I ate a diet that's very normal for a British tuss. I gained so much weight not in this vicious cycle of overeating, anxiety, sleeplessness,

scanned my brain and if I continued for a year, I would have killed Dr. Chris Ventulkin.

Doctor, researcher and a BAFTA award-winning broadcaster.

Chris forensically examines the effects ultra-processed food have on us all.

75% of the calories that are consumed globally come from six companies.

Food mafia.

They are controlling our food and what we eat, engineered to be consumed to excess.

Whether it's a burger from a fast food chain or a supermarket bread, everything is adjusted so that things become irresistible.

And a pandemic of diet-related diseases has taken over the world.

One in five people in this country get 80% of their calories from ultra-processed food.

Poor diet has overtaken tobacco as the leading cause of early death on planet Earth.

And by the age of five, kids in this country will be that much shorter, nine centimetres, compared to other countries.

And this is all diet. You can't stunt a body by nine centimetres and not also stunt them intellectually. Why don't we just all make better choices?

I have almost no interest in personal responsibility. This is about social justice.

And people without money, they're forced to eat bad food.

If you got rid of poverty, you would get rid of around 60% of the problem of diet-related disease.

What about the people that say this is just about calories in, calorie out?

There are two very big problems with that. And this is very good, robust science.

The first is that...

And if people are listening and they want to lose weight, the evidence says...

I just want to start this episode with a message of thanks.

A thank you to everybody that tuned in to listen to this podcast.

By doing so, you've enabled me to live out my dream, but also for many members of our team to live out their dreams too.

It's one of the greatest privileges I could never have dreamed of or imagined in my life to get to do this.

to get to learn from these people, to get to have these conversations,

to get to interrogate them from a very selfish perspective, trying to solve problems I have in my life. So I feel like I owe you a huge thank you for being here and for listening to these episodes and for making this platform what it is.

Can I ask you a favour?

I can't tell you how much you can change the course of this podcast.

The course of the guests were able to invite to the show and to the course of everything that we do here just by doing one simple thing.

And that simple thing is hitting that subscribe button.

It helps this channel more than I could ever explain.

The guests on this platform are incredible because so many of you have hit that button.

And I know when we think about what we want to do together over the next year on this show,

a lot of it is going to be fuelled by the amount of you that are subscribed and that tune into this show every week.

So thank you. Let's keep doing this.

And I can't wait to see what this year brings for this show for us as a community and for this platform.

Dr. Chris Van Telekin.

You wrote a book, Ultra Processed People.

I know from first hand experience that writing books is a painful experience.

It takes a long, long time to do it.

And you have an extensive experience across medicine, across different sort of scientific disciplines.

Why does this book and this subject matter?

Matter to society?

And maybe even more importantly, why did it matter enough to you?

It matters to all of us because for a very long time we've been incredibly confused about what to eat.

And we've called the foods that harm us junk food and processed food and high fat salt sugar food.

We've not had a way of labelling foods even as a pandemic of diet related diseases taken over the world really.

And this is particularly true now in low income countries and particularly true with low income people living in the UK.

So poor diet, which means a diet high in ultra processed food has overtaken tobacco as the leading cause of early death on planet Earth.

For humans, the animals we farm and for wild animals, of course, because ultra processed food is produced by a food system that is the leading cause of loss of biodiversity.

The second leading cause of carbon emissions and the leading cause of plastic pollution.

So about 12 years ago, the definition was developed to describe a Western industrial American diet.

And it was done by a team in Brazil and not much of the best work on this stuff has been done by teams in Central and South America.

Because what they saw in those countries, whereas this is crept up on us in the UK, in places like Mexico and Columbia and Brazil,

obesity was essentially unheard of. And within a decade, it went to being the dominant public health problem.

In towns in Mexico, you wouldn't know anyone who was living with obesity.

And within a decade, everyone would know someone who'd had an amputation for type two diabetes. The only thing that had changed was the influx of broadly an American diet, industrially processed foods.

So the definition was invented 2009, 2010.

And we've had a decade of evidence now that is very clear that it is ultra processed food that is responsible,

not just for pandemic weight gain and obesity, but also for a long list of other health problems, including early death.

Why did this matter so much to you? What is the personal reason here?

I'm an identical twin. I've got a brother who lived with obesity for a very long time, and my weight

would fluctuate.

I'm insulated by privilege, by my surroundings, by education, but I'm always on the brink of weight gain.

And I recognized in myself that I lived with an addiction to many ultra processed products, and my brother particularly did.

And so at the core of the book was this sort of moment of understanding where there are several sort of fulcrums in the book, I suppose.

But two of the key elements are, first of all, for many of us, ultra processed food isn't just harmful, it is addictive.

and it makes all the criteria for addiction, and it has so much evidence that for some people, these products are as addictive as tobacco products, drugs of abuse, alcohol, gambling.

But that nagging people is really, really harmful.

So I'd had a very toxic relationship with my brother, and in fact, the whole family, we're a very close family,

but we had, for the better part of a decade, been nagging him to lose weight.

And I took him to see a behavioral change expert who said to me, I don't need to speak to you.

I said, no, no, he's the fat one. You've got to speak to him.

He said, no, you are the problem.

Your brother to lose weight will be to lose an argument that's been a decade long with you.

You are the barrier.

And so because I'd been nagging him, I owned his problem and he didn't own it.

And so at the heart of the book is this idea that nagging people generally pushes them toward doing things that are harmful.

It generally makes them more likely to do the thing you're nagging them about.

And I've tried to engage with these products when we come to individual solutions.

I've tried to engage with ultra processed food as an addictive substance, a substance that I was addicted to.

What is the balance there between personal responsibility and being a victim of circumstance in the sort of food landscape and society that we live in?

Because there's obviously been a huge debate around obesity and weight.

There's one school of thought maybe over on the more extreme side that says just get out there and make better choices in your life and go for a run or something.

And then there's another school of thought that says weight gain and obesity are a byproduct of genetic, our genes and the environment we live in.

What is the truth in your view and in the case of your brother?

I think we have really, really good evidence that personal responsibility, these arguments around willpower and personal responsibility are morally, scientifically and economically redundant. They have no value.

So when it comes to population health, there are loads of different ways we can argue this.

If we look at willpower, insofar as it's ever been operationalized for research and there's not a huge amount.

The research and you will know some of this, the research is quite nuanced, but broadly it serves as

a proxy for poverty.

So the original marshmallow experiment, which I think you've talked about where you offer a child a marshmallow and say, you know, we'll give you another one if we come back in five minutes and you haven't eaten this one.

That experiment, those children who were unable to resist the marshmallow went on to really suffer in life.

They had much, across all kinds of different indicators, their lives were much more troubled.

They had lower achievement economically and socially.

What it turned out is when you adjusted for maternal education, the effect went away.

In other words, the kids who were taking the marshmallow were from poor households and they were making a sensible choice.

They were taking an opportunity when it arose because if you come from a situation of deprivation or disadvantage, often things that are promised never materialize.

So once you controlled for that in the studies, broadly, your ability to resist a marshmallow aged four predicts the household you're from.

You might be from a low education, low income household. It doesn't predict anything else.

So that's one way of looking at willpower and there's lots of evidence.

The other thing is that if we look at weight in the mid 1970s, and this is American government data, there was a sudden inflection in weight gain where the obesity pandemic took off around 1975.

You look at a graph, it's bumbling along, suddenly everyone goes up.

I want to say everyone, black, white, Hispanic, men, women, you know, five year olds, 50 year olds, 90 year olds, everyone starts gaining weight.

So unless you're going to propose when it comes to weight gain that there was some failure of moral responsibility in young Hispanic men and older black women and middle aged white people, you know, that just doesn't stack up.

What changed was the food environment. So my feeling is the only thing that is interesting to talk about is the structure of the society around us.

And we have really good evidence that when you simply give people money, and we've done this, this research has been done by economists, by doctors, by social scientists.

When you give people money, they make smart choices.

Rich people don't eat bad food because they don't want to eat bad food.

And people without money eat bad food because they're forced to eat bad food.

And the cognitive dissonance that you and I were talking about, quite often, we will find people with low incomes making quite cogent arguments about the food that they eat, appearing to side with the companies that are predating on them.

Because otherwise, how could you live with this dissonance in your life? Otherwise, you're just a powerless victim of transnational food corporations.

I have almost no interest in personal responsibility. I think if you give people technical knowledge and you give people income and opportunity, most people want to be healthy and live good lives. 1970, the food environment changes. Can you tell me exactly how the food environment changed that caused multiple demographics to gain weight?

There are two answers to that. The approximate reason is the invention of ultra-processed food.

So the industrialization of food supply. You can talk about why that happened in a lot of different ways.

Part of it was to a booming population, post-war, and these products were extremely convenient.

They allowed women to continue to be in the workplace. Of course, women had entered the workplace in the war.

So there were a lot of things that were immediately appealing about these products. TV dinners, Swanson TV dinners appear in the 50s.

By the time of the 70s, these products had become very widespread.

So in the same thing, we were a decade behind in the UK, but this stuff is now our national diet.

Why exactly it took over is the subject of a lot of the research I'm doing at the moment.

So now I work much more with economists than nutritionists, and what we see is the financialization of the food industry.

So the primary determinants of almost every action that happens in almost every food company that supplies, say, 90% of our calories,

all the indicators are financial. They're not to do with public health.

So we can use financial indicators, we can use financial research to show that the food industry does these things like buy cheap debt,

use that to do share buybacks, rather than generating value.

We can show that they vote down, activist investors will vote, institutional investors will vote down public health proposals at shareholder meetings.

And so part of it is the takeover of the food system from being a system where people would grow a lot of their own food,

make food at home, they buy ingredients from local shops to a small number of companies supplying food.

So now 75% of the calories that are consumed globally come from six companies.

There are about 15 to 20 companies that make most of the food we eat in the UK that process the food.

So we've got a very small number of agribusiness producers that make more or less 12 things that, you know, we eat broadly pigs, cows and chickens.

Those are our meats. We don't really eat other meat, maybe a bit of lamb, maybe goat, maybe goose, not really duck, perhaps.

So we eat really three meats. And then our main sources of calories come from four or five crops, corn, rice, wheat, soy, palm, bit of sunflower.

So the human diet, which should encompass thousands, perhaps tens of thousands of different species of thing, has now, because of the pressures of commercial efficiency,

become reduced to a very small number of companies with enormous power producing, making a very small number of food products and needing to generate intellectual property.

Sounds like a mafia of sorts, like a food mafia.

I'm going to let you say that.

No, don't sound like me saying it. I don't want them coming for me.

I think it's, I don't mean it to sound malevolent.

So the argument I've just made can sound a bit neo-Marxist or anti-growth or anti-capitalist.

And I really don't mean it to sound like that, but it is important to understand the incentives within the system.

And if the incentives are financial, you'll end up with ultra-processed food.

So the logic of the food is the cheapest possible ingredients with the longest possible shelf life and maximum intellectual property.

What is ultra-processed food?

So, broadly, there are three types of food.

There's unprocessed or whole food, which might be like an apple or an oyster, or you can drink milk out of a cow.

You shouldn't because you get brucellosis, but you can do it.

That's whole unprocessed food.

Then there's processed food.

So there's butter.

So we can take whole milk.

We can process it into butter or cheese.

Now, we've been doing that.

So North African pastoralists started doing this in the Sahara region, maybe seven, eight thousand years ago.

They started making dairy.

And if you can make butter, you get all the fat, soluble vitamins from milk.

You get very high calorie and it almost never goes off.

It's really long shelf life.

Similarly, cheese.

Add a bit of fermented, add some salt.

You get a long shelf life, very nutritional product.

So those are processed foods.

And we've been eating processed foods for over a million years.

I mean, humans are the only animals that have to process their foods.

Food processing has shaped our jaws, our teeth, our guts.

So compared to any animal of similar size, we have tiny little teeth, minuscule, fragile jaws, very short guts.

Because we've extended our digestive tracts out of our bodies and into our kitchens.

We chop food rather than chewing it.

We cook it rather than digesting it.

So our food is pre-digested.

So processed food is good.

Tinning, canning, concentrating, fermenting, salting, smoking.

All these projects, techniques were invented really by women over hundreds of thousands of years working in caves and huts and shelters and then kitchens.

They produced modern food.

And diets from the high Arctic to, you know, sea mammal diets from the high Arctic, pescetarian diets in East Asia, vegan diets of South Asia.

Any traditional diet you point to is basically associated with good health.

All of them.

They've all evolved in different ways.

Same is true of French cuisine, rich in butter and red wine.

The only diet that we've studied that really seems to bring health harms is an ultra-processed diet.

So that is the American financialized industrial diet.

So ultra-processing is about using these commodity ingredients that I just listed, you know,

commodity ingredients like soy, corn, rice and a bit of meat.

Reducing them into powder form, basically.

So if you grow corn, the market, I mean, you understand all this much better than me.

You get money and finance.

The market for cobs of corn, spread with butter and salt, is pretty limited.

If you grow cobs of corn, you can sell a few of them.

But if you can turn the rest of them into corn starch, which you can modify and turn it.

So it's like you can create any chemical property that starts you want.

You can turn it into corn oil and you can turn it into high-fractose corn syrup.

Suddenly you have the ingredients for every single food product on the planet.

So the logic is to take your corn, break it into pastes and powders with an infinite shelf life, then recombine them with additives.

texturize them, flavor them, put a brand on it, and then you can add just enormous value.

And a lot of the ingredients we see in ultra-processed food are waste products from old food processing.

So the whey proteins we see in our nutritional powders.

I mean, this was a waste product from dairy.

You know, it used to be spread on fields or fed to cows.

But now the value you add, instead of it being used for fertilizer,

the value you add when you turn it into a nutritional supplement is a thousandfold, probably more than a thousandfold.

Citrus fiber.

You'll see citrus fibers and ingredients in a lot of bars.

Sounds healthy, doesn't it?

Like it's, you know, citrus fruit, fiber, what could be, and it probably is reasonably healthy.

It's left over from the juicing and tinning industries where you have to get the peel off fruit.

And if you put it through a set of chemical processes, you can extract the fiber added to the human food chain and create enormous value.

So the logic of ultra-processed food really is about creating products with intellectual property that use the cheapest ingredients you can.

That will last for a long time.

And from what I understood there, that last process, sort of step three, so you had whole foods, then you had processed foods, then you had ultra-processed foods.

And in the ultra-processed foods category.

What they're doing is taking the good stuff out and putting some bad stuff in.

Is that a simple way to think about it?

I would think.

I think that is a very simple way.

That's a straightforward way of thinking about it.

The additives are not really the problem.

So the problem, I would say, some of the additives we think are harmful.

We've got some quite good research around some of the artificial sweeteners, some of the modified starches, xanthan gum, the emulsifiers,

and some of the colorings and texturants.

Then we have some research that says the fact the food is mechanically processed so hard.

It's generally very soft.

So think of any ultra-processed food you can, whether it's a burger from a fast food chain or a breakfast cereal or supermarket bread.

Generally, these calories are soft and they're energy dense because they're dry.

And so dry food is important for shelf life.

The softness and the energy density means you consume them very quickly.

And so you essentially consume them before you become full.

So that's one of the ways they drive over excess eating.

So if you like the laundry list of the ways in which the food harms us is softness, energy density, some direct harms from the additives,

a lack of phytonutrients so it doesn't contain much real food.

And real food, real plants and animals should have a great variety of molecules and chemicals that we don't understand very well.

But vitamins from a plant seem to interact with you very differently from the vitamins in an extract. But the main thing is the way the foods are developed.

So I spoke to so many people in the food industry who were all wonderful, by the way, you know, I really enjoyed most of all talking to them.

But the food scientists all said the same thing that the products are generally put through a focus group.

So you start with your box of cereal that you've been making for decades and you have formulation A and then you make a new formulation, formulation B.

You put it through the focus group.

If the focus group eats box B quicker than box A, box B is the one that goes on the shelf because if they eat it 5% quicker, you'll sell the box is 5% faster.

That's the financial indicator.

And so it's not any one aspect of the food that's harmful.

So much as when the intention is to create products that people will use as much as possible, then you end up with addictive food.

Interesting.

The food is put through, if you like, almost a Darwinian evolutionary process where every single thing, every dial is tweaked on every product every few months.

Everything is adjusted from the sweet, salt, sugar ratios to the texture in the mouth to the color of

the packet.

And everything is dialed up to 11 so that things become irresistible.

And maybe you don't live with this, but people who many people listening will recognize in

themselves that there are products that they cannot stop eating.

They fantasize about them.

They think about them.

And once they start eating them, they will consume five adult portions.

I've got a six-year-old and a three-year-old and my six-year-old can eat five adult portions of any sugary breakfast cereal in about 20 minutes.

I brought some food along with me today.

I'm looking at it because I wanted to get your opinion on it.

So I brought a group of food products on the left here.

Now these are things that I think growing up, I thought were good.

Yeah.

So you're very bold with these brands.

I mean, you're really limiting sponsorship opportunities.

Well, you know, you know, I do think about that sometimes, but I also don't really care.

I think like I'm in the pursuit of truth here.

So much of why I do this is to educate myself.

And I think if I educate myself, then I'll help educate other people.

That's why I'm also okay being a total idiot on this subject matter because that is the truth.

So here I've got four products that are typically seen as being quite healthy.

Breakfast cereal, Cheerios.

I grew up thinking good for me.

Actimal, good for me.

Diet Coke.

Great because there's no sugar in there.

And then this is whole grain bread.

50% of your daily whole grain in just two slices.

Perfect.

So for a start, I have a slight unease.

I'm going to talk about these products.

I've a slight unease talking about any one product.

The evidence applies to the category of food.

And this kind of stuff in a sense, I think you're abs.

These are such brilliant choices because this is the foundation of our diet.

And one of the things that's happening at the moment is the food industry exploring painting me as a snob.

Because I'm critiquing these sort of core things, you know, tins of beans with flavoring or supermarket bread, fish fingers.

I think this stuff is at the shallow end of the pool in a way.

It's not by any means the worst stuff.

But in a way, it presents the biggest moral hazard because we think it's so healthy.

I have the Diet Coke.

Diet Coke is my favorite example because this is the ultimate health food according to the way we label food at the moment.

It has four, where's the camera?

It's all green on the...

It's four green traffic lights, right?

What do they call that, that traffic light system on the food?

So this is the way we describe whether a food is healthy or not in this country at the moment.

And this system is quite influenced by the food industry.

And it breaks all foods down into fat, saturated fat, sugars and salt.

And says that, you know, if those are the bad things and if a food is high in them, it'll have oranges and greens.

So if you look at the Cheerios, they're mostly on the front, it's on the front.

It's optional, by the way.

So it's not always on every packet, but the Cheerios are oranges and greens.

Yeah.

Now, there is a baked in confusion for this because what do you do as a traffic light that's orange and green or red, orange and green?

Do you go? Do you stop?

Is it on the active now?

It's not on there.

No, I can see it on there.

So it may be on the bottom.

It's optional.

So who knows if, you know, we don't have any way in this country of describing either healthy food or unhealthy food other than these traffic lights.

Anyway, this is a healthy food.

Now, if we look at the ingredients on the Diet Coke, carbonated water, fine.

Now there's a colour called Caramel E150D.

Caramel makes you think of your traditional, it's a French 19th century invention, burn sugar, crème brûlée.

It's like it's a bit naughty, but it's fine.

Caramel E150D has nothing to do with caramel.

It is carbohydrate treated with a mixture of acids and heat to produce things that contain ammonium and sulphide.

So it's a food additive colour with no benefits.

And I think it's a caramel.

Artificial sweeteners, aspartame and as a sulphame K.

Now, sweeteners are tricky because we know sugar is harmful because it rots teeth and it promotes weight gain because it makes you eat more.

The weird thing about sweeteners is they don't seem to help with weight loss at all.

They may, some of them seem to be more metabolically harmful than sugar itself.

Humans are quite good at eating sugar.

When we lollipops, continuously as kids or have sugary drinks, it's not good for us.

But human societies have for millennia existed with a huge amount of honey and refined carbs.

So sugar we can handle, although we should reduce our intake.

Sweeteners are quite weird because they're a nutritional lie.

You put sweet taste on the tongue, which says to your body, sugar is coming.

So maybe put up some insulin, maybe start preparing in other ways physiologically to receive refined carbohydrates.

And when that refined carbohydrate, when the sugar never arrives, it seems to be physiologically confusing.

The World Health Organization now says sweeteners aren't better than sugar when it comes to weight loss.

And there is an anxiety about aspartame and cancer that I'm personally not in a big sweat about.

There's some evidence, but not at normal doses.

Then we've got natural flavorings, we've got caffeine flavoring and addictive drug, and phosphoric acid and citric acid.

Natural, it said.

Natural flavorings.

That's good.

Well, flavorings are flavorings. Flavorings should signal nutritional content.

When you eat a tomato, it has flavor, not for fun, it has flavor because it signals the nutritional content of the tomato.

When you put flavorings out of context, even if you extract them from the tomato or the strawberry or the peach, it's very confusing for you physiologically.

You have a very sophisticated internal system to link flavor molecules, which are broadly smell and taste molecules, salt, sweet, bitter, sour, and some savory ones.

Your body has a way of linking all that information with nutritional information that you get from your gut subconsciously.

When you muddle it all up in a product like this, it's very confusing.

The phosphoric acid will dissolve the minerals out of your bones as well as dissolving your teeth.

What we have here is a solution of flavorings and addictive drug, an acid that will leach stuff out of your bones, and sweeteners that seem to be metabolically confusing and certainly aren't better than sugar, and yet we think of this as a health product.

That for me is the archetypal, confused way of thinking about food.

What we also know is that when it comes to kids the age of my youngest, so the age three, they are drinking on average one can of artificially sweetened drinks every single day.

We've taxed sugar.

Sugar has come out of our diet.

We've seen no weight loss, no indication that it's helping health, and what we are doing is consuming huge numbers now of these artificial sweeteners, which we also know affect our microbiome.

What is a better alternative that's popular on the market then?

Because it appears to me that all of the drinks in the bloody supermarket have artificial sweeteners and flavorings.

They do because of the sugar tax, so it's almost impossible now to buy fizzy drinks without sweeteners.

So for kids, I try and not give any advice to anyone ever, but my kids eat a lot of UPF, but they don't have fizzy drinks.

I think fizzy drinks are really quite harmful across the board.

So kids should just drink milk and water, milk if they can have it, and grown-ups can do pretty well on milk and water if you drink milk.

What about breakfast cereals and Cheerios and things like that?

So breakfast cereals are really convenient. Let me see the Cheerios.

So I think these probably do meet the definition of the art.

So we've got things like palm oil, caramelized sugar syrup, colors, and Ato Norbix in an antioxidant.

So this is ultra-processed. It'll have some fiber. You'll have it with whole milk.

I don't want to demonize breakfast cereals. My kids eat breakfast cereals for breakfast, but it's not like eating porridge, which is just whole grains or real bread.

And what you will find is if you give this to a kid compared to porridge, they will be able to eat much, much more of this.

And there's a lot of marketing that this is a really, really healthy product.

And I would say the evidence says that this falls into a category of foods that we actually know are associated with negative health outcomes.

It says on the side there, doesn't it? A list of all the health benefits.

A really good way of telling if a food is ultra-processed is if there is any health claim on the packet, it's almost certainly ultra-processed.

And part of that is to do with this intellectual property thing, that the only food you can make lots of money out of is a branded product.

So there's no money in broccoli, milk, steak, eggs. Supermarkets quite often make losses on all those things.

There's no health claim on broccoli or on plums or on milk. There's no health claim on steak.

It's only the ultra-processed things that you get marketed to you in this way because there's enough money to do it.

The actamel is interesting as well. The immune support.

And it says Vitamin D and B6. So that, rich in Vitamin D immune support, that is definitely healthy. I mean, this is where we should have done the maths and shown how much sugar there was in each pot.

These are very high calorie shots of sugary liquid that will harm teeth.

And I don't know why you'd have this if you could just have real yogurt or milk.

And the reason they back add the vitamins is to be able to make health claims.

So generally foods with added vitamins, real food doesn't need added vitamins.

And we're, again, we're pretty sure that, and I'm conscious who I'm talking to here.

I've got, I'm, I'm, I probably have to tread a bit carefully.

Supplementing vitamins into food doesn't seem to have many health benefits for healthy people.

So we've got quite a lot of very big data on this.

And there are lots of studies that show benefits that are funded by people who make vitamins.

But broadly, the independent evidence shows that when you get vitamins and minerals in the context of food, they're really good for you.

And when you take them in pill or supplement form, they don't seem to have many benefits if you are healthy.

And this food here, this bottle of Coke, I've got can of Pringles and Cocoa Pops Kellogg cereal.

This is the stuff that I typically think of as like bad processed, ultra processed, stay away from.

You would, but give me the Cocoa Pops.

So the Cocoa Pops, we look at these traffic lights, okay?

Green, green, orange, orange, pretty healthy.

I mean, there is a, there is a monkey on the pack selling it to my, to my kids.

Yeah.

It says high in vitamin fiber.

Vitamin D, iron.

Yeah.

Iron, supporting your family's health, right?

I mean, everything about this tells you that this is a product not just safe for kids, but intended for kids.

And we'll know you like, you can't sell things if they're not healthy.

There must be some regulator dealing with that.

And this is the thing that my six year old will eat five adult portions of.

So when you eat five adult portions, the traffic lights only apply to a 30 gram serving for you.

Now a 30 gram serving is, is a handful like that.

It's one big spoonful.

Okav.

So this is the product that I, I recognize addictive behavior in my kids.

And frankly myself, I mean, I could eat, you know, 300 grams of it.

And the other thing that I, I went and got from the supermarket because I was thinking about what I typically think as ultra processed and good for me.

I went and got this frozen pizza here.

And then I went and got a test goes finer.

So this is high end, you know, much more expensive, not frozen pizza.

And I thought surely this pizza here is better, a lot better for me than this one here.

So again, there's a complexity talking about is one better than the other because we've, we've never done a trial testing them against each other.

They're both ultra processed.

I know because I looked at the ingredients, they both contain ingredients that you don't have in a domestic kitchen like palm fat or dextrose.

And they're both made really in a sense by the same company.

So both of, they're both made by PLCs who will be owned by institutional investors with

requirements for growth.

So they come from the same food system with the same incentives about production.

And my bet is that you or I would be able to eat the entire pizza at a single sitting and we'd be still licking the pack of both of them.

So this is food that in a sense is, is engineered to be consumed to excess.

You did an experiment, didn't you?

Quite famous experiment now where you put yourself on an ultra processed food diet.

Can you tell me about that experiment and the symptoms that you saw when you did lived off ultra processed food pretty much exclusively?

So I ate a diet that's very normal for a British teenager.

I ate 80% of my calories from ultra processed food.

So for a teenager in, in, you know, my kids school, for example, this would be a completely normal thing to do.

One in five people in this country get 80% of their calories from UPF.

So I wasn't really putting my body on the line.

I was switching from 20% to 80%.

Kind of two really big things happened.

There was some health effects.

So in terms of the physical effects on my body, I gained so much weight and I wasn't, it wasn't supersized me.

I wasn't forcing it in.

This was done as part of a scientific experiment for a big study that I'm now running at University College London where I work as an academic.

I gained so much weight that in, if I'd continued for a year, I would have doubled my body weight.

We scanned my brain before and after I worked with colleagues at the National Hospital for Neurology and Neuroscience, so Neurology and Neurosurgery.

So this, these were scans done very expertly and while I'm only one patient, you can, you can subtract the noise.

You can be very sure that what you see is real.

We saw enormous increases in connectivity between the automatic behavior, habit bits at the back of the brain and those reward addiction bits right in the middle of the brain.

So we can't exactly say what's happening, but certainly behaviors and rewards are getting much, much more connected.

Most significantly, I think we saw a change in my hormonal response to a meal.

So when you eat real food, whilst you're eating, you're chewing all kinds of hormonal and neurological changes happen in your body that will come to a point.

They'll say, look, you've had enough.

You're fine.

You can stop eating now.

And that's called satiety.

And we've evolved this mechanism since living things first started eating food hundreds of millions of years ago.

And all animals have it and humans have it too.

What we saw is that at the end of a standard meal at the end of this month, my hunger hormones remain sky high.

So this is food that is interfering with our body's evolved mechanisms to say, I am done.

It's time to stop eating.

But there was this other thing that happened, kind of the most important thing, and it's the core of the book, is that midway through this diet, which I was quite enjoying.

You know, if you're sort of middle-aged man trying to, you know, the quest is always to lose weight and I could go back to eating the foods of my childhood and I was eating hot wings and all this stuff that I hadn't eaten for years.

I was really enjoying it.

But I was also doing all this research, partly for the book, and I'm, you know, as a scientist, I study nutrition.

And I was talking to a colleague in Brazil called Fernanda Rauber, and she just kept saying, this isn't food, Chris.

It's an industrially produced edible substance.

And I sat down that evening to eat a meal of takeaway fried chicken, and I could hardly finish it.

And she had flicked this switch in my brain where all of this ultra processed food had become disgusting.

But I then had to keep eating it for another fortnight.

And so it was a bit like the very famous book, The Easy Way to Quit Smoking, where you smoke all the way through reading the book while you learn about smoking.

And by the end of the diet, I mean, I now don't want to eat any ultra processed products.

So the gift I'm trying to give the reader is if you're living with addiction, my invitation at the beginning is eat along, eat while you read.

Don't forbid this stuff to yourself.

Let yourself wallow in it, immerse it, taste it, and you'll start to read and read the ingredients lists while you eat.

And you'll realize that all the food is the same flavor profile.

It's all equally salty and sugary and sweet.

It's all acidic.

And you will gradually become disgusted.

And that's not a promise.

That seems to be what's happening to a lot of people.

And that is a very well evidenced technique when it comes to living with addiction.

So the World Health Organization, who I work with, recommends The Easy Way to Quit Smoking for quitting smoking as being as useful as patches or any other technique.

So for the individual, treating it as an addictive substance may be really useful for some people.

What was the impact on your mental health and how you felt from a psychology perspective?

Because we've seen this huge rise in mental health diagnoses across the board, especially in younger people.

But it seems to be pretty consistent throughout different ages and demographics.

And I wondered if there's a link between ultra-processed foods and mental health crises that we're living through.

We've got really good epidemiological data.

So we now have hundreds of prospective studies, which are the best, the kind of studies we use to link smoking to cancer.

That it is not just associated with physical ill health, metabolic disease, inflammatory disease, cardiovascular disease, cancers, early death.

It's also associated with anxiety, depression, and also dementia.

And my experience of being on the diet was that there was a thing that I think the research doesn't capture, which is because it's salty.

I was getting up to pee more at night and I was getting really constipated and uncomfortable because it's quite low in fiber.

And so I got in this vicious cycle of sleeplessness and I'd often find myself at the fridge in the kind of small hours of the morning and the food felt like the solution to the problem.

So I got in this spiral of sleeplessness, anxiety, overeating.

And we know that stress and elevated cortisol also generally increases your desire for low quality food and makes people overeat.

So in a way that kind of middle-aged stress, anxiety, this sort of mild mental health symptoms that so many people live with, often it is just driven by the food.

I read this stat in your book that according to the World Obesity Federation, 51% of the world or more than 4 billion people will be obese or overweight within the next 12 years.

So I like to say they will live with obesity rather than use obese as an adjective because I think the biggest problem for people who live with obesity is stigma.

It's that being obese is your identity.

And what we actually know is that the World Obesity Federation are doing some really good work identifying this as the major public health problem.

The ticklishness talking about this is it's really hard to say that obesity is a problem without also saying that people who live with it are the problem.

If you're not careful, a war on obesity becomes a war on people who live with it.

And I think the evidence is very clear, it's just about the food environment.

So yes, you can make these very powerful economic arguments that we simply cannot afford to have a food system that's driving this rate of disease.

I think the moral arguments are much more powerful that this is stuff that causes human suffering. So I would not actually tax ultra processed food and I certainly wouldn't ban it.

I think all my arguments are about increasing freedom, increasing choice, increasing opportunity. And that's quite conscious.

I mean, you know this as a skillful communication.

You talk about kind of doing exactly this in your book where I'm trying to make an argument that will appeal to the political right.

That are much more on the side of, you know, free market, low regulation.

And in fact, we can have regulations completely compatible with huge economic growth.

And what I'm asking for is a food system where people with low incomes have access to healthy

affordable food.

Because a lot of people would say, and this is sort of part two of your book that, okay, so the solution here is really just for people to make better choices when they're, I don't know, in their fridges or when they're walking through a supermarket.

Why don't we just all make better choices?

I mean, you will, you may have a much more profound, I think you're asking this question in a provocative way.

I think you will understand it much better than me.

I've always had choice.

And so when I choose to buy things, they're unhealthy.

It is with a degree of choice.

I do my patients.

I run a clinic at the hospital for tropical disease where I work and most of my patients have no addresses.

They're very disadvantaged.

They're migrants asylum seekers.

They come from very low income families because those are the people who get infections.

Now, when I say to them, go and eat some healthy food, they all know what healthy food is.

They've often got very diverse communities.

They've often got very rich traditions of healthy food from the communities or the cultures they've come from.

They are completely unable to buy it.

In the case of the asylum seekers, they're on eight pounds a day and they can't work.

You can't say to someone, spend your eight pounds a day on apples and broccoli and meat.

They haven't got knives to cut it with.

Now, we know a million households in this country don't have fridges, freezers, stovetop cookers.

So there are a huge number of families that only have a microwave to cook.

And fresh food, while there is always a politician willing to advance this argument,

like, you can buy a bag of lentils.

If you go to the cash and carry, you can buy rice or lentils for, you know, a couple of quid for 10 kilos.

It costs money to heat it. It costs time.

Time is the most expensive thing for people with low incomes.

They need pots, pans, cutting boards, knives, tupperware.

If you're going to batch cook, which is the only way to make home cooking economical, you've got a deep freeze to store it in.

So saying to people with low incomes, you know, make healthier choices, it is nonsense.

It's just, it's, and so I feel very strongly, the world does not need another person like me saying that. No one. I mean, we all, people hate being told what to do.

There was a study done on toddlers in 1920 that you write about, which is quite illuminating, where they got to choose their own food from a selection of unprocessed foods.

And the children instinctively chose their own diet, which met their nutritional needs and calorie

intake.

What was that experiment and what does that indicate to us about the nature of this argument? What, as it relates to just being able to control what we eat and choose what we want?

If we look at the animal kingdom, even if you look at something you might think has quite a simple diet,

like a, like a big herbivore living in, you know, any of the big herbivores living on any of the big planes in the world.

And you think, well, they just eat grass. They don't. We've done loads of experiments where you put, it sounds a bit unkind,

but you put a hole in the neck of the animal and you put a bag on the hole and you collect the plants they're eating.

And you can do this in a way that's relatively humane.

And what we discover is if we study goats or cows, they're eating 50 or 60 different plants a day.

Calories are abundant. And what those animals are doing is balancing all their nutritional needs from all those different plants

and selecting them and learning about the flavor profile and the mineral content.

They're moving to avoid predators and the rains to different soils.

So animals are incredibly sophisticated at perfectly balancing their nutritional needs from their environment.

And obesity is non-existent in the wild animal kingdom.

In urban animals, actually, that start to scavenge from humans, there is some evidence of obesity.

But in wild animals, there is no obesity.

Humans, it turns out, obviously have the same ability.

And so a scientist called Clara Davis is an amazing woman.

She was a gay woman, one of the first medical graduates in North America.

And she did this experiment where she was taking abandoned kids in the sense that they functioned almost like an orphanage.

And each child got access to 34 different whole foods every single day.

And it was things like there was raw bone marrow and cooked rice and vogurt and milk.

And they had a little bowl of salt they could have as much or as little salt as they wanted.

And her question was, could the kids balance their nutritional needs?

And the best example is a kid called Earl, who she took in a few months old and he came in with rickets.

So he had very bad vitamin D deficiency, he had bendy bones.

And they did some x-rays and you could see the rickets on the x-rays.

And every single day, he would glug an entire cup of cod liver oil, which at the time was one of the only, really the only source of vitamin D.

And he drank this every single day enthusiastically.

He always wanted his cod liver oil.

And on the day his rickets were healed and you couldn't see them anymore on the x-rays, he stopped drinking the cod liver oil, never asked for it again.

And none of the kids without vitamin D deficiency would drink, would touch the cod liver oil.

So something in Earl's body was saying, I will, when I need this stuff, I'll have it.

And once I don't need it anymore, I won't have any more of it.

And all the kids that she studied over many, many years with access to a full range of foods perfectly matched all their nutritional needs.

They all grew really well.

They were intellectually well developed.

They're extremely healthy.

And they didn't have any of the sort of food refusal problems that parents have nowadays.

So, and she knew very well that the point was the kids only had access to good food.

She wasn't giving them access to industrially processed junk foods, which were still slightly available.

It was a really cool experiment.

For me, I take away from that, that our bodies can kind of self-regulate what we need if they're in an environment where the options are good.

So if I'm a parent, and I'm sure I'll be a parent in the next couple of years, I hope so.

If I just make sure in my house, all the food options are good for my kids, whole foods, all the good stuff you've described.

Presumably, then I can just unlock the cupboards and let them run free.

I love talking to people who might become parents about what they think me.

I mean, I'm like, wow, you just, I mean, yeah, good luck to you.

Can we have this conversation again in about six years?

Can you tell me why I'm...

Well, you're not wrong. You're completely right.

It will be impossible for you to limit the influx of ultra processed food into your house.

So clearly, I've written the book on this, I study this, I would love to do that.

I want my kids to be normal.

Being normal is really important as a kid.

And food isn't just stuff we put in to build our bodies.

Food binds us to the people around us.

Food is part of our community and our culture.

In the UK, our food culture is ultra processed food.

And if you don't eat and drink ultra processed food, you become a slightly odd person.

And so I still eat it when I go to friends houses because otherwise I look like some, you know, fanatical food snob.

So, and it's the same with my kids.

So grandparents, friends, relatives, all bring it around.

You don't control what they eat at school.

You know, my youngest one's a really nice nursery,

but still ultra processed food from the minute she gets there to when she leaves.

So very good luck to you.

But this is why I argue I nod to if an individual wants to read my book,

I think they will come away with technical knowledge that they will be able to use.

And I wish them well with that.

The big argument of the book is about this.

This is about social justice.

You know, it is really appalling that even for people with a lot of means, real food is incredibly affordable and unavailable.

As you guys may know, this podcast is sponsored by one of my favorite bands in all the world, which is Woop.

AI is a topic I've spoken about various times on this podcast.

And it's a topic that I'm pretty obsessed with,

but we don't often talk about how it could be used as a force to make our lives even better.

Woop is using the power of AI to drive meaningful positive change.

My Woop doesn't leave my wrist.

And their new feature, which is called Woop Coach,

uses the power of advanced AI to synthesize all of your health and fitness data

and provides you with personalized recommendations to support you on your health and fitness journey.

You can literally ask it questions like, why am I so tired?

Or can you help me build a strength training program?

And its advanced AI system will provide you with answers that are unique to you.

So if you would like to check it out and level up your health and fitness journey in the process, go to join.woop.com slash ceo to get a free month's Woop membership.

As you'll know, this podcast is sponsored by Huell.

And one of my favorite products that they've ever created is their Huell Daily Greens.

It actually performed so well when we released it that it sold out completely.

And the only thing I'm back here to say to you guys is that it's now back in stock.

It tastes amazing.

And it's actually got 91 vitamins and minerals and whole food ingredients in one scoop.

It's nice not to have to think about taking lots of different pills and vitamins in the morning.

I can just take this and I know that I'm giving my body a good dose of all the vitamins and minerals that it needs every morning.

It's a lot better tasting than having to force down some of the other green powders I've tried.

And it's really reassuring to know that I'm looking after my body properly.

Unfortunately, and currently, this product is only available in the US.

So anyone in the USA, head to Huell.com to get it before it runs out again.

But anyone that's not in the US and wants it to come to their country, please send me a DM, a direct message.

And I'll speak to the team at Huell in our board meetings and I'll let them know that you want it in your country.

What about the people that say this is just about calories and calorie out?

The fitness community, a lot of the weight loss community just say what you've got to do.

And I've actually got a friend that said this to me quite passionately.

He says, what I do is I just measure the amount of calories I'm taking in, measure the calories that

are coming out.

And I make sure that there's a calorie deficit.

And if you have a calorie deficit, he actually says to me one day, he goes, you can eat whatever you want and you'll be fine.

Mathematically, he's not entirely wrong.

There are some very, very, there are two very, very big problems with that.

The first is that while some people can just eat two instructions, many of us have genes that lead us to engage with food in a more interesting way.

You know, I care about food, I love food, I'm driven to it.

So you, your friend should come around my house in the morning with a box of cocoa pops and try and get my daughter to eat one adult portion and good luck to him.

I mean, they'll be screaming and crying and she'll be grabbing the box.

So the food, it's a bit like saying to smokers, all you have to do is just smoke one cigarette.

Don't smoke the whole pack, just have like one to be social.

Or people who live with addiction to alcohol will just have one drink and that won't do you any harm. The food really is addictive for many people.

But there is this other bit of the equation, which is really fascinating, which is that when we do more activity of the kind that most of us do,

it doesn't seem to have an enormous impact on the calories that we burn.

And this is very good, robust science going back to the, going back to the 90s.

The most, if I tell this as a story, which I think is the way you do it, there was a scientist called Herman Ponzer.

And he wanted to know how many more calories he'd burn if he went and lived as a hunter-gatherer with the Hadza tribe in Tanzania.

So he went and studied them and he put, he used to think of double labelled water where you can measure very accurately calorie expenditure

and he put them in metabolic hoods and he studied them for months and months.

And he came back and he looked at his data and he thought he'd got it all wrong.

Because the data showed that for, essentially, if you or I went and lived in Tanzania

and we walked 15 kilometres a day hunting antelope and digging tubers out of the ground, we wouldn't burn any more calories per day.

And he just could not make sense of this.

So then he went back and looked at all the data available in the literature.

We've studied animals, we've studied different human populations.

We've studied subsistence farmers compared to secretarial workers in the States.

We've looked at miners.

The same thing is true in all the studies.

When you do sustained activity over a long period, it doesn't massively impact your calories.

Now, some exceptions.

If you do polar exploration, if you cycle in the Tour de France,

if you go to the gym for an hour and a half every day, six days a week,

you probably do burn a few more calories.

But activity of the kind we all do doesn't seem to.

And that explains why exercise is good for us.

Because if you don't do exercise, I burn 3,000 calories a day.

Let's say with slightly different body compositions, but roughly you and I burn 3,000 calories a day.

If you do your hour and a half of exercise every day, you're stealing energy from your other budgets.

You're taking it away from inflammation, away from hormones, and away from anxiety.

That's why exercise seems to be good for us.

Because I'm sitting here and I'm relatively sedentary with my two kids.

I don't go to the gym for an hour a day.

So I spend my calories, but they're spent on inflammation and anxiety and relatively high hormone levels.

And is this what we call the fixed energy model?

I read that in your book, that term.

Yeah, so that's the model.

And there are lots of exceptions.

But what that model tells us, along with all the other available data,

is that when we are talking about populations who live with obesity,

increasing activity will be really good for them, but it will not have a significant effect on body weight.

So when we're talking about the pandemic of obesity, activity isn't hugely important.

And if people are listening and they want to lose weight,

many people have the experience that putting a healthy diet in the context of lots of other healthy things

is often really a good way of bringing about behavioral change.

You'll feel good in other ways.

But the activity in the exercise, if you think that putting in your slog at the gym,

most of us can manage 40 minutes every other day tops.

And I get nowhere near that.

It's not going to have an impact on your weekly calories.

Even if we accepted that, even if we did think that it increased the number of calories you burn, there's other evidence that says you either eat more because your body isn't just the mathematical machine that your friend proposes.

But also, if you add up the calories and you go to the gym for half an hour, four times a week, it's just not very many calories in terms of your weekly calories,

even if you're cycling as hard as you can for the whole thing.

I can definitely relate.

I work out every day just because I...

You do it every day?

You seven days a week?

I have a PT every single day.

And the reason I do that is purely because I am best disciplined when I have a clear routine.

So knowing that it's part of my habit and that it's actually today, it's in my calendar.

Yesterday it was in my calendar.

I even have lunch in my calendar now because I'm just trying to make sure that I have some kind of routine with my eating.

Or else I just won't eat.

I remember on Friday, my first meal was at 6pm because I was podcasting, had some stuff with the BBC,

and I don't want to eat before I do anything because I'll slump.

My point here, though, is with my personal trainer every day, if I don't change my diet, very little happens with my body.

Actually, I end up growing a bit more muscles.

I end up getting a bit stronger.

But in terms of weight loss, the fat just sits there.

Interestingly, though, from a psychology perspective,

I've spoken to a lot of scientists and doctors who have said your body will basically overcompensate for what you've just burned

if you go for a 5 or 10 mile run.

Your body wants to defend its weight because that's defending its survival chances.

For me, one of the things that happens is if I go and work out in the gym because it was so painful, I'll then come home and look at the flapjack or the cookie or whatever.

And I'll think that's two steps backwards.

That's interesting.

Whereas some people will come home and look at the flapjack and go, I've earned that.

But to counteract my own point, that also happens sometimes.

I go, well, I can have it because I just ran or whatever.

What I might do is I might avoid the flapjack, the obviously bad thing,

but then I might eat more of something that I think isn't bad.

You'll have a sort of nutritional bar or something that is sold to you as being part of that kind of access.

Yeah, and I'll eat four of those.

One of the really interesting things is when you speak to nutritionists,

and I've spoken to a couple who work with really elite sports teams,

those athletes generally eat food.

So they have chefs that make, and they might make quite an elaborate flapjack,

but it will be a flapjack made with the ingredients you would have in your kitchen.

And they will often drink milk while they're cycling or running.

And they'll eat pieces of chicken rather than other things.

This topic of willpower, again, we kind of started with it.

Willpower comes up a lot in your stuff, and it's been so interesting listening to your stuff about it.

I have to be honest, I have evolved in my thinking about it

because I've listened to both sides of the argument around willpower,

and it does appear to me that there is probably something else going on.

But with all these studies on willpower, it's hard to establish causation

because there are other factors that are quite clearly could confound the variables in place.

So it's something that I've gone back and forward on.

You talk about twin studies in the context of willpower and what that can teach us.

Why did you talk about twin studies in Chapter 9?

Part of it was done by a colleague called Clare Llewellyn.

And what Clare was looking at was the herit...

It's a bit convoluted, let me see if I can do this.

The heritability of obesity genes.

So there's a weird thing, we see this with...

It's a bit easy to understand with IQ, but it's true of IQ genes and obesity genes.

That in some places, if your parents have genes for obesity,

you will have a 90% chance of inheriting the obesity.

But in other families, it's more like 10%.

Same is true with IO.

So what Clare Llewellyn showed was that if you came from a situation of deprivation,

if you came from a low-income household,

your genes for obesity are much more likely to be expressed.

So you would inherit those genes and you would develop obesity.

Now, the social importance of this was because IQ studies

originally showed that intelligence was hereditary.

And this caused huge problems because it was done in the States

and minority groups were measured as having lower intelligence.

And this provided that kind of core argument of saying,

well, some people are genetically less intelligent.

And there's a woman called Sandra Skarn.

She did the first studies and it was twin studies that showed it

with that whilst intelligence is heritable in some communities, it isn't in others.

And basically it works like this.

If you come from a well-off household, all your genes,

whether they're for a healthy body shape or for intelligence, they're all maxed out.

And so all the variability is genetic in the population.

If you come from a low-income household, you might have genes for height

that never get expressed.

You might have genes for intelligence that because you have been poorly nourished,

you haven't been as educated as well, those genes for intelligence never get expressed.

So you have a really complicated picture where genes can be inherited

but not expressed in different communities according to how those populations are treated.

And so that's one of the crucial things in psychology is when we only study

white middle-class populations, when we only study psychology students,

we get very, very different answers to when we go and look at populations who live with disadvantage or low income.

So essentially what one of the big findings from Clare Llewellyn's work is

if you got rid of poverty, you would get rid of around 60% of the problem of diet-related disease.

And you and your brother, because you are twins, are quite a good example of this, I guess,

because you referenced how he went and lived in Boston

and was having a stressful time and gained weight.

I mean, every time I go to America, we travel out there to record the podcast.

It's just absolutely fucking wild.

I just feel terrible.

I always gain weight.

And it's just unavoidable.

If you're doing work like you do in the States and you're at hotels

and you're on the move and you're traveling, you cannot eat good food.

That mini bar in the Bloody Hotel, which they just keep topping up.

I remember I was saying to the team, I was like,

I put the cookies in the fucking bin and then I came back the next day and they put two bags there.

Yeah, they think you've eaten the cookies.

Yeah, they thought I enjoyed them.

I mean, the marketing, that's a form of marketing.

And if you think that you are struggling, I'll come back to Boston,

but if you think that someone like you struggles in a hotel room

when they put cookies and all this junk there

and you have to sort of put it out of sight.

For a British teenager, this is true for teenagers in States, Canada, Australia,

they are saturated in marketing in a way that you would be completely invisible to you and I.

I mean, you may remember this from childhood.

It's on your bus tickets.

When you buy stationery at the shop, it'll be on your receipt.

It's on your music apps because we pay for our music apps, but kids don't.

It's on their social media.

The companies get their phone numbers directly from the intercompetitions

and then they send them meal deals and messages, ping, ping, ping, to their phones.

So it's 360, 24-7 immersion in marketing of addictive products.

And so it's not that confusing why 25% of British kids live with obesity, not just overweight.

Anyway, so Boston, yeah, my twin moved to Boston.

It was a situation of some stress.

He'd had a kid, a son, Julian, with someone in a way that wasn't planned, I suppose.

Julian knows this.

I mean, it's all part of a very dear family now.

But it was very stressful.

He went there to do a master's degree.

He lived above a burger shop and he kind of ate his problems and he gained 30 kilos.

And that is an example of we both have a genetic vulnerability,

but my life in the UK was very stable and I was in a different food environment in the UK.

You move my genes, my clone, genetically we're identical.

You move my clone to the States, stress him out a bit, he gains 30 kilos.

I mean, it's nothing.

Has our willpower changed?

Has our personal responsibility changed?

You know, a set of accidents and coincidences and the food environment and what determined his weight.

There's nothing to do with willpower.

Whenever I feel like I'm in a situation where I don't have autonomy and control,

I'm like, oh, and when I hear about this sort of food environment we're living in

and the big food mafia and the marketing and pinging me left, right and centre

and all the products that are in some of these ultra processed foods

that are making me feel addicted to them.

It's just triggering my brain in a way that I can't seem to control either.

I go, I wanted to be able to do something about it on an individual level.

I want to be able to take back control without having to wait for bloody downing street or the White House to change things.

I love that.

And what I try and propose in the book is that you need to make that journey.

Probably when you start reading the book, you're in this sort of unconscious stage.

You don't think of yourself as either a victim or anything.

You're just eating your food.

And the midway through the book, I think I do propose to you that you are a victim and that's a hard thing for any of us to listen to.

Most of us don't want to be victims.

And I think you have to make the journey from victim to activist pretty quickly.

And you can be an activist in your own life for yourself

and you can, if you have resources and money and skills, you can get rid of ultra processed food.

Lots of people actually can't.

I just got to be really blunt here.

There is an anxiety I had writing this book that for the core audience of readers

who can afford books, most of them will be able to buy sourdough from a fancy bakery rather than the loaf of bread we just looked at.

But for the people who are most affected by the problem, it simply won't be a choice.

For someone like you, yes, you need to take that kind of emotional reaction

and turn it into direct that rage rather than directing it inwards.

It's directing it out to a food system that controls you.

One of the political narratives we hear is that any kind of regulation is nanny-statism.

It's about government overreach.

At the moment, we live in a nanny state.

The nannying is done by transnational food corporations.

They don't pay any particular tax in this country.

They do employ some people, but these are not companies that are part of our sort of culture.

And yet they are controlling our food and what we eat.

And I think we need to rest a little bit of control back off of those companies.

But that group of people that maybe weren't the majority of people you were speaking to with your book

that don't have the privilege that me and you have to make better choices

as it relates to food or to buy the pots and pans and chopping boards

or get a chef to cook it for us, whatever.

What do you say to them? What do they do?

I mean, this is why I don't give advice because we are at this moment

where we do have to politically treat the companies like the tobacco companies.

Now, at the moment, for many people, trying to quit ultra-processed food

will be like trying to guit smoking in the 1960s.

Is it really addictive?

So do you want me to do a bit on the evidence for addiction?

Please, yeah.

The definition of addiction, because food addiction has been really scientifically complex for a long time

because baked into the notion of addiction is that the only strategy that ever works is abstinence.

You cannot be abstinent from food and so food can't be addictive.

So for a long time we said, well, food is a behavioral addiction

where it is that the food behavior is not the food itself.

The definition of ultra-processed food allows you to describe the category of substances that are addictive.

And when we go and speak to people who say, I live with addiction to food

and you say, what do you feel addicted to?

It's always ultra-processed products.

It'll be very different.

Some people, it's going to be the dark colors.

Some people, it's biscuits.

Some people, it's pizzas.

But it's always UPF.

The definition of addiction is continued use of a substance

despite knowledge of harms, physical or psychological, and despite repeated attempts to guit.

And you and I will both know people in our own lives who continue to eat this food.

I was definitely one of these people, despite knowing it was harming me and wanting to stop eating it.

So that's why I think I have two groups of readers.

Some people are just going to want to cut down.

You might be someone who's maybe eating a little bit more than you want and you just want to go, I'm going to maximize my health and I'm just going to have it.

It's a treat on a Friday night.

And that's fine.

It can be like booze or the occasional cigarette.

For some people, that one cigarette, that one glass of wine,

but for many, probably 40% of people, I don't know about your audience,

but across the country, 40% of people will have a troubled relationship with it.

And for those people, abstinence may be an easier strategy.

So yeah, I think it's addictive when we look at scans.

It's addictive when we do surveys.

It's addictive when we look at the profile of genes and the other surrounding factors that lead to addiction.

It's caused by the same things.

And there's lots of basic science about the speed of consumption and addiction.

So addictive things are normally very quickly consumed, shots, crystal meth, tobacco products.

If you chew tobacco, if you have slow release methylphenidate, it's a treatment for ADHD.

It's not addictive.

If you have weak session beer, it's not addictive like teguila shots are.

So the speed of hit seems to be important.

And that may be partly to do with the softness of UPF.

You get a very quick hit of your nutrition.

Is there a link between ultra process foods and neurodiversity, ADHD, those kinds of things? Because there's some emerging evidence about ADHD.

I'm speaking to, there's a working group at the Royal College of Psychiatrists who are really interested in the links between binge eating disorders and other eating disorders and an ultra processed food.

I think we are only at the very beginning of discovering the health effects.

But remember from very early on in childhood, a huge number of kids in this country are on a diet of almost pure ultra processed food.

But that's often in a situation where there is also other sources of trauma, there'll be other health factors, there'll be poor housing.

It will go hand in hand with lots of other things.

So as an adjunct to other problems, I would think there will be a link, but teasing it all out is going to be complicated.

A high UPF diet is linked to more deaths globally than tobacco, high blood pressure or any other health risk.

22% of all deaths, that's the stat I got from your book.

And also increased consumption of UPF, ultra processed foods, is linked to the following diseases.

All cause mortality, cardiovascular disease, cancers, high blood pressures, fatty liver disease,

inflammatory bowel disease, depression, worse blood fat profile,

irritable bowel syndrome, dementia, and I can't even say that other one.

Frailty, just being weak and old.

Part five of your book is what am I supposed to do about it?

And I've kind of answered it.

I want to make sure I'm really clear on my own life here.

I can because I have the privilege of doing so.

I can make better food choices.

The first part of it is awareness, knowing what ultra processed foods are.

And I believe I've got that definition from you.

Step two is I really need to do an audit of the things that I'm consuming frequently to make sure that I'm at least intentional about my consumption of ultra processed foods.

And then I can make better choices to bring in more whole foods into my diet because you're right.

There's so many things that I'm consuming that I thought were good for me.

I mean, I drank bloody orange juice for sunny D for 20 years because I just thought it was great for me, vitamin D or something.

I can't remember.

So sunny.

Yeah, exactly.

And it was marketed at me.

Awareness is step one, making more informed choices.

I guess it's step two for me.

And then there's a broader point, which is about trying to change the system for others, which I can do by having these kind of conversations, I guess.

I love that those steps are coming from you.

I don't have a...

I honestly don't care what people eat.

I like freedom.

I don't like being told what to do.

And so I am not prescriptive about what anyone should eat.

Nowhere in the book do I say you should, like as a normative statement, you should eat less UPS.

So if you want to, knowing what you know, that's up to you.

I don't think anyone has a duty to be healthy, to generate economic growth.

I just think no one asked to be born.

You're born.

You should be able to live your life as you want.

What I do think is what I want for everyone is that they can...

They have agency so that they are not subject to constant predatory marketing and they have true choice.

So all the policies that I'm proposing, and I'm part of a big group working on this,

are about making real food affordable and available.

So in terms of the hierarchy of what needs to be done for everyone,

the number one thing is tackle poverty.

Poverty is a political choice.

There is enormous wealth in this country and people born into disadvantage should not have a different childhood

than people who are born rich.

And it feels kind of almost revolutionary to say that, but it's really obvious to me, like why...

I mean, I can talk about this all day, but health outcomes are so different for people born in poverty, for people who live across the road from my kids.

So that's the number one thing.

The second thing is some very light regulation.

I don't want to tax things.

I don't want to ban things.

We need to appropriately label unhealthy food.

And at the moment, the labels are so confusing as to be unusable.

We need to put in our national nutrition guidance that there is good evidence linking ultra-processed food as a category to all these poor health outcomes.

We should recommend, the government should recommend that people do try and consume less.

Now, there will be a real problem for the government doing that, because the government creates a food environment

and it's really hard for a government to say, look, on the one hand, don't eat all this,

and then go on the other hand, that is all you can afford to eat.

So that's going to create a real political problem.

That's sort of what we're up against.

The most important policy step is to get industry out of the room when it comes to making policy.

So I just spoke at the World Obesity Federation in New York.

There are UN-aligned, WHO-aligned group.

Outside of the UK, there is no discussion about the role of ultra-processed food.

The pandemic obesity is primarily due to this Western industrial diet.

Everyone agrees on this.

Countries like Argentina, a can of cola has three big black hexagons on it, bigger than the logo of the company that makes the cola.

Same with most of the breakfast cereals.

You know, there are warnings in the national guidance.

So globally, people are very, very aware of this.

In the UK, there is real control of the public health narrative by the food and drink industry.

So as an example, all our major charities that influence policy, and a lot of policy comes from charity,

they're all paid by companies that make by UPF.

So if we look at the British Nutrition Foundation, it is majority funded by all the major food companies.

You can name Coca-Cola, Nestle, Cargill, all of them.

Cancer Research UK, Diabetes UK, the British Dietetic Association.

All of them are funded by companies that make ultra-processed food.

So we need to start treating the companies like the tobacco industry and saying,

no, no, your money is not good and we won't take it because it influences food policy.

That's kind of the most important step.

So part of being an activist in this area for me is not taking food industry money myself.

And so that is a very painful weekly process because if you write a book about food,

you get offered enormous amounts of money to go and work for the food industry.

How did your food consumption change from the beginning of this book to the end of this book?

Were there any particular choices that you have unmade or made

because of what you learned in the process of writing this book?

I think resisting addictions, if you live with addiction, is almost impossible.

That's the whole point about addiction.

And what you need to do is to make the journey from being addicted to being disgusted.

And love and disgust are quite anatomically close in the brain.

They're neurologically quite related.

And many of us have experienced this falling out of love process

where something or someone you're infatuated with that is irresistible.

You want to spend all your time engaging with, suddenly becomes something you really don't want to do.

And smokers will describe it.

Some people have this experience in human relationships.

It can happen that switch can be flicked quite quickly.

And I think if you're someone who lives with addiction, you need to figure out how to flick that switch.

That at the moment, if you're addicted to this food and you constantly trying to resist it, it will be too much.

So I think that is kind of the priority if you're living with the addiction.

It's to try and get to disgust.

And that's what happened to me is the food became...

You know this thing about the Uncanny Valley?

Where if there's a thing in animations where if animations are very cartoony, they're fine.

But if they become quite human, they suddenly start looking weird.

In films where they get it a bit wrong, where the cartoon characters are too realistic,

they become almost zombie or corpse like.

So this Uncanny Valley that animation goes through where it becomes weird.

And then when they're ultra human, they're fine again.

The food for me was a bit like that.

It entered this sort of Uncanny Valley where it's similar to food, but it isn't food.

And so now I just don't want any of it.

But I will eat it to be polite.

This stuff that I brought with me.

You know, the pizzas, I've got the cocoa pops, I've got the coca-cola here.

Is this food?

I don't think it meets...

So food is very poorly defined.

We don't have a working definition of food sort of in law.

But I think food is substance that you eat for nourishment.

And it should be about nourishment culturally, socially, personally, psychologically, as well as physically.

And these products are developed to generate financialized growth for institutional investors.

They're not made by people who love you, who want to nourish you.

And so I don't think it meets what I think is a useful cultural definition of food.

I think it's very useful to not think of them as food.

And I don't think a mixture of coloring addictive drugs and phosphoric acid could be called food in any sense of the word.

It doesn't have nutrition.

It only has things that will...

We're pretty sure that almost every ingredient does you harm in some way.

So I don't see how that could be called food.

It's a way of commodifying your ill health for the benefit of a very small number of people.

Are you optimistic?

Oh, that's such a great question.

Like I live with...

And I want the real answer, yeah.

That's a sort of...

You could ask me, you get a different answer each morning.

So at the moment, here are my sources of optimism.

There is another way of doing this.

I have a friend who runs a not-for-profit drug company, works as a normal drug company, has a huge quantity of revenue.

Only one person took a pay cut.

That was the CEO.

So he doesn't own it.

Everyone else is paid exactly as if they're at a normal pharmaceutical company.

The purpose of it...

And he paid back investors.

It's a really...

It would be cool for you to interview him, actually.

He's one of the smartest people I know.

He came from Big Pharma.

And because he's not obliged to institutional investors, he developed drugs for low-income settings.

He also sells them in middle and high-income settings and does really a great job.

But the purpose of the company is to reduce healthcare inequalities.

Now, there are lots of people who are working on a similar model that will sit within, you know, a capitalist structure

that will pay back investors, but where food needn't become so beholden to institutional investors.

So I think there are financial reasons for optimism.

There are economic models.

We can propose corporate structures.

We can incorporate things in different ways that will serve the community in different ways.

So that's one source of optimism.

The second source of optimism is we sort of did it with tobacco.

And the cool, terrible thing about tobacco is we regulated the tobacco industry

and got smoking rates right down and the growth of equity value of the tobacco companies

has continued more or less uninterrupted throughout.

Now, part of that comes from selling cigarettes in other countries.

Some of it comes from the rise of vaping.

But nonetheless, we did manage to get control of tobacco.

So as a public health activist, I have a template.

I know how to do it.

I know how to tackle marketing.

And we have a roadmap.

And we also know that people are furious.

I mean, people are enraged.

For 40 years, we've watched particularly our children not just get bigger, but get shorter.

So if you have kids, if you have kids in this country by the age of five,

they will be that much shorter than if you had kids in Scandinavia or Bulgaria or the Netherlands.

At the age of five, that much, nine centimetres.

That is the difference between a British five-year-old and a Bulgarian five-year-old.

And this is all diet.

So it's not just our kids live with a beastie.

They are stunted.

Now, you can't stunt a body by nine centimetres at the age of five

and not also stunt them intellectually.

So people are furious.

We sort of know this is happening.

We know we can't stop eating this food.

A beastie is all around us.

And so I think there is real, real momentum for people to reclaim their foods.

And we do have a lot of amazing food cultures in this country

that we can draw on for kind of rich, phenomenal diets.

You might explain why the US is so poor from an education standpoint to some degree.

You know what I mean?

Because they always rank at the very bottom of the education tables.

It's about the same in the US, the physical stunting.

The physical stunting, once you get rid of cigarette smoking during pregnancy.

which is still far too high, it's really all due to diet.

So there's all those causes of optimism.

And yet I also am up against the power.

Any one of these corporations has revenues equivalent to the GDP

of a pretty decent sized country like Venezuela, Croatia.

And that's any one of the companies.

This is just such a conspiracy theory that I just popped into my head about my own childhood.

I'm the youngest of four, right?

And if we just look at the brothers, so there's three of us brothers.

I'm the youngest brother.

And Kevin, my oldest brother is a monster.

He's like six, five or something.

Even Jason is like six, three.

And then I'm short.

And I'm like short in comparison to six, six, one.

But there's so much, there's so much shorter than me.

And I did, I was thinking about it as you're speaking.

My mother did make home cooked food.

She was at home during my older brothers and sisters as they were growing up.

So she was cooking in the house the whole time.

African food, lots of whole foods and chickens and vegetables and salad.

Traditional like any traditional diet.

And then she started businesses and stopped coming home.

So I was a scavenger and I had like free reign to go to the sweet shop and eat not so good things.

So I was just thinking about, I've always wondered why I'm shorter than them.

And I'm younger, but maybe there's...

You're stunted physically and intellectually.

Maybe.

I think you're going to have difficulty selling people.

I mean, it is an intriguing point.

We know about youngest people in Europe, the youngest children are about...

I don't know, I don't know that to say.

They're about five IO points, less smart.

I'm the idiot of the family as well.

My brothers are absolute super genius.

They're like, they're like mathletes in the UK.

My brother was rewriting the textbook.

He was on the front of the Plymouth Herald because of his bloody, the grades that he got.

I think it was the Plymouth Herald.

It was one of the newspapers.

He was in there and Kevin was even smarter.

He was another super genius.

I got kicked out of school.

It's really interesting.

I mean, that idea of eating a sort of traditional home cooked whole food diet versus your probably quite high UPF diet.

I mean, the data, you're one case, but we build evidence out of case studies.

I love that idea.

I'm not sure I can really accept you as kind of intellectually, physically stunted sitting across from you.

No, but academically, they were just so much...

So they still are so far ahead of me.

In fact, Jason now works in my company just to help me with everything because he's so smart.

There's a pair of twins I know who separated at birth,

adopted in China, separated at birth.

They're quite well now.

I've interviewed them for a podcast and one grew up in Norway,

one grew up in the States, genetically identical.

And the Norwegian twin is that much taller than the American twin.

So we do see these natural experiments too.

Crazy.

How's your brother getting on?

So maybe the biggest effect of the book is he kind of eye stopped a message in the book.

And I would say this because people are listening and it listens to selfish.

How do I lose the way?

How do I quit UPF?

I've said that, but the bigger thing is don't beat your loved ones over the head with this.

So many people are like, I'm going to buy your book for my wife or husband or daughter.

I'm going to tell my kids.

And when we let people go and we stop owning their problems,

it gives them agency.

It empowers them.

And then it's up to them to decide.

And if they have the resources and the opportunities, generally they will.

And so a big, a kind of core message to the book is stop nagging your loved ones about their food.

Their food is controlled by forces that are far bigger than you.

They know what to eat.

Nagging people about their weight only stresses them out and makes it worse.

So when I, it was when I let go properly of what's on the eats and stop really,

really stopped caring about him and started to kind of not see him as an extension of myself.

Because when he, he would be big in public.

You know, we worked together as television presenters and God, you're embarrassing me.

Like we're trying to talk about health and medicine to kids and look at you.

And when I let all that go and saw him, it's like, you know, he's such a wonderful person.

I love him so much.

Who cares about his weight?

That enabled him to sort of engage with it.

Then lots of other things happened.

He's just got married to a public health academic.

He's got resources.

He got a bit older.

I mean, all kinds of things happen.

So much of life is, is luck.

We can tell these narratives of how someone got from A to B, but he's very fortunate.

And I think celebrating weight loss is just something I'm, I'm so anxious about doing.

But he, yeah, he, a big product of the book was an improvement in my relationship with him because I stopped caring what he ate.

I find it so interesting why people decide to make changes in their life.

And it's so different for everybody.

I've, I've wandered and pondered whether sometimes we need a little bit more pain.

You know, I can't forget a conversation I had with a manager of one of the top music artists in this country that was struggling.

And this person was a friend of mine, the person struggling.

And I kind of went to him and I was like, listen, how can I help?

And he goes, you can't.

He goes, I've managed a lot of music artists that have struggled with addictions of various kinds.

And at some point they'll reach a rock bottom and they'll decide themselves that they need to make a change.

And it's such a hard thing to accept just to kind of let someone in your view go into free fall in an area of your life.

You want to catch them.

You want to hold them up and support them.

That moment of clarity, of decision, that's when we've all had it switch suddenly flicks that can never arise as long as someone else is telling it.

And the clearest example of this is the washing up that my, you know, we've got a family and everyone's.

And sometimes as I'm about to heroically at the end of a meal, get up and do all the washing up, my wife will say to me, could you clear these plates and do the washing up?

And I've gone from being an empowered person with agency about to heroically do my bit for the family to being someone doing the bidding of someone else.

And it enrages me.

And we do it to each other.

So just allowing other people to grasp their problems and deal with them or not is, you know, it's a really hard journey for a doctor because doctors are all about telling you about yourself.

And I try and do it less and less.

It kind of reminds me a little bit of what I was saying earlier about.

I don't like it when it feels like I'm being controlled.

Yeah, veah.

And that's kind of what the food environment we live in makes me feel like it makes me feel like I don't have a choice.

You don't.

And I want to have a choice.

You don't really have a choice.

I mean, if you have enough money and you're really prepared to get up early in the morning, you have some choices.

But our food choices are severely curtailed.

And if you're on a motorway, if you're traveling around this country, if you just try and go out on that high street out there and just buy yourself a quick lunch, there aren't a lot of choices.

The pain thing is interesting.

We need a little bit of pain in our diet.

We need foods that are bitter and real and chewy and crunchy and make us work for them and take time to prepare.

And one of the big switches is trying to see food preparation not as a chore, but as something that connects you to your ancestors.

I mean, you know, we've survived because we come from this long chain of people who just spent hours a day grinding and pulverizing and salting and mashing and figuring out how to make food to nourish us.

And it's the thing we should do with other people and trying to enjoy food prep is a big change for me.

Second ago, I asked you if you're optimistic and you gave me...

I dodged it.

You did a little bit, but you gave me the reasons for being optimistic.

What are the reasons you're pessimistic?

I think because when it came to tobacco control, it took from the certainty that tobacco caused not just lung cancer, but strokes, heart attacks and a whole range of other health outcomes, including early death.

The same list of health outcomes that ultra-processed food causes.

From that knowledge to proper regulation took 50, 60 years.

And because around a significant percentage of women still smoke throughout pregnancy in this country, which is a good benchmark of not succeeding there, they're highly motivated to stop and unable to.

And we see the rise of vapes.

So it's an arms race.

You know, I'm a virologist by training.

My PhD is in studying how viruses compete with humans.

And in an arms race, you never get ahead for very long.

It's like business.

And business is a great example of an arms race.

You understand arms race is better than anyone.

You can't just build your company and be like, well, that's done.

Oh my God.

Let's watch the money flow.

Someone's always, always trying to overtake you.

So we're, as a community of activists, what we need to build is a, is a sustainable form of activism that is, you build regulation, you build on that, you keep generating evidence.

And there are some, we have more and more ways of doing it with these sustainable non-for-profit, not-for-profit food companies, for example, as a way of funding activism.

So are you optimistic?

I have to be.

I mean, nothing worth achieving will be achieved in our lifetime.

So this will not be just the work of my lifetime.

And I'm, I'm inheriting this work.

Many of us are inheriting this work from a generation of people who've been slaving at this since Nestle were indicted for aggressively marketing infant form either in very, very low income settings and really harming children in low income countries.

So, you know, that, that was kind of the first engagement with big food where people were, were angry and we could really point to a problem.

And those activists now, they're my, they're my, they're 20, 30 years older than me.

And they're, they're sort of handing knowledge to me and a whole bunch of other people across around the, around the world, people from the global south, people from very diverse communities. And so we're, you know, I'm going to hand this to my kids, but, you know, there's a fight and you can be on one side of it, I guess.

Chris, we have a closing tradition on this podcast where the last guest leaves a question for the next guest, not knowing who they're going to leave it for.

And the question that's been left for you is what will we also has a little brackets and says you regret in 10 years about how we brought up our children today.

I can tell you, because I already regret it and it's, it's not spending the kind of quality time that I've just given you with them.

That, you know, to spend time with you today, I prepared, I thought about it, I've read your book, you know, I've been listening to podcast for ages.

And as a result, we've had at least what feels to me like quite a meaningful engagement.

It's really nice.

I leave kind of enriched.

And my kids get this, these sort of snatches at time of time.

And you talk about diarising lunch.

And I know this is the thing you talk about in lots of places.

It's not just giving the crumbs to your family, but it's like giving, investing in your family and the way you do your work.

And I don't do it because, you know, my wife's pregnant.

I've got two kids, six and three, and it's just a scramble.

So that's what I will regret.

And it's great actually being given the opportunity to articulate that and go, OK, if I'm going to regret it, who do I want to be?

And, you know, I love that question.

I'm going to go away and try and force time with them that I'm present.

And often they don't want, they're not interested, but it's just being there, listening to them and investing in them regularly in the way that I do with everything else in my life.

Chris, thank you so much because you, you, um, I feel like this book, I think it's been in the Sunday Times best seller chart.

For like 25, 24 weeks or something mental.

You knocked me off number one.

Oh, listen, I'm just visiting.

You live there.

So I'll be there for another five seconds.

I'm sure you'll be there for many, many, many more weeks.

And you're starting a really important revolution and conversation around what we eat, a really important one.

And books come along once in a, once in a while, once every couple of years, once in a generation. That really neat culture at the exact moment with the exact language, with the exact appreciation of the reader, the nuance, the inclusivity, not taking provocative stances that are so far on the right or so far on the left that they alienate a certain group.

They kind of bring everyone in and they appreciate both sides of that nuance and that perspective. And this is exactly what this book does perfectly timed written perfectly to appeal to both sides of the most tricky narratives.

And that is why it's such a brilliant book.

And that's why everybody needs to read it because as you said, I think before we started recording, it's starting a conversation that we really need to start.

And it's, and it's these books that end up changing, changing the world and changing legislation. So congratulations, first and foremost, but thank you, secondly, for writing such an important book at such an important time.

I'm really blushing.

I mean, there's very few people I'd rather hear that from than really means a huge amount. So thank you.

We've got an exciting new sponsor on this podcast and I couldn't be more excited to announce that we're now working with Shopify.

And if there's one tool that I use pretty much every single day in my businesses, that is certainly Shopify.

I'm sure you've all heard about Shopify, but for some reason, if you haven't, then Shopify is the commerce platform that is revolutionizing millions of businesses worldwide.

Whether you're starting a side hustle, a new project with a friend or a global business, Shopify has you covered.

You guys may know that we recently sold a product on this platform called the Diary of a CEO conversation cards, which featured questions from the guests in these episodes.

And from start to finish, from launching that product, we used Shopify, a total game changer makes life incredibly, incredibly smooth when it relates to business.

And a tool that my team have absolutely loved using, which is not always the case with technology.

We couldn't have launched those conversation cards without it.

And if you guys haven't tried Shopify out for yourself, then I highly suggest you do head to Shopify.com slash Bartlett to take your business to the next level today.

And let me know how you get on that Shopify.com slash Bartlett.

Let me know how you get on.

Thanks for watching.