

Dr. Jason Fung on Fasting Nutrition and the Academic-Industr...

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SPEAKERS

Dr. Jason Fun, Ivor, Dr. Jason Fung

Dr. Jason Fung 00:00

So many people have come up to me. They've said, Oh, you know, I looked it up and my doctor thought I was crazy, but I did it anyway. And now look my diabetes. And I'm like, Yeah, because it makes sense. It's obvious. And you're doing something which is natural. It's It's It's 100% natural, and it's been used for thousands of years. So it's like what could be better than that?

Dr. Jason Fung 00:24

Welcome to the five Emperor podcast. I'm your host, Ivor Cummins. We're supported by the Irish heart disease awareness charity, which advocates a simple CT scan to reveal your CAC score. So know your score, take action to prevent that premature heart attack. Everything you need to know will be right here. In today's podcast, we have someone pretty famous, who I'm sure a lot of you will know. Dr. Jason Fong. So he's kind of a disruptor in the space, as we used to say in corporate circles, and it's great to see again, Jason, how you doing Hey

Dr. Jason Fung 01:00

I'm good how are you?

Dr. Jason Fung 01:02

Not so bad busy I was in Houston and Miami with our ragged storm then in Israel Tel Aviv last week and I'm going to New Zealand on Monday so I'm I'm keeping moving

01:15

that's awesome

Dr. Jason Fung 01:17

well you know there's a lot to do out there so got to keep on the road. But here I was going to talk to you Jason about your I don't know your latest stuff. I know fasting is a big focus so people be aware of

that. And I actually met Megan and angel in low carb Houston with Dr. Nadia rally at his home so we had a great conversation and it sounds like things are really heating up for you.

Dr. Jason Fung 01:41

Well, I'm always trying to stay busy just like you Ivor But yeah, I mean, it's it's a couple of things that we're trying to sort of get out there more as you know, Megan and I have been working hard on the fasting method calm, which is sort of our program for fasting which is true To make it easier for people to do it. So it's sort of a step by step online program that they can join. And they can either do it themselves, so I'd go through our courses, or get an email to them. And our idea is that, even if you know that the fast thing is good for you, a lot of people don't have a lot of experience. So what people really need is three things. One is education. So we have a number of courses, and we're still sort of upgrading as we go. So we have sort of beginner courses, intermediate courses and advanced courses. So everybody from the neophyte to a series, the advanced course is going to be a series of lectures that I'm doing for specialist physicians. So that's sort of at the highest level of knowledge, you know, with all the sort of studies and evidence with the assumption that you know, all that stuff. So it's going to be talking about diabetes and metabolic syndrome and all kinds of interesting stuff. interesting to me anyway. So that's that's sort of the education part. And then we've put a number of resources together. So from Megan's experience, working with clients directly. We have like handouts, like our cheat sheets and quick guides and that kind of thing. And then a community with like brute facts, and a forum where you can ask questions, we do video questions and answers. So sort of these these are the supports people need in addition to understanding sort of why they should be doing it, but also really a step by step guide, as well as other resources and a community so you can talk to other people who are doing it, ask for help ask for questions, and so on. So that's, that's what we've been sort of focusing on the last little bit and we've also got some, some more. I've got a cookbook coming out in December, which is the obesity Code cookbook, which is essentially a collection of recipes that follows some of the principles laid out in the obesity code. And with Nadia, we've got pcrs book coming out sort of middle of next year. And that's going to talk about what what I talked about a little bit last year, which is other diseases, which are related to hyperinsulinemia. Because what we've done is recognize, so I don't deal with PCs. So that's polycystic ovarian syndrome, polycystic ovary syndrome, which is a huge, huge cause of infertility. So people spend a lot of money trying to get pregnant when the disease in fact is quite, quite closely related to insulin resistance and weight. So that's where I come in. I don't actually treat a lot of patients with PCs because that's not my specialty. Nadia is a natural path has a very, you know, a deep passion For that disease. So we work together on this book. So I'm trying to lay out sort of some of the principles, but also science, some of the science as to how this disease is related to hyperinsulinemia. So if you have too much insulin in a woman, you get all these changes, or you get too much testosterone. So you get acne and you get an ambulatory cycles, which means that they don't have normal menstruation, and they don't operate properly. So if you know, obviously, properly, there's no eggs, so therefore, there's no baby and you get infertility. And the point is that a lot of people spend a lot of money trying to get fertility treatments and so on when they really need to change their diet, and then they can get pregnant. So that's yet another disease. So, I often talk about the diseases of hyperinsulinemia, which is obesity and type two diabetes. And some of these sort of other diseases which are on the horizon, which people are starting to recognize, which are also diseases of hyperinsulinemia, which has metabolic syndrome. As well as cancer, but PCs is also one of these things, and that's what he talked about. It

Dr. Jason Fung 06:06

sounds great. Jason Yeah. I was over in Tel Aviv as I mentioned there, a doctor Mariela glandt over there set up this big conference 500 people, I think 30% medical professionals on average. And I was just telling her about a recent paper, which posed the question is prostate enlargement, the peak house of the male, I made a very good case that prostate enlargement on issues are kind of the peak costs of the male IE underpinned by insulin resistance, and all those negative vectors being driven by hyperinsulinemia. So I think like they're just more conditions that are intimately related to our our big issue in the Western world. I saw Yeah, and I saw it European society, cardiology today. It's national or worldwide diabetes day, I think, but they came out with a big report. Big splashy report. And they basically said that it's beyond epidemic or words that affect diabetes. And there'll be 650 million diagnosed diabetics in the coming years alone. And of course, that doesn't include the maybe I maybe billion or more on diagnosed diabetics who are suffering, all the effects of diabetes would have been diagnosed. So this hyperinsulinemia it's just getting bigger and bigger in spite of the efforts of low carb and other people like yourself.

Dr. Jason Fung 07:30

Yeah, I think so. I mean, the problem is that a lot of these things take decades to to develop. And then when the scientific consensus changes, it takes decades for people to sort of admit that they were wrong and change their mind. So it really is a long term process. But the whole point is that when you eat certain types of food and when you eat very frequently, so when you eat insulin goes off, and insulin is not bad in itself. If it's a natural hormone, but its job is to tell you to store energy that is, when you eat and assuming that you eat a combination of carbohydrates, fats and proteins, when you eat, insulin goes up, and insulin tells your body, hey, store some of those calories because there's gonna come a time when you're not eating. So when you go to sleep, and you're not eating insulin falls, and that's the signal to start taking some of those calories like, which is stored in the body and to bring them back out. So the problem is, if you switch as we did to eating a lot of refined carbohydrates, what happens is that insulin goes up much higher than it normally should. And if you're eating a lot more frequently, then insulin is going up a lot more frequently than it should. So we're not only eating more sort of high insulin foods, we're also eating them more frequently. So instead of three square meals a day which is what your mother and your grandmother said, Now We're talking about six meals, small meals with snacks and all this sort of stuff. So we're constantly stimulating insulin, we're eating foods that stimulate insulin more, and therefore insulin is just going higher. And we're seeing diseases that are caused because insulin is too high. So the most obvious of those is obesity. So if you're always storing calories, your body's going to store body fat. So that's not that hard to understand. The next thing that happens is you develop type two diabetes. So if you're always storing all this fat and sugar, then eventually it's just going to spill out into the blood and then that's what when you get type two diabetes, so people talk about insulin resistance. I actually think a better term for that is hyperinsulinemia. And they go hand in hand. So the thing is that everybody says Oh, if you develop insulin resistance, then you develop hyperinsulinemia, which is Piper which means too much insulin which is insulin and emia, which is the suffix means in the Blood. So hyperinsulinemia is literally too much insulin in the blood. And this hyperinsulinemia is a better term, I think, than insulin resistance because it tells you immediately what the problem is. Because if insulin is too high, the solution is to lower insulin. It's not that difficult to understand. If you start talking about insulin resistance, which is what we've been talking about for the

last sort of 25 years. Then you say, Okay, well, if insulin resistance is the problem, now you have the second question, what causes insulin resistance? And you have all these people say, oh, dietary fat causes it and genetics causes it and all this stuff, it doesn't give you the answer to, to what you're looking for, as opposed to referring to it as hyperinsulinemia problem is too much insulin, the solution is lower insulin, then the question is, how do you lower insulin and that's where you can say, well, maybe you should eat low carbohydrate foods, maybe you should do intermittent fasting. Those are both known strategies to lower insulin because insulin is too high. So that's that sort of why it's important to sort of define these terms. And to use the terms a bit more frequently. I know you did a lot of work with Dr. Kraft and that's exactly what he said, you know, hyperinsulinemia and insulin resistance, they're sort of the same thing. They're actually not different from each other. They're exactly the same thing. But by calling it one thing versus the other. It's a huge, huge problem, because you're not given the answer. When you call it insulin resistance, we call it hyperinsulinemia. The answer is sort of right in front of your face. And then you can take steps to to to to make it better. So yeah, today is world diabetes day. And it's it's it's funny because there's all these people talking and still not a lot of people talking about how it can be reversed low carbohydrate diets, intermittent fasting, I mean, it's getting more recognized, but we still got a lot of work to do.

Dr. Jason Fung 12:00

Yeah, Jason, this is an old chestnut for sure are the hyperinsulinemia versus using the term insulin resistance. The only reason I favor insulin resistance is because of revision and you know, the showman lab and it's just an established term. Whereas hyperinsulinemia might sound a bit new to some people, but you're absolutely right. It's hyper insulin. That is the problem to address most directly, and it gives the answer to what you need to do most directly. So I guess if we use both and move over to hyperinsulinemia over time, it's probably the best compromise. So so many diseases relating to hyper insulin and the fasting thing is really interesting because there's a lot of dietary arguments You know, we've got the game changers movie recently came out which the path to being saved as the vegan diet. We've got low carb, we got keto and we got carnivore now and there's all these kind of factions are arguing over the ultimate diet. But the beauty of promoting fasting is you bypass all of the dietary arguments and all that politics and the stuff that the corporates are really kind of pissed off about, like diets that target certain foods, and you go to something that's more fundamental unnatural, which also achieves lower insulin in a most powerful way, the practice of fasting. So do you believe this is one of the most powerful tools to promote? And also in your answer, do you not need to be kind of rolling in on a lower carb diet to enable you to fast with more ease and to make that approach successful?

Dr. Jason Fung 13:43

Yeah, I think you're absolutely right. So I think low carbohydrate diets work a lot better with fasting for certain reasons, but it's not necessary. As you said, it really works with any diet and because it actually tells you nothing. So when you do intermittent fasting tells you nothing about what you're eating when you're eating like you could eat meat or up vegetables or you could eat whatever you want. Fasting doesn't it doesn't influence that. So whatever die you want to follow, this is something completely separate. And just as important. In fact, I think it's actually more important in many respects to that. So the whole point is that in this is one of the things that is always interesting is that a lot of diets can work. Well like you see it in dietary studies. So you have for instance, a low carb versus low fat study. And it

on average, low carb does better but if you look at the actual individual data, like the patient level data, what you see is a huge splay in both sides. So there are people on the low fat side who lose like 30 pounds, and there's people who gain 30 pounds. On the low carb side, there are people who lose like 40 pounds but at the same time There's still a lot of people who will gain like five or 10 or 15 pounds. So there's a huge variability in terms of individual response to any diet. So while some people may do well on one diet, other people do very poorly on the same exact diet. And that's what you see in most dietary studies. And so that's a problem when you try and apply it to any individual person can say low carb is a better diet. And on average, you'd be right. But if you were to take one individual person, you couldn't say that because it depends on where on the spectrum that you fall. So because of this variability, that's what sort of leads into a lot of this debate of diets and so on. So if you look at the stuff that most people agree upon, it's not that far off, like don't eat a lot of processed foods, like we all agree on that don't eat a lot of sugar. We pretty much agree on that. Don't eat vegetable oils. I mean, that took a long time to get through. But now I think most people can say, yeah, you shouldn't be eating margarine, eat butter instead that's getting there, but not quite there yet. So we do agree on a lot of the things in terms of the diet. But the first thing is something completely outside of that realm. So the point is that there's been two major changes if you look at the diet, and I'll just use American data because that's the most easily accessible to me. If you look at American data from the 70s, people were eating three times a day, if you go to 2004, people are eating five to six times a day. So it's you're talking about instead of three square meals, you're talking about snacks all the time. So therefore, there's been two major changes in dietary habits. Since the 1970s. Not only has the types of foods been changed, because we went through that whole low fat phase, but the frequency of meals has also changed. And that sort of didn't get any recognition at all. So we went from your mother and my mother saying three square meals a day so you want an after school snack They She said, No, you're gonna ruin your dinner. You want to know that time snack? She'd say, No, you should have ate more at dinner. So there was this idea that you should eat three meals a day and not snack. And now you go and people are saying, oh, snack all the time, eat small meals, you know, graze throughout the day. That's a new phenomenon that has never been done before. And it was not a conscious decision. It's not like Harvard School of Public Health and said, came out and say, oh, eat six meals a day. It just sort of gradually came about and I think it's, it's very tightly linked to the sort of low fat foods. So as people ate more and more bread and pasta, so this is the 80s people are eating white bread, white pasta, what they got was this big spike in their glucose a big spike in their insulin and then it would go back down. So if you're eating two slices of toast with jam in the morning, what happens is at 1030 you're like ravenously hungry. So then you Go around looking for a low fat muffin to eat. And then you eat that. And then you eat a big plate of pasta for lunch. So you get a big spike of glucose, you get a big spike of insulin, then just as quickly it goes back down, then you're hungry. So at three o'clock you go looking for some granola bars and some other such thing, right. So now all of a sudden, you're eating six times a day instead of three times a day because if you ate bacon and eggs in the morning, you wouldn't need to eat that low fat muffin in the middle of the day. So because we went to foods that were largely refined carbohydrates, what happened is that without sort of recognizing this, what happened is that we cut out all of the satiety signals. So if you look at the human body, when you eat foods, there are signals to our body to stop eating those are the satiety signals so colas is to Keinan for example, it's one of them, and that you get with dietary fat with dietary protein. You get a lot of peptide why why, if you eat a lot of food, your stomach will actually stretch and you get stretch receptors in the stomach which tell you to sleep Stop eating. They're actually very, very powerful. If you've ever tried to eat one

of those 42 ounce steaks in Texas where you get it free, if you eat 42 ounces, they never give away free steak. It's really hard to keep shoving steak in your mouth. After you get full, you basically get nauseated, then you throw up. So these satiety signals are very, very powerful. What we did without recognizing it, is that as we told people to eat white bread and jam, we took away all their satiety signaling, there's no protein, there's no fat because fat and protein tend to go together. And because they're refined carbohydrates, there's no bulk, so you don't get the stretch receptors which are bulking up. So if you're eating a big pile of beans with a ton of fiber in them, for example, you're gonna stretch, a lot of solids gonna stretch and you're gonna stop eating. When you're eating a whole lot of white bread and jam, you're not going to get that so we totally wiped out our satiety signals, and that's why we had to eat so frequently. So One was related to the other, but sort of unrecognized. So we started eating all the time we started eating all these processed foods. And before you knew it, we had a lot of insulin coursing through our system, which is hyperinsulinemia, all of which is telling our body to please store some of this food energy as body fat. So we gain body fat because we're telling our body to store body fat. So it's a very interesting thing. And that's why low carbohydrate diets, for example, which have sort of an emphasis on proteins and fats work better with fasting because they keep you full longer. They activate satiety signaling better. That's not to say you can do it with a vegan diet if you're eating big piles of salad and beans and so on. Yeah, you can certainly do that. It doesn't preclude it. But I think the main thing is that you have to recognize that there are two big changes the what foods were eating but also the when we're eating, they're linked to In a way, because if you're eating a carnivore diet, for example, then you're getting a lot of satiety. Hormones pumping through, you're not going to be hungry, just like everybody knows, like, you eat a big steak, you're not hungry afterwards, you just don't want to eat. And so therefore, it's much easier to do the fasting because you're working with your body with your hormones to to do the fasting, as opposed to eating the same number of calories as Coca Cola and white bread. Like you're not going to get the same feeling of being full and therefore you're not going to be full, then you're gonna have trouble getting through the fast because you're not. You're not full.

Dr. Jason Fung 21:44

Yeah,

Dr. Jason Fung 21:45

absolutely, Jason. And for me, it's like the banking phrase too much is never enough about banking, greed on Wall Street. But yeah, those kinds of processed foods for me, I just, I just can't stop. I mean, for decades, I had that problem and I put on a lot of weight for the man A woman in the street then obviously a lower carb, higher protein on fast, satiety based nutrient dense food is the way to go. And then fasting what I've kind of settled on now, because I'm quite indulgent, and I like my food. I've settled on two meals a day, and sometimes one meal a day, essentially. And it works really well. I don't feel hunger. I feel a slight clang in the middle of the day in my stomach, but nothing that disrupts my work or I'm my mental acuity. And when I get to around 5pm, with the whole family, I've a large family with a big meal with meat and vegetables, highly satiating, and it just works so well. And yet many people out there if you describe this regime to them, they'd say, Well, you know, that's almost like a, you know, a food issue, or, you know, you've got some kind of fixation to eat only once or twice a day, but they're completely wrong. I mean, that is probably ancestrally the best way to go.

Dr. Jason Fung 22:59

I think so. And I think that the thing is that you have to understand that the human body is very, very smart. That is, if you eat once or twice a day, I mean, that's the whole point of our body, carrying body fat and glycogen and so on, because those are stores of energy. So you do not need to eat all the time. And all these people who say, well, you have to eat every two hours. I'm like, so why, why do you have to do that it's like a car. So you have a gas tank for a reason, because it's a store of gas. So you don't have to go to the gas station every three minutes when the gas and the engine sort of turns off. Just a quick

Ivor 23:44

break to remind you that this podcast is only possible due to funding from David Barbosa and the Irish heart disease awareness charity. For middle aged people, it is imperative to find out your heart attack risk by getting a CT scan of the heart and your CAC score. The new haich d.ie website has all the scan resources, please support us by visiting and sharing widely. Knowing our score, you can take action to stop the disease process and save your own life. It can even be as simple as removing sugar, refined carbs and seed oils, ie processed food from your diet. And now we return to the conversation.

Dr. Jason Fung 24:21

So what they're saying is that, you know, oh, you if you own a car, you should go to the gas station six, seven times a day, because as soon as the gas, you know, gets out of the circuit, you're done. It's like, No, you have a gas tank that stores guys. Like our body has body fat and glycogen, which is a store of energy, so you do not need to. So I'll tell you, there's a ton of people say that, oh, you have to eat six times a day. I'm like, why? And of course they have no answer to that whatsoever. They're like, Oh, this and that. It's like aching. None of it was science based in the first Place, there is no science to say that eating six times a day is good for you. There's no science to say that eating once a day is bad for you, there's, there's simply, the data is simply not there. And it's because our bodies can adapt very easily to it. So the important thing with and I do much the same as you I eat twice a day or once a day, for the most part, sometimes on holidays and stuff, I'll have three times a day, but I eat much the same as you and I think that the the reason is because you have to sort of adapt your eating style to your lifestyle. And if you work, really the easiest thing to do from a life standpoint, is to skip breakfast because nobody really cares if you breakfast or not, because everybody's on the go. Everybody wants to get up so I get up a little later so that I don't have to eat breakfast and clean up and do all that stuff. I just kind of shower and change and go out the door. And then if you skip lunch a couple times a week. Again, most people just don't care that much. So therefore You get through, you get your work done doing this podcast, and nobody really notices that you haven't eaten. But at the same time, now you can go and have dinner with your family, you can go out with your friends after work or, you know, on the weekends and half half of that. I mean, it's it just works very easily in your life schedule. And that's the whole point is to be able to it's flexible enough that you can adapt it for other people who are not working, then maybe a different schedule works better for them, maybe going breakfast breakfast, or maybe going for a three day fast or five day fast is better for them. And if you find the right community, there's no reason why you couldn't you know, one of the other things that is I think is very interesting is doing these longer fasts. And you don't have to do them all the time, of course, but they're really just another tool. So I always look at tool. It's like a, you know, having tools in your toolbox. It's better to have more and you can use If you want to you can not use them if you don't want. But the point is that if you are at a

situation where you're very sick that is your sugars are way up, you're going to be put on insulin, you're you have type two diabetes, stuff that's really going to seriously affect your health. And you can use one of these sort of stronger weapons that is longer fast because if you don't eat, your blood sugar will come down. Then your body is using up the sugar and just talking about diabetes. If you're having a disease where you have too much sugar, and you have fasting, which is a an intervention, where you simply allow the body to naturally burn that sugar. It's like okay, well, like let's just one and one together here, right? Like, too much sugar. Let's burn sugar. Okay, now we can take care of the whole problem, why people don't is sort of beyond me. Like I try and tell people, hey, this is a good option for people if they want to do it. Like I'm not wanting to force people to do anything they don't want to do. But hey, if people want to do it, and so many people have come up to me, they've said, Oh, you know, I looked it up. And my doctor thought I was crazy, but I did it anyway. And now look my diabetes on I'm like, Yeah, because it makes sense. It's obvious. And you're doing something which is natural. It's it's, it's 100% natural, and it's been used for thousands of years. So it's like, what could be better than that?

Dr. Jason Fung 28:36

But yeah, but Jason, I guess there's the corporates are very much against it for obvious reasons. And they have the food companies driven this whole culture. They didn't initiate it necessarily. They got the idea. I think you mentioned before from Type One Diabetes about a little regularly being gold for blood sugar stabilization, and it became a kind of a meme 50 years ago, but the corporates jumped on us and drove up remorselessly right? We'll all our snacking culture, and that increases profits. But the medical business as well doesn't like a apparently quacky sounding idea, like fasting from thousands of years ago, being put forward as a major weapon or a tool, as you say, for diabetes and other chronic diseases. It kind of puts them out a bit, makes them feel a bit uncomfortable, I'm guessing. So that's probably where a lot of resistance comes from. And the idea of fasting being healthy, which is 100%. no question in my mind, I think it's the most healthy thing you can do almost. Jeff Gerber. Actually, my buddy, you know, Jeff, he mentioned if I was talking to, to ask about the safety aspects of fasting and maybe a day or two or three day fasts, Is there much literature, or are you building effectively literature through all of your patient experience, even if not actually publishing in peer reviewed is the evidence Mounting for the safety of multi day fasts for instance.

Dr. Jason Fung 30:03

I think that Yeah, one is that multi day fast. It's It's a tool. So tools sort of have often up to the edges. That is it's very powerful. But it can be also very harmful if you're not doing it correctly. So absolutely, you should be doing it. if if you have severe disease, and if you're not feeling well, absolutely, you should see your doctor about it. The point about the multiple day fast is that it's it's it's a little bit more extreme than, say a 24 hour fast. So we did publish a case series about three patients. In fact, we did 24 hours, fasting three times a week, and they each had about 20 to 25 years of type two diabetes on a high dose of insulin, all three of them and so we were able to get them all off insulin, it took us between five and 18 days. So here these people had type two diabetes for 20 years. We essentially got them to a state where they were non diabetic within a month and a half sort of thing for all three patients. And it's quite striking actually. So multiple day fast can be safe. And we do a lot of those in our clinic, but they do have to be monitored a little bit more closely, because blood sugars will fall a little bit faster. So therefore, you have to adjust the medications. But there's no reason why you couldn't do it. So there's not a lot of data on multiple day fast because, heck, you know, when I started talking about this, about

five years ago, I mean, the thought of going more than three hours without putting them off in your mouth was like, wow, that's crazy sort of thing. So to suggest that somebody go for five days without food was utterly ridiculous. It's a little bit better now. So there are more studies on alternate day fasting, for example, and certainly that one case series. I mean, it took us about four years to get it published. It was ridiculous. That's how long it took. It just kept getting put off, put off, put off, put off. So then eventually published it, we have a couple of other case series. So trying to build that consensus that this is a reasonable tool. And I think that the part of the problem with the doctors is that most doctors are good people. But there's a whole problem with the way the system is set up. And this is what I sometimes called the academic industrial complex, right. So just like the military industrial complex in the United States, you have this academic industrial complex, where pharmaceutical companies can pay influential doctors, a lot of money. And when you get paid a lot of money by a drug company, you like them, that's just human nature.

Dr. Jason Fung 32:49

I like them just listening to that I like them already.

Dr. Jason Fung 32:54

So if you look at the amount of money sloshing around in the system, that goes to Pay doctors. It's a ridiculous amount like most research and like if you look at big pharmaceuticals, their marketing budget is much bigger than their research budget. It's about marketing, not about making good products. So if you get doctors on your side, so of course, in the United States, they have a thing called pro publica, for example, where you can look up how much each your own doctor is getting paid by pharmaceutical. So it's a conflict of interest. That is, if and then the way they work. And I've written about this on medium and other places, is that they have they pay an influential doctor so they get to go to a big name University, they say, hey, do you want to come on a speaking tour, they'll do a speaking tour of like, you know, 10 cities and obviously, it's not cheap, so they pay them probably 30 \$40,000 to take a two week vacation with the drug Rep. And then all day need to do is give a talk to some local doctor so the local doctor will get go out there and they will get a free dinner and a very nice dinner usually would cost. It's usually at the best restaurant in town with wine and everything. So it's it would cost you normally sort of like \$150 \$200 to get that same meal and they'll give it to doctors for free just for listening to this special speaker from a big name University. And they will put the drug company will make the slides and they'll tell that doctor exactly what to say so that the doctor doesn't even have to put any work into it. He'll just give the talk and he'll get paid. Sort of like 1500 \$2,000 a talk. So easy money. You go out there you have a free dinner. Two hours later, you cash your check for \$2,000. It's easy enough, but what you've done, of course is that you've been promoting a drug or Insulin or whatever, and basically influencing other doctors to prescribe that. And whether it's good for patients or not is sort of irrelevant. It's really up to the pharmaceutical. So we recognize that these are conflicts of interest. So if you ever go to an academic talk people will put up there slides in today. These are my conflicts of interest. It's like, my question is if we know their conflicts of interest, and why do we even allow it, like there shouldn't be any conflicts of interest. If you look at journal editors on influential journals, they make a lot of money. So I remember one paper looked at one of the cardiology journals and on average, the editors were getting something like \$400,000 each from pharmaceutical company, so a huge amount of money per year. So a huge amount of money. So obviously, if you're a doctor and you're making an extra \$200,000, on the side, pumping, you know, these, these drugs, you're gonna like it pretty soon. You're gonna believe

you're own propaganda because you've been the one spouting it out there and remember, and the more influential so the higher up in the university, the more money these guys get. So if you think that the guy at Harvard or Stanford is the most smartest person, you also have to realize that they're also the most crooked. They've taken the most money from the pharmaceuticals. So therefore, they're the most biased, and they don't even know that they're biased. That's the problem. They think that they're completely unbiased. They think the system is fine. But when you actually look at it objectively, and there's been tons and tons and tons of papers, looking at this academic papers, it's pretty obvious that the money in the system is the entire system is corrupt. And that's why we have a problem because everybody all the doctors want to give drugs all the way because they say wow, this guy from Harvard, this guy from Stanford, this guy from wherever Oxford, they're getting You know, they're, they're the ones saying that, oh, insulin is good, and statins are good and this and that. It's like, well, they're also the ones taking all that money. So how do you know that they're not biased? And their answer is, because I'm not biased. It's like, Well, we know your bias. It's all unconscious bias. So the whole system is crooked. It's, it's terrible. It's this whole academic industrial complex, which has to be sort of, it's a sort of cartel that really needs to be broken up, because we need doctors to have an objective view that is if you work at Oxford,

Dr. Jason Fung 37:35

you need to be not taking any money

Dr. Jason Fung 37:37

from anybody but Oxford. That's pretty simple. Just like if you're a judge, you need to not be taking money from anybody other than the government that is paying your salary because we don't want you to be biased in any way. So if you have influential doctors like at Harvard with this, whatever that Staton collaboration,

Dr. Jason Fung 37:58

propaganda team

Dr. Jason Fung 38:01

They take millions of dollars. They say they're unbiased, but they're obviously biased because they've taken millions and millions of dollars. Why do we need to why is this acceptable? That's That's my question. And I think it's something that should be considered absolutely unacceptable. The same way that a policeman cannot be taking money from the local pizza guy, sort of thing, right? It's like, you can't do that you can't take you can't have a drug pusher paying a cop. It's corruption. But you can have pharmaceuticals, which is a drug company, paying doctors which are the gatekeepers, and it's like, that's corruption, too. It's just accepted as part of normal business, but it's a horrible, horrible system.

Dr. Jason Fung 38:47

Yeah, I agree. Jason completely. And I discovered this when I first got into the field eight years ago very quickly, and I realized how essentially perverted the walls and I was a corporate guy and used to extremely strict appropriately expense control where everything was really regulated. And then like you described there, it's insane out there. But I guess the people with the money and the power and the influence are the ones profiting and the ones who are inherently most corrupt. So they're controlling it.

So we're not really going to see a change in general. But I guess we can always speak out against him as much as possible. If doctors in the frontline get converted to realize that cholesterol is not really a problem, that carbohydrate is the issue and not so much fats and protein, and all of these other key messages and fasting is incredibly therapeutic and get people off meds and regress their diabetes. If all those messages get out. I think the doctors in general are going to become more distrusting of the corrupt system that they're currently kind of trapped or trapped in. So I think indirectly it'll get better maybe, but here I have a case history for you. You're a nephrologist, right? Yeah. Yeah. So I have someone actually very connected to me who over the years will not listen to me. Skinny trophy, so skinny with a small Tomi, really like bear build a male. And years ago I told this person, you're diabetic man. I mean, there's no question. And he said to me, I'm not about it. I asked the doctor, am I anyway, diabetic? The doctor said no way your fasting glucose is 5.5. And I said, Look, you're diabetic and you've been diabetic for five years. And I pointed to the stomach and I pointed to his liver values, and I said, Look on every ratio and your ggt is up at 60. You know, you're you're diabetic. So any of that recently got diagnosed with chronic kidney disease stage three. So finally, not only is this person listening to me, but the advice which is fasting and very low carb and I said it's simple. Within three or four weeks, your hypertension is going to drop, your weight is going to come off and all your macros are going to improve. Sure enough, lost 17 pounds in around five or six weeks, barely disappeared, it was almost hanging over the bell to the stage face shrunk. Wife is delighted. And I'm sure the chronic kidney disease will at least stop at stage three. But interestingly, the doctor when he looked back at the records, I asked him look back in your arrest records, what about your last tests? And in his previous test two years ago, CKD stage three it was never mentioned. And this time he has to ask the doctor what CKD meant. So anyway, that's long window, but the reality is CKD is essentially a result of diabetic dysfunction. It's massive out there. Do you think fasting, low carb and all the good tools can also stop CKD at a stage and perhaps slightly regressive? Why do you reckon or what are you seeing?

Dr. Jason Fung 41:54

progression is hard because so for sure you can prevent it because The majority of what I see in terms of CKD is diabetes and high blood pressure. And if you lose weight, and if you watch the sugars and so on, very often you'll be able to prevent type two diabetes. The problem is when you have type two diabetes or hyperinsulinemia, for 10 15 20 years and you develop the kidney damage, then it's not easily reversible at that point. So it's like if you don't change the oil in your car for 10 years, and then it breaks down, they say, Okay, I'm gonna start changing Oh, my car's like, that's great. But that damage that is done is already done. So that's the thing about CKD. It's much the same. So if there's damage done, then it's not likely going to be reversible, but at least you can slow it down or prevent it from progressing. So because type two diabetes and high blood pressure sort of make up the vast majority of CKD. Really, you could have the same beneficial impact, but you have to make sure that people don't get the weight problems and so on.

Dr. Jason Fung 43:01

And Jason actually in the US, I know that people are generally very overweight and you're focusing on weight loss in many patients. But of course, the metabolic diseases that are going to kill them are going to get resolved as well. But weight loss is a big focus. I'm not sure in Canada, but the whole problem of 10 outside fat inside the internal visceral fat with someone who doesn't appear overweight. Do you see quite a lot of that as well. I know most people with metabolic disease diabetic dysfunction appear

overweight, but me and the I HDA charity and my sponsor David Bobbitt are particularly focused on the toll fees who perceive that are not obese, they don't smoke. And yet of course, if they've got the diabetic problem and they can easily have those, there are just as more charts disease risk essentially and vascular destruction is going on hidden. So do you see many of the trophies or is it more people who are genuinely very overweight looking I

Dr. Jason Fung 44:00

think I do see quite a lot actually. So we see a lot of South Asians who are actually same as your friend very slight, but then they have this little potbelly and they think they're okay. But then you check their measurements and all this stuff and of course they have diabetes or pre diabetes, and it's all that visceral fat. So the problem is not actually the fat, the problem like fat in fat cells is okay, fat inside your liver is not okay. So the point is that it's all that really the fat around the visceral organs. That is really the problem. And it's not so easy to diagnose the body mass index, or your body weight gives you sort of this false sense of security that hey, it's okay because I only weigh X number of pounds and therefore my body weight is this. I found it interesting. A few years ago, I saw a statistic that in China, they have a lot of type two diabetes, the average body mass index of the diabetics, they were developing it a BMI of 23.7, which is actually in the normal range. So 20 to 25 is considered normal weight. So these people were not overweight. It's just when you actually look at them, they actually had a little potbelly, which has all that fat that's around there. And that's what I talked about a bit in my book, the diabetes code, which is really the fat, the visceral fat, or sometimes it's called ectopic fat. That's the actual problem with the metabolic diseases. It's not actually the weight itself, the subcutaneous fat, the fat that's carried under the skin, and what a lot of people have in the United States, it's, it's, you know, usually they have both visceral fat and subcutaneous fat, but it's not actually that unhealthy for you that extra fat that's sort of, you know, all around that sort of overall fat, as opposed to the fat that's carried around the abdomen. Unfortunately, the more common is to get all that fat that's carried around the abdomen, which is much more dangerous.

Dr. Jason Fung 45:58

Yeah, I guess There's even fewer people but a huge risk and no idea they have a problem our athletic people who don't even express the little potbelly maybe they're not Asian origin. And a bit like David Bobbitt himself, you know, have massive calcification rank diabetes, but not showing up and fasting only in postprandial insulin and they actually don't even have the potbelly. But I guess you wouldn't see too many of those in America or Canada, genuinely slim looking people who have a lot of diabetic dysfunction if you measure them properly.

Dr. Jason Fung 46:33

I mean, we do see them sometimes but you really have to go looking for them and the problem is that those people who are athletic and don't have a little potbelly and have that fat on the inside. They, they often don't go looking for those problems. So it's interesting because Dr. Michael Mosley in the UK, of course, another big proponent of fasting diet, it's very interesting because he actually, as part of his show, did an MRI and saw that On the inside, and he was like, Oh my god, like, look at that. And that's what sort of brought him around to do all that work talking about the five, two diet and fasting and all that sort of stuff, because he himself had not even recognized because he's quite slender looking. He had not recognized it and he had done that MRI or at least that I that's what I read anyway. If you hadn't

done that MRI, he wouldn't have even even recognized that he was at risk of all these diseases. And of course, then, of course, you know, he went on to look into it. And then he became a big very big proponent of fasting in the UK really brought it to the forefront. So that's

Dr. Jason Fung 47:41

for sure. I mean, Michael Mosley is a great example. And I'd forgotten that example, but I remember it very well. It happened to be an MRI and a HDA. Of course, we say get the Carney calcium scan because at the end of the day, you can be fat pins, smoker, nonsmoker, but the arbiter really is how much disease you have nachos for heart disease. But the CAC also reflects all cause mortality risk, because the underlying inflammatory process that drives the calcification kind of drives a lot of the other diseases. But But MRI yeah can show you what you would not see from all the other measures. So, equally a useful test, but like you say, Jason, very few people are getting any of these tests. They're going into the doctor, they're getting a fasting blood glucose. They're not even getting a fasting insulin and fasting values do not check the operating range of the jet engine, right? It's not idle. So you miss.

Dr. Jason Fung 48:34

Yeah, yeah,

Dr. Jason Fung 48:36

it's there. There are better measures to to look for sure. But the thing is that people have to like it has to be simple enough to do I mean, anyone see, there's a lot of problems with that too. But in general, it's not a bad test. It has to be simple enough to do for the whole population to just go in. So blood tests are generally what, what are easy to do for those people who are interested they can go ahead And do the the coronary artery calcification and so on, which is I think, a great test. But in Canada, it's not that easily available because the government doesn't pay for it. So people have to pay for it themselves. So therefore there it's not so so easily available. But a great a great test nonetheless.

Dr. Jason Fung 49:16

Yeah, well, that's a no Canada. I've seen a lot of people come back to me now around the world, but specifically Canada, a lot of people complaining that the doctors don't want to give it even if they're going to pay. So Canada weirdly seems to be going against logic. And they're also going against logic in their dietary guidelines. It's bizarre. I mean, they're going against I think maybe we just finished in that because I know you've got to get back to your practice. But the dietary guidelines in Canada are kind of going backwards. And complaining about eggs and dairy and kind of going backwards.

Dr. Jason Fung 49:52

Yeah, it was it was a bit strange and I don't know who they're listening to, but there's obviously a very Large sort of group of people who are entrenched in this sort of academic industrial complex. And of course, the government is going to go to the universities presuming at those are the sort of experts. And so therefore, they're very influenced by by them. And of course, if you go to any academic institution, and talk about obesity, it's all about calories, calories, calories. So because fat is high in calories there for five years finding, that's their sort of idea. Yes, it's stuck in the 1970s. But hey, that's what they built their careers on. And they're still there now, and they're the professors and so on. So that's why very few good ideas in nutrition come out of the universities, truthfully, and obviously people

know this because they never go to the universities asking you for help with easy I mean, it's just not something you do because they seem to have no expertise in it. So the point is, that When they start with these guidelines, and they went very much plant based, for example, that was one of the Canadians guide new guidelines, one of their big things. And then, as you said, going back on some of the new science, so I don't even know where it comes from. I mean, the rest of the world has moved on. The American Diabetes Association, for example, says the diet with the most evidence for reversal of type two diabetes and so on is the low carbohydrate diet. And the Canadian guidelines Don't even mention anything like that. So, yeah, it's a little it's a little distressing for sure that people are going to be looking for guidance and getting the wrong guidance. But hey, you know, that's, that's sort of beyond my paygrade. I don't I don't have any influence on that, obviously. So. Well, we'll

Dr. Jason Fung 51:55

leave it to Nina Ty Schultz on the nutrition coalition in Washington. And I think Caroline For a man who imagined Iceland lovely lady, she's a nice assist. And I think she has over 2000 female I think medical professionals who've signed a, an affidavit to kind of tackle this problem we just mentioned with Canadian guidelines. So there's a lot of good people, they're pushing back, which is great. And the academic industrial complex, it kind of might be that they're not stupid, and they're not corrupt or evil, but maybe they're a little bit of all three. And it's just cause a problem. So hey, great stuff. Jason. I know you've got a hard stop now. And I want to respect that and we'll catch up again when your next at a conference in the US or anywhere actually.

Dr. Jason Fung 52:44

I'm not sure I came to your at Denver. Last year, Denver. I don't know if I saw you

Ivor 52:52

were you there. I was, but I was doing some interviews and I was pretty busy, but I saw you briefly we chatted

Dr. Jason Fung 52:59

last one and then I'm not sure what I'm doing next year. For this year, I did this other conference in Austin, which was quite good as a lot of medical professionals. It wasn't a low carb, low carb conference. But that's what I'm trying to do is trying to reach sort of into the some of the other places. So this was a lot of various medical specialists is about three or 400 medical specialists, so it's good because it helps sort of get them because they they start to understand the science, obviously, they have the background in human physiology. So when you talk to them about the science, they start to get it right away that this is not like some wacky stuff. It's all based on good science, like fasting low carbohydrate diets. It's all based on good science. So I think I have another one. That's next year in London, Ontario. Which is a family medicine conference. And I know I'm doing one for the functional medicine conference. I'm doing free one in Toronto, for the library because I like the library. I love to read. I'm doing a talk for them in Toronto. So, yeah, I have a few. But, you know, as I said, I do try and get to more than some of the other groups that aren't, you know, so So. Yeah, so so specialize in low carb, because, you know, try and spread the message out there and get it out to some of the other, the other medical professionals so that so that they hear it and they actually have exposure to some of these ideas.

Dr. Jason Fung 54:44

Not sounds great, Jason, you're absolutely right. The medical conferences and getting outside a low carb is so important because there's kind of a glass ceiling there To be honest, and low carb is expanding. So it's it's great to get the message out broadly, but it's still low carb It's medical doctors and professionals who really need to be in large meetings discussing their stuff for sure. I think there's does a keto conference in Switzerland.

55:09

Oh, that's right. Yeah. Yeah. I think that's the

Dr. Jason Fung 55:13

Yeah, no, I think there is a keto conference in Switzerland. Well, I don't think I'm going to the speaking of it next July, I think, keto live in Switzerland, and that's got 86 CME available credit medical credits. And Denver has a lot too. So I, I think there's somewhere in between where the low carb conferences as they attract more and more doctors, and they stack up on CME credits for medical education. They'll start making those more powerful for the Well, I suppose the strategy or the target. You have got more medical people in and not quite so many enthusiastic lay people. That's great, too.

55:51

So anyway, yeah, absolutely. I think we need both. I think we need the enthusiastic lay people for sure. But then we also need to get to the medical professionals too, and not all of them. gonna come to a low carb conference. And that's the, that's the idea. So I can get into some of their conferences, and they'll actually understand what the what the sort of issues are and at least think about them anyway.

Dr. Jason Fung 56:14

Excellent. I'm possibly doing a conference in Ireland next April. But again, I'm not going to mention low carb at all, or keto. It will be a health nutrition lifestyle conference to address stop and reverse disease. But I'm going to avoid for similar reasons. I'm going to avoid the low carb word altogether, and make it more political.

56:35

Yeah, I mean, it should

Dr. Jason Fung 56:36

just be about the operation and make it more political.

56:39

Yeah. And fasting and fasting.

Dr. Jason Fung 56:44

Excellent. Well, hey, thanks a lot, Jason. We'll catch up again. And yeah, let us know if there's anything you want connected to this when I release it or the links, obviously to intensive dietary management and all the

Dr. Jason Fun 56:55

change to the fasting method calm. So that's we've built a new website we're still working on it. But it's a new website called the fasting method calm and it's a whole sort of new program. It's still in the it's launched, but we're upgrading everything as as we go. So yeah, that one would probably be the best one to do.

Dr. Jason Fung 57:16

Great stuff. The fasting method comm I like it. I love it. And I always do love your stuff, Jason. So that's not a surprise. Hey, thanks a lot. Good luck next time.

57:27

All right, thanks. Good to talk to you.

Dr. Jason Fung 57:30

Thanks for tuning in. Guys. If you're watching on YouTube, you can see my subscribe button in the middle of the screen, a free viewing of the Widowmaker movie on the far right. And myself and Dr. Gerber's book each rich live long on the left, or otherwise, please do subscribe to the audio podcast. Thanks