Swell AI Transcript: The Power of Nutrition for Lifelong Health with Dr. Federica Amati

Dr. Federica Amati:

He gave a few lectures about how exposure to certain foods increases risk in cancer. And I remember just looking around the room to see if anyone else was as shocked as I was, because four years of university, all the work experience in hospitals, and I had never come across anyone telling me that food is what's doing the thing. Medicine hasn't had nutrition in the curriculum until about four years ago. It's clear now that from public health research, poor diet is the most important factor in determining your health. It used to be smoking, now it's poor diet.

Matt Eastland:

Hi everyone, I'm Matt Eastland and welcome to the Food Fight podcast from EIT Food, exploring the greatest challenges in our food system and the innovators dedicated to solving them. We are thrilled to kick off series 6 of the show, episode 136 everybody, can't believe it, with some exciting conversations that you're not going to want to miss. Over the next few months we'll explore the innovations regenerating our farming and food production, the latest thinking in food health and sustainability, and the trends shaping the future of food. And of course throughout the season we'll be hearing the inspiring stories of the food heroes transforming our food system for the better. But for our first episode of our new series, we're on a pathway to healthier living. And it brings me great pleasure to welcome to the show highly respected researcher, nutritionist, author and public health advocate, Dr. Federica Amati. Federica's work focuses on helping individuals make informed dietary choices throughout life and Federica's latest book, Everybody Should Know This, explores the science behind eating for lifelong health, which is the focus of our episode today. I'm really looking forward to the show Federica. So welcome to the food pipe podcast. Thank you for having me I'm excited to be here great stuff before we dive into your book and your expertise so I'm so excited to have you on the show and I genuinely mean this because I'm fascinated by this topic, but also I've also been on a bit of a roller coaster through my life on health as well. So child of the 80s and probably would be have been regarded as obese as a child by today's standards and then kind of went through a phase in my 20s of being totally gym obsessed and now I'm like this self-confessed food tech nerd so I've kind of it's all a bit of a mash together plus I'm a massive fan of Zoe so I went through the first wave of, I think, second wave of your program and I found it quite life-changing actually. So even for someone who I would think I'm quite into this space, I learned a lot about food, health, nutrition myself. So just generally, I'm just a big fan. But so I'm really looking forward to the conversation. But before we go to your book, as I say, I'd like to kind of just have a chat about how it all started for you. So what inspired you to focus on nutrition and public health? And what's driven your career into this field?

Dr. Federica Amati:

Yeah, it's a really good question, isn't it? Because in hindsight, you can see the puzzle pieces. But actually, I was born in Italy, born and raised Italian parents, very Italian, and moved to the UK when I was seven. And I have quite, children of the 80s, I think we had it quite rough in some ways, because also parenting styles are very different then. So my parents didn't really tell us we're moving. They said we were going on holiday, and then we never came back. I was like, which at the time, you can see how they'd be like, oh, it's just easier if we just tell them we're going on holiday, but actually very traumatic.

Matt Eastland:

They just wake up in a different place entirely.

Dr. Federica Amati:

Like, we just didn't come back from this holiday. I was like, when are we returning? No? Okay. So moved here and actually moving to the UK was really interesting because the food environment, the food culture is very different here. I still remember some of the early memories I have as being at school. We went to this really brilliant school, like very lucky, but I just remember the snacks that they gave us were squash, which I had never seen in my life and could not comprehend. I was like, why is that? Even from that young age? Yes, I remember thinking that it was disgusting, like I hated it. And of course I knew orange juice, but I was like, why wouldn't we just have fresh orange juice? What's the purpose of that? So I remember that so clearly. And also these like snack bars. So we were given, I think, I don't know if they still exist. Do you remember tracker bars? We had tracker bars. And then if we were really good, so if we did well on our spelling test, we'd get like kit kats or penguins, right? These just weren't foods that we ever had at home. And I honestly, I didn't really like them. I didn't like the taste. especially the drinks, I couldn't get past the squash and how gross it was, still can't and I'm an adult now.

Matt Eastland:

You don't have to drink squash as an adult.

Dr. Federica Amati:

I don't think you have to at any age, let's be clear. That's true. So I think I went through school and I, from a young age, my mum was a doctor. She practiced medicine for many years but then she actually, when she moved to the UK, she switched to regulatory sciences. But I really loved her knowledge. I was always impressed by how smart she is. And I just thought, I really like that. And I always had a desire to be helpful in some way. So I wanted to do a job which would help people. So I sort of thought about, do I become a lawyer? And is that how I do it? That lasted about five minutes.

Then I was immediately drawn to medicine. I thought, if I do medicine, I can work with people, I can really improve their health. Like, that would be amazing. And I get to learn all about the body. I was fascinated with the human body. I wanted to know more. And actually, around the time when I had to start making these decisions at school, my grandparents moved in with us. Typical Italian family. They got too elderly. They became frail. So we flew them over from Italy and they moved in with us. And I started to see what happened when things went wrong, basically, like when disease struck. And that pushed me to want to know more because I wanted to be useful for them. So that did mark the way I sort of grew up. And actually, my maternal grandmother died the day of my chemistry A-level. Now anyone who's applied for medicine will know that chemistry A-level is pretty critical for getting in. So I had an offer to go to Imperial Medical School and I missed the mark by one point. So that was... Harsh. It was harsh, Matt, but a brilliant plot twist. The university said, look, just go and re-sit that one exam and then come back next year. And I think for some people that would have been like, okay, cool. Like, I'll do a gap year. That was not my plan. I didn't want to gap year. So I went and saw the six month advisor and said, what, what should I do? And she said, well, you go somewhere else. Like, what about Edinburgh? They're a brilliant, brilliant biomedical university. Like they're one of the best in the country. And I said, Well, I've not been there and it wasn't a plan, but yeah. So I called them and spoke to this lady in admissions there. And this is like a week before term start. It's quite late. So it was all... And she said, well, yeah, we love your UCAS form. Yeah, yeah, you can come. Okay. Loved my course. did pharmacology for my honors, just to like show chemistry who's boss, which was really satisfying. Did endocrine pharmacology to really show that I could do the chemistry bit. And then after that, I had this decision again to make, like, do I now do post-grad medicine or do I, like, is there something else that I want to do? And so I thought, okay, I'll tell you what I'm going to do. I'm actually going to find out a bit more about the health system before I really fully invest myself in it. So I went off and did public health at Imperial College, right? And again, I went and did that, and I absolutely loved it. And I suddenly realized, okay, this is really cool, because you can actually impact population health. So during my Masters in Public Health, I became involved with the WHO Collaborating Centre there, went to Geneva, saw how it all happens. It was so eye-opening. It was amazing to see how knowledgeable and purpose-driven and meticulous people are in making these plans and understanding what's going on. And then, in that time, I was taught by a professor called Elia Ribley, who's a legend. So he started the EPIC cohort, which is the biggest cohort for cancer and nutrition. Like half a million people, really cool, really cool science. And he was one of our teachers and he gave a few lectures about how exposure to certain foods increases risk in cancer. And I remember sitting, I was always the kind of the student sat at the front, no surprise there. And I was sitting in this lecture theater, watching him talk and looking at his slides. And I remember just looking around the room to see if anyone else was as shocked as I was. Because, so by this point, I'd done, you know, four years of university, biology, chemistry, all

that, all the work experience in hospitals. And I had never come across anyone telling me. that food is what's doing the thing. The risk factor being something we're doing every day, right? So that was a light bulb moment for me. I thought, when are we going to do more of that? How do I find out more? Basically public health nutrition, how can that be shaped to help people? So this is then when the whole restructuring of public health happened. Worst time ever to be like a young public health graduate looking for a job. And my professor at the time just said, listen, go and do something else. Literally, it was like, just get a job, do something different, do a different skill set. So I left Imperial, I got a job in marketing, no idea how I didn't have any qualifications for it. It was basically through a friend of a friend who was like, yeah, sure, you can have this job. And that then got me to getting a job offer in the States. So one of the things that I wanted to do was live in New York before I was 30. No reason for it. Just loved America. My dad loved America. We used to holiday there. This was on the bucket list. It was. So I basically like got offered this visa and this job to work in New York and I was like, I'm there. I'm coming. And my parents were like, okay, so is this like what you're doing now? You're not doing any of the things that you did for degrees. I was like, And I remember at the time, I thought, no, this is it's all going to come together eventually. But for now, I'm just going to do this thing because I really wanted it. So I went out, worked there for a couple of years, loved it. Amazing. Smashed it also, like progressed so quickly. You can't do that anywhere else but New York. Suddenly, like you're now the director. I'm like, really? I'm about 26, but okay. And learnt so much about how to work, how to work hard, how to communicate and plan. Things that academia doesn't really teach you, to be honest, right? When I was doing this work, I just, I heard a voice in my head that said, wouldn't it be great if you could be doing this, it would be about an actually useful and important message for health. And so I really wanted to use the skill set that I had developed with this work experience I had into something that would be useful to communicate science. So what I decided to do then was come back to the UK. And also at this time, my dad fell ill. He didn't tell me because they didn't want me to worry about coming home from the States. But as it turns out, he had colon cancer. And the way that I found out was because he basically gone through the diagnosis and they had decided that actually they thought they could just operate and remove the tumor and it would be fine. So they didn't tell me until after the operation when things went very wrong and he ended up in a coma. So I flew home on the next flight, left my entire flat. I was like, I'm never coming back. Bye. and came home and actually came home to be with dad primarily but it was also the sort of plaster ripped off and I went back did a PhD in clinical medical research because in my mind if you're going to try and communicate science really effectively and in a way that is responsible then you really need to understand research And there's nothing better than a PhD to help you with that. So that's how I came back. And long story short, being back in academia gave me the opportunity to bring public health, nutrition together with proper research. So alongside my PhD, which was back at Imperial again, so not in nutrition, I

started doing additional courses in nutrition. And in the end, also did a master's in nutrition. Because one of the things that I noticed is that as nutrition has become a more crowded space, A lot of people with opinions call themselves nutritionists, but don't have the training. And thankfully, registered dietitian is a protected title, but nutritionist isn't. And what I didn't want to do was to be somebody who, yes, had done the science and had done the stuff, But it was very important to me to get a master's with AFN accreditation, so that I could actually, you know, be recognized on a register as somebody who's keeping up to date with nutrition science specifically. And keep it up, because eventually, in an ideal world, it will be a protected title, so that the public will know who to look to for advice, because at the moment it is Wild West out there. And so for me, nutrition is like the tool that is the most powerful tool to deliver public health. That's why. it became my spearhead, let's say. It's clear now that from public health research, poor diet is the most important factor in determining your health. It used to be smoking, now it's poor diet, which is not a good state of play, but I think we need more people who are going to make public health nutrition their priority, and that includes people like me who are like scientists and researchers and I work clinically, but we need politicians to start getting on board, policymakers and other types of influencers to realize just how important it is to get nutrition right. So that's how I got that. That's very long-winded, wasn't it? Sorry.

Matt Eastland:

OK, I mean, it's an amazing story and it's it seems like a mix of sort of serendipity plus obviously your own natural drive to do to do the right thing, which is kind of all come together. And you talk about plot twists, but it sounds like there's been a couple in there which have really set you on this path, which is really amazing. And and, you know, you're you're here now and you've You've written this incredible book, which I'm digesting as we speak, particularly as a new dad. So I'd love to talk more about that specifically. So your book, Everybody Should Know This, The Science of Eating for a Lifetime of Health, This is a topic, broadly speaking, that we've been covering on the podcast for a while. So I don't know if you know, we've had Dr. Bill Rawls on, who's cellular wellness. We had Lisa McFarlane, one of the Mac DJ twins on, who's just brilliant. And we've also spoken a lot about personalized nutrition on the show. And so the book takes a really interesting stance as it goes through the ages, which I've never seen before, actually, which I really, really liked. So what inspired you to write the book? You've spoken a lot about nutrition science. Why have you broken it down like this in terms of the phases of life? Did you feel that that's an area which hasn't really been covered before?

Dr. Federica Amati:

Yeah, exactly. So, life course nutrition is something that we learn about in lectures and stuff. And in a full like, sort of 360 situation, I now teach nutrition to medical students at Imperial

College. And when I teach them, life course nutrition, which is standard. So anyone who studies nutrition will know life course nutrition, because it's such a standard part of what we learn. And what I realized, whilst I was teaching, but also with my one on one patient contact is that no one really knows that. So this, I think, diet culture in the way that we talk about diet is often quite absolutist, it's like, and everybody needs to do this. And this is good for everybody. And of course, there are certain principles that are 100% good for like 99% of us, like eat more fruit and veg, you know, but there's clear distinct differences in development, physiology, cognitive health, metabolic health, that change throughout our life course. Now, when I say that it's obvious, it's obvious that a three month old baby is going to have different requirements to a 14 year old, it's going to have different requirements to like a 28 year old. So when I explain it, oh yeah, it's true. But no one's actually laid it out for like a lay audience, right? So when we talk about the first 1,000 days, the developmental origins of health and disease they had, these are all theories and ways of talking that are very common in academia. And they're not brand new concepts that I've invented. They've been around for decades, but they're not communicated.

Matt Eastland:

Because I was going to say, because I've never come across life course. Life course nutrition, yeah. Nutrition as a term, I'd assume that this is something you've invented.

Dr. Federica Amati:

No, no, it's not. It's not something I invented at all. And life course nutrition goes hand in hand with life course medicine. So if you think about like pediatrics then leads to like the specialties and then geriatricians. Geriatricians for me are the ones that have like the biggest life course approach because they tend to take everything into consideration that's led the patient to the health that they're at at that point. And geriatricians, we need so many more of them in this country and everywhere else. But so, Yeah, Life Course Nutrition, I decided to write the book because I wanted to write something that would be useful for anyone picking it up, but also would be useful for themselves as well as their loved ones. So, you know, the people who have read the book and maybe if you're not currently planning to or going to have a family yourself, the first bit of the book might be something that you're not that interested in. But I guess for me it's actually important for us to understand the early years because we can better understand our own health if we understand what's happened then. And it is one of those books some people just dip into the bit they want.

Matt Eastland:

Which is great because you can keep coming back to it through the different phases of your life which is perfect.

Dr. Federica Amati:

So that was the idea. It's just laying out this understanding of how the life course impacts our health and what nutrition can do as a tool to support those changes. And of course it is, because it's only one book, it's quite a general overview. But the idea is that it's a foundation. It's like the basics and the foundation of the physiological processes, the metabolic changes, the nutritional needs that we know about throughout this time. And I try to highlight specific windows of opportunity where there is like a significant step change, which we can hone in on and actually make the most of it. Like just try and see if we can intervene at that point. It can have a bigger impact for like immediately and for long-term health as well.

Matt Eastland:

And you speak about these windows and I guess if you go to like the early years part, which of course at the moment I'm, you know, particularly interested in the middle of. So you talk about the golden window of opportunity. So the first 1000 days, you know, in the early years. Can I ask you what do you mean by that golden window and why are the first 1000 days so critical?

Dr. Federica Amati:

So it's called the golden window of opportunity because it's the time period in which we can have the most impact for long-term health. Now it's called the first 1,000 days because we think of it as from conception being day zero to second birthday being day 1,000 give or take depending on whether you're premature or not. But it's this idea that from conception to around second birthday, so much happens that there's real potential to make a difference. Now, when we really think about this, and as I say in the book, preconception care is actually super, super important. So it doesn't take away from the importance of preconception care because when we think about how long it takes for sperm or egg to mature, it's about 90 days. And so what happens actually before you're even conceived has an impact on that.

Matt Eastland:

So this is this is an area of sort of health nutrition I had no idea about.

Dr. Federica Amati:

And I think that that's A shame because for two reasons, right? So when we look at public health nutrition globally, some of the biggest interventions we have for countries that are much less fortunate than ours is to really hone in on this period of time to give maximum impact. So there's lots of programs around the world that will really aim to support women in antenatal care or girls who are likely to become pregnant. Because we know that this

preconception period and early pregnancy is so critical. But here, we're all too busy. I mean, it's changing now, but when I grew up, all I was told was, don't get pregnant. Just whatever happens, don't get pregnant. I was like, okay. You know, we don't actually... say like, listen, young adults are at their most fertile, you're much more likely to get pregnant by mistake. So instead of just focusing on like, this is what you have to do to not get pregnant. We should also be aware that, okay, do everything you can to not get pregnant if you don't want to, but also make sure that your nutritional status is such that if you do get pregnant, you could A, support a pregnancy if you want to go through with it, or B, support having to terminate that pregnancy if that's what you want to do. The conversation's just not there, you're right. And what I feel strongly about is that preconception care, this developmental origins of health and disease hypothesis, DOHAD, like there's so much science that shows how impactful paternal exposure, so like the father's lifestyle, the father's BMI, recreational drug taking, smoking, drinking, has a huge impact on the child's health, in a different way to maternal exposure. And so this is to say, like, if we need to change the way we look at this period of life, because whether you're trying to conceive or not, if you could potentially become pregnant, the exposures that you're like sort of putting yourself to, will have a long-term impact. And it takes two to tango, so it's not just the mother. I work with a lot of women who are trying to conceive. Often they will have been trying for a while by the time they come to me. And they come to me alone. And I go, if you have a partner that's going to be the father, where are they in this conversation? Because actually their lifestyle and their diet is just as important as yours.

Matt Eastland:

Which I imagine that when these people come to, they have no idea about.

Dr. Federica Amati:

As I said, often women come to me like when they've already tried, possibly had failed IVF rounds. And there are some really brilliant OBGYNs, obstetricians and gynecologists who are very forward—thinking and will recommend dietary change before starting IVF, but a lot of them don't. And that's a misstep too, because you can hugely improve fertility and success rates of things like IVF with nutrition intervention. But that's not to blame the doctors, because you have to remember that medicine hasn't had nutrition in the curriculum until about four years ago. And that's five hours maybe with me at Imperial, if you go to Imperial. Some universities still have none. So it's a real missed opportunity and the preconcept like anyone who's listening to this and they're possibly thinking that they might want to conceive in the next year. The more runway you give yourself, the better.

Matt Eastland:

Got it. OK. And when, you know, the miracle has happened, let's say, and, you know, from your book, again, I take away that the chances of, you know, actually conception happening and then going to term, you know, people don't realize how, how, what a miracle that actually is of happening.

Dr. Federica Amati:
Statistically, it's Very rare.

Matt Eastland:

Yeah, which is amazing. And so, you know, you have your child and then obviously there are certain things that you would advise that you should be doing to improve their sort of health chances later in life. So I know that this is all about personalized nutrition, but are there any kind of key steps or takeaways for people on the show in terms of, OK, you've got these first thousand days, you've got your child. What should people be looking out for or avoiding maybe?

Dr. Federica Amati:

So I think, let's talk about what we should be having. I think avoiding can come as an afterthought, because if I tell you what to avoid, that's the thing you're going to think about. But certainly, the more you can have a whole food diet, the better. Now, if just saying that actually opens up to covering a lot of the other bases. If you're having a primarily whole food diet, that means that you will have to eat some whole vegetables because there's only so many whole eggs, whole chicken breasts, whole salmon you can eat. And whilst like oily fish is important for both fertility and pregnancy. What's more important in terms of other sources of food, Omega-3 fatty acids in only fish but whole fruits and vegetables, nuts and seeds. Nuts and seeds are like superpower houses for sperm health. Just have a handful of nuts if you're worried or if you're trying to conceive. Whole fruits have been demonized quite a lot recently and there's really no reason to. And actually, from public health evidence, it's clear that people who eat more fruit live longer and have a reduced risk of death. So if you want to live well and live long, do include whole fruits in your diet.

Matt Eastland:

It's weird and interesting that they have been demonised and yet for some reason drinking orange juice is absolutely a great thing to do but having a whole fruit is for some reason the health industry has veered away from that recently.

Dr. Federica Amati:

I think it's part of the whole carbohydrates are bad for you. Not a thing, right? They're not bad for you. And especially when it comes from now, of course, refined, highly refined carbohydrates are a different story. But when we're talking about carbohydrates from

fruits, from whole grains, from legumes, they're absolutely essential for health and actually all of the healthiest dietary patterns are high in these foods. So whole fruit, whole vegetables, legumes, nuts and seeds, of course, if not, if you're allergic to nuts, you can just stick to seeds, and oily fish. If you can have those foods as a real mainstay in your diet, and if you can choose whole grains, at least some of the time over refined carbohydrates, things like pearl barley, spelt, quinoa, buckwheat, You know, they're like in the middle shelf on the bottom, like in the middle aisle, bottom shelf, really hard to find, no sexy packaging situations. They're the things you kind of want. They're cheap as well.

Matt Eastland:

The fact that they're not in sexy packaging actually makes them cheaper as well.

Dr. Federica Amati:

Well, but it's also why people don't even, so many people I work with are like, what's spelt? And I'm like, well, it's this thing and you cook it the same as rice and you can store it in the fridge and they're like, wow, that's really good. Like, yeah, it's great. Get those whole grains, cook them in the same way that you would rice. Rice isn't a whole grain, so it doesn't count. I'm really sorry. It's a refined carbohydrate and it's not that good, but it's easy to eat. So if that's part of your diet, absolutely fine. But if you can add whole grains in, that would be really even better, right? So if the majority of your diet comes from those foods, then the things we're supposed to be avoiding Like ultra-processed foods.

Matt Eastland:

Which I would like to talk about at some point.

Dr. Federica Amati:

Yes, and it's difficult to term, what does it mean, there's lots of debate, but just for ease, if it's a food that you've bought and it comes in a packet and you haven't made it at home and it has additives in it that are there for essentially commercial reasons, so additives that are there for flavor, texture and sweetness, it's an ultra-processed food. Now, if you're making the majority of your diet up from these whole foods we've spoken about, there's not going to be that much room left for these ultra-processed foods, right? So, fine, if you're occasionally buying like the frozen lasagna or if you're buying the cookies, I'm not saying you should never eat those, but at the moment, the UK is in a state where more than half of our calories come from the ultra-processed foods. So if we can just reduce that down by focusing on the whole foods first and then you'll have some space for these guys, for the whole processed foods, not loads. And then I guess the other things to say that really should be avoided is alcohol, smoking and vaping, same. Don't

do it. Because actually, many people, many of us still do have these behaviors and especially if you're trying to conceive or pregnant, whatever side of the coin you're on, male or female, don't do it. It's just reduce the risk. There's really no need to do it. And it's really hard to give up. I'm not saying that it's easy, but find a way that you can stop these behaviors before you start trying. with full compassion that it's really hard.

Matt Eastland:

Yeah, yeah, it absolutely is. And you talk about behaviours. I'm interested, before we kind of move on to the adult phase of life, or sort of adolescence and then into adulthood, how does that, what happens in the early phase of your life, so as a child, how much sway does that have in terms of what your choices are and your pathway, I guess, or health pathway later on in life? I ask because I think it's an interesting topic but also because maybe selfishly, a child of the 80s, we were basically told sugar is great and processed foods are amazing and everything's cheap and convenient and you can have as much of it as you want. And I was talking to a producer before the show about the fact that, you know, everyone has their child's parties at, you know, fast food. McDonald's. Exactly. So you're kind of enshrined for life in that belief that a bad food, as we now know it now, is actually representative of a good time. And that has stayed with me. You know, so even now, you know, for someone who understands this space fairly well, I will still fall off the wagon.

Dr. Federica Amati:

And I'm like, I just want... Oh, but Matt, you're being so harsh on yourself. OK, there's no bad foods. And there's no wagon to fall off.

Matt Eastland: Okay, you see?

Dr. Federica Amati:

You're being really harsh to yourself. And I'm a child of the 80s. Food was different. So like, even though, and Italy was very different, but ultra processed foods were nowhere near as common as they are now. Like we know that they weren't. The supermarket aisles were not stocked with aisles and aisles and aisles of them.

Matt Eastland:

I must have just glorified that in my mind.

Dr. Federica Amati:

Yeah, so food environment has changed drastically. The way that even these fast food outlets foods are made has changed. They're just

not, they're just made differently, right? I'm not going to say they were. My favorite example is Nutella, actually. I used to eat Nutella fairly frequently as a child. If you look at the composition of Nutella in the 80s and 90s, it was actually mostly hazelnuts. Is that right? Yeah, so the composition of that has changed. Now it's very much mostly sugar. So again, it's like we can't really compare like for like because it's changed a lot. And also that was the food culture at the time. I'm sure we'll look back to now and think, oh my gosh, when I was in my 20s and I worked in this bank, I drank my lunch at my desk every day. I can't believe I did that. But right now, that's the reality for lots of people. I'm not going to name the name of the brand, but you know who I'm talking about. So it's just about, when we think about the exposures, so you asked me like how much of an impact does it have? And the data we have on this, obviously a lot of it comes from observational data, so it's just following people up and seeing how different dietary patterns have impacted later in life, so you follow children up. But also a lot of this knowledge we have is actually from populations that have undergone like severe malnutrition during pregnancy or an early life exposure, there's specific famines that are looked at to understand the impact of that famine on that child. So a lot of it is from very extreme circumstances, right? But you extrapolate this sort of physiological and metabolic effect from those. And what we do know is that children who are exposed in early life to certain things. So the first thing is how you're born. So were you born by caesarean delivery or by natural vaginal birth? And I say this having had a child born both ways. So one was a caesarean, one was vaginal birth. And that does have an impact on the initial gut microbiome composition of the child. And we have like long-term follow-up studies that show that children born vaginally have a reduced risk of things like eczema, asthma, and basically allergic diseases, which when you understand that the gut microbiome, these trillions of microbes in your gut, are the training ground for your immune system, you can see how that's possible. Because when you're born by caesarean section, basically your initial blueprint of gut microbes is completely different. It's like the surgeon's skin bacteria, the bacteria in the air. It's a different exposure. Now, the good news there is that you can actually close that gap, the difference between vaginally delivered and cesarean delivered babies. The gap closes quite naturally later in life, around the age of two, because other exposures take over is more important. So one of the most important ones, and I'll keep this brief because it's a huge topic, is breastfeeding. Breastfeeding is absolutely the best way for babies to be fed in terms of their health, their gut microbiome, their immune function, cognitive development. I want to actually change that to breast milk, human breast milk, because a lot of parents can't breastfeed, a lot of babies can't be breastfed. It doesn't matter. Human breast milk by a donor human is also brilliant. But the composition of human breast milk is very different to formula milk, which is obvious to say, but it is actually very hard to talk about because you get a lot of backlash. Well, fed is best. Sure, like we don't want any child to starve. Absolutely. But I would love to see us be a country where donor breast milk is as easy to access as formula milk. Some countries

have that. There are countries in South America where human donor breast milk is standard. You can access it in hospital, you can access it like at home. And so babies can easily get human breast milk. And I don't think it should be controversial for human breast milk to be the first choice, first port of call for children, as opposed to formula milk, which is, you know, essentially cow's milk that's been processed into a powder, right? And it is a problem of access, but the UK has the lowest breastfeeding rate in the world. So sad. I read these stats. Yeah. And, and really, so it's partly to do with access to breast milk, but it's also hugely to do with how we don't support women to breastfeed, and we make it hard, essentially. There's not enough training or understanding. We don't prepare women. I mean, I went into my first pregnancy thinking I knew a bit of stuff, a little bit of things, but no one told me that breastfeeding in the first six weeks of the baby's life is basically a full-time job and you'll be breastfeeding for eight hours a day. Now, if I'd known that, I would have been like, right, ready, let's go. Like, I'm going to do this thing for eight hours a day for six weeks and then feeding rate changes. But I was completely, completely flawed. I had no idea. And the issue is that often the support systems are in place, whether that's your health visitor or your midwife, whoever, they're just like, oh, just give the baby a bottle if you need to. And that's not actually, if you want to breastfeed and you're trying to establish that breastfeeding, that's not very helpful. It's from a good place. But there's other things that we could be supporting women with that would be more helpful to support them than just being like, oh, if you give them up. And so it's a really big topic and I say I won't dwell on it too much, but essentially where possible, human breast milk as an exposure in early life is another one of these things that helps to improve health outcomes later. Again, we are looking at things like immune system function, but also there's data looking at lots of different outcomes. I think the strongest evidence is for metabolic health, so reduction in risk of type 2 diabetes, reduction in risk of obesity, and in immune system and gut microbiome composition. So that's where the strongest data is for long-term health impacts. And then weaning is a really important stage, right? So you're still in this 1,000day period, exposing your child to really a variety of whole foods. And not only whole foods here, I want to add something that's a bit outside nutrition but really important, but also natural environments. So a lot of children, especially born in big cities, might go quite a few days without actually going into green space. And the thing is that the way our gut is a tube that's essentially exposed to the outside world. So yes, what we eat is by far the biggest exposure, but everything we breathe and swallow is also an exposure. And when we go for a walk in a park and there's like mud and leaves and trees, there's microbes in the air all the time and like fungus spores, we're surrounded. And so when you're walking through a forest, you're inhaling and then swallowing this beautiful diversity of microbes from natural sources, right? Same thing in a flat or a block of flats or an office space or where we are right now, Matt. Right now, what we're inhaling is basically what's come off the surfaces of the carpet and the wood. So there's a little bit of wood here, plastic, but no natural microbes. There's no like live

microbes. And actually that exposure to the microbes from the outside space also contributes to a better diversity in the gut.

Matt Eastland: That's fascinating.

Dr. Federica Amati:

So you know how in Scandinavia kids get left outside in parks and stuff? And there's this real culture of going for walks in the woods. And it's actually a really good idea. And my favorite bit of science around this was a study that looked at how pet ownership impacts gut microbiome composition. So dogs obviously go outside, rummage around in the grass, they sniff everything and they pick up on their paws and their fur. And actually, dog ownership improves, increases gut microbial diversity in the owner's house. that grow up in households with animals, and dogs specifically have a bigger impact than cats for this, probably because they're cuddlier, have better microbial diversity. I'm really sorry. I love cats. I love both, by the way. But when this study came out, it was so funny. I was doing some interviews around it and I convinced my husband to get a dog. I was like, we need to get a dog for our babies. for their gut microbiome. I'm not suggesting you do that, by the way, unless you're well equipped to have a dog and look after it properly. But exposure to animals, and that's also where we see such a difference between countryside living populations and urban dwelling populations. They have very different gut microbiome compositions and disease risks, and allergies in children are completely different in these populations, and asthma. When we're weaning our children, apart from taking them for nice walks, exposing them to whole foods, carrots, cucumbers, bananas, apples, like all of these foods have microbes on them and in them. As soon as you're buying a child like a carrot puree in a plastic pouch, it is sterile. So not only there's lots of issues with making pouches the primary source of food. They can be useful for travel, they can be useful for lots of things, but when that's the primary exposure for children, packets of food, pouches, A, they don't learn to know what food looks like. That exposure to seeing what the food looks like, smushing it, throwing it on the floor, throwing it on the floor again, tasting it, spitting it out, is all part of learning how to eat. So often this culture of like putting a baby on a high chair with its own little table thing and then just putting a bowl of smoosh in front or a pouch, how is that? Then that's not teaching them to eat, right? So it's really exposure to foods, whole foods and trying to keep that diet in the first year, a whole food diet. is really worth it because they were much more likely to enjoy a wider variety of foods later. And also that initial phase of weaning is the easiest part because they will try anything you give them. So children will, you can put an avocado, a lemon, you can put sauerkraut, they will try it. As they get older, Children realize that food is one of the only things they can control because they have to eat it themselves. And so independence, one of the ways children show independence is by choosing to refuse or accept a

food. And that's a really important part of them having their own boundaries. But it also means that you go from having a child who will literally eat anything to suddenly choosing what they eat. And a lot of parents are like, oh, my God, they're not eating anything anymore. This also coincides with like a real slowdown in their growth rate. And so again, parents needn't worry when they see this big switch down in how much food they'll try and eat because it's both physiologically correct and also it's them showing independence and that they have a preference and actually they can have a choice. They don't have choice in much else, right?

Matt Eastland:

Yes, you're right. This is one area of their life they can actually

Dr. Federica Amati:

That's why it's also guite a good idea, sometimes when parents struggle with their kids, basically saying no to any food that's offered to them, give them a choice on something else that day. Can they choose their outfit, like their socks even, if it's a uniform they have to wear? Can they choose what coat they wear? Give them choices because then there's more collaboration. But food exposures, even if they don't eat it, exposing the food, putting it on the table, and saying, what do you want to try from this? Like that family style eating is actually a really good way to continue food exposure. So start at home, keep that exposure, healthy whole foods as much as possible. I can't stress enough how important it is to get your kids used to plain yogurt. Because Flavored yogurts are one of the worst culprits for added sugar for children, and one of the worst culprits for emulsifiers, and they don't have any of the live probiotic strains that are so good in yogurt. So, one of the best hacks is if you get your child used to natural Greek yogurt, natural live yogurt, whatever, kefir, early on, they will love it, they will choose it. then when they're exposed to Petit Filou or another Fromage Fray brand, they'll be like, what is this? It's delicious. Yes, it is. But you will not be having it regularly, right? But if you start from that, it's very hard to then expect them to enjoy natural yogurt.

Matt Eastland:

Okay, I see. God, I'm learning. I'm learning a lot and I wish I could just have maybe we'll just have an episode on just like early years but I wouldn't want to just kind of skip over the other phases because I'm assuming yes the first thousand days are super critical But obviously that changes and, you know, these different stages of life are also very important. So you talk as kind of the next phase of the book, we kind of get to that adolescent and then adult phase. And I guess I'm interested. So. We talked about health challenges as a child, but how does that evolve? So what are the key health challenges that you've seen through your work as you kind of go through adolescence to adult? And I guess from that, what habits would you, or behaviors should I say, do you think people should be

Dr. Federica Amati:

Yeah, so adolescence, there's these phases of growth spurt. So you're completely right, the first thousand days is very important, but it's not like done and done there, right? So there's lots of opportunities later. There's a growth spurt in mid-childhood around the age of seven, eight, which is another really good opportunity to reframe healthy eating and choose whole foods and support your child with that growth, essentially. It's an important period for immune system function at that age.

Matt Eastland:

So the window's not closed after a thousand days?

Dr. Federica Amati:

No, no, no. It's just that because so much is built, like all of your organs are built in those first thousand days in the womb. So it's just the, let's say, the blueprint of the home is set and the foundations are laid. So like you can do a lot more afterwards to your home, which is your body obviously, but you can repaint and rearrange and strengthen the roof and all these things. But it's just when the initial foundations are set really is in the first thousand days. Then you have these other growth periods, middle childhood and then adolescence, puberty hits, masses of change, of course, a lot of them driven by sex hormones, which cause different tissue growth, but also actual growth. And for girls, you know, this is where menstruation starts. And it really highlights a point where low iron status will make itself known. If until that point maybe dietary iron status hasn't been ideal, children can kind of get by. But as soon as menstruation starts, that bleeding tips the scale into low iron or iron deficiency. And actually, iron deficiency and eye deficiency anemia are really prevalent and problematic. So globally, we estimate between 40% and 50% of girls are deficient, which is... have low iron status. It's really high. And it's really important because having low iron impacts cognitive ability. So if you're at school trying to learn and do exams, this is really important. It impacts growth as well, so like how tall you can become and how strong in terms of lanyard tissues. It also impacts energy and mood. So when we think about adolescence and puberty, often the signs of low eyeing can be missed because, oh, she's just being moody, she's just tired. So it's really important to make sure that we do focus on this time to correct anything that might not be supporting. And it's obviously a really important time for brain restructuring and function, mood. These hormones have an impact on how our brains function and our mood. So supporting brain health in adolescence is really critical. We can do this with nutrition. Of course, there's so many things in adolescence, including social media, peer pressure, exam pressure, changing bodies, like how we relate to our bodies. All these things are huge topics. And nutrition really plays a role and a supporting role where it's like,

OK, that's all going to happen regardless of what your diet is. Unfortunately, social media doesn't have anything to do with diet. So what can we do in terms of food choices to support the stress that comes with all these changes? And that's where eating a whole food diet, a diet that's really rich and nutritious foods, is really important. And I stress this because often for teens the only meal they'll have with their families is probably dinner. So it's like one meal opportunity a day and then weekends to pack as much punch as possible, where we know that children in the UK, you know, up to 72% of their daily calorie intake is ultra processed foods now. So they're one of the populations that have the highest. Yeah, it's really high. What can you do at home to make sure that at least when they're home and they're eating at home, they're getting the maximum benefit from the diet that you're offering, that's on the table? get them involved in cooking. Like cooking is a life skill that is not, it's a life skill. It's not like, you're not born knowing how to cook, right? And we overlook this as a skill that actually needs some teaching.

Matt Eastland:

Yeah, absolutely. And we've spoken about this on the podcast before and I've always been struck, and actually I can't remember who it was, but somebody said that if there's one piece of advice I could give people, it's to just learn to cook. I wouldn't know who that is. One of the things that it does is of course it connects you to not just the food that's produced that you eat but it connects you to where your food actually comes from because you get to see it, taste it, you know, touch it and all those sorts of things. So yeah, I'm completely in agreement on that.

Dr. Federica Amati:

So then we move into like 20s and 20s is a really interesting age because For most of us, metabolically, we are super flexible. We are able to take things, we can get two hours sleep and go to school or work or uni the next day. And also we can eat foods and it doesn't really do anything. We don't feel the effects in the same way that we will later. But it's also this amazing opportunity to build the body that you want to carry you into adulthood and like older adulthood. Because the ability that we have to increase our muscle mass and to double down on the bone density, which actually happens earlier in life, but there's another, like, this is a good time. It's really important. So when we think about the risk of things like disordered eating or under eating, chronic undernourishment, this is actually really important to support young people in building a strong body at this time, not a skinny body. because after 30, it's harder to build muscle mass. It's still possible, of course it is, but you have to work a lot harder. And going into life with a good muscle mass, skeletal muscle mass, I'm not talking about like ripped bodybuilder situations, I mean, that's fine, that's your thing, but it's really the skeletal muscle mass that's functional, that keeps you strong and flexible, and that means that you can get up, roll over easily. That's what's going to carry you into older

life, able to get out of your own chair when you're 86. So we have to start thinking about, like our bodies are amazing and they adapt to how we treat them. But if we're training our bodies to sit still at a desk for eight hours a day, that's what it's going to adapt to. and it's much harder to pivot from sitting for eight hours a day to playing golf for eight hours a day in our 70s than it is to start thinking about like how can I incorporate movement in my day now and how can I eat food that actually supports my body to maintain that healthy mechanisms now like if we're If you think about metabolic flexibility, it's this idea that our body can efficiently, and this is really, by the way, what Zoe testing is based on, right? We're trying to see how metabolically flexible you are when we give you those cookies. You might have done the muffins if you're an LA doctor. I did do the muffins. Yeah, yeah. So they're like metabolic challenges. Those cookies and muffins, they're clinically designed by Professor Terry Berry, our chief scientist, and they are the equivalent calories, fat and sugar of an average American meal. Yes, that's right. But they are high in fat, high in sugar. And so they're like a metabolic challenge. It's like, bang, how are you going to handle that? And we then measure how you handle that with your continuous glucose monitor, with your blood fat testing. And that gives us an indication of like, how tired your metabolism is from sparring. If you think of it like a boxing match, right? Every time you eat a meal, your metabolism has to respond and it's so good at it. We've evolved an amazing system that keeps us alive, which is brilliant, right? So we're extremely efficient at, unless you suffer with a condition like type 1 diabetes, where you won't go into hypoglycemia and you won't go into hyper very easily. So you won't have too high or too low very easily. And it's all carefully monitored. But if we challenge our metabolism with very high fat, very high sugar foods a lot, then every time it has to like pump out more insulin, like clear more of this out of the way, our liver and our pancreas has to like work really fast. The liver's packaging things up, trying to put them somewhere useful, right? And if you do that again and again and again, like eventually it gets tired. And that tiredness, it's like the aging of your metabolic system, means that then the way that fat is stored starts being more harmful, so around the liver, around the organs, instead of in your fatty tissues or around your muscles. If you don't have that baseline strong high muscle skeletal mass, there's not even enough storage space to put this energy away for later. And then if you have all the stored energy, right, so all of your skeletal muscle mass, has stored energy as fat ready to burn when you move. If you never move your muscles, it just sits there. You don't use it. So it's like metabolic flexibility is this concept. People don't like the term metabolic health. They think it's abstract. I don't think it is. I think it's like... If you understand that your body is there to help you and to support you and to actually use food in the best possible way for now and for what you're going to do later, then you can understand that if our lifestyles don't actually support its function for eat now, use it later, eat now, use it later, then we're going to run into problems. If we're trying to reduce the rate of ill health, We're all going to live a long life. It's great. Medicine means that we don't just drop dead with an

infection. But the number of healthy life years is not that great. It hasn't kept up with longevity. And the health gap for women is even bigger. So women can expect to live about 20 years in poor health. That's not a great picture. But often that poor health comes from these non-communicable chronic diseases. The biggest risk factor, poor diet.

Matt Eastland:

I guess a couple of things that sort of jump out for me. One is it feels that you talk about the foundations. It's allows you to like the idea of the safety net allows you to kind of bounce back and it prepares you better for later life. And I also like the fact that you talk about have you ever thought about what you want to be like? Yeah. when you're in your 80s, I don't think anyone has that conversation. Because if you did, you'd be thinking about, OK, well, what do I now need to do now in order to get there? And I guess that takes us to the latter stages of of the book. You know, you talk about nutritional health is wealth. Yes. And then we talk about the idea of health spanning. I guess for our listeners, I mean, I'm always asked this question, what are some of the key factors? I mean, you're probably going to say to me, get the foundational years, right? I get that. But what are some of the key factors that contributed to it? I was about to say extending your health span, but maybe it's not about extending it based on what you're saying. It's the quality of your health span. How do you get longevity, but with quality?

Dr. Federica Amati:

Yeah. And longevity is a funny term, isn't it? Because it's become like the zeitgeist. Yeah. How do I live long? It's like, well, you need to live long and prosper. You can live long, but you might be in bed. So no, I think there's a couple of things like the health wealth is, I love this because I think sometimes we're quite well versed in thinking about savings and pensions, right? And so you put money in, there's compound interest and you'll have more money later. But in terms of health, it's like, OK, you can do that, but for health. So every time you make a food choice, and lifestyle choices, not just food, but in this case, I'm talking about nutrition, right? Every time you eat a meal, every time you pull together food, it's an investment in your health account. And essentially, that interest, the money you put in has compound interest. So the more choices like that you make, and it's not about perfection, you don't have to always have this beautiful meal, it's variation, it's about consistency over perfection. So say 80% of the time, you're making choices that are really centered to improve your health, right? Then you put that into your health account and it just builds and builds and builds. And then one day something terrible happens and your health takes a hit, but you've got quite a lot of money saved up, quite a lot of health wealth in your bank. And so it might get hit, but you will have a good point and you carry on. And so, and actually it's really important, I think, to say that we can't go back and change our foundational years. And

that's not the point of the book. You can do a lot to improve your health and well-being by changing your diet at any age. So there's beautiful modeling studies that show us that if you change your diet at age 70, you could add six healthy life years to your life. That's a lot. That's like 10% lately, right? So it's not about... There was a study that made the front page of everything recently which showed that your diet age 46 was the best predictor for dementia and Alzheimer's age 69. And that was a modeling study, like the age is kind of not the point of the study, although everyone was like, oh my God, I'm 48, what should I do?

Matt Eastland:

I just read that headline, I was like, I've got a little bit of time.

Dr. Federica Amati:

Yeah, no, the point of that study was that there's this compound effect of nutrition on health outcomes. So what it was trying to show, I think, and I'm not an author, but this is how I interpreted it, is that your dietary habits aged 46, are going to have an impact on how your brain is going to function in your late 60s. But that also means that, like, what you were eating five years before or what you eat five years after that age point is still important. It's a compound effect. So every time we make a food choice, we want it to be smart, because a smart food choice is an investment in our own health. And not only for the long term, because also I'm very conscious that some people do then develop chronic diseases, especially like cancer, with the best possible diets and lifestyle. So it's not just about... You can't prevent everything. And none of us really know the initial baseline risk point we sit at. It's very hard to know, apart from some very genetic forms. But you know, you still will feel better today too. So if you do these things, and you improve your diet, some of the transformation stories that you see, yes, with our ZOE members, but all over really, in clinics and online, everywhere, you see people just feel better. They're like, I feel so much better today. Within a week, I was getting up in the morning. It's also an instant benefit. And if something does happen that's terrible, you have a much bigger resource pool to get through that challenge and to hopefully improve your quality of life, even if you do have to go through treatment or something happens, right? So it's a real... You know, in the later part of the book I also talk about the fact that in later life we are more sensitive to poor diet, dehydration, alcohol intake, and so being mindful when we're supporting those around us who are older that actually we should really think about their diet to improve their quality of life, right? And whether that means that you maybe help your elderly neighbor with their shopping once a week, you know, when you start looking into this, I really, I'm fascinated, maybe because of my grandparents, but I'm really interested in how we treat older people in society and how it is for them to live. Access to supermarkets is a problem. When you go into the supermarkets, some of the healthy foods are often very low on shelves or very high, making it harder

to reach. If you're shopping alone as an older person, how do you reach those foods? Then packets can be hard to open. Ultra processed food packaging is very easy to open. It's very smart. So how do we help people? And older people have some of the lowest consumption of fiber, even though we know that constipation is one of the most quality of life limiting things that happens later in life, right? So fiber consumption in older adults of the age 70, 97% don't reach 30 grams a day. So it's really bad. How can we help older people achieve a better diet? I mean, my mom's 70 this year, I hope she doesn't mind me saying that, but she's like incredibly independent and she has transformed her diet and her life in the past sort of three years. So it's never too late, and you can find ways that work for you and this is where by the time we get to sort of 70, 80 our life course has had effects on us, our metabolism, our bodies, perhaps we have things that we're suffering whether it's hypertension, high blood lipids, whatever it is, there's different things you need to be mindful of when thinking about what works for you and this is why Like, there isn't a one-size-fits-all approach, but there's great studies to show how people who don't have that functionality, that independence, and that are borderline frail, can have a huge transformation with improved diet. So it's never too late. It's really worth investing in time and effort into picking nutrition up as this tool that can transform your life today and for the next 10, 20, 30, 40, 50 years.

Matt Eastland:

I love it. I love that. I love the positivity of it. I love the fact it's never too late. And I guess because a lot of people out there must be thinking, well, you know, Maybe I haven't made the right choices, but I'm there now, so I'll just carry on as I am. So that's encouraging. I think we're at that lovely part of the show now, Federica, where we look forward a little bit. So let's do a bit of crystal ball gazing. with all your experience and skills and, you know, all the things that you've done. Yeah. I'd be super interested to kind of get your view of where do you think this space in terms of kind of like nutritional health through the ages is going to be in five to 10 years? What's going to be the new normal? And I guess I'd love to know. I always ask my guests this. It's like, are you are you more kind of positive about the future or negative? So do you do you feel that things are going to get better?

Dr. Federica Amati:

Yes, I'm fundamentally a positive person. So maybe not the most balanced. But yeah, no, I do. I actually think we're at this pivot point. Because people are really interested in nutrition. So at first, it's a bit messy, because it's a lot of voices and it's a bit messy, but this interest is great. And I think that people are realising that they can take agency over their food choices and it will make them feel better. I think the most important thing that we need to remember is that demand is created by where we spend our money. So we can see this how supermarkets have to adapt to supply foods that people are actually going to buy. And if you're a food

manufacturer and your supermarket is not buying this food from you anymore because people don't want it, they have to pivot and make something else. So whilst we kind of wait for policy and legislation and industry to get together, that's going to take time. And I'm hopeful that that will also happen, by the way, but it's going to take time. But what's quicker is how we spend our money makes people change what they're doing. I think working with supermarkets is important and helping to direct this new interest in healthier foods is important, but also empowering people with the knowledge to say, you don't have to buy that.

Matt Eastland:

And I think one of the key things I've taken away from this podcast is that that point around power. And, you know, because I think a lot of people feel that the choice just isn't theirs. But I'm really getting the sense that it really is. You know, if you really can change, you know, change your life, change your health outcomes. And so I would have been surprised if you'd come back to me and said, you don't see the future as being a bit more rosy than now. Federica, we are right at the end of the show, but just for a bit of fun, as I said to you at the start, I would like to just do the last couple of minutes on something quick fire. OK, so one sentence. You'll see. So, yeah, a little bit about yourself and then some more kind of opinion based stuff. So tea or coffee? Coffee. OK. Red wine, white wine or no wine?

Dr. Federica Amati: Red wine very occasionally.

Matt Eastland:

Okay, yeah, definitely took that from Zoe. Last great book that you read, or last book that you read?

Dr. Federica Amati:

I usually have like three on the go, so I'm currently reading Inflamed Mind.

Matt Eastland: Inflamed Mind, okay.

Dr. Federica Amati:

It's about the theory of inflammation and depression. Very good book. I'm reading Nicole Vignola's Rewire. She's wonderful and her book is brilliant. So those two are both on the go at the moment and I'm highly enjoying them. And then recently I read a fiction book which is really unusual for me and it was absolutely amazing. My agent gave it to me and it's so good and it's The Ministry of Time. So good. So I enjoyed reading that on holiday as something a bit

different. So complete fiction. Absolutely brilliant storyline.

Matt Eastland:

Loved it. All right. I'll look that up. Thank you very much. Single best piece of advice you've ever been given. If there is such a thing.

Dr. Federica Amati:

Okay, so the single best piece of professional advice I've been given was by my professor Salman Rawaf at Imperial. He said, just before he told me to go away and do something else with my life, he said, don't take life too seriously, it's already serious enough.

Matt Eastland:

Wise words, thank you. Do you have a go-to convenience food or is this like your nuts and

Dr. Federica Amati:

No, no, that's not what I said. Let's think. Shreddies for a car journey. 10 out of 10, you know, because the kids inevitably you fed them. You're only going for an hour and a half, but half an hour and they're like, I'm starving. And bananas are always there, apples are always there, sandwiches. But shreddies are one of those things that you can just pop them in a Tupperware and they enjoy opening the Tupperware and snacking on them. And I think, you know, that's fine. And then I sometimes keep, so in the cupboard as well, we have the parboiled whole grains, which you can just microwave. And it's more really for my husband than for me because he likes to pull meals together really quickly. But they're actually really convenient and they help you to incorporate whole grains more easily into your life.

Matt Eastland:

Yeah, I'm starting to move more towards that as well now that time is scarce. Last two quick ones. So we had, by God, it was episode seven. We had a Brazilian chef on called Bela Gil and this is one of the things that has stuck with me that I've just always in my mind. She said, there are two moments in your life where you really focus on your health, becoming a parent and getting ill.

Dr. Federica Amati:

Yeah. Yeah. I think I see that a lot. Yeah.

Matt Eastland:

Yeah. And I was wondering whether those are the two kind of interventions where you should go after.

Dr. Federica Amati:

Yeah, and that's kind of what I was saying where there's always this opportunity when when someone does get ill or they have a scare, they will search for answers to how to prevent that happening again, or not everybody, but a lot of people. And then certainly I think, yeah, early parenthood or pregnancy. And that's why it's also hard to see companies that really target young parents with fads, because it's not fair.

Matt Eastland:

And finally, the one key thing you would like everyone to take away from this episode?

Dr. Federica Amati:

My one key thing, if I could boil it all down, is that food has the power to be the best ally for your health.

Matt Eastland:

Nice. Yeah. Love it. Okay. Thank you, Dr. Federica. This has been amazing. I knew this would be a great episode. And you could just be one of those top five people I've met in my life. It changed my perception of things. So from my own bottom of my soul, thank you very much. This has been joyous. So you've done some amazing stuff. Where can people go to find out more about you and obviously buy your book?

Dr. Federica Amati:

Yeah, so my book is available everywhere. I think Amazon, Waterstones, your local bookseller. Ask your local library to stock it. Dr. Fede Amati is my handle across all social media platforms. And so I try to put things, useful things on there. And I respond a lot to what people ask me to put up. So I'll do deep dives on that. And then you can find me on the Zoe's Science& Nutrition podcast and a lot of the newsletter content and everything that comes out from Zoe, I'm usually often in there and I review it and all those sort of things. So if you want to find out more, it's a good resource. Yeah, I think that's it. I'm here now. That's right. On this podcast.

Matt Eastland:

That's right. Well, thank you. You know, as I say, this has been amazing and it's been really joyous to have you on the show. So, yeah, thank you very much and looking forward to finding out what's coming next. Thank you.

Dr. Federica Amati:

Next book. My next book. Yes. Great stuff. Thank you.