## Diet Doctor Podcast with Brian Lenzkes (Episode 41)

**Dr. Bret Scher:** Welcome back to the DietDoctor podcast. Today I am joined by Dr. Brian Lenzkes. And this is a special episode for me because we trained together way back when we were internal medicine residents before we sort of got into the world as real doctors so to speak and certainly before we came on the low-carb journey.

But we each found low-carb for different ways and different reasons but for both of us it transformed our practice and transformed how we impact our patients and now we're both trying to spread the word to as many patients as possible and as many physicians as possible.

So we spend a lot of time in this episode talking about that; we mentioned the Diet Doctor CME course, a continuing medical education course that is out there and is free and we want as many doctors to participate in... just as part of our mission to educate the world about the benefits of low-carb, but also in a responsible way, in a trustworthy way.

And I think that's where Dr. Lenzkes talks a lot about how to know when you're really impacting patients and how to help other physicians see that as well. I think he's got a wonderful perspective, he's a witty intelligent guy who has his own podcast too, at Low Carb M.D.

So definitely check him out and I hope you enjoy this episode and you can go to DietDoctor.com to see the full video and the full transcripts and of course all the other membership benefits of being a Diet Doctor member. So enjoy this interview today with Dr. Brian Lenzkes.

Dr. Brian Lenzkes, welcome to the Diet Doctor podcast.

Dr. Brian Lenzkes: Bret, thank you so much for having me, man... It's an honor.

**Bret:** Yeah, it's great to have you. I mean, I got to say I love having all my guests on, everyone's been amazing, but this is so special because we go back... Gosh, what is it? Like 20, 25 years here where we were residents together, just fresh out of medical school... actually I was one year ahead of you.

And you were an interim and I was a second year resident and here we are sort of learning to be doctors in this big wide open world and we are learning so much about how to help people and a lot has changed since then, hasn't it?

**Brian:** Yeah, we've been through a lot. You were the chief resident the year before me and I got to take over the reins and try to get some of your wisdom and it took me a while to catch up, but yeah, we're seeing changes.

**Bret:** Like put yourself back in that mindset when you're a chief resident and you're about to embark on your career as a doctor and you think of all the people you're going to help, all the impact you're going to have on people's lives and then when you get out in the real world, sort of what happened? What did you notice when you first started practicing about the impact you were having?

**Brian:** Well, we have our nice white pressed coats and they're going to save the world, right? And I think once you get into the reality of life you realize first of all a lot of people aren't going to take your advice and they're going to have their lifestyle that they're going to have and they know it's detrimental to them but they continue to do it. And then we try to fix that by throwing more drugs on to fix the problem.

So I think a lot of us get disillusioned, we talk a lot about position burned out and I think that's overseeing a lot because doctors think they're going to save the world and then they realize a lot of times people don't even listen to them. Or if they do, we are giving bad advice so we have to figure out how to help our patients again.

**Bret:** Well, that's the thing, so now let's get into your transformation. You leave residency and you start practice and I'm sure it was a calories in, calories out eat less, move more, here's your prescription type of practice, which is what we are taught, right?

It doesn't mean it's necessarily evil but that's just how we are taught to practice. But then things changed for you, so bring us up to speed on how that changed and why that changed for you.

**Brian:** Well, for me weight was always an issue. I come from a family where everyone has diabetes. They are from Ohio and they are eating their bad food and they say, "I just take some Lipitor and I could eat all the cholesterol I want. I'll just shoot some more insulin and then eat all the sugar I want." So for us once you start getting into practice, you realize a lot of people are doing that.

They think if they take that magic pill that is going to fix their blood pressure, their diabetes and all this and that they are just going to be healthy and they can do whatever they want, we're kind of looking for that magic pill... You know, people say, "What's that magic pill for weight loss?" They will ask me and I'm gaining weight every year.

I'm eating six small meals throughout the day, I'm exercising six days a week and I'm gaining 3 to 5, 7, 10 pounds. So two years ago I was 40 pounds heavier than I am now. So I had a patient

come in and I asked him-- I always ask patients what they're doing... And, you know, our typical advice was eat six times a day, never skip breakfast, you're going to starvation mode... Right?

And just exercise more and everything will work out. And so when you see a patient come in and he lost 40 pounds the first we think of because we never see that is you might have cancer or something. And he told me he was doing this crazy fast diet where it was like two days a week you would eat 600 cal or less and the other days you would eat whatever you wanted. And on those two days you would eat very low carbs.

Now I am trying to figure out from a medical perspective... If you're eating 600 cal, the next day you must be starving all day and want to eat all day. And he said no, that's weird, I'm not hungry. He said, I force myself to eat the next day... and I said that doesn't really make sense. So I start researching fasting and who comes up? Jason Fung.

And so looking at him talking about insulin resistance, metabolic syndrome and all these things that we're fighting with drugs and he says it's a lifestyle issue, you know. So I started applying that to my life and I started losing weight and I started feeling better, my focus is better, my energy is better.

And so I started realizing... gosh I've been giving bad advice and I've been given bad advice. I remember when I first listened to Jason Fung and I said if this guy is right, I'm going to be super mad because everything I've been doing has been detrimental.

**Bret:** Yeah, let's talk about that for a second like how does that feel, as someone who has been giving advice to people... and that's our job as physicians; to give advice to people improve their lives. And all of a sudden you think, "Oh, my God I've been doing it wrong and telling people the wrong things"... How does that feel inside you?

**Brian:** It is hard because that's what we were always told. And when you find out there's no research that says yes, this is the way we should do it and it's mostly opinion and we just hand opinion down... We know in residency that the attending physician tells us how things are and we just accepted it as truth rather than looking at it and saying, "Are my patients getting healthier or getting sicker?"

And am I getting healthier or am I getting sicker? So at some point we have to step back and analyze that. I think I had the advantage or disadvantage of always struggling with weight my entire life, because I played football and I wrestled in high schools so I would lose 40 pounds and gain 40 pounds because I was small enough to play defensive line, but I had to lose weight for wrestling because you have an advantage to be thinner.

So I always assumed I just messed up my metabolism during that time and there was kind of a hopeless thing and I would just always have to be struggling with it and ultimately getting diabetes... I think a lot of us think that... We're just going to get diabetes, we're going to take blood pressure medicines and be sick as we get older, right?

So I think when you start realizing, well, that's not true, we can reverse the ship, we can take steps and impact our own health and it's not going to be a drug deficiency that we have... It's lifestyle a lot of times.

**Bret:** One of the things I think is so interesting is this concept of admitting we're wrong and admitting we have been wrong. I mean, let's face it, when we were residents we had amazing teachers, we had amazing attendings. They were smarter than anybody, they were great at clinical practice, but they only know what they had been taught too.

So this teaching has been passed down and when you have that awakening to say, "Wait a second... Maybe we're not doing this right." It's hard to admit. And I think the reason why I am making such a big point about this is because one of my questions for you is how do we get more doctors to realize that there's another way out there. But part of that comes with admitting we've been wrong, which is hard to do.

So I guess I am skipping ahead a little bit, but what has your experience been now that you have been practicing low-carb, working with your patients, seeing success? How are other doctors looking at you and reacting to you when they see what you're doing?

**Brian:** It's a process, I think you have to stay on the line and you make the points, you show the labs, you know, you go through and try to educate... that's what we have to do. The problem we have, like I was starting to get too, was like a lot of doctors been thin and in shape their whole lives, so they never had to struggle.

Now I have Tro Kalayjian who has lost 150 pounds. I have all these doctors who have struggled and then they changed what they were doing and they got better. So now they're obligated to tell their patients about it. So I think at some point you have to assess. Now it doesn't work, you know, we're always tweaking... I'm always tweaking my diet now... I'll add in fat, take out fat... fast more, fast less, trying to figure out what works for me. I think that is the big take-home message, is there's not a one-size-fits-all.

So to have a food pyramid to say everyone eats the same thing... it's what you can eat is going to be different than what I can eat. I have to be super low-carb to maintain weight. Otherwise I am on a trajectory course towards diabetes. So I think, you know, what's important I think how do we reach other docs and I think by being reasonable and bringing more docs who are reasonable into the fold.

When I heard about you doing low-carb I was blown away, because I thought how can this cardiologist take this risk talking about low-carb, because most of us will just kind of keep it quiet because it's taking a risk, you know. When we first started talking about this stuff, no one knew about it and it was certainly fringe.

Now you're going down the street where we're just talking about how, you know, you got to different restaurants and they'll have a keto menu now. Because obviously it's working, people are having benefit. And I think what happens for us is that the patients are educating their doctors now. I got educated by a patient. So I told him he was going into the starvation mode, well, he lost 40 pounds and I'm overweight, right?

What am I going to tell him... he is wrong? At that point I thought, man, all the Melba toast I had and rice crackers and all these kind of things and you start realizing... I was just spiking my insulin and sugars up and causing myself more problems and not even enjoying it, drinking green shakes that I didn't enjoy in the morning. Because I thought that was benefiting myself with nutrients, right?

Bret: Right.

**Brian:** So I think when you start changing and seeing a difference and you start realizing we have an obligation now to get the word out. So getting new docs, I think the more people like you who have credibility and weigh the evidence and it's not just an emotional reflex... you look at it, because you have a responsibility to your patients. I think more docs like that who weigh the evidence and say, wow, I think we've been wrong and here is my data, and here is my clinical experience showing there's value to that.

**Bret:** Yeah, it's so interesting when you have the personal experience that then will set you on the course to help your patients, but if you don't have that personal experience, the inspiration or the motivation needs to come from somewhere else. And so frequently that will be from the patients and that's why I tell every patient who has had success with low-carb, tell your doctor about it so that they can look into it more.

And actually as we were talking before, Diet Doctor has this CME course coming out now that we just want every doctor to take to learn more about low-carb and it's free anybody can take it, so more doctors have this in their toolkit. So once you put it in your toolkit and once you realize this was the way you wanted to practice, how did your practice change? What did you notice different?

**Brian:** Well I am having a lot more fun now. When my labs come in I'm excited, because I see the benefit, I see people coming off insulin and I've had a number of people come off insulin, coming off blood pressure medicines. So we are de-prescribing now for the first time in my

career. You know, I was doing this for... how long we've been out there before we started doing this stuff? You know, 13, 15 years.

Bret: Right.

**Brian:** And now all of a sudden people are getting better. They come off meds and they're excited. They go, hey Doc, did you see my weight? Hey Doc, did you see my blood pressure? You know, did you see my labs yet? And they're excited, they're happy to come in, they're not avoiding me and say, oh I don't want to go and see him.

And that's one of the things we could tell. Someone doesn't come in for a few months and think, uh-oh... they fell off the wagon, we're going to have to reach out to him, right? And it's surprising... the thing that surprises me clinically is some people-- it's just like a religion or just like having a new experience.

People are super gung-ho, you know, in the office they are fired up and they are going to be super successful and then they flail out, they are getting life struggle, stress and all that and then other people I just mentioned in are passing and they just take the bull by the horns and take off and they have unbelievable success. So we can't predict... And some... I believe he was in his 80s and lost a ton of weight.

He was 80 years old, now lost 46 pounds, came off diabetes meds, came off his blood pressure medicines, and I have a picture of him holding out his belt, showing how loose his pants are now in his 80s. And he feels great, he is at the YMCA making new friends, he is working out again and before he was just sitting on the couch, watching TV. So when you see those changes, it's very exciting, you know, it gives us hope for the future.

**Bret:** I love how you said your practice is now more fun and it's not that it's all about us having fun, but we have fun because we're helping more people and we're seeing the success in our patients and I think that's amazing and I love the way you said that. But how many people in the first 13, 15 whatever it's been years of practice, how many people did you take off of insulin?

Brian: Zero.

**Bret:** How many people did you take off of blood pressure medicines even?

**Brian:** We didn't.

**Bret:** Not many, right?

**Brian:** Yeah, it would be very, very unusual for that to happen.

**Bret:** Zero... and the same for me. Like the concept of taking somebody off insulin was just like... no, you wouldn't like think about it. But now how often you take people off insulin?

**Brian:** Now is happening frequently and I've taken people off and when they go back on, they go through a life stress and I've a lady that went back on insulin for a little short time and now she's off of it again because she realized, "Oh my goodness, my diet makes a difference", when she went back to her comfort food and stress reduction techniques that weren't healthy for her and she realized.

Now she's gung-ho and going for it, she realizes that she gains weight on insulin, she feels poorly, her energy is down, her mood gets worse and once she's off of all that, everything gets better.

**Bret:** Yeah, so this whole concept of diabetes is not just a chronic condition that's going to require more and more medications. It was so new and now it seems not so new anymore, like it should be commonplace.

**Brian:** Well, I think people like Jason Fung, you know, Dr. Unwin, you know, when they have credibility, you say these guys have credibility... I do weigh it myself and look and say, "Are these guys nuts? Are they selling me a product?" No, they are just saying, look I'm having benefit, I want to help other people.

So Dr. Unwin took him 25 years. I was teasing him, it only took me 15, it took you 25 years to figure this out, but he was burned out and ready to retire. What a loss that would've been to medicine. The way he is impacting these people and doing exactly the opposite of what we've been saying and having great clinical success.

So when you see that and you see he is a peaceful real loving guy and his patients probably don't want to disappoint him, so he has a better success rate I think than most people, but I think part of the problem is we've been told diet doesn't work, because we've given bad diet advice. So they say, well spent two minutes talking about diet then tell me what drugs are going to fix the problem.

That's is just the way it is, because that's the reality we face. But now we're in a new paradigm, we are in a new era where we can impact patients, we can help them get along. And I think when people hear, hey, I've had 15 people come off of insulin, they think, "Why can't I do that?"...

There's hope. And Dr. Unwin he talks about that... of having hope... He says, this isn't a chronic progressive disease... we can reverse it. Not we... you're going to have to do it, but let me help you with tools, maybe it's going to be getting more active maybe it's watching the stress, getting

enough sleep. It's not just one thing, it's not just what you're putting in your mouth, but is the whole lifestyle approach that we're missing out on.

**Bret:** Yeah, great point. We still need to talk about exercise, we still need to talk about stress, we still need to talk about sleep because those impact every part of your life and impacts the decisions you make for your nutrition. So it's all interrelated. But it's a good point you are bringing up about Dr. Unwin.

Gosh, that would've been terrible if he would have retired before finding low-carb and revitalizing his career. The other day somebody asked me, "Come on, is he really like as nice and as kind and as gentle and as wonderful as he seems on his interview?" And I say, yes that is him to the tee. I mean, he is just such a wonderful individual and like you said, just a tremendous role model to say, "This is what I've done, this is how I've helped my patients. And here's the data." I love this collecting data and putting data out there.

So let's transition for a second about low-carb and data for physicians. Some can see it as fringe, some can see it as a total fad that is not backed by science, but that's not the case. So again why do you think there's that disconnect that people aren't quite recognizing the data that supports low-carb?

**Brian:** Yeah, I think it's a hard thing. I think it's because we've seen so many fad diets come from TV doctors that have come and gone. So a lot of docs say look, I'm not wasting time learning about this, because it's going to be gone in a year. But it's still there and we look back at the history of medicine, you look at Osler, what did he do.

They didn't have a bunch of fancy lab test, they checked the urine for glucose. And so they would put them in the hospital cut their carbs until they weren't peeing glucose anymore and said okay this is the-- Well, back they didn't know the difference with type 1 and type 2 and if you were type 1 you were going to die without insulin. So they started figuring that out and so Osler, the Godfather of medicine that we base all of our practices on now, was doing the same thing we're doing.

So this didn't just start with Atkins, it didn't just start with Dr. Unwin, and Jason Fung, he didn't invent fasting, but he is the one saying, yes, it's reasonable and here is why. So I think when you step back and you start looking, you say well this is not just a fad that's going to go away. We are in a major epidemic right now of diabetes metabolic disease and we have to fix that or we are going broke.

So I think the more people you see that are realizing this is not going away because patients are getting better. It's not like they are losing 20 pounds, then getting it back, then losing 20 pounds again and just staying on that same cycle.

If we get people educated they're going to-- You know, I was kind of joke about it, because people asked about, "Did you advertise?" And I'm not even taking new patients anymore. But you get one nail tech or one hairdresser who lost 80 pounds, how many lives are they going to touch? How many people are they going to talk to? And how many of those people are going to take it back to their doctor and go, "Look doc, here is what I'm doing"?

So hopefully we're smart enough to say okay what we're doing is not working... it seems to be working... let me at least look at that. Like when you mentioned the CMEs. A doctor, even if they don't believe in it, they say let me learn about it. So at least they will be educated to say, I don't agree with it and here's why. And a lot of times people start out like myself... I looked into it to see how I can discredit it.

**Bret:** Right, you are skeptical at first.

**Brian:** You have to be skeptical, that's what we are called to do. And once you start saying, I am having clinical success, I am having personal success, my patients are doing better and I am enjoying the practice of medicine I'm doing what I wanted to do when I had my fancy white coat, right? Now it's dirty and beat up with ink stains but we're helping patients again. I think the more doctors who experience that...

We are getting tons of feedback from docs who learned about it through their patients because they listened, they sat there and-- in our defenses docs we have 15 minutes with the patient if that, sometimes eight minutes... How are we going to fix all these problems that quickly?

A lot of us are running to the lunch or we work late that night because there's a patient we know, it's an upfront cost to us. But over time they're going to benefit, the patients are going to be better. And there are not going to be through 1 million drugs with interactions and problems.

**Bret:** Right, it's such a good point and I think a big part of the issue... I started that question about the evidence and the evidence of low-carb and why people have a hard time accepting it, I think part of the issue is the outside world sees doctors as scientists and people who know how to interpret scientific studies well.

But, gosh, that seems like it sure falls flat because we spend so much time talking about the power of nutritional epidemiology or these observational trials and that's what's informed our practice for 30, 40+ years. And it seems like with the push for low-carb has come the push for let's evaluate the quality of our evidence and see what we're basing our decisions on.

And that's an awakening that physicians need to have as well. I think that part of the disconnect was saying, "No, we can't go to low-carb", because look at all the evidence, look at the weight of the evidence, like you just stick the evidence on a scale and whichever weighs more, you know,

that's the right answer rather than looking at the quality of the evidence. So what do you think it takes to get doctors to see that as well?

**Brian:** I think you have to assess your success, I think you have to step back and look clinically. One big eye-opener for me was hearing Ivor Cummins talking about Dr. Kraft.

Bret: Yeah.

**Brian:** Saying insulin is the problem, these guys all have high insulin, you know, heart attack, strokes, peripheral vascular disease, they either had diabetes, pre-diabetes or their doctor missed the diagnosis. Now these guys are either nuts or doing pathology all these years and looking and actually touching the vessels and looking inside the hearts and seeing the damage... maybe he knew something everyone else wasn't seeing and he sends a book to all the major medical centers and no one listens.

So I went back to my practice after that after Low-Carb San Diego and I said okay let me look at my patients who had major cardiovascular disease, you know, early strokes, early heart attacks, multiple stands, bypass surgery, and every single one of them had a high insulin level. -See if they did it--

**Bret:** You never checked before.

**Brian:** Yeah, I never looked for insulin ever in my life. So when you step back and look at it, you say, "Wow, is that a coincidence?" I mean is it just the odds? Maybe... that's possible, right? So you can't say that's all of it, but you have to say that this is contributing. You know, we're seeing an epidemic of these things and less people are smoking and we're still seeing heart disease, we're seeing all these other factors involved.

Obviously that's when you start saying how much is stress a factor, stress raises insulin levels, not sleeping raises insulin levels, so you start looking at lifestyle and saying like Ben Bikman from BYU says, hey look lower your insulin level, make your body as sensitive to insulin as you can. Watch your stress level, get enough sleep, all these things we're talking about and then we have to make those changes in our life at some point.

So I think as docs, we're not good at looking at root cause. You know, the engineers come in and make us crazy. They say, what's a root cause? Why do you get high blood pressure? Why do all these things run together? It's not a shortage of medicines. It's like there's some underlying thing that's causing this problem.

When the building falls, they look at all the structural problems as the possibilities. And then they knock one out at a time. As docs we don't think that way. We just look at what we've been

told and say this got handed down and we have to understand that most of our education is coming from drug companies also; we have a vested interest.

So I had to step back-- does Jason Fung have a vested interest whether my people fast or not? He doesn't, he doesn't make more money if I have my people fast. So I think is those kind of things, you have to look at what's behind it and the money and say, gosh, who is out to help the patient?

**Bret:** Yeah, the concept of follow the money is so interesting because huge organizations like the American Heart Association, you know, sponsored by drug companies sponsored by cereal making companies and snack food companies, you know, and it doesn't mean that just by donating, you know, they're dictating what's there, but why would they be taking money from those companies?

There is just the perception of influence there is it just seems so backwards. And I think all the major medical organizations need to cut themselves off from pharmaceutical companies. But then you get into the low-carb sphere and the fasting sphere and for the most part I think the majority of people want to help their patients, but now it seems we can start to see some of that industry creep in, some of that capitalism creep in and it's hard to fool people, but now people are pushing products, people are doing this for profit...

Do you think that's going to sort of give low-carb and keto kind of a bad name, like oh, people are just doing this to make money off of it? And it's kind of devalue it?

**Brian:** Absolutely, you know, I look at that, I interviewed one of the top nutritionists around and I asked her about heart healthy whole-wheat and oatmeal. And I said, what happens to my cardiovascular risk if I stop eating those things? And she said, "Your risk goes down". But they say it's heart healthy... Yeah, compared to donuts and cake, right?

So when I see a sticker on a box that says keto or low-carb or low-fat or heart healthy, I avoid it, I don't eat box stuff generally. So we're defeating the purpose I think when we say, we're going to have a bar. I think that's where we run into trouble in the ketogenic low-carb sphere; is we're saying I like cookies, but I'll put artificial sweetener and eat all the cookies I want.

Or I'm going to have more cake, or my favorite ice cream... and we're doing that every day all the time. You are adding a ton of fat and calories and then you blow it that night, oh, I'll have a piece of bread or whatever. And then you start wondering why it's not working, right? So I think there's a lot of that, there's going to be people making money off of it. And there will be good products and bad products and things that help...

And there's things I believe in, I think will help people in a jam, but I think that is going to be more of a tool to help you if people say, "I can't give up my... whatever... donuts." So okay have low-carb donuts for a little while and then taper it down just like we would with heroin... you get them on methadone.

And if you put them on methadone for the rest of their life you haven't accomplished anything. So I think a lot of us are looking at it that way, because we really don't know I think what's really going to be helpful as when we can look at fasting insulin levels and say, when I'm having this artificial sweetener what happens to my insulin?

Because we are trying to keep our insulin as low as we can. It's not all just about the sugar, right? And then we look at the processed foods all the seed oils we've been told are good for us and margarine and all these things that we've accepted as being healthy that are not healthy when you look at the data, so I think there's going to be just human nature. The people are going to try to monopolize.

And like you said, if it's not corruption, is the perception of corruption. So if my podcast is sponsored by a certain company and I push it like crazy, they will say, he is just doing that because he's paid, right? And that's what I respect about Jason; when he joined the podcast he said look, we're not going to take any outside money. So we're fortunate enough to be able to raise our own.

Look at what Diet Doctor does, they're not selling commercials every two seconds. Or if is a product you really believe in, you really think is helping people, you say, look we have a vested interest, we're sponsored by this company and we believe in it. So I think it's a-- And I don't follow people who do that, because you got to make a buck at some point, but I think it's the credibility over the perception of corruption.

**Bret:** Yeah, at Diet Doctor we sell no ads, we sell no products and that's so important to show we're not influenced, that we really want to provide the best information to help people. But my goodness, when these medical organizations are creating guidelines that are supposed to influence medical practice and they are being funded by pharmaceutical companies...

I mean, come on, is any surprise that they spend 50 pages of their 55 page document talking about drugs and then four pages of references and maybe one page of lifestyle intervention? Because people don't make money with lifestyle intervention. So it's a sad situation we've gotten ourselves into that we need to get ourselves out of and if the organizations aren't going to do it, we, as individual physicians have to do it. And that's where people like you definitely come in to help turn this tide.

**Brian:** I think, that being said, I think a lot of these companies are out to make money. They have shareholders to answer to, so as this keto thing catches on or low-carb or whatever end of the spectrum they're going to fall on, they're going to make products that people are demanding at some point. They are going to advertise and do a lot to get you to stay with what they're making now.

Like some of these things are made to be addictive. Do we understand that? If you talk about addictive foods, they are mostly half fat have carbs. We look at donuts and we look at pizza, you look at ice cream and all these things, so they are made to be addictive because our body wants to survive.

But very few people go home and binge on turkey by itself or chicken. Or say I'm going to eat chicken until I throw up, but you give them Pop tarts, you give them Doritos or something, and they will be eating them until they-- you know, tons of calories of that. So I think it's us educating ourselves, saying, look, I'm not going to be a victim. And that's one of the big things, I think a lot of people don't realize what the low-carb and keto movement is.

So many of my patients now are saying, "I'm not hostage to being hungry every two hours. I can skip lunch and I don't die." And I think the more we do those things and have benefits, it gets so much easier. Because if you talk to people about fasting, when Jason Fung talks about fasting... You know, I thought this guy is nuts. Who wants to not eat when you have food available?

But when you start understanding-- Like if I'm going to run a marathon, I don't start running a marathon the first day. You say, okay, I'll start walking, then I'll jog a little bit, then I'll do interval training maybe and then you end up doing that. So what we're finding is a natural progression, is people will start a low-carb diet and they realize they are not that hungry.

They will skip lunch one day and go, oh, that was not a big deal... I will skip breakfast tomorrow right... and it's not a huge deal. So I think we've been sold a bill of goods and that we've all kind of bought into it.

**Bret:** The fear of hunger is something I have to sort of address in so many patients, because even if you're not hungry now, you might be hungry later and you've got to prevent that hunger from coming in. Well, no, you really don't because hunger doesn't shut down your body, you know, a little bit of hunger going a couple more hours.

When you learn that it's not that big of a deal, it really gives you a lot of freedom and like you're saying low-carb just makes it that much easier. That's why the intermittent fasting, time restricted eating and low-carb is such a great combination which it seems like you've had wonderful success with, personally and with your patients.

**Brian:** I think when you have data and you have to look and I've been impressed over the last several months for sure about how adaptable the human body is, to think that we are so fragile, that we have to eat every two hours, in the history of man was never like this. The farmers would eat a huge breakfast, work all day in the field, they didn't stop every two hours to eat and shut all the machines down and yoke up the horses... and then they would eat a huge dinner at night.

Then the next day they would do the same thing again and again and the hunters would kill something, eat the whole thing and then go four, five days, kill something again. If they got weak and fatigued, we'd all be dead, we wouldn't be here right now. So I think all these kind of arguments, you start looking at and what I think is really going to bring in the low-carb movement is the continuous glucose monitors, right?

So if I fast all day, my sugars go up, and if I work out really hard, my sugars go up. So do I need to carb-load for my sugar that goes to 143? By definition is kind of funny, because if I wake up in the morning, my sugars run 85, if I fast all day it's around 90 to 95, depends on what my stress of my day is maybe, but my body is providing that sugar, it doesn't mean I have to eat it with each meal, right?

And then when I work-out, it spikes up like crazy, because my body says, you need more energy, let me kick it out into the system. So you start realizing the numbers aren't as scary as we thought they were. Dave Feldman showed that with LDL-cholesterol; fasting three days and LDL goes up by 100 points. Eat high-fat and it drops by 100 points, just like that in three days. So we're giving people lifelong treatment based on labs, it can change drastically, super quickly with lifestyle.

**Bret:** I want to go back to what you were saying about the CGM. So some people may listen to what you've said and say, wait, it goes up with fasting, it goes up with exercise... that sounds bad, that sounds dangerous, but actually you're using it as a positive example, so explain that a little more.

**Brian:** I think a lot of people get concerned about it. When I first started doing this, I reached out to Jason. I said, Jason, look I'm cutting my carbs like crazy and my fasting sugar in the morning is going up. And he said, "You should be happy." And I was like, "Why?" He said, "Because your body is breaking that, your glucagon is working. It's kicking in the fat stores that you have out into sugar and you're using that as your energy source so you don't have to eat sugar all the time. You don't have to eat that to keep your sugars up."

So when you start realizing, "Oh, where is that coming from?" and you start understanding why is the body doing that... that's why I like what Dave Feldman talked about... like if you want to get good cholesterol-- and we were just talking to someone about that for the weekend-- eat a

high-fat diet, add more carbs to your diet, if you're low-carb and you will drop your LDL like crazy for the lab test.

That just doesn't mean you're healthier doing that, but the labs look better. So the same thing with the continuous glucose monitor; when you start realizing how your body works and how adaptable it is, that I don't have to eat sugar all day long. If my sugar is staying in the 90s all day, when do I need to carb-load that?

And I'm not diabetic, I am metabolically healthy. Now the caveat will be if you're not fat-adapted, if you just all of a sudden start fasting, your sugars will drop like crazy, because you can get your fat stores if your insulin is really high. So it's hard at first, that's why fasting is fallen out of favor, because unless you're fat-adapted, it's super challenging to fast.

A lot of people want to do it for religious reasons, but they are miserable the whole time because their body is saying, "Where is the sugar?" and they're freaking out because they are starving at that point. So once they get fat-adapted for a few days before they do it, they do a lot better and it's more of a spiritual act for them rather than a penance, like, you know, torturing themselves.

**Bret:** Yeah, it's a great point. It's not that you can't do it if you're not fat-adapted, but it's just not very pleasant. But if you're fat-adapted it actually can be pretty easy to do... so a big difference.

And again not to harp too much on the CGM's, but I am as big of a fan of them as you are so I love talking about them, because once we get continuous glucose monitors available more often, it's going to change the way we practice medicine, it's going to change the way people live their life, because you have that immediate feedback of what you ate and what it did to your blood sugar or not eating and what it does to your blood sugar.

And importantly the area under the curve, and that's something I talk to patients about all the time, because if you wake up with a high blood sugar or it goes up when you exercise or it gradually increases when you're fasting, what you're concerned about is sort of the area under the curve for the total day, which is still far better than if you're eating carbs all day and having the spikes up and down. And also the amplitude of the spikes.

So if your average is 120 but you're getting up to 180 or 190 sometimes and dropping down to 70 sometimes, that's not very healthy. But if your average was 120 and you stayed at 120 the whole time that's a healthier way to do that. Now with fasting, with low-carb that's more along the lines of what your blood sugar is at and then your average is going to keep dropping over time.

I mean these CGM's-- Apple keep saying they are going to come out with a noninvasive one and I can't wait until they do because that's going to be a total game changer. Do you find you're using them in patients even without diabetes and that people are getting benefit from them?

**Brian:** I am, especially when people aren't sure. And as a matter of fact I have two nutritionists I take care of; they are diabetes educators. So they came in, the first thing they each said independently, they don't know each other, they are from two different systems, each one said, "What do you think of this ketone stuff that's going around?" And I said, "I think it's great. Why?" And we had this conversation.

And each of them their training is you have to have 50 g of carbs with each meal. And this is in a diabetic and I'm talking about non-diabetics. So we've gotten into this discussion, I showed them my CGM readings and they were blown away by it. And they said, "What about this big spike you had?" Well, it spiked when I was exercising. But if I ate something before I exercised, my sugars didn't spike that much.

Because I had another energy source, I didn't have to tap in so much to my liver fat stores. Not a good thing, but it made the sugars look a little lower. So I said to each of them, this is your career, this is what you do. It's probably good for you to educate yourselves. So why don't you try doing what I do for a week and then try to do the ADA recommended diet for a week and see what your sugars did.

And both of them called me and said, "Oh, my gosh, now what do I do?" Because when you start seeing that your sugar is flatten out and you're non-diabetic what do you think it's doing to the diabetics? It just doesn't make sense. When you talk logically, you start understanding that we're doing crazy stuff because the big concern when I started low-carb, when you ask about how their doctors responded, well, they said it's dangerous, because they can get low sugars. How are they going to get low sugars?

When you have that discussion it makes sense because we say okay how many carbs you're eating for breakfast? Okay, shoot that much insulin to get rid of the carbs. And if they don't eat breakfast what to you tell them? You don't give them any insulin because they will get low sugars. So once they eat eggs for breakfast how much insulin do you give them?

Well, none, but they can get low sugar from the long-acting insulin they are on. Well, why don't you taper that down? So once you start realizing we're giving insulin, shoving it into the tissues, it makes a lot of sense not to use-- to cut your sugar as much as possible to decrease the amount of insulin. The only difference is someone who is shooting insulin versus someone who's producing it from their body. So either way we benefit from decreasing our bodies' need for insulin.

**Bret:** And that's a good point about this need to de-prescribe and doctors need to be aware of that and that's a big part of our push for the CME course, because all it takes is one doctor to say, "Yeah, sure, you're on insulin and you are on an SGLT2 inhibitor. Go try this keto thing and see what happens." Then the patient gets into trouble because they are not being monitored well enough and they are not adjusting their medications.

So that's why there is a certain knowledge base that needs to happen for people who are on diabetes medication specifically. But for people without it it's a lot easier to implement this. But also I've got a couple of patients who love the CGMs for the behavior modification part of it.

Like that is your little angel and your devil on your shoulder when you see what your blood sugar does or you know what is going to do when you think about eating something different that makes you say, hang on a second, maybe I don't want to do that, because of that psychological part with that immediate feedback.

And it's something that we don't have right now. We don't have a tool other than the CGMs which can be really expensive for people. So I think that's going to be so helpful when we do get that because that behavior modification part is a big deal.

**Brian:** Yeah, and I think that's part of our system problem is a continuous glucose monitor costs about 100 bucks a month. How much do you save in insulin use? How much do you save in other medication use? And looking down the road... amputation. The number one cause of amputation, of kidney failure, of blindness, the number one cause of heart disease, right?

This disease is major. And until we look at it and say we have to invest upfront to prevent these problems, until we change that we're in big trouble as a system. We have to figure that out.

**Bret:** So let's transition for a second here though. Now you're awesome on Twitter, I've got to say, you're incredibly witty and funny and poignant and you point out some great-- your tweets just are very timely and they really impact people I think and you post some great success stories about your practice and it's so positive, but... here comes the but... there has to be some cases that don't turn out so great, right?

There has to be some cases where people struggle or they don't do well. So what have you seen there that you think people can learn a little something from about how to maybe avoid that or, you know, ways that they can help?

**Brian:** I think we are on a big learning curve right now. I think we're on a point where-- why do some people do great, you know, and some people flail out? And I think until we start looking at carbohydrates as an addiction-- Rob Cywes totally changed my views on this; I argued with him-- He is a gastric bypass surgeon for people who don't know who he is.

He is one of the most brilliant guys around trained by Tim Noakes who knows a little bit about this stuff. But he says, look, it's an addiction problem. He said, why else would you fill up on steak and be totally stuffed and you can't take another bite and you send the steak away and then they bring your favorite dessert and obviously you have a bite or two? Why? You get the dopamine release.

So definitely we say I'm addicted to chocolate, we say these things, but people don't really believe in the addiction part of it. So that's a huge, huge deal. And that's why when you talk about the artificial sweeteners and all that stuff it's one of those things if we are using it as a crutch to get you off of that sweet taste but eventually you have to get rid of that sweet taste that you're craving all the time.

And so I think there's a lot of people that's just-- I'll give you an example of a lady, I just saw her for a pre-op for a gastric bypass surgery. She works at a hospital and we put her on a ketogenic low-carb diet. In the first month she lost 8 pounds. She resolved her hot flashes she has all the time, her back pain got better, her anxiety got better, all this stuff got better in one month.

Bret: With only 8 pounds!

**Brian:** With only 8 pounds of weight loss. So I saw her in the three month follow-up which probably was a mistake on my side and I asked her about it and she said, "Oh, I did great for a month, my mood was good and I was clear and all that." And I said, "Why did you stop?" And she said, "I lost 8 pounds so I stopped." All of her life... so her blood pressure, everything got better.

Because 8 pounds were so concerning, I think that's one big thing... is people have seen and heard stories about someone loses 100 or 150 pounds and not everyone is like Tro Kalayjian. Tro lost weight like 350 pounds, now he is a 32 inch waist and he's an athlete. Me I've been struggling with low-carb and stuff and my weight comes down slowly but surely so I have to be patient. So at some point you have to trust the process.

I think the people who fail out or the ones who don't trust the process, you know they haven't seen it up but then they'll run into their neighbor who has lost a bunch of weight and go, okay I'll do it again. But then you realize you don't have to butter all day long. Do you want to burn your own fat or do you want to eat butter as your fat source?

So I think it depends where you're at. Someone who's lean and fit like you can get away with a lot more than I can get away with trying to get down, right? I tell people it's like when you're trying to keep your car running, some people just need a little bit of a tune-up, some people just need oil change, some people need a major overhaul.

So I'll manage it differently if you're diabetic and your sugar is 350 compared to, you know, if you're 5 pounds from your goal weight. So we all are going to have a different approach we'll have to take and I think a lot of us on Twitter getting back to that a little bit as we battle it out over the minutiae. Because you're going to figure out whether you're vegan or whether you're carnivore. You cut out the garbage processed stuff in the middle, you know, the bad seed oils and those kind of things and you do better.

And then you fall on whatever end of the spectrum you are going to fall on based on your preferences. It doesn't mean you're an idiot because your diet is different than mine, so you see these things on Twitter with people getting into huge cussing fights and, you know, bring up personal stuff about being divorced or whatever it is, is totally outside of what we're talking about, right?

We get distracted from what the original point was. So I think it's those kinds of things we start seeing, that we're all individuals and I think the big thing I've learned is it's not a one-size-fits-all. It's an N of one for you, what works for you. If you say, I eat meat twice a week and I feel great... perfect. If you eat once every five years and feel great... perfect, whatever. So figure out what works for you and then go on with it. And I think each of us has to experiment enough and have the courage to experiment, to figure out what works for us individually.

**Bret:** It's a good point you bring up about the example that people set, of I lost 100 pounds, I lost, you know, 150 pounds and then everybody says, I'm going to do that too and it's going to work for me the exact same way. Well, it's probably going to work for you but might not work in the exact same way and I think that's a really important point that you bring up.

And the different concept between health and weight, like you said that woman saw many things improve for her, but her weight was slow to decrease and if you focus too much on weight you can sort of lose the health benefits. And a lot of times when I talk to people it's about being patient and being patient and pointing out all the benefits that come along the way besides just weight. So I think that was a great point you brought up.

**Brian:** Well, just to put a punctuation mark on that, I have a guy, he is Italian, which is a tough sell for keto low-carb, and he was at the point we were max on his oral meds, we had to put him on insulin, or he had to change lifestyle. And his daughter said, "He's not going to do it doc. He eats pasta every day and all this." So I said, "Look, here's your options, we could do this or we could do this, we put you on insulin.

And he goes, "I'm not doing insulin. I see what happens to people so I'll change my lifestyle. Three weeks later he comes in, he lost 3 pounds but he normalized his sugar from over 200 down to like 110 consistently on a 3 pound weight loss. So it doesn't have to be that you lose 100 pounds.

Because when his liver fat-- that's a whole different-- you know, like Jason Fung and some of these people are talking about your liver being like a suitcase-- it was totally full... You got to hire a bunch of people to shove more fat into that suitcase, which is the carbohydrates that we're shoving in there.

But once you empty that down a little, you become more efficient, you have a little bit of a backup battery, hopefully that makes sense to people. Well, it's not overcharged all the time, but you can deplete it, either by cutting carbohydrates or intermittent fasting, both of those work... it is just what works for you.

**Bret:** Yeah, I'm always jealous to people who can come up with great analogies like Jason or even like Dave Feldman. I can't come up with analogies like that, that always makes me so jealous... Wow, those are really great analogies, but I get the concept, I get the concept... that you can normalize your blood sugars, improve your insulin resistance, reduce your liver fat without decreasing your body weight tremendously.

You can see those health benefits. And there's actually a great study that came out showing that regardless of weight loss you can improve metabolic health with low-carb. I mean it's out in the literature in a double-blind randomized study, the studies we need to see. We just need to get those in front of more doctors so they understand.

But anyway, we've been harping on that enough. I want to transition for a second to I guess you could say new part of your career... for about a year now you've been the host with Tro Kalayjian of Low-Carb MD podcast. So how's that been going?

**Brian:** Oh, it's been great, it's so much fun. You know, with Jason Fung and Megan Ramos help us out. And it's been great because we really wanted to reach frontline docs, we wanted to reach people who gave up. You know, we've had people that were 675 pounds or 679 pounds, I got corrected, and dropping under the 280s, less than 300 pounds low-carb, after failing gastric bypass.

So when you start hearing from all these frontline docs, because that's what changed my view and I think when you're done by your CMEs and what you're trying to do we have to get doctors understand the benefit. You have to understand like there's other people out there, I'm not the only one and I wasn't the only one. I was fortunate enough when we were giving our talk, which was nice of you to join me and give me some credibility when I was first starting out to that church group.

We had a bunch of people and the two keto dudes let me come on and talk about all this stuff and we had a few people from that. And I think having a platform I realized there's a benefit to having frontline docs to say, I'm from this little town here, look what I'm seeing... look at Dr. Unwin from this little town in England and none of us ever would've heard of them.

So we're having all these great docs come on and nurse practitioners and PAs who get in and are having clinical success. So the more people hear that is not just Brian who is some crazy guy out there making up stuff and he has some vested interest, I think when you start realizing there's a ton of us out there who are benefiting and having, you know, for me Diet Doctor as a resource... are you kidding me?

I mean in Guatemala I was overwhelmed because I saw the devastation. Everyone was drinking soda and their sugar is 300 and they go, "What? Quitting dessert?" Man, that soda is killing you. That's the problem. But I can send them to Diet Doctor in Spanish and they could learn and not have to do-- So I think that we all have our niche and it's super important...

I think drawing battle lines and saying, I want my podcast to be more successful than yours because I listened to Ivor Cummins, I listened to... all these things and you start realizing all these good people out there are trying to help people. And so I think that's what we are seeing is people are starting to hear people like you and what you do as a cardiologist.

Nadir Ali, you know, we have so many frontline people, docs, cardiologists, we are seeing benefit in the realm of psychiatry. So what we're doing is we're all putting our piece of the puzzle together. Me as a frontline doc, I am not a researcher, so I'm not going to be able to give you a ton of research evidence, but I rely on those people to do it and I rely on people like Dave Feldman who are bringing changes to our whole paradigm of what LDL-cholesterol is and how it works.

Because we all just thought that was the killer, that's all we knew back then when we were in residency, was keep your LDL as low as you can but are there other factors involved? Does insulin play a role in oxidizing LDL, into the bad stuff or damaging the endothelium, the lining of the blood vessels. So I think all of us are starting to put our little piece of the puzzle together and we all need each other to make that happen.

So, you know, that's what I think is exciting. Is seeing having our podcast and the success with-We don't have a fancy set up like you with all cool stuff and you get all the-- this is super awesome. Tro and I just throw on some headsets and start talking to people, because we believe it's the content, right?

It's the content we want to get out to as many people and we self-fund, so we're not taking a kickback from anyone or anything like that, but we can bring on people who have new products that might be helpful, because we have no vested interest other than saying, hey, this may help you as a tool.

And I think a lot of us are doing those kind of things and saying hey there's other people doing this and I think for us the vested interest, really for ourselves is having more docs out there and that becomes the standard of care. What we have to do is change the standard of care, because what we are doing clearly isn't working.

So doing more of the same just isn't going to work. It's just not going to work, I'm telling you, so we have to change and when we start seeing success stories or hearing stories of people controlling their seizure disorder on a ketogenic diet that are real people. It's not a before and after picture that we could doctor. This is their story, right? So the more you hear these stories and you see the docs who've sacrificed, who have been through a lot...

You hear about Gary Fettke and what he went through and Tim Noakes... I mean I'm not a conspiracy theory guy, but they went through a lot. They sacrificed a ton. So what we are doing is kind of easy because is like they took the hill and we're just running up behind them, saying, hey, we did it, guys.

So there's so many great people out there and when you meet them personally, as you know, you've interviewed a lot of people, you see their integrity and what they're doing. You look at someone like Rob Cywes, he's a gastric bypass surgeon, he has endless supply of patients, and he's saying day we can avoid surgery in a lot of you. Let's do something different.

Gary Fettke can amputate everyone's feet... well, he gets, let's prevent this from-- that's why we went into medicine; to prevent the problems. Even me as a primary. People say, "How many have you taken off insulin?" For me it's like how many have I prevented from going on it in the first place.

**Bret:** Right, even more powerful.

**Brian:** Yeah, it's even more powerful and it's not me doing it, it's the patient saying, "I'm not just going on that road", because they've been told they have a chronic progressive disease that's irreversible. So when they can reverse it and their A1c is coming down and they have that little bit of leeway now it's exciting, it's fun because there's hope. I think Dr. Unwin is so on top of this saying, look, when we have hope we do better.

When people have hope that they can lose 20 pounds or 50 pounds just starting-- getting better every day, you know, for all of us I think there's a lot to be said about that and that's what medicine is about, to give you hope and you hopefully trust your docs and, you know, that's one of the things... I get a lot of people that want to come to me because they say, "My doc doesn't get it." Well, you have a good doc, let's train him, let's teach them.

Have them do this. At least care enough about your doc, not just say, "You don't agree with me, okay--" Because the doctor has heard it all already. They've heard the HCG diet, they've heard the grapefruit diet, this diet, that diet and none of them had worked long-term. Why? Because you have to change your underlying metabolic health.

And that's what we're talking about. Is if we do that one of us, we're going to have long-term success, not losing 50 pounds in a month and then you go back to eating what you're doing. So a lot of people have that view and until you understand it's lifestyle, it's stress management, all these things we talk about, they are not going to have success doing anything. You have to buyin and you have to believe at some point.

**Bret:** And that's the next stage, that's where we have to get. It's just more physicians on board and is going to come from patients, is going to come from podcasts like yourself and like mine and it's going to come from us as vocal advocates but not as like fringe, this fixes everything, this is the one magic thing. I mean we have to be honest about it, it's a process like anything, it's got its place and it's got some time where you have to be careful or maybe it doesn't work as well.

And I think as long as we can keep promoting that message to as many people as possible, the doctors have to start hearing it, especially if it's coming from patient success stories. So that was a great point because I get a lot of questions too about my doctor doesn't get it, my doctor isn't on board, can you help me find a new doctor? And the answer frequently should be, help me educate your doctor.

Let's help us, you know, together we can work to educate your doctor to try and transform them. Maybe they're not going to become a low-carb doctor who uses it for everybody but at least to be knowledgeable about it, be aware of it, understand that it's one more tool in the toolkit that is going to help people because that's why we're here and that's what we're doing; trying to help people.

**Brian:** Yeah, and I think that's just understanding that... having them have a big picture of stepping back and say, why is the sugar going up? Why is the LDL going up in any type of weight loss? It's going to go up because your body is kicking more energy into the system. So I think when you start being less fearful and understand that this is going to be normal for a couple of months. Let's let it ride and let's stick with it because there's that initial panic people get.

So I warn my patients. I go, "Your LDL is going to go up for three months, it's going to." And surprisingly I see a lot of people that their LDL drops right away and they feel good about it and their triglycerides and HDL definitely go the right way and their blood pressure gets better and they are coming off meds.

So I think writing enough to that time-- And Bret, as a little plug for you, I can't help it, you know... when I saw that you were doing low-carb that gave it a ton of credibility to me. And that was before I knew heck of a lot. Because I know you look at the data, you assess things, you're not just going to jump on the latest fad that's happening and you play the devil's advocate and you go, what about people who say this?

Well, my people have this concern. I think that there's value to that because we have to understand enough to either defend what we're saying, or realize there's no defense for certain things saying, yeah, that's not a good situation for this. It's not a one-size-fits-all. So I think that's really important.

We have reasonable people who say let me weigh the evidence and show what the evidence shows. So I felt a heck of a lot more confident when you were doing this too. That I wasn't in the boat all by myself, some primary care guy doing this stuff, but when you start seeing all the world experts who've looked at the data and say I've weighed it and I'm looking and I'm looking at clinical experience, putting them together and saying, "There's a problem, we got to fix this thing".

**Bret:** I appreciate you saying that. Thank you. Am I blushing? Can you see it? All right, I appreciate that. Well, this has been great, I really enjoyed talking to you about all this and getting your experience and I highly recommend people to check out Low-Carb MD podcast and to follow you on Twitter because like you said you'll make me crack up at least once or twice a day. But where else would you recommend people go to find you and any last words for our audience.

**Brian:** Yeah, you know, I'm not accepting new patients. Now I do some consulting, through a low-carb advisor for people who are just trying to get on track to understand lifestyle and health and what their labs might mean and hopefully work with their doctor to educate the doctor. And that's one of the good things; I know you are doing that for a while too. And when you educate the docs, you go, look, here is what it means.

And I think so a lot of our value is going to be in educating the doctors. Then what happens is as you have more doctors and we're not in so much demand. So there's enough sick people to go around.

And so the more of us we're getting, we realize our system is in trouble, so the more docs we bring in, the more practitioners we bring in, you know, that understand and help their patients then-- You know, Andy Phung is a great guy, low-carb keto guy and people drive six hours to see the guy.

Bret: Wow!

**Brian:** And so people are going across town to see Tro Kalayjian, they're flying across the country to see Tro. So I think when you start realizing... Gosh, why don't we have someone in Kansas City? Why don't we have someone in Orange County? Why don't we have someone who gets this stuff? So that the patients can get cared for by people who get it, right? So I think that's the huge thing about Diet Doctor.

What we're all doing is saying, "Let's bring more people into the fold who get it", and then the standard of care and the quality care will change. So I think it's coming, it's just being patient like we tell people with low-carb diets. You're not going to go with 80 pounds in a week, it's not going to happen. But you can say, "Let me start exercising, let me start doing this little tweak" and I think that's what we're doing in medicine.

The more people who get it and then they have clinical experience and they go to their partners like I've done with my partners. They're asking about keto, low-carb, what is insulin level, what does this mean? And so we become educated and we educate others. And then we just pass along, you don't hold that secret to yourself.

You pass along, hopefully through Diet Doctor and all these other podcasts. We're reaching people, I know we're reaching people, we get calls from doctors all the time thanking us that they're start to see things differently and their patients are doing better and they enjoy medicine again.

**Bret:** That's awesome, that's a great impact to have and helping them help more patients. Well, thanks this has been great and I look forward to hearing more from you on your podcast and what comes next in your future.

Brian: All right, we'll have you on, man. Thanks for having me.