off My Operating Table by Philip Ovedia.

Why did you decide to write this book? What was your mission?

Yeah, I wrote the book because I struggled to find this information.

I as a heart surgeon, I as a doctor, I as someone in the medical system that is supposed to be built around making people healthy and keeping people healthy, struggled to figure out the information that's in that book.

You know what I mean? You say healthy. What is healthy? How does a doctor like you characterize health?

So I define health today as our bodies working the way they should.

So, you know, I talk about metabolic health in the book.

And the way that I define metabolic health is that our bodies are properly utilizing the inputs that we are giving it.

And the primary input that we give our bodies is the food that we eat.

And so when we eat, one of three things is really supposed to happen to that food.

Some of it gets turned immediately into energy for us to fuel all of the activities throughout our day.

Some of it gets broken down so that we can build and rebuild the tissues in our bodies, processes that are always going on.

And then a little of it is supposed to be stored for times when energy is not available.

And what has happened in our modern environment is that system has broken down.

And we end up storing too much of the energy and we end up not being able to ever use that stored energy.

And that has a whole host of downstream problems that it creates.

And these are things like heart disease that I treat every day.

These are things like diabetes, cancer, Alzheimer's disease.

All of these chronic issues that we see becoming so common in our society today.

You're a heart doctor.

What's been the most emotionally challenging day of your career as a heart doctor?

Well, it's actually the opening chapter of my book.

It was the day that a very young woman ended up on my operating table and she did not make it off

my operating table.

She came to me with a devastating cardiac condition.

Me and my team spent over 10 hours trying to save her life.

But ultimately we could not save her life.

And I had to go tell her young children that their mother was not coming home to them.

That was the most challenging day of my career.

And that was a day that I realized things had to change.

That was one of the days that set me on this pathway.

That made me realize the mission that I needed to be on to keep people off of my operating table.

Was her heart condition preventable?

Yes.

Can you give me some color?

Yeah, so she developed a condition.

It's called an aortic dissection where her blood vessel leading out from her heart tore.

And that comes from high blood pressure.

And she had high blood pressure that wasn't adequately addressed, wasn't adequately treated.

And I believe that her condition was 100% preventable.

I believe that if her physicians had understood that her high blood pressure was because of the food that she was eating,

if they had given her better advice around the food that she could be eating

and the impact that this was having on her life, that her path could have been changed.

She was metabolically unhealthy in your view?

She was metabolically unhealthy.

Clinically obese?

Clinically obese. High blood pressure.

I would say she had probably all five measurements of her metabolic health abnormal.

And no one, although I don't know this for sure, no one likely ever had that discussion with her.

And she was young, you said?

She was very young.

But under the age of 50?

Yeah, she was 38.

Jesus.

This is one of the most troubling things that I have seen during my career as a heart surgeon.

Understand that I started my career as a heart surgeon 20 years ago.

And at that time, we would operate on 70 and 80-year-olds, 60-year-olds.

It was rare that we would operate on 50-year-olds.

Today, just 20 years later, I routinely operate on 40-year-olds and I occasionally operate on a 30-year-old like that woman.

Have you ever operated on a 20-year-old?

Not for someone who wasn't...

It's a different condition.

Different condition, a congenital heart condition.

I've operated on 20-year-olds.

I haven't operated on 20-year-olds with atherosclerosis, but I don't think we're far from that point. When we look at the fact that a third of the children are obese,

that we see metabolic disease increasingly in teenagers and even children as young as eight or nine years old,

there are going to be 20-year-olds ending up on my operating table in not too long a time.

I was going to ask you early, Ron, why all of this matters.

Sometimes I flick around in my head and I think, well, if I live to 60, 70, if I live to 60,

but I just have loads of fun, and when I say fun, I'm kind of mischaracterizing fun

is doing whatever I want and being driven by my own physiological and psychological compulsions, which means just junk food, whatever, whatever.

Or I go, I can live longer and avoid some of those compulsions that I might have as relates to diet.

But I think that example you gave of why it's so important,

because you had to walk out of that operating room and go and speak to a family,

some of the young kids, young kids, right?

That were how old?

The youngest one, I believe, was three or four.

The older ones were eight, ten years old.

I'm guessing you'll never forget that conversation.

How do you prepare to have that conversation with a ten-year-old and a three-year-old about their mother not coming back?

Are you trained to do that?

There is no training to do that.

Unfortunately, as a heart surgeon, I have that conversation with family members, not infrequently.

Having that conversation with children, with such young family members,

I don't know that there's any way to prepare for that.

I certainly wasn't prepared for it.

One of the things that I've come to realize is no matter how good a heart surgeon I might be,

no matter how good all the heart surgeons out there are,

you're always better off if you never needed the surgery in the first place.

Understand that I'm essentially looking to put myself out of business.

I spent my entire life becoming a heart surgeon, preparing to be a heart surgeon.

I still love being a heart surgeon, but I realize in the back of my mind,

every time I'm doing heart surgery, essentially, that I shouldn't need to be doing this.

I believe I know that the vast majority of heart disease is preventable.

The vast majority of the surgeries that I do are preventable, shouldn't need to be done in the first place.

That's why my mission is so important.

That's why I'm doing what I do. That's why I wrote the book.

That's why I'm here talking to your audience today, because it doesn't need to be this way.

When you go into that waiting room, what do you say?

I said, I'm sorry.

I said, I'm sorry that we weren't able to save your mother.

I said that your mother came to us, came to me with a devastating problem,

and I did everything I could to try and save her.

But her situation was not saveable.

I just said that I'm sorry that your mother is no longer with you.

Do you carry a weight from having to have that conversation over and over again?

Yeah, I definitely carry that weight from all of the times that I've had that conversation.

Whether it's an 80 or a 90-year-old that many people would say they lived a good life,

they did everything they wanted to do,

or whether it's a 30-year-old young mother who did not get to see her children grow up and whose children need to grow up without her,

the conversation is never any easier.

And especially recognizing that most of the time they didn't need to be there in the first place, that they could have made changes in their life that would have kept them from getting there, that their doctors could have given them better advice to help them make those changes.

How common is heart disease?

Heart disease is the number one killer here in the United States and worldwide.

Here in the US, 600,000 people die from heart disease every year.

About a quarter, 25% of the deaths every year are due to heart disease.

So heart disease is incredibly common, but it wasn't always that way.

It really only became that way within the past 70 years or so.

And we have to ask why.

Because if we're going to take the view, which the healthcare system largely has,

that heart disease is inevitable, it's so common it must be inevitable,

then why wasn't it always a problem?

And those are the questions that I think we don't do a good job of asking.

We as physicians have become so busy taking care of all the sick people

that we've kind of lost the time and the ability to think about why there are so many sick people to start with.

And so when I look at something like heart disease and I start to think about why is it so common? Why has this become, you know, everyone knows someone with heart disease.

Everyone knows someone probably that died of heart disease, that is suffering from heart disease. It literally is all around us.

And I want us to step back and start asking why is that?

Why is that?

It's because of the food that we're eating.

It's that simple.

When did this change?

So there must be a point in history where you see correlation between our diets changing and heart disease increasing.

Yeah, so here in the United States, starting right around 1950, there was a sharp increase in the incidence of heart disease.

And at the time, we actually, our sitting president, while in office, had a heart attack.

And this set off the alarm bells and everyone started asking why, you know, where did all this heart disease come from?

Because it's real interesting, you go back to some of the medical reports from 1900, 50 years before, and heart disease is incredibly rare.

And the leading physicians of the time would go their entire careers without really seeing heart disease.

So something changes in a pretty short period of time.

And when we, you know, what does that correlate with?

It correlates with the introduction of processed food.

It's like, you know, sugar, the consumption of sugar starts rising dramatically,

along with the incidence of heart disease, packaged foods, processed foods, whatever you want to call them.

These are the things that we see being introduced widespread into society around that time.

I am an idiot when it comes to cardiovascular health.

So when I ask this question, please explain it as if you're talking to a monkey.

What is heart disease? Like from a physiological standpoint, what is it?

Is it my heart just not feeling so good?

Or is it might the, I'm going to think of a big cardiovascular word here.

Atrium.

Pretty big one.

Ventricle, bigger.

Ventricle, atrium.

Are they blocked?

If I was to guess what heart disease was from a monkey mindset,

I would say that it becomes blocked by something.

Is that a bad guess?

Yeah, no, that's down the right pathway.

So realize that there are a number of different forms of heart disease.

But when most people refer to heart disease, they're referring to what we call atherosclerosis.

And what that big fancy word means is exactly what you were getting to.

Something gets blocked.

The blood vessels on the heart get blocked.

So realize that the heart is a muscle.

Like any muscle, it needs oxygen.

It needs blood to carry that oxygen to it so it can work.

Now, the unique thing about the heart as a muscle is that it never stops working until the day we die.

So it needs that constant supply of oxygen and blood.

And when the blood vessels that are carrying that oxygen to the muscle of the heart start to get blocked,

start to get clogged, there may not be enough oxygen making it to the heart anymore.

That's what we call a heart attack.

Basically, that there's not enough blood flow, that there's not enough oxygen getting to an area of the heart.

And that's the most common cause of heart disease.

That's what most people are referring to when they say heart disease.

What is blocking the flow of oxygen to the heart?

Well, you know, that's really the million dollar question.

So when you look at it under the microscope, what you see is plaque builds up in the blood vessel.

And that plaque is composed of cholesterol, fatty stuff, and it has calcium in it.

And, you know, when you really get into the microscopic levels, it has some of the blood cells, both the red blood cells, which are oxygen carrying cells, and white blood cells, which are our immune cells,

are all involved in these plaques.

So when we were first trying to figure out what was causing heart disease,

and the early scientists, the early physicians were looking under the microscope,

and they were seeing that there was cholesterol in these plaques,

and they said it must be cholesterol and fat in the foods that we are eating that are causing these problems.

It made a lot of sense, and we set down a pathway to try and get people to eat less cholesterol.

We set down a pathway of developing drugs that lower cholesterol,

and it would make perfect sense that that would take care of heart disease.

And yet here we are 70 years later, and people are eating less cholesterol,

and people are taking medications to lower their cholesterol,

and yet heart disease isn't going away, and it's actually getting worse.

So we have to step back and say maybe we were wrong about it being cholesterol

that was causing the heart disease in the first place.

And maybe it was...

And maybe it was something else.

So, you know, when we look at what else might it be,

and again when we go back to the early days of this science,

the other thing that was talked about was sugar.

And there were many leading scientists, again going back to the 1950s,

who were saying that it was sugar that was causing this problem,

because sugar damages blood vessels.

Again, we know this, that sugar damages the lining of the blood vessel,

and maybe the cholesterol is there to repair that damage.

That theory, that hypothesis, makes a lot of sense.

We have a lot of scientific evidence to support that theory,

yet that theory got buried.

It got the other theory won out that it was the cholesterol in the diet.

And like I said, it makes sense to go down that pathway,

and we can see how we started pursuing that.

But we need to step back now, 70 years later, seeing that it's not working,

and maybe saying that maybe it was sugar all along,

maybe it was sugar in the first place.

Do you believe it was sugar?

I don't think it's only sugar.

I think sugar plays a large part in the process.

And the way that I look at it is,

we have to look at what leads to sugar building up in our bloodstream.

And this is another important concept to understand,

because most people think, oh, well, the reason that we get high amounts of sugar in our blood is because we're eating too much sugar.

And that's indirectly true.

But the reason that we end up really getting high amounts of sugar in our bloodstream

is because our metabolic health,

what we kind of started talking about earlier, gets broken.

So we have to look at what's breaking our metabolic health

if we really want to get to the root of this problem.

OK, let's look at the...

What are the markers then that my metabolic health is broken?

How do I know, sat here now,

because there's a Girl Scout outside the studio,

and I just bought some cookies off her.

So I'm trying to figure out whether I should eat them or go get a refund.

So how do I know if my metabolic health is intact?

Because there's often been a debate,

people might think it's just based on my waistline,

it's a conference of my waist.

But I remember reading once upon a time that sumo wrestlers are significantly healthier than most Americans.

So how does one look, by looking at themselves,

understand if they are metabolically healthy or not?

Yeah, so just by looking at yourself, you may not be able to tell.

But it turns out that your waist circumference is one good thing you can look at in yourself.

And in general, having a larger waist circumference is an indicator of being in poor metabolic health.

Is that the biggest indicator?

It's one of the five indicators.

It's the easiest one for us to tell just looking at it by ourselves.

The other indicators are our blood pressure.

So, you know, almost everyone, when they go to the doctor,

they get their blood pressure checked every time.

And the reason that we check people's blood pressure so commonly

is because it is an indicator of health, of metabolic health specifically.

Some other measurements, you can't tell just by looking at yourself.

You need to get your blood work checked.

You need to see what the level of sugar in your blood is,

what we call the fasting blood glucose level.

And then you do need to know what some of your cholesterol levels are.

But importantly, and this is one key thing that I want people to understand,

is we're not focused on the cholesterol measure that most doctors talk to you about.

What we call the LDL cholesterol, or a nicknamed bad cholesterol,

which is an inaccurate nickname, but not important right now.

We want to look at two of the other measures of cholesterol,

what we call the HDL cholesterol, again nicknamed good cholesterol.

And we want to look at your triglyceride levels.

And when you look at those five measures, those five measures will tell you

whether or not you are metabolically healthy or not.

But the problem is, as you were talking to,

you can't just look at yourself and know what those measures are.

You have to put the effort in to figure out if you're metabolically healthy or not.

The statistics are actually pretty shocking.

Because we have statistics, again, here in the United States,

looking at data from 2016 that show that 88% of the adults in the United States

are not metabolically healthy.

So when you look at those five measures,

they can't meet all five measures of optimal metabolic health.

That's nearly everybody.

That's nearly everybody.

And you can say, well, maybe it's all of the obese people.

But when you look at people who aren't overweight, who aren't obese,

50% of them are not metabolically healthy.

You talk about this concept of being skinny fat in your book.

I think my friend called me that one day when he was trying to insult me.

A couple of years ago, what does skinny fat mean?

What is that?

Yeah, so skinny fat will oftentimes be referred to as toffee thin on the outside and fat on the inside.

And what that really means is that we have internal fat around our organs,

specifically in our abdomen, around our liver, around our pancreas, around our kidneys.

That may not be obvious from the outside.

Many of us kind of know what this looks like.

You know, someone who's got skinny arms and skinny legs, not a lot of muscle,

but they have a little bit of the pouch in the middle.

That is skinny fat.

And again, unless you're measuring it, unless you're looking for it specifically,

you might not pick up on that.

And it is a big problem.

Many people hypothesize that actually getting obese on the outside is a protective mechanism,

because it's really when you get fat on the inside that we see the damage start to occur.

Things like diabetes, things like heart disease really start to manifest when you get fat on the inside.

So do you think being skinny fat is worse from a metabolic health standpoint than being fat on the

outside?

It very well can be.

And oftentimes the problem with the people who are skinny fat is they don't get picked up on until we're much later in the process,

until they're much sicker.

So that's one of the issues with being skinny fat.

And one would only know if they were skinny fat really by going and getting some of those key metabolic health markers checked

in terms of their triglycerides, their blood glucose levels, etc.

Exactly.

So I'm trying to be in that 12% of people that are metabolically healthy and that meet at least all five of the criteria for metabolic health.

I've had so many guests on this podcast recently that have talked to different diets, the carnival diet, keto.

We talked about the Mediterranean diet, a gluten-free diet, vegetarian, veganism.

It's a lot.

Yep, there's a lot.

And my question to you, and I know this isn't necessarily an easy question to answer,

but what is the diet that's going to avoid my metabolic health breaking down,

going to keep me off your operating table and keep my health intact?

Which diet should I go for, Dr. Philip?

Yeah, so, you know, I go into it in the book and what I really tried to look at was,

what are the common things amongst all those diets that will keep people metabolically healthy or make people metabolically healthy?

And really it comes down to eating whole real food.

Elimination of processed food, I think, is the most important step if you want to get metabolically healthy and remain metabolically healthy.

And within that framework, there are lots of different possibilities.

Some people have great success as a carnivore.

Some people have success as vegans.

You can do keto.

You can do Mediterranean.

You can do paleo.

You can do lots of things in between.

But when you really look at what is the one commonality that we can point to that will predict the best success of being metabolically healthy,

it's eating real food, eating whole real food.

What is whole real food?

Yeah, great guestion because sometimes it's hard to tell these days.

So the rule that I, you know, the kind of rule that I give people around eating whole real food is eat the things that grow in the ground

and eat the things that eat the things that grow in the ground.

So these are going to be your plant products and these are going to be your animal products.

So you're pro animal products?

I am very pro animal products.

I actually think that when you look at the balance between the two, you're probably better off eating more animal products than more plant products.

And again, that's something that goes very counter the mainstream narrative.

Understand that as human beings, we evolved eating animals.

We evolved eating meat.

Our bodies are uniquely designed to process that meat.

Our bodies are not well designed to extract nutrients from plants.

And in fact, when you really look at the sort of evolutionary system, what developed is that the animals, especially ruminant animals with multiple stomachs,

they are designed to extract nutrients from plants.

Those nutrients end up in their muscle, in their meat.

And then we are designed to get the nutrients from the meat.

So I do think that meat, animal proteins are essential to human health.

And yes, being a vegan is going to be healthier than eating a diet full of processed food, the sort of standard Western diet.

But I don't think it's optimal for human health, ultimately.

Quick one. As you guys know, we're lucky enough to have BlueJeans as a sponsor and supporter of this podcast.

For anyone that doesn't know, BlueJeans is an online video conferencing tool that allows you to have slick, fast, good quality online meetings without any of those glitches that you'd normally find with other meeting online providers.

You know the ones I'm talking about, and they have a new feature called BlueJeans Basic, which I wanted to tell you about.

BlueJeans Basic is essentially a free version of their top quality video conferencing.

And that means that you get immersive video experiences, you get that super high quality, super easy and zero fuss experience.

And apart from zero time limits on meetings and calls, it also comes with high fidelity audio and video, including Dolby Voice.

They also have expertise, great security, so you can collaborate with confidence.

It's so smooth that it's quite literally changed the game for myself and my team without compromising quality at all.

So if you'd like to check them out, search BlueJeans.com and let me know how you get on.

DM me, tweet me, whatever works for you. Let me know how you find it.

I've now been a Huell drinker for about four years, roughly.

So much so that I ended up investing in the company and I play a role on the board of the company, but they also very kindly sponsored this podcast.

And to be honest, I've never said this before, but Huell believed in this podcast before anybody else.

The CEO Julian told me before we even launched the podcast how successful it would be and that Huell would back it.

And I absolutely have a huge amount of gratitude for them for that support, but an even greater sense of gratitude for the fact that they've helped me stay nutritionally complete throughout the

chaos and hecticness of my tremendously busy business schedule.

So if you haven't tried out Huell, which I hope most of you have at least given it a go by now, try it out.

It's an unbelievable way to try and stay nutritionally on course.

If you have a hectic busy schedule and let me know what you think, send me a tweet and a DM tag me.

Let me know what you think. Back to the podcast.

In your medical practice, have you seen any recurring trends based on people that have consumed a vegan diet?

Yeah, so I think a well constructed vegan diet, what probably should be better called a whole food plant based diet, is a significant improvement over the western diet, over the standard American diet, over a diet with a lot of processed food.

And that's really what you see when you look at the scientific literature around vegan diets.

It's an improvement over the standard American diet, but it's not necessarily optimal and especially over the long term.

So the story that I see on a recurring basis is that someone will be eating, will really not be paying attention to what they're eating.

They'll just be eating the food that's around them, the standard western diet, and they'll be in poor health because of that.

And they'll decide to make a change and because there's a lot of messaging around it, oftentimes a vegan diet is going to be the first one that they try.

And they're going to feel better initially. They're going to improve their health initially. Their metabolic health markers will improve.

Over the long run, it becomes fairly difficult to maintain a good vegan diet.

You have to be supplementing. There are certain essential nutrients that we cannot get from plants. And no one argues that. The vegans don't argue it. They just say, okay, I'm going to take my

supplements.

It's hard to get the right amount and the right balance of proteins and amino acids from plants. And again, if you're supplementing, you can do it.

So the people that I see having long term success on vegan diets are often working very hard at it and they're very carefully planning.

And like you said, it becomes hard to do on a day-to-day basis unless you're really putting a lot of energy into it.

In chapter eight of your book, you say our ancestors didn't evolve to take supplements, so we shouldn't be taking them either.

You believe that?

I do believe it. I do believe that any diet that's optimal for humans shouldn't require supplementation.

And so when I look at the opposite end of the spectrum, when I look at people who are doing a carnivore diet and eating all or at least primarily animal proteins,

they usually don't require supplementation and they are thriving on long term carnivore diets. And I think it's a more ancestrally consistent diet and I think that it is, in a lot of ways, easier to maintain.

You don't have to quite do all of the planning that goes into a vegan diet.

But ultimately, I'm happy as long as someone is getting metabolically healthy and staying metabolically healthy on whatever diet they're eating.

And so I'm not dogmatic. I don't tell all my patients you need to be carnivore.

I work with people on vegan diets.

Ultimately, I want to help people understand how to get metabolically healthy, how to maintain metabolic health.

And if they do it as a carnivore, if they do it as a vegan, if they do it somewhere in between, I'm happy for that.

And I believe that should be our measure of success.

When talking about metabolic health, you lay out these seven principles that will help us achieve that optimal metabolic health.

One of them, and the first one you say is to reframe health as a system, not a goal. What does that mean?

Yeah, so I think this is a real important first step in this process.

It's really the mindset behind it.

And when I say I want you to think of your health as a system, not as a goal, what I mean is that I don't want us so focused on the short term,

which is one of the mistakes that I oftentimes see around health.

So many people, we kind of talked about it earlier, will say they recognize that they're unhealthy and they want to make a change.

Oftentimes, this is around their weight.

And they'll set a short term goal.

They'll say, I want to lose 20 pounds.

And one of two things is going to happen in that scenario.

You're going to make a bunch of changes.

Hopefully you're successful.

You lose the 20 pounds and you say, great, I accomplished my goal.

Now I can go back to what I was doing beforehand because that's just the natural inclination I think that we have as human beings.

We don't want to continue to put that work in.

The other possibility is that you don't meet your goal.

You don't lose the 20 pounds because it's actually hard to lose 20 pounds and you get frustrated and you give up and you go back to your old habits.

So instead, what I encourage people to do is think about their health as a system and think about the habits that are going to support that system.

It's a more positive way to think.

What are the habits that I can adopt to support my health?

More sustainable.

People can do that over the long term because when we're doing positive things to improve ourselves, we can do that over the long term.

If we're taking away things, if we're restricting ourselves, we aren't very good at doing that over the long term.

Number four of your seven principles for metabolic health is about exercise.

In the book, if I remember correctly, you say that exercise isn't the best approach.

Isn't the only approach one should consider when thinking about dropping weight and reducing waist size.

A lot of people might be surprised by that.

Yeah, so some of the concepts that I talk about in the book around exercise, the way I phrase it is I want you to get more activity.

One of the mistakes that I see people making is that they focus on doing periods of exercise.

They say, I'm going to go to the gym and work out for an hour.

I'm going to go run for an hour.

And they don't pay attention to getting enough activity throughout the rest of their day.

So I try to get people to refocus on just getting more activity throughout your day.

And then when it comes to your exercise and your metabolic health,

the most important part of building metabolic health through exercise is going to be building and maintaining your muscle.

Muscle is very unique when it comes to our metabolic health.

Muscle is metabolically active throughout your day.

And so when you focus on building and maintaining muscle, it's going to better support your health, your metabolic health.

Then if we're just trying to do the cardio exercise and burning the extra calories during that time that we were exercising.

Because you say here on page 72, keep it in mind that research shows cardio is an unreliable tactic for fat loss.

That's a shock to most people because we've been taught that cardio is everything.

Right.

So when we look at the science around cardio, you know, chronic cardio exercise,

what most people think of as jogging or running at the gym, we see that it doesn't help for weight loss.

It doesn't help for fat loss.

And that's why I don't want people to focus on cardio.

And, you know, when we look at the macro level of this, we have more gyms today than we ever have.

People spend more time at the gyms doing cardio than they ever have.

And yet we have a worse obesity problem than we ever have.

So cardio is not effective for weight loss.

Science is pretty clear on that.

It doesn't mean that cardio doesn't have benefits.

And I'm not telling people stop all the cardio that you're doing.

I just don't want people to think that only by doing cardio are they going to be able to lose weight and lose fat and have long term success around that.

Well, you know, I think that surprises people because, you know, when I do cardio, I sweat.

Yep.

And I can feel it just feels like the fat is melting and it's pouring off my skin.

Like, you know, I must be losing weight.

Right.

So it seems like a bit of a head spin that that's not helping me lose weight.

Why isn't it helping me lose weight?

Yeah, there are two reasons that it doesn't help you lose weight.

Number one is for most people, after they do a lot of cardio, they get hungry and they eat more.

So they kind of counterbalance whatever extra calories they may have burnt off doing the cardio.

Is that in built or is that just, you know, is that the brain?

I think it is.

I think it's our body's sort of homeostatic mechanism.

And the other problem with, you know, thinking you're going to lose weight just by doing cardio is it's really relying on the calories in calories out model.

So again, the underlying assumption there is that if we just burn more calories, that will compensate for the extra calories that we've been eating.

And again, we see that that doesn't work over and over again.

We know that our body actually adjusts the amount of calories that it burns.

And if you go and you do that hour at the gym during that hour, you're going to have burnt more calories.

But during the other 23 hours of the day, your body is actually going to burn less calories to make up for that.

Well, that's bad news, isn't it?

That is bad news.

And, you know, the extra point there is when we build muscle, muscle build muscle burns more calories throughout the day.

So that's the other reason that the focus on muscle building is really the most effective way to exercise your way to weight loss.

So, OK, so weightlifting, you would advise as a preferential way to lose fat and improve our metabolic health versus just like going for a jog.

Right.

Even if I'm burning 500 calories on my jog versus burning 500 calories doing weightlifting, you think that the weightlifting

calories burn are more important for weight loss than the jogging calories.

Yeah.

So when we look at the science around building muscle resistance exercise, as I said, we see two unique benefits to building muscle.

Number one is that that muscle is going to be more metabolically active tissue that we're going to have on us all the time.

So we're going to be burning more calories throughout the day, despite, you know, the activity that we're doing.

But aren't we just going to get more hungry?

We don't seem to get more hungry from those, I guess, from that metabolic activity.

It's not the same as doing the cardio, making us more hungry.

The other unique thing about muscle, though, to understand is that as we age, the more that we are

able to maintain muscle, the better quality of life that we have and the longer we are going to live. Again, this has been shown in repeated studies, many different areas, heart disease included, that building and maintaining muscle as we get older is one of the best strategies for living longer and for living better.

It's a bit of a downward spiral, though, isn't it?

Because, you know, I get older, maybe I'm a little bit more inactive, maybe I retire, and then I lose muscle.

And as I lose muscle, I become more inactive, and the spiral, the cycle continues.

But it doesn't need to be that way.

We can maintain muscle throughout our older age.

And the key is to doing that is to maintain your metabolic health, is to be eating enough protein, is to be eating whole real food, and is to be continuing to do resistance exercise, resistance activities.

Throughout your lifespan.

And we can actually maintain muscle as we get older.

One of the ways in your book that you assert we should maintain our metabolic health, one of the tactics to maintain our metabolic health and stay off your operating table is to sleep more.

And I wondered why does sleeping more improve my metabolic health?

Yeah, so sleep really has, again, unique benefits related to metabolic health.

When we sleep, that's the time that our body is really doing that rebuilding process that is so key to us maintaining health.

We see a unique sort of two way relationship between sleep and metabolic health.

And this is important for people to understand this.

When we are metabolically unhealthy, our sleep suffers.

If you're not sleeping well, it can be a key indicator that you may not be metabolically healthy.

We also know that people who sleep less are more prone to being metabolically unhealthy.

Many different reasons why that might be.

But ultimately what I focus on is that in order to be metabolically healthy, you need to be getting enough sleep.

And if you're not getting enough sleep, it very well may be a sign that you are not metabolically healthy.

Can you give me maybe one hypothesis as to why that is?

Why my metabolic ill health will cause my sleep performance to decline?

Well, one obvious thing that we can point to is sleep apnea.

Sleep apnea becomes very common as you get metabolically unhealthy.

What's sleep apnea?

So sleep apnea is basically when you stop breathing for short periods of time while you're sleeping. And we know it's very closely related to metabolic disease.

I now have worked with many patients who have improved their metabolic health and their sleep apnea goes away.

And again, the traditional view on sleep apnea in medicine is that it needs some procedure.

Sometimes that's a surgical procedure or it's things like wearing masks to treat the sleep apnea.

And what we don't do is ask why we have that sleep apnea in the first place.

And again, it seems to be related to our metabolic health.

And one of the fairly consistent things that I see in people as they improve their metabolic health is their sleep gets better.

And those that have sleep apnea, it oftentimes improves or even goes away completely when they improve their metabolic health.

And there's a weight loss component to that.

But we even see this in people who aren't overweight.

They have sleep apnea.

They improve their metabolic health.

They don't even necessarily lose weight as part of that process.

And yet their sleep apnea goes away.

When you were 40 years old, you described yourself as being morbidly obese.

Did you have sleep problems?

I probably did.

I was never really diagnosed with it.

But my wife would certainly tell you I used to snore a lot.

And do you still have any sleep problems at all now?

No, I don't.

I no longer snore and I feel well rested every morning when I wake up.

So I no longer have sleep problems.

You think you no longer so?

We can never be certain for sure.

Chapter two of your book, you say that there's 12 deadly food lies and you highlight the 12 deadliest of those food lies.

One of them we've talked about already, which is, and that's the first one in the book, which is that only obese people are metabolically unhealthy.

We've talked about that a little bit.

One of the surprising ones out of the list is that you seem to have had a real, I guess, perspective change over the years about the role of the profession that you're in.

And at times in your book, you seem guite critical of doctors.

I think even when you talk about the seven principles of metabolic health, number seven of those principles is you're encouraging people to get a doctor that understands it.

Get a doctor who gets it.

Yep.

Do you ever receive pushback from your own industry for being somewhat critical of the way that the system is designed and the perspective they have towards medication and medicating things and whacking them all once the mall has reared its head versus preventative measures?

Yeah, I certainly do get pushback.

And as you said, I am critical of my own profession because we as the healthcare system, we as medical practitioners, need to be asking ourselves, are we doing good enough?

And when we look at a society that everyone is unhealthy, we've touched on the statistics before, we can't absolve ourselves of that responsibility for getting us to this point.

Big food.

Big food is part of it.

What is big food in your view? Like, how do you define that?

It's the processed food industry that's all around us.

It's the vast majority of what is presented to us as food these days.

When we walk into the grocery store, when we walk into the supermarket, the vast majority of what's in there is not whole real food.

It is not designed to support our health.

What's it designed for?

Profits for the food industry.

That's pretty much alludes to point number four in your 12 deadliest food lies.

You say the people who produce our food want us to be healthy.

You say that's a lie. They do not want us to be healthy.

Well, it's not that they do not want us to be healthy.

It's that our health is not a concern of theirs.

They are an industry.

As an industry, their goal is to increase their bottom line, is to support their profits.

They don't care whether or not we're healthy as part of that.

And quite frankly, they don't have a reason to.

If you are a food company, your goal is to get people to buy more food, to eat more food.

What are you going to do? You're going to design foods that make people hungry more often.

And that's exactly what processed food does.

The problem with these processed foods is that they're supplying us with calories.

They're supplying us with energy.

They're doing that basically cheaply.

And yet they're not providing our bodies with the nutrients that they need.

So our bodies are constantly seeking those nutrients.

And therefore we find ourselves always hungry.

And that is the main problem with processed food.

That we end up taking in an abundance of energy without meeting the nutritional needs that our body is looking for.

What about fasting?

I've often been, I think recently, because we've had a few health, food related, fitness related guests on the podcast,

I've started thinking a lot about fasting.

So for example, yesterday I had one meal for the whole day.

And I start because I sometimes reflect, I go in search of answers by looking at how I assume our ancestors used to live.

And I can't imagine that we were necessarily grazers.

I can't imagine that we were like cows in fields just eating all day, throughout the entire day.

Exactly.

So is that accurate?

Are you with me?

Yeah, I think that's very accurate.

And you know, ancestrally, and even, you know, again, we don't have to go that far in history.

If most of us ask our grandparents or our great grandparents, depending on how old they are, how often they eat,

they're usually going to tell you two times a day, maybe three times a day.

The average person today consumes calories eight times a day.

And you know, do the math.

If you're asleep for eight hours and you're eating eight times a day, you're eating every couple of hours.

What's the harm?

The harm is that our bodies never get the opportunity to burn the stored energy that we have.

And so we just end up building up more and more stored energy.

And we reach that point where our bodies can't do that any longer.

And the metabolic processes start to break.

How could you, how could you at following your own advice?

I think I'm pretty good at it these days because I'm giving myself better, I'm giving myself better advice

In the past, I wasn't good at following my advice.

Like I said, you know, I would tell myself all the time, eat less, move more, count your calories, eat a low-fat diet.

And I wasn't good at maintaining that.

Today, I'm good at maintaining the advice because it's better advice that I'm giving myself.

So I'm not going to sit here and tell anyone that I'm perfect.

You know, this isn't 100% of the time, but it's pretty darn close.

One of the things that I often hear when we have, you know, health experts or doctors or anybody that understands kind of our physiology,

our health at a deeper level or is qualified in that department.

What I hear often in like the comment sections or from our audiences,

I think they search for nuance in the advice that they're being given.

Like they want to know, you know, it can feel like an expert or health expert is saying,

don't eat the fucking birthday cake.

Your birthday's cancelled.

Yeah.

You know, and no one wants to cancel their birthday.

Everyone wants to have the cookie from the Girl Scout that I just bought earlier on.

Yeah.

Like where is the like, you know, is there a middle point?

If we're talking about this cardiovascular epidemic and this heart disease epidemic,

where is the like middle, middle ground where I can live my life?

I can eat the cookie from the Girl Scout, but I can still be metabolically healthy.

Yeah.

So I think that's going to vary depending.

It's going to vary person to person.

This is why I think the metabolic health measures are so important.

This is why tools like a continuous glucose monitor can be so powerful.

Because depending on your situation, that answer is going to be different.

I can certainly tell you that, you know, nine years ago when I was morbidly obese,

every Girl Scout cookie I ate was making me more metabolically unhealthy.

Today, now that I am metabolically healthy, yeah, I can have an occasional Girl Scout cookie and it's not going to break the system.

Not right now.

I bought three packs.

She was so persuasive.

Anyway, sorry.

Yeah, they are.

So, you know, ultimately, this is why I rely so much on the metabolic health measures.

This is why I want people to be paying attention to these things.

Because each one of us needs to figure out how we can improve our metabolic health.

What I find, what's most interesting, I guess I'll say about this,

and this is personal experience and this is also the experience that I have with my patients,

is the more metabolically healthy you get, the more you want to remain metabolically healthy.

When we figure out how to properly fuel our bodies and we figure out what we should be feeling like on a day-to-day basis,

we don't want to go back to being unhealthy.

We don't want to go back to feeling like we used to.

When I think about what the struggle it used to be for me to get through a day as a busy heart surgeon,

I would be tired all the time.

I would be in a bad mood.

I would be hungry all the time.

And today, being metabolically healthy, that's no longer the case.

I have abundant energy to make it through my day.

People will listen to this advice, the information you give your book, you know, this podcast.

They'll listen to it and then a lot of people will make zero changes as a result of it.

I mean, you must have seen that in your practice over and over again,

where maybe you have recurring patients who you're saying the same thing to every day and you know that the health markers as it relates to metabolic health are getting worse and worse and worse.

Why don't we listen?

Ultimately, I think we don't listen because we don't believe that it's possible to be healthy anymore. I think one of the biggest problems I see is we look all around us and we see that everyone's

unhealthy.

And we just assume that we can't be any different.

Well, if you're one of those 88% who look around and see, you know, people, I mean, everyone you must look at,

9 in 10 will be metabolically unhealthy.

So you must think that's the norm.

The bar must be lowered per se.

Exactly.

What I want, ultimately, you know, we started talking about the mission that I'm on.

And the mission that I'm on is to give people hope for them to understand that they can be healthy, that they don't need to end up on my operating table,

that they don't need to be relying on the pharmaceutical industry for the last half of their life.

On that point, though, of the forces that stop us from heeding the advice we're given and that we know to be true.

It's not that I think a lot of time people know this stuff.

Like they know that certain foods are good, certain foods are bad.

We're at that point now in the kind of public consciousness as it relates to health where if you walk me through a supermarket,

I think I'm probably at the point now where I can say, listen, I know that's bad.

I'm going to get it anyway, but I know it's bad.

Also, you could walk me through, say, you know, the aisle where you have whole foods that have been grown in the ground

or the aisle where animals who eat the stuff that's grown in the ground are.

And I know that's good for me.

But as it relates to, like, the forces, the psychological forces that are stopping me from eating that food every day,

what are those forces?

I'm assuming there's a chemical component to it.

There certainly is.

We have the data, you know, that processed food is addictive.

You know, sugar is addictive.

You've probably heard, you know, that sugar is more addictive than heroin.

And that comes from studies where they look at, you know, the addiction centers in the brain and how much they light up with these different chemicals.

And there's evidence that sugar is as addictive if not more addictive than heroin.

And sugar is like in everything.

Sugar is in everything.

In history, again, they know this.

It's not an accident that what may be the most addictive substance on the planet is in everything they're trying to sell us.

It's there for a reason.

If I give up sugar today, like a drug, like heroin, does the desire for me to have it again wane over time

to the point where I won't have the compulsion to go grab the cookies anymore?

My personal experience is yes, it does.

You know, I can certainly say today, you know, ten years ago, if you had asked me,

do you want the Girl Scout cookies?

The answer was always yes.

Today, I can say I can live without the Girl Scout cookies.

So, yes, I do know that that, like any other addiction, after a period of time, it becomes less of a

temptation.

We'll see how you respond to the cookies when the cameras stop rolling.

We have a new little tradition that we have started on this podcast.

These are called the Diary of a CEO conversation cards, right?

So at the end of every podcast, our guests for the last couple of years have written a question for the next guest in this book.

We've now turned them into these conversation cards.

You can see on the back of the conversation card, a QR code where if you scan it, you can watch the answer and find out who answered it.

And on the front, it has the guestion written and the name of the person that wrote the guestion.

So you can play these at home with your friends.

If you want to have the kind of conversations we have here on the Diary of a CEO,

get a little bit deeper with them and hopefully build your connections with them.

Now, usually what I do is I spread them out in front of you and I let you pick one.

But I'm actually going to stitch you up.

So I'm going to pick one for you to answer.

Are you up for it?

I'm up for it.

Okay.

Let's do it.

Let me go for one that I think will be difficult.

Okay, here we go.

This is the one I've picked for you.

I might pick another one.

We'll see.

So the question is, tell me something you have never told anyone before.

And that was asked by Gary Neville.

I am not sure that I can solve the problem that I'm trying to solve.

I'm not sure that I can complete the mission that I now know I was put here to fulfill.

Our problem around health might be too big for me to solve, but I'm not going to stop trying.

Do you think it's too big for us to solve?

Like at your core, do you think we're going to change direction as a society?

Do you honestly believe that based on everything you know, big food, big farmer,

the way the human brain is wired, the direction of travel of humanity?

Do you really believe people are going to stay off your operating table?

Yes or no answer?

Yes. I do believe it.

But I am concerned the effort.

I'm concerned that we have gotten too far down the pathway that we may not be able to truly solve this problem.

I think ultimately, not everyone is going to be able to extricate themselves from the situation that they're in.

Are you married?

I am married.

You live in Florida, right?

I do.

You've got a nice house in Florida.

I imagine you do as a heart surgeon.

It's a pretty nice house.

If I asked you to bet the person you love and your house in Florida, on whether we'd be in a better position in terms of the health crisis

and our overall metabolic health in the Western world,

in a better or worse position in 50 years' time,

which way would you place your house and your wife?

In 50 years, I'm going to bet we're going to be in a better position

because if we're not in a better position in 50 years,

we're not going to have a society left.

And that I truly believe.

What do you mean by that?

I mean that we are literally collapsing under the weight of our own health problems.

And if we don't change the course in the next 50 years,

I worry that for my children,

I worry that for my children,

there aren't going to be enough healthy people left in the world

to maintain society for us.

Have you ever had any psychological support?

Because if I had your job, I think I'd have a lot of sleepless nights.

I reflect on that conversation you had to have with that 30-year-old mother with the kids.

Have you ever sought out psychological support

or had therapy to support you with the weight of what I would describe as trauma?

I haven't.

The way that I think I am able to deal with it is

there are lots of positives.

There's another patient whose life I can save

or whose life I can improve.

And fortunately, I guess the statistics are in my favor.

The vast majority of the time, the surgeries that I do turn out well

and the patients do survive, and I have improved their lives.

And I get that positive feedback.

They come back and they see me in the office.

They are able to express to me their thanks for improving their lives.

So in the end, I know I'm having a net positive in the world,

but it doesn't change how hard it is when we don't get the positive outcome that we're looking for.

Philippa, I would have to agree.

I think that you definitely are having a positive impact in the world.

And I think your approach to targeting the root causes of the problem

as opposed to just the problem itself once it's sometimes too late

is an important conversation that we need to be having.

People must wonder why I've had so many of these health-related, food-related conversations on this podcast.

And it's because I'm on that journey as well.

I'm on the road to learning more about how I can live a not just a longer life, but a fuller life.

Extending my life is one thing, but adding quality to my life over that extended period

is in my view probably more important because I have no interest in living to 100

if I'm not going to have mobility, if I'm not going to be able to walk up the stairs,

and if I'm not going to be able to enjoy the life that I've extended.

And so I really love having these conversations about how we can all do that together.

And as I said recently, I think when I was speaking to a health expert or I was speaking to Simon Sinek.

all of these things, you know, food, health, cardiovascular health,

all of these things are fundamentally related to us being better as humans,

whether it's as entrepreneurs or actors or artists or whatever we want to be.

The foundation, the first foundation of our lives is our health.

Without it, we have nothing.

And if my health were to go because of decisions I've made or because of chance or luck or genetic heritability, whatever it might be,

everything I am, everything I've built, everything I love, my dog, my team,

this show would unfortunately come to an end.

I'm sure they're trying to replace me, but it would all unfortunately come to an end.

And so that means that your work is the most important work anyone can do, in my view,

because it is our first foundation.

So thank you for doing that work, Philip.

We have a closing tradition on this podcast.

You've answered one of our Stitch Up questions already,

but the last guest always leaves a guestion for the next guest in the diary of a CEO.

And the guestion that's been left for you is,

what advice did you get from someone earlier in your career that you followed,

but now, in hindsight, wish you hadn't and why?

Oh, I love that question.

That is a great question.

Call them out, Philip.

So I'm going to say that the advice that I had followed earlier in my career

that I had gotten from my mentors that I wish I hadn't followed was to stay in my lane.

Many times in medicine, we pick our specialty.

I chose to be a heart surgeon.

And the advice was always just to focus on doing the heart surgery.

And what I realize now is that I need to be treating the whole patient.

I need to not only be thinking about the heart surgery that I'm doing or that I've done on that patient,

but I need to be thinking about the whole patient and why they got there in the first place and what we can be doing to change their course.

Working further upstream.

Working further upstream, addressing the root cause of their problems.

And even after they've been on my operating table, I don't want them coming back.

I don't want heart disease to continue to be a problem in their life.

So I realize now and I try to implement now that I am addressing that whole person and I'm not just addressing their heart disease.

Well, Phillip, I hope you're the best of luck in your mission.

And I do believe that in 50 years' time, because I'm an eternal optimist,

I do believe that we'll be in a very much better place as it relates to metabolic health, in part because of the education and the information that people like yourself

are committing their lives to sharing.

Your book is fantastic. Thank you for writing it.

Very accessible for someone like me who might not know the most about cardiovascular health, but I really enjoyed it and I really enjoyed our conversation today, so thank you.

Thank you.