

Bad Science and Diet Lies Keep Feeding Obesity: Gary Taubes with Dave Asprey – #778

Announcer:

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Dave Asprey:

You're listening to Bulletproof Radio with Dave Asprey. Today is going to be awesome because I have my very favorite all-time science journalist on the interview for you today. This is a guy who got famous in keto circles before keto was a thing with a book called, Good Calories, Bad Calories, which for me is the high mark of science books to be able to not waste one word in a book like that. A great thinker and leader in understanding low-carb, understanding keto, and understanding sugar. He's also known for a book called The Case Against Sugar. If you're a long time listener you might remember episode 223 where he talked about the bad science in public health, which has only gotten worse, researching healthy diets, what gut bacteria does, and how to experiment on yourself.

Gary has released one of his infrequent and always epic new books and this one's called The Case for Keto. He just explains straight up how the way we think about obesity has led to 60 years of controversy and these diet wars about calories. And, basically, the end of it, why I always felt ashamed when I weighed 300 pounds, because I did what was supposed to work and it just doesn't work. He tells us why. Also, side note, before we officially welcome him to the show, Gary actually introduced me to the very first agent who represented me for my first book, a lot of you probably don't even know about, called The Better Baby Book, which took five years to write. It was all about fertility. It was a phone call and an email that he placed that really set me in motion as an author. Gary, welcome back.

Gary Taubes:

Dave, it's good to be here. Thank you.

Dave:

What made you have to write another book now?

Gary:

Okay. Well, we have not won this battle. What I'm doing in this book, I think of this as a grassroots movement. The whole world of people who were struggling with their weight or struggling with their blood sugar and were doing exactly what they were supposed to be doing and it wasn't helping. When I started writing about this 20 years ago, there might've been a dozen doctors in the US, or maybe in the world, who were prescribing low-carb, high fat keto diets. Half of them had written diet books like Mike and Mary Dan Eades, the Sugar Buster guys, Agatston with the South Beach Diet, and Ted Naiman. Atkins was still alive. That was it. If you did this and you lost 60 pounds, you would go see your cardiologist and your cardiologist would tell you you were crazy, even though you were 60 pounds lighter.

Now, 20 years later, we've got a few tens of thousands of physicians out there who are prescribing these diets. We've got dieticians who are being won over and nutritionists who are slowly being won over. It's a slow slog and we're still fighting the establishment. As you've said, the bad science has not gone away or gotten better and so we have to keep getting this message out there. As it evolves, what I wanted to discuss was how would it evolve and then I wanted to put it all in context. The book started off with the title, How to Think About How to Eat. Actually, even before that, I wanted to

call it In Praise of Fad Diets. Because, the reason ... It sort of struck me. I talked about this. I was being interviewed for a BBC documentary and all they wanted to hear from me was why did people do fad diets and why were there so many fad diet doctors out there? And, why did the diet books sell so well?

I was literally doing the interview and I thought, why do people do fad diets, because the conventional wisdom doesn't work. You do exactly what you're told to do and all it does is keep you fat and make you hungry. You feel bad about yourself because you blame yourself for failing. Any reasonable person in that circumstance is going to look for another approach. The other approaches are the approaches being peddled by fad diet doctors, some of whom have happened to have gotten it right. I wanted to explain how we got into this crazy naivete, this idea that people give like you weighed 300 pounds because you ate too much, which is the bedrock conventional. That's the Newton's laws of obesity science and it's insane. And then, I wanted to explain what the alternative should've been, which is you weighed 300 pounds because you had a hormonal disorder going on in your body. We're storing fat rather than burning it for fuel. That's a fuel partitioning problem.

The bad science in the nutrition community has evolved having to live with this inane idea that obesity is an energy balance idea, that obesity researchers kept adding in the philosophy of science had come epicycles. One stupid idea after another so that they could justify continuing to believe what they had always believed, despite all evidence that it's complete and utter failure. Among that evidence being the obesity epidemic and the diabetes epidemic. This was an opportunity to me to unravel all of those epicycles, throw them out, bring us down to the essence. And then, I interviewed about 120 physicians out there and another 20 personal trainers, nutritionists, dieticians, a dentist, a smart guy and I got to ask them what their challenges were and what they were learning about prescribing these diets and what they were seeing in their clinics.

Dave:

I remember really well when the Bulletproof Diet, which involves cyclical keto, not eating sugar, not eating bad fats, and stuff that you are very familiar with. And someone, I think it was *The New York Times* or maybe *The Telegraph*. They're saying, "Well, how do you ... How do you know this isn't just another fad diet?" I'm like, "Guys, we're going on 50 years of starting from the year I was born." Robert Atkins published a book and yet I was fad because no one listens except for these brief periods. So, if this is a fad diet and fad diets lasts for 50 years, then yes, it's a fad diet, but I'm pretty sure keto is not going away because it's the only thing that works.

Gary:

Well, and this is the thing. First of all, it's not 50 years. In five years, it'll be 200 years.

Dave:

Now, there you go, from Banting?

Gary:

Yeah. No, even before Banting. It goes all the way back to this Frenchman, Brillat-Savarin. Brillat-Savarin said he's a lawyer and bon vivant. He likes to live and he likes to eat. He's struggling with his weight also so he quits his law firm and he travels around and he writes about eating. He puts together this book called *The Physiology of Taste*, which has been in print since 1825. Not that many nonfiction books, other than the Bible, can make that claim. In it he says, "Look, I talked to 500 people, all of them struggling with their weight and they all ... You know, if somebody is obese, then they're going to tell me

they love potatoes, they love bread, they loved pasta, they love rice. These are the foods they can't live without. These are the foods we fatten animals with."

Dave:

Shocking.

Gary:

And, sugars make everything worse. In 1825, sugar was still hard to come by and sugary beverages. Basically, you might get a lemonade a cafe because they could put some sugar and water and stir it up and add lemons. He didn't think of sugars as a major problem because if you've got people not to eat grains then they would eat pastries and they wouldn't get the sugar. But, anyway, so that's it. It's always been there. There's always been this idea that if you don't want to get fat you had to avoid carbs. I use this in the book. Ultimately, the low-carb, high fat ketogenic way of eating is a way of eating that ... Brillat-Savarin's 195-year-old phrase, more or less rigid abstinence from ... He said, "Flours and grains are fecula," which is another word for it's gone out of style in the past 200 years. But that's it.

Dave:

Wow.

Gary:

The fad diet is the low-fat diet that was introduced in the 1960s. It was supposed to be a way to prevent heart disease and then became an obesity diet. It had never been tested. It had never been tested for obesity. It required lowering fat and adding back carbs. When then the nutrition community starts to embrace a low-fat diet for heart disease they transform carbohydrates from something that every woman knew was fattening. This was a first line of British Journal of Nutrition article in 1963. Every woman knows carbohydrates are fattening-

Dave:

Wow.

Gary:

... which they did. And then, by 1985, 22 years later, they're heart-healthy diet foods. The personal health reporter in *The New York Times* is writing a bestselling diet book, telling us all to eat pasta because even though we used to think it was fattening, it turns out it's not. They never tested. Nobody thought let's do a clinical trial comparing these so the carbohydrate is fattening idea was left to the diet book doctors. The Atkins and Tallers and Eades. All these people who stumbled on and on their own and said, "Hey, when I tell people not to eat fattening foods, they don't get fat anymore."

Dave:

What do you think when you hear the words, the French paradox?

Gary:

That's one of those epicycles. You've got this theory that fat causes heart disease and then you have a country like France, where they live on ... Gee, they didn't even eat chicken in France, right?

Dave:

Yeah.

Gary:

They ate duck.

Dave:

You'd soak your chicken and pork fat and then you'd eat it.

Gary:

Foie gras and cheese and eggs. I lived in Paris for two years. They were two of the best years of my life, I have to admit. Every morning for breakfast I had eggs and bacon in the cafe because that's what they were serving. How do you explain a low level of heart disease in that population? Well, you say it's a paradox. You don't have to say, maybe our hypothesis is wrong. There's a low level of heart disease in Switzerland. I lived in Switzerland doing my first book for nine months. Geneva was not my favorite city. But, two of their staple foods, the two foods that the Swiss are famous for are cheese, fondue, and a dish called raclette, which has melted cheese on a plate with cornichon, onions, and pickles. Cornichon are pickles. Anyway, so this is it. Anytime you come upon contrary data, you just assume that this is ... You write it off as paradox. You never have to consider that your hypothesis is wrong.

Dave:

After I lost the weight, I was really angry for a few years. I was so lied to, I had a chip on my shoulder and I think I'm over that. I'm now just mostly incredulous, but I would call it the American paradox, which is why don't Americans eat like French people to get thin. I guess it's not that hard because it seems to work for them instead of like, "Oh, clearly it's because of the wine. Let's drink more wine." And I'm like, "Guys, that's not going to work either."

Gary:

That's the thing you say that it's all because of the red wine. I mean, it's just ...

Dave:

It's anti science.

Gary:

It's layers and layers of bad science. You start off with an assumption that you can't even test and experiment and then you assume it's true. You just keep layering, again, these epicycles on top of it or spinning them around and then you end up with what you call a multifactorial complex disorder that's clearly so complex maybe it can't be solved. Anyone who says there's a solution is clearly deluding themselves or selling something and then maybe you just have the wrong paradigm.

Dave:

Do you ever feel a little bit of pride when you look around and there's tens of thousands of doctors talking about the keto diet? You were one of the first and most science-based voices writing about this. I mean, back in 2007, your big book came out. I considered you to be one of the big guys who first

planted the modern seeds of this. When you go to bed at night you're like, "All right, I helped these 10,000 plus doctors get there."

Gary:

When I'm feeling bad about myself and I need to prop up my ego. This is going to sound hubristic and I don't mean it to, but the book I've always wanted to write is about good science and bad science. I spend a lot of time when I'm not watching Netflix or Amazon Prime with my wife and wishing the kids would just go to bed already. I spend a lot of time reading memoirs of scientists and looking for where they talk about how they do their science and what they think is good science and bad science. I read Darwin and his memoirs.

Dave:

Wow.

Gary:

At the end of the memoirs, he talks about how many books he's published and how many different foreign language additions there are of their books. He does everything but talking about his Amazon numbers and then he talks about the mantra that he repeats to himself over and over and over again when he gets criticized or feels like people aren't taking his work seriously. The mantra was something like, "I've done all that one man can do. No one could ask for anything more."

Dave:

Wow.

Gary:

But, I thought, I'm no Darwin, as my high school guidance counselor would have said. What he said was, "You're no Einstein." But, you just see and sometimes you have to remind yourself that ... I did this misguided debate with some young neuroscientist named [Guyane 00:15:10] whose first name, I'm not going to say, because I couldn't-

Dave:

I remember when you did that.

Gary:

... pronounce it on the debate and I still can't remember how to pronounce it correctly.

Dave:

He spells it wrong that's why.

Gary:

At one point, I just said, "Jesus, you clearly think that I have done an enormous amount of damage in the world by raising these issues and implying that the mainstream medical community, you know, God forbid, might've made a mistake and a tragic one in this case." But, you and I both know we're both bombarded by emails. We get emails daily saying, "Look, I went on keto diets and I went on a low-carb high-fat diet. For the first time in my adult life, I was able to achieve and maintain a healthy weight

without feeling like I was starving myself to death." There's always ... I don't know. He didn't find those observations meaningful. I do. I mean, there's clearly, as you put it, what I talk about in the book the conversion experience. You had a conversion experience, right?

This was a Malcolm Gladwell phrase from his first hit in 1998. He wrote an article on obesity called The Pima Paradox. He asks the same questions I asked when I wrote about obesity for *The New York Times Magazine* in 2001. But, the difference was, in those three years, I had David Ludwig to follow at Harvard and Eric Westman to follow it that Duke. I could see that there were really respected establishment physician researchers who were taking seriously the idea that carbohydrates were fattening and for a diet to work it shouldn't have them in it. But, Gladwell talked about the conversion experience in diet books.

Every diet book doctor tells a story first about how he was getting fat or a diabetic or growing five arms or turning green or whatever it was and nothing he did helped. Then, he followed the advice and then he went to the depths of the local medical school library and from there he merged with the secret formula that he's now going to give you because it cured him. The fact is all of these physicians went through that and it was either one of two phenomenon. If you're doing family medicine or internal medicine or pediatrics in America, you're dealing with the negative sequelae of obesity, diabetes, hypertension, metabolic syndrome, insulin resistance. That's what versus you're confronted with. You're telling your patients how to eat because that's how the American Heart Association and the American Medical Association says we should do when they're not getting any better. You're just managing disease. You're either confronted with your patients getting fatter and more diabetic.

That was the case with like Eric Westman and then one of his patients does Atkins against his will. He does Atkins to get healthy and his cholesterol profile gets better. Eric Westman is open-minded enough to say, "Wow, this is interesting. This goes against everything I believe. Maybe I should look into it." Exactly what you want your doctor to do. Some of them did that and some of them were getting heavy themselves and so they couldn't blame their patients for not taking their advice because they knew they weren't taking their advice. Some of them are vegans and vegetarians and some of them were world-class athletes. My former partner, Peter Attia at NuSI is a prime example. Peter's an exceedingly smart physician-

Dave:

Yeah, he's great.

Gary:

He was doing everything he was supposed to be doing right. Working out three, four hours a day, swimming from LA to Catalina and back, and he's just getting fatter.

Dave:

It's so frustrating.

Gary:

But, the problem is you have to have a weight problem to understand that. If you're thin and you're doing everything right, then there's nothing to learn. There's no conflict between your expectations and reality, so there's no learn. Science starts with the observation of something that conflicts with what you believe it should be. You have a hypothesis about how the universe works and you see something that doesn't fit that hypothesis and now you have to generate a new hypothesis.

Dave:

Okay, Gary, you've got it all wrong. If there's something that disagrees with what you believe, you suppress it via orchestrated censorship and commercial interests. I mean, come on. I don't know what century you're living in, this old science you speak of.

Gary:

And cognitive. They never discount the fact that nobody wants to admit they were wrong. I thought a lot about this when NuSI was up and running and we were dealing with these researchers, particularly the collaboration at Columbia University, which has some of the leading obesity and diabetes researchers in the world that we were working with regularly on this experiment. We would meet with them every three months and one of them in particular just kept getting fatter and fatter over the course of the three, four years that these meetings went on. You knew that when he was in college, he was about six foot three. He was within a month of being my age. I could bet you when he was in college he weighed 160 pounds. Maybe he was up to 220, by the time we were doing these experiments. I kept arguing that he should understand phenomenon of going into ketosis, of being on a ketogenic diet, because that's kind of what we were studying.

We were asking a scientific question and we we're using a ketogenic diet to ask that scientific question. But I said, "You're clearly gaining weight, try the diet. It's an experiment, just so you can understand this phenomenon of sort of gaining weight, regardless of what's happening to your, you know ... what you're eating and how much you're exercising." And then, suddenly it's like you flick a switch and the weight starts to go away. I couldn't get him to do it.

Dave:

Wow.

Gary:

I couldn't get him even to try it. He would write me these long, apparently thoughtful explanations for why would it be unscientific to do an N of 1 experiment. I thought so much about this. The problem is it's like we attend different churches. You and I attend the church of carbohydrates and insulin. That's a way to drive weight gain. They attend the church of energy balance. That's the Newton's law of obesity is you get fat because you consume more energy than you expend. There's no more fundamental law in the obesity community than that. Everyone you know believes that and everyone you know worships at that altar. Everyone you know in your field has built up their career based on that belief system. All the epicycles I talked about that you have to add to that belief so as to continue to maintain that. That's the research that these people do. You yourself have moved the top of your field based on the respect you've garnered from all these people that believe exactly what you believe.

This is like the essence of group think. Everyone you know, the people you respect, think the way you do. That's why you respect them. You think they're smart because you agree with each other. I mean, we think we're smart because we agree with each other. It's sad, but it's true.

Dave:

That's human.

Gary:

Exactly. If you're going to change to the way you think, now you're going to go to a new church where everybody you know goes to the old church and you're going to start proselytizing about some new religion when everyone you know believes the old religion. There's virtually nothing to gain other than the pursuit of truth and reliable science and helping your patients and all that stuff, but that's indirect. As far as yourself, it's almost impossible for people to make that conversion. The only way you could do it is if you have the courage. If you're getting so heavy or so diabetic that now your health is more important than what you believe to be true.

Dave:

You know what I would love to be able to do is to be able to sneak some xenoestrogens into the holy water at church of calories because I've got academic literature from agriculture that says if we put xenoestrogens in cow's ears they get fat on 30% less calories. If that is possible, the calorie thing is bullshit. That one outlying thing says there must be something else possible. The fact that people would look at me and say, "You didn't lose weight on a low-carb diet because you couldn't have lost weight." I'm just scratching my head going like, "Are these alternate universes we live in?"

Gary:

The funny thing is the obesity research community is overwhelmed with examples like that. From the very first animal model of obesity, the very first one, one of the two most famous animal models of obesity. The two most famous are the ventromedial hypothalamically lesioned mouse or rat. Pick your rodent. VMH lesioned animals and then the Ob/Ob mice that led to the discovery of leptin, to every other animal model of obesity. But, including these two, those animals who get obese even when you half starve them. By half starving them you measure the amount of energy that a lean animal eats and you cut it in half and that's what you give to your obese animal model. If you grow this mouse from when it's a pup upward you'll end up with an obese mouse that's half the size of the lean animal, but it's full of fat. These studies have been sitting there in plain view. The Churchill quote about some people stumble over the truth and they just pick themselves up and hurry on like it never happened.

I spent the winter interviewing obesity researchers, the ones who would still speak with me, which about half of the community, and those are the half that are so uninterested in what a science journalist says that they've forgotten what I've written in the past. I would ask them, "Look, you know, you've got all these belief systems about how whatever gene you've discovered or molecule you've discovered affects appetite and how it tells the animal whether it's eating too much or not, but here you've got this ... your very own animal model that will get obesity when it's half starved. What does that tell you about the relevance of what the appetite ... if you can starve it and it still gets fat?" They would say, "Well, that's an interesting question." You've been in this field for 30 years, Professor, and I ask you basically to explain a fundamental observation of the field and the response is, "That's an interesting question, or I hadn't thought of that." These are very smart people. That's the power of a religious dogma, like calories and energy balance.

Dave:

I have a book on fasting and that comes out a couple of weeks after yours and, with good luck, both of our books will be on *The New York Times* list at the same time. And, certainly, I know your-

Gary:

Suspect yours will be higher.

Dave:

I'm not worried about being higher, but yours is worthy of being on *The New York Times* list because of the quality of your writing and what you have to say and I'm saying that very seriously. The idea that we have this religious filter in people's brains, it seems like if keto is a problem, when you start saying fasting, that's even worse because now you're going to be starving. If you don't eat six times a day, you'll go into starvation mode and then you'll die and all that kind of stuff. I almost was hesitant to write about that, which goes hand in hand with keto. It doesn't have to be keto. It can be a little bit keto sometimes, depending on what you eat when you come out of the fast. It's like just bumping up against an immense mountain of belief systems that are based on false assumptions. I mean, are you hopeful that we're moving in the right direction?

Gary:

I mean, we are moving in the right direction. There are forces that are working against us. Like I said, when I got into this 20 years ago, there were a dozen physicians prescribing these diets. Now my rough estimate is a few tens of thousands. My support for that is there's a Facebook group of women physicians in Canada who are eating low-carb, high-fat diets and the last I looked, which was about nine months ago, there were 4,000 women physicians in Canada. I'm assuming there are 4,000 male physicians in Canada who are also doing it at least, maybe more. I don't know how many have stopped doing it and didn't disengage from the Facebook group. You don't know those things. But, from that I think we can reasonably guess a few tens of thousands worldwide, minimally. That's a positive thing.

I just spoke this morning with Arjun Panesar and Charlotte Summers, just for a book I'm doing on diabetes alone. Well, Arjun started diabetes.co.uk in the UK. Arjun was studying machine learning and artificial intelligence when his grandfather was diagnosed with type two diabetes and his grandfather didn't know what to eat. Arjun said, "Let me sort of crowdsource it online. I'll build a program where people with diabetes can go online and talk about what they eat and what kind of ... what works and what doesn't." And now, between their various arms of their online empire they have 1.7 million numbers.

Dave:

Wow.

Gary:

What came out of what works ... 10% of the type two diabetics in the UK. I think they said 18% of the type one diabetics. What came out of what works is a low-carb diet, the opposite of what they're being told to eat by their physicians. They went into it with no bias. Arjun just wanted to know, "Tell me what you're eating and tell me what your numbers are" and because of the way the National Health Service works is it evolved. There are these forces we don't even see in a day-to-day notion. Day-to-day, moment to moment, that are working to communicate this and for every one ... This is one of the phenomenon I talk about in the book. For every physician whose patients get healthier doing low-carb diets, if those patients see any other doctor, there's a likelihood after a while those doctors will say, "Geez, I noticed you lost 60 pounds."

Going back to a story Arjun told me. Arjun Panesar, they've been working with this physician, David Unwin in the UK. David Unwin has a practice with a lot of diabetics and about 15 years ago or 10 years ago, I forget what the date was, he realizes that he has a woman he's been seeing in his practice who he hasn't seen for two years. He made contact and they say, "You should really come in for a

checkup, you know, because ... an exam, because you're ... you've got diabetes." She shows up and she's lost so much weight that he doesn't recognize her and her diabetes has apparently gone away.

Dave:

Wow.

Gary:

And she's On diabetes.co.uk. She's changed the way she ate because she's been looking at what all these other tens of thousands, becoming hundreds of thousands, of people are doing that are making them healthy and he wanted to be healthy too. And then, David doing what Eric Westman did in the US looks at her and says, "This is fascinating." He gets on diabetes.co.uk. He signs up and he's the first physician or healthcare professional to ever sign up for it even though they now have like a hundred thousand members. The first time they ever talked to him is they have to apologize because they assumed he was a troll. They've never confronted a physician with an open mind before.

Dave:

There's a lot of anger. I didn't see a doctor for four years. I was really pissed in my late 20s. I'm like, "You guys have no clue what you're talking about. You think I'm sneaking Snickers bars and I'm doing what you said and I'm just weak and tired and hungry and all that." Part of it too is fixing that rift between people and doctors because most doctors really do want to help. They just didn't have the information and at least now it's out there. I think any doctor who reads any of your books is going to have to at least scratch their head and say, "Maybe there's two ways to lose weight."

Gary:

Well, that's the thing when I'm writing and with the title ... Originally, I told you I wanted to call this In praise of Fad Diets, but that was never going to fly with my editor. That was my fantasy. I think I have a chapter called still called In Praise of Fad Diets. And then it was How to Think About How to Eat. That was my wife's suggestion. I thought that was terrific because basically the idea is we've been getting lean people's diet advice. Lean people do what the authorities tell them to do and it works for them. And then they say, "Well, it just keeps me thin. Clearly it'll keep working."

Dave:

It works until they get cancer. Yeah, there's that.

Gary:

Yeah. Works for them in the short term. We don't know what's going on long-term because we don't have those trials. What we need to accept is that those of us who gain weight easily are different from those people who aren't. This is one of my revelations in doing this. I told you Newton's law of obesity is you get fat because you've taken more calories and you expand and that means the difference between a lean person and an obese person. If you have two kids who are both 17, 18 years old, and they're both relatively lean and one goes on to become obese and the other stays lean, the difference is the one who went on to become obese ate more than he expended and the lean person didn't. If these researchers thought about it, which they don't, but if they did, they would conclude that the difference between a person who gets fat and a person who stays lean is just how much they eat and exercise. No physiological difference, no hormonal differences, no fuel partitioning differences in the body, no insulin differences or pick your hormone. It's just how much you eat an exercise.

This is insane. What we need to understand is that those of us who fatten easily we can't eat what lean people eat because if we do, we'll be fat, hungry, tired, grouchy. And then, when we go in to see the doctors, they'll accuse us of cheating on the diet, because we're still heavy. That's one of the epicycles. If someone stays heavy and they're doing what you tell them to do and they say you're doing what you tell them to do, then they're lying to you. I mean, this is built into the literature. 1930s you could find doctors documenting that their overweight, pediatric patients are lying to them about their diets and therefore they just lack willpower.

Dave:

Wow.

Gary:

Anyway, all of this has to be re-jiggered. You have the right paradigm. Obesity is a hormonal disorder. Hormonal dysregulation of fat accumulation and the link to diet is through insulin. You minimize insulin and you could do it by fasting for long periods of time or intermittent fasting. You could lengthen this time that you're mobilizing fat rather than storing it, which is the time that your insulin levels are low and you can lose the weight you stored.

Dave:

One of the things I came across in my anti-aging book was that chronically low insulin was linked to higher all-cause mortality and chronically high insulin is also linked to all-cause mortality. I feel like there's got to be some Goldilocks zone, which is when do you need to be keto and when you need to be low or even moderate carb, but not necessarily full-on keto. I mean, are you keto all the time without ...

Gary:

I've never measured. This book, by the way, despite the title, *The Case for Keto* is a case for carbohydrates being fattening. [crosstalk 00:37:12] And then, the diet where you abstain from carbohydrates if you abstained from carbohydrate rich foods, you're probably going to be in ketosis.

Dave:

It's possible to eat 100% protein and not get there, but most people over time, you're going to get into keto.

Gary:

My editors liked the title. Keto is a buzzword. I didn't fight it, but ideally this was how to think about how to eat if you're one of these people who fattens easily or if you know that you put on fat easily, so easily that sometimes or all the time it seems you can't stop it from happening. Then, knowing the mathematics obesity people are supposedly ... I read memoirs of writers struggling with obesity like Roxane Gay's got this heartbreaking memoir called *Hunger*. Tommy Tomlinson, one of the great titles ever, *The Elephant in the Living Room*.

Dave:

That is a great title.

Gary:

Both cases. They say Tommy weighed over 400 pounds and Roxane Gay probably weighed over 400 pounds. They both talk about knowing the mathematics of obesity, which means if they can somehow eat 500 calories less every day than they used to be, they'll lose a pound a week and they won't. It doesn't work like that. It's not about math. It's about knowing the endocrinology of obesity, the effect of hormones on fat storage, and metabolism.

Dave:

One of the things that happened after I met some of the early low-carb people because of the anti-aging nonprofit group that I run. You actually came and spoke probably before Good Calories, Bad Calories. This had to be like 2005, 2006. You wrote the book. I didn't launch Bulletproof until 2010, the blog. And I said, "All right, I'm going to test this thing. I'm going to eat 4,500 calories a day. I'm going to stop exercising and I'm going to restrict my sleep to less than five hours a night." And then, at the end of the month, I should gain, whatever the math would work out to, but like 10 or 20 pounds of fat. I'm pretty sure when I'm controlling my insulin, I'm probably only going to gain three pounds, and I lost three pounds. I was getting sick of eating too much food, which is not good for you. I don't recommend it. But, I was forcing myself to eat more than I wanted and I was either losing weight or maintaining weight. My energy levels were up. I felt good.

That was one of the early blog posts I made. It was also kind of stress testing the principles of the diet that I developed, which is keto at its core. But, it also is don't eat inflammatory fats and don't eat inflammatory vegetables and stuff like that that are still hotly debated by various people. I think if you hadn't have written so convincingly the Good Calories, Bad Calories, I probably wouldn't have done that experiment. That really cemented for me, "Okay, I got this." I mean, to this day, I can still put on fat like no one's business, but I can eat 100 grams of carbs a day as long as they're the right carbs and I don't gain any fat. If I wanted to lose a little bit of fat, I just eat 70 grams or maybe I go keto for a week or I fast, but it's not hard. There's no pain.

I just remember the struggling and the suffering and just the intense hunger and all that crap. It has been a bit been a part of my life for so long. I don't want to go back to that ever. Every time I see someone who's really overweight everyone knows they're overweight when they are and they're trying to do it. They haven't had access to your books and just to this whole body of knowledge. You see him sitting there drinking a diet soda just like I used to. I'm going, "Man, it's not going to work. It just won't." And then ...

Gary:

Yeah. I remember sitting when we were doing this experiment with NuSI, the Nutrition Science Initiative. We would have meetings quarterly in Bethesda, Maryland next to NIH at this DoubleTree hotel. After one of the meetings I'm sitting having dinner and before I was leaving for the airport and I was sitting in this lousy little restaurant next to this family of four that was saying in the hotel and it was a mother and a father and maybe a 13-year-old lean daughter and a 15 or 16-year-old obese daughter. The mother and the father are eating normal meals and the 13 year old was eating a normal dinner. The 16-year-old girl with obesity was eating a low-fat, mostly plant vegetable plate with maybe 400 calories for dinner and-

Dave:

And hating it.

Gary:

It was heartbreaking. And, hating it. I know hating her sister. Her sister's probably hating her because she's ... It's just you could see the burden of this obesity and then starving herself on something that ultimately wasn't going to work because it wasn't fixing the problem. The problem wasn't too much food or too much fat. It was, in effect, any carbohydrates for her.

Dave:

Wow.

Gary:

I want to reach out, and I have tried, to Roxane Gay. This wonderful, heartbreaking book just came out. *What We Don't Talk About When We Talk About Fat* by a young woman who weighs, I think she said, 340 pounds and her struggles and the burden and the social ostracization and the psychological issues. You could see her struggling to eat healthy. Right, which to her means low-fat foods and skinless chicken breasts.

Dave:

Yeah. If you're empathetic, you feel a lot of compassion for them, especially if you've seen it so many times or if you've lived it. It's one of the things that gets me up in the morning is I don't want anyone to go through what I went through starting around 16 through about 25 because, man, it is a miserable existence and you think it's your fault.

Gary:

Yeah. That's the thing. But, the weird thing is we're still perceived, even by these people, as quacks.

Dave:

I always liked that because I'm not a medical doctor, so if you call me a quack you're promoting me to the field of physicians and I'm not even licensed. I'm like, "Thanks, Steven Barrett. I love you, brother." By the way, that's guy runs Quackwatch. He's a total quack himself.

Gary:

Yeah. No, I agree. I've had explained to me that I don't rate being a quack because you need to be an MD to be a quack and it's like, "Okay."

Dave:

It was on my bucket list, Gary, to be listed on Quackwatch. It really was because every doctor I know who's made a difference has been attacked by Quackwatch. When the USA Today used Stephen Barrett to discredit what I was doing I'm like, "Yes, this is like a serious career life moment. I finally, you know, I made the list of big time people who make a difference."

Gary:

Geez, now I'm going to have to go look to see if ... What am I chopped liver? I don't get on the list? Although, I do try to be relentlessly honest about what we know and what we don't. [crosstalk 00:44:26] To me, that's the essence of good science is never over-interpret the data. As long as you say exactly what you can defend and nothing more, then you're relatively safe. Even in this book I'm arguing. We can't say that you're going to live longer if you go on a ketogenic diet because we don't have that

evidence. What we know is you're going to get healthier. We've got clinical trials and hundreds of thousands or millions of anecdotes that in the short-term this is going to make you healthy. There are certainly people who can keep it up for life.

It's funny, writing about diabetes means writing about Richard Bernstein of Dr. Bernstein's Diabetes Solution. Bernstein was diagnosed at age 12, which was 72 years ago and he's been on his diet since early 70s, which was 40-

Dave:

Seems to work.

Gary:

... plus years and it hasn't killed them yet, so that's a good sign. He might just be ...

Dave:

It is indeed.

Gary:

Not in clinical trial, but it's a good sign.

Dave:

It's good sign. Well, speaking of good signs I'm seeing lots of people interested in your new book and I certainly enjoyed getting early access to it. I think you have a special gift for explaining things in a way that's really accessible and is just full of integrity. I want to thank you, again, for the last 20 years of work and for continuing to be on the case. In this case, *The Case for Keto*. I want anyone who's listening to this, if you appreciate good writing, having things spelled out well for you with 100% certainty, I will tell you, Gary is a better science writer than I am. Gary, I've been on the monthly *New York Times* science bestseller list. It was the highlight of my career as an author and it was a big honor, but I am nowhere near the science author you are.

I'm just telling you guys, you need to read *The Case for Keto*, even if you already say "I know keto works." There's stuff in there that you don't know that you want to know and because you don't have to be in ketosis all the time. You don't have to be on the zero carb diet. But understanding the mechanisms and the mechanics, it's hard to do and reading a book that makes it easy to understand is very difficult. This book is worth your time. Gary, thanks for being back on Bulletproof Radio. Just keep doing what you're doing. I absolutely love your work.

Gary:

Okay. Dave, thank you. You have made my day and now I'm going to go have a Bulletproof Coffee.

Dave:

All right. It's a deal.

Gary:

It's a deal. Okay. Thanks.