Diet Doctor Podcast
with Dr. Tro Kalayjian
Episode 49

Dr. Bret Scher: Welcome back to the Diet Doctor podcast with Dr. Bret Scher. Today my guest is Dr. Tro, officially known by just the one name, Dr. Tro. And Dr. Tro is a board-certified physician in internal medicine and obesity medicine who has taken on being a very vocal and visual low-carb physician based on his own amazing personal journey.

And now what he's done to transform his entire practice of medicine and help hundreds if not thousands of people transform their lives and their health with low-carb. He also is the cohost of the Low-Carb MD Podcast and as you'll hear he really has his empathy for his patients, his desire for helping his patients as his core what motivates him for everything he does.

Now sometimes that makes him controversial because he is very outspoken on social media, he does not back down from a challenge; in fact he rises up and just gets more invigorated to challenges on social media it seems like.

But hopefully what you'll see in this interview is that the real Tro is so focused on the patient and a really kind, and giving, and generous human being that if you only know him from the social media, I think you're going to be surprised about some things in this interview and if you know him personally you're probably surprised about how you find him on social media.

But regardless, I think the main message here is the message of how can you help people. And what does it take? Not just what science says about our bodies as thermodynamics and calories, but what it means for us emotionally, the issue of food addiction, or cravings, or the emotional eating. You know, calories don't necessarily address that.

So his whole mission of addressing that and addressing health and addressing food altogether is I think a message we need to hear more. So I hope you enjoy this episode with Dr. Tro. Dr. Tro, thanks so much for joining me today on the DietDoctor podcast.

Dr. Tro Kalayjian: So happy to be here... very much a pleasure.

Bret: Now, you've been obviously a very visible member of the low-carb community and proponent of weight loss, both with your own personal history and of course with your role as a physician as well. So, if people aren't familiar with you, give us the short version of your personal journey that's led you to where you are today.

Tro: Wow, let me try to dial it down to three minutes. I was a 350 pound doctor, training in one of the most prestigious systems in the Northeast, the Yale System. And I had many brilliant col-

leagues and researchers consistently asking me why I wasn't eating less and moving more. This was you know basically a lifetime... I had endured a lifetime of having no understanding of my appetite, what's driving it and how to manage my appetite and how to approach dieting.

And as you know as a physician and as a board-certified cardiologist, we were always told in the medical field that the approach to dieting should be lowering your calories, lean meats and eating more vegetables and whole grains. And while that sounds great, it wasn't applicable for my life.

So when I finally figured out that, hey wait a second, let me go back to the literature and try what actually work for weight loss I was very surprised to find that we were essentially lied to. And that was really disheartening to me. Like if you have a drug and you want to see how a drug does for pneumonia, let's say or how a drug does for coronavirus let's say, what you do? You go to double-blind placebo-controlled studies or the head-to-head studies and you look to see which one has the greatest effect.

And I started there... I said, let me go to the-- You know what? Let me go to the literature and see which one has the greatest effect and let me start there. And I was so surprised to find low-carb having pretty consistently a greater effect than a low-fat kind of standard approach. That's where my journey started. When I had to question everything I was told.

Bret: Now, did you have this sort of aha moment of, oh my God, why did I never hear this before? I went through how many years of medical school, how many years of residency and I never heard this before... I had to find it for myself. Was that sort of like--? How did you feel about that? Was it was it frustration? Was it anger? Or was it just like, wow this is amazing?

Tro: Well, I think really at first it was just... I was very pragmatic about it and I was like, let me just lose weight; I will just follow the weight loss data. Let me go about this as an evidence-based approach. I had this great effect in six months, I had this great effect at 12 months. We know that diets are hard to adhere to, so if that has the greatest effect in six months, as long as I keep it up should have the greatest effect at 12 months.

And in fact there's some evidence even back then that at 12 months maybe there's even more of an effect. And David Ludwig has really showed that more recently. But so yeah I said, there was no emotional, I wasn't angry, I wasn't anything. I was like I'm just going to do what the data shows.

At six months low-carb is better, at 12 months low-carb seems to be better. I'm going to start there. And then I start unpacking more and more over the years and as I am looking further and further asking myself the questions... Why am I hungry? Why am I eating?

You know, what's going on with my body? What about metabolism? What about fasting? I'm not hungry, should I be eating, should I not be eating? I'm working out... Should I be eating? So, as I explored the literature... how much protein... you know, maybe not protein... What are the risks of low-carb?

I'm looking into all of this and I'm coming up-- now the anger is building over that one year. You know, now the anger is building, like holy crap, we've been lied to and we've been misled and that's when I said I have to get certified in obesity medicine and I can't let anybody else suffer the same way I did.

Bret: But, when you went to get your certification it was probably still a lot of the eat less move

more, count your calories type of message, wasn't it?

Tro: Yes, so then... let's fast-forward... I lose 150 pounds. And this was like three or four, five years ago. Six years ago I started thinking about how to do this and you know basically I've been on this journey know five, six years. And yeah, after I lost the majority of the weight I said I can't let anybody else be like this, I have to do something about it. And I go to these conferences to get board certified in obesity medicine which I eventually did.

And there's a strong push for surgery, medications, I mean the obesity medicine main conference is Obesity Week, some of the issues I saw there right away was it was sponsored by a medication and when you get there, you know, there are tons of vendors selling supplements and shakes.

And that's fine, I get it, some people need shakes, I use shakes from time to time very rarely; I try to stick to real food but I understand that there is a role for bars and shakes, but the overwhelming message was eat less, eat lean meats, eat whole grains and avoid saturated fat and avoid excessive protein which is-- But then out of that same--

You know, the same people saying that old message which we know is wrong, right, they were also saying any diet works. You know, all that matters is compliance. So they are speaking two separate messages.

Yeah, we acknowledge the data supports low-carb, you know, but we're going to be biased and say that our main recommendation is go low-fat and eat multiple times a day, eat, you know-- And if you look, the largest voices in that group may come from, you know-- for example the chief scientific officer from the ADA gave a lecture literally saying that-- he said, eat lean meats, eat whole grains, and then he said, doesn't matter what you do, low-carb or low-fat.

Well, wait a second. Let's re-examine that. You're saying, eat lean meats and whole grains and then you're also saying it doesn't matter if you do low-carb or low-fat. You're contradicting yourself. And if adherence is the message that you believe is the most important thing, you know dietary adherence is the most important factor, which they say, all those figureheads say the dietary adherence is the number one most important thing...

When we go and we look at how you can measure dietary adherence, the fact that you can use a ketone or continuous glucose monitor is an amazing adherence tool that no other diet has. So I'm like sitting there at these conferences like what the hell is going on here? It's like a twilight zone, you know. Like where-- I think the reality is they can't let go. They can't let go of the old mindset. And I think that's a problem.

And then you may have other bad actors who may be purposely prejudiced against the low-carb community and we've seen that, you know. We've seen Yoni Friedhoff for example who has a clinic in Canada and he is also obesity medicine certified, he's come out criticizing low-carb doctors as being too fringe and going after a lot of low-carb researchers and the penance of low-carb doctors. And if you look at his book you know he preaches eating 5 to 7 small meals and he preaches eating immediately upon waking up and he also preaches snacking.

But then he'll also say do whatever diet works. So I don't know how to reconcile those two. I think what it is, is a bias against low-carb approaches and they are unable to reconcile new data and old data. That's what I believe. I don't know that that's the case. So I don't know how you feel, you've seen it too. You've probably experienced some of the same things I saw. Some recent criticism of you which I found was completely unwarranted on social media by another fellow vegan doctor.

So I think you've probably experienced the same things I experienced.

Bret: Yeah, there's no question in nutritional wars as they're called I guess, there's a lot of religion, there's a lot of hard belief and there's a lot of financial interest, all sort of mixed into one, which really kind of muddies the waters and makes it very difficult to have a meaningful conversation I think especially on social media.

Which I definitely want to talk to you about your social media presence as well. But, first let's rewind for a second, because your story is still amazing, so I still want to highlight it. You basically lost half of your body weight. You lost like 150 pounds... Is that right?

Tro: Yeah, like about one third. So I was 350 pounds and I lost 150 pounds, mainly by lowering carbs then... actually I should take a step back. The first step was replacing the foods that I could not replace with lower carb versions. Sorry, replacing foods I could not restrict.

So maybe understanding binge eating and food addiction and then lowering the carbs and leveraging the satiety and appetite suppression of ketosis and then adding intermittent fasting so that was my general-- and then adding exercise. So that was the general kind of plan. And this is the general plan we use to advocate for people who come to me with a desire to lose weight with low-carb dieting.

Bret: You had a personal transformation which led to the professional transformation as you revamped your entire practice to focus on this and help people in this way when they're not getting the message from other people. But as you were going through your own personal journey, did you have any concerns about, well, there's weight loss and there's health... And the two are not always equal.

So did you have concerns that yeah, I am losing weight, but am I harming my health in the process? Because that's sort of what we've been trained to think in traditional medicine, contemporary medicine. So did you have that thought process? And how did you get yourself out of it if you did?

Tro: Absolutely, look I tell my patients this, you know, when they come to see me... I don't even trust myself. I verify. I put a CGM on myself. I have a lipid meter right here where I could do a finger stick and check my own lipids. I can take an ultrasound, put it on my neck and measure the thickness of my carotid artery.

So I don't believe anybody, I don't believe what Atkins says, I don't believe what Yoni Friedhoff says, I don't believe what David Ludwig says, even though I respect him, or Kevin Hall... I don't believe all these giants in the obesity and weight loss field or these voices... but I don't believe anybody. I don't believe the ADA; I verify all of them.

And we have the tools now. You can measure your ketones, you can measure your continuous glucose levels, you can measure your lipids with a fingerstick, you can measure your A1c; we can get lab work. And you can take an ultrasound, put it on your carotid and look at the thickness and you'll know... hey, are all these evil things that they say are going to happen happening?

And so I think when I saw those values improve and when I understood those values a little bit more, it made me like a little bit more accepting of my journey and then ultimately I had to decide, well look I had failed other approaches. Like I can't do, you know, vegan. I can't do it, I've done that, I've tried. I can't do moderation, so why would I--? Am I going to be relegated to obesity or

except that I failed these other modalities that are strongly encouraged and then accept weight gain and obesity with an approach that the convention doesn't agree with? I think the thing that was an easy decision for me.

Bret: You know, it's so interesting as a physician I can't remember how many times I wrote failed lifestyle interventions or noncompliant with lifestyle interventions. And I'm sure every physician has experienced that, but until you had that personal experience of you also "failing lifestyle interventions", did you then have this awakening? So I think it's so important for doctors to hear this story and to take stock of themselves and how many times they see their patients not complying or lifestyle interventions not doing what they expected to do.

And instead of saying they've tried everything, realize there are other options that we haven't been taught. I think that's such a great example that you set. So a big focus of what you do is just practical. Is it working for this patient? And you measure and you test like you said. So, let me ask you, do you care about the calories in calories out model or the carbohydrate insulin model? Do you care which one is right and which one is tested? And how does that factor in to your brain and your practice, and your life?

Tro: There's two ways to think about it. Ideally we want to know if we can help patients. So I think the carbohydrate insulin model matters, because I'd like to know is it going to get easier for you over time? And that's something that, you know, that the carbohydrate insulin model may hint at. And I think we see this in David Ludwig's work. Your metabolism may go up somewhere between 200 and 300 cal per day by lowering your insulin.

And that's a meaningful increase. I mean 200 to 300 cal a day, you know, as you age from 20 to 60 you're going to drop your metabolism, 200 to 300 calories per day. So if we can come up with a way to sustain weight loss by altering the macronutrients of a diet it's meaningful. So I do care about it. I think look... ultimately do I think that carbohydrates are the only factor that play into weight loss and weight gain? No, I don't.

And I think that there are many short-term and long-term factors that have nothing to do with the carbohydrate insulin model of obesity that need to be dealt with. But bottom line, the last 50 years have been the practical application of calories as a way to modulate weight loss and weight gain or obesity and they haven't worked. You know, there's more MyFitness pals, more nutrition facts, labels on everything, you know, like calorie information literally on the menus.

And these don't affect behavior and they don't drive desire to eat. You know, they don't-- In fact I would argue-- You know, Kevin Hall did a great study, one of the biggest proponents of thermodynamics, Kevin Hall, did a study where he presented people food that was processed and not processed. And it was the same exact calories that were presented, the same exact macronutrients, the same exact kind of salt and fiber, and what happened?

The processed food group ate more calories. So certain calories lead you to eat more calories. And we know David Ludwig showed-- so I'm going to combine these two giants-- David Ludwig showed that certain calories increase your calories out. They increase your energy expenditure, your resting metabolic rate. So if the calories affect both the calories in and the calories out, it's going to be really difficult to quantify in a meaningful way.

So, I think that meaning-- let's make it super simple. If you eat 300 cal of Oreos, when do you get hungry again? And what happens to your next meal? You're probably eating one hour later and it's something even worse, right? If you eat 300 cal of eggs, which is, I don't know, four eggs,

right? What's going to happen? You're going to be full for a couple of hours. So, the type of calories affect both the in and the out.

So I think that we have to acknowledge, one, the calories model of obesity has failed. Everybody knows about calories, they have an understanding of calories. And even clinicians you and me, when we are put in a metabolic ward and we see how accurately we estimate our calories, we're off by 20%.

That's nutritionists and dietitians 15%, 20%. The laypeople, the average layperson, it's 30 to 50%. So either you forgot what you ate or the portions you ate. So the calorie information is everywhere. Even the best of us can't measure it.

Bret: This is an important differentiation. So it's not that restricting calories, eating low-fat, eating the "recommended diet", is not that that can't work. It's not that if someone was compliant like the message of compliance adherence is key. So it's not that that diet can't work if you complied with it. Is that it's that much harder to comply with over the long run because of all these factors. Would you say that's a true statement?

Tro: Yes, I believe in the conservation of energy. I just believe that it's not useful for weight loss. That's it. That's the sentence that everybody needs to hear. Yes, conservation of energy exists; it's not helpful. It's not helpful for the average person. If you are a neurotic bodybuilder for example, it may be helpful for you. It may be helpful for you. But for the overwhelming people who are just trying to navigate basic weight loss, it's not largely helpful.

And I think you hit the nail on the head there. We believe in calories, you know. The majority of people who follow low-carb diets believe in calories. We just know that appetite suppression leads to decreased caloric intake. Full stop. So, there is something that leads to calories. I'd rather focus on that something.

Bret: And the psychological aspect is so important. I mean, you can measure calories in, calories out, you can measure thermodynamics, you can measure what happens in the body. But what happens in the brain is even more important. And that's something that I really appreciate that you talk so much about and you're such a vocal advocate for, addressing hunger, addressing binge eating, addressing food addiction, which is a bit of a loaded word about addiction or not.

But whether it meets the criteria for addiction, it's clear that we are human beings with cravings, we are human beings that have trouble regulating food intake. And that's something you address quite a bit. So, what do you find--? Was that one of your revelations as well that, oh my God, no one's talking about this? We're talking so much about food, but we're not talking about behavior. And how did you make that transition to sort of focus more behavior as well?

Tro: Yeah that's-- you know-- I can tell use it was staring me in the face and I didn't want to address it ever in my own life. I can tell you for sure patients come to me... I mean look, go down the street and say, do you have a problem with sugar? And nine out of 10 people will probably tell you, yes. Now is sugar addiction real from a scientific perspective? Let's the scientists figure that out.

From a clinical perspective patients come to me and say they're addicted to sugar. They probably mean they're addicted to hyper palatable food, they probably mean there's a metabolic reason that's making them hungry. Metabolic, psychological, neurologic reason that's making them hungry. But the way that they communicate is, I'm addicted to sugar, I am addicted to food.

So, clinically it exists. Scientifically, I let them figure that out. At the least it should be, you know, this is what's reported to us by patients. So, absolutely. But how did I discover it? Let me tell you. I was a 350 pound doctor. For my entire life it was finish your food and I had three kids and those were two kids at the time and I was finishing their plates, because I don't want to waste it. And one day I said to myself, wait a second, I am a 350 pound doctor... I want to lose weight - why am I logicking myself?

What has hijacked my logic that I'm convincing myself to eat more because I don't want to waste it? And then, you know, here's another quick little tidbit that let me off to it and I will quickly segue off, you know... My wife was always very supportive. She never had an appetite so she never quite understood my appetite issues until later on, more recently, but she would say to me, you know, what happened to the ice cream?

You know, what happened to the cereal? Are you sure you want to eat that? And my initial reaction... if you have a lifetime of obesity and somebody tells you to eat less, your gut instinct isn't like, thank you for helping me. So well really I should've been. So, logically speaking, I'm a 350 pound doctor, 90th percentile my board exam, you know, trained in the Yale system, I'm very passionate about evidence.

I should say thank you for encouraging me, Rosette, thank you so much. I should put the ice cream down but I didn't say that I was agitated by that response. And now here I am asking myself, wait a second, why am I getting agitated? Wait a second, why am I logicking myself into eating more?

Why am I getting agitated in response to somebody who's trying to support me? And when I connected the dots, that's some things in my life that's changing my emotions and changing my logic to the point of self-detriment, that's when you really have to consider food addiction.

Because I am a logical guy, I am a physician. I'm very pragmatic, I am fairly... I'd like to think I am emotionally stable, so why am I getting agitated? What's going on? Why am I logicking myself to eat my kids' left overs when I want to eat less?

Bret: That's sort of introspection. So, you had to look at yourself and that's not always comfortable for people. And actually right now is a perfect example in the time of Covid 19 and lockdown and people spending time at home, more people stressed and worried about things, there's a lot more emotional eating going on, whether you are already keto, whether you're already intermittent fasting, whether you're a vegan, everybody's experiencing the stress and the emotional eating.

So are you seeing this with your patients and sort of a spike and the need to address the emotional components and the psychological components of food? **Tro:** Yeah, I think the concept of food addiction also has to be paired with the idea that look our brains are amazing at getting food. We're designed to eat. Unless the wire is a really cross like in certain eating disorders like anorexia or bulimia, the desire is to eat whether that's carbs, carbs and fat, or fat alone. Your brain is going to go for it.

Or flavor or taste, or sweetness... there's a lot of drives... or stress. I mean we-- but to answer your question stress is actually one of the biggest predictors of weight regain in our practice. We have a panel of hundreds of patients on remote scales and when we see those weights go up, it's always stress. And when Covid hit... I got to be honest with you, I broke down, because I was getting calls and I was in tears in my office here, because we got a call after call for anxiolytics.

And then we got calls after calls for binge drinking and then binge eating and then we're watching the scales go up, you know, remotely, watching the CGM's get more erratic, and people are suffering. And all of a sudden we're booked out for weeks in follow-ups with people that we have identified as high risk for weight gain. And I said enough is enough. We're going to have these free townhalls.

And then we started doing these free Zoom weekly meetings and we have hundreds of people on there and they're all experiencing the same thing. So, it's absolutely a factor, I mean, this is so key, more than calories. It's how you manage your appetite when you're stressed. That's probably one of the most important factors you can focus on. Can you eat foods that make you less hungry and fill you up when you're stressed out? That's an important defense to obesity. You hit the nail on the head.

Bret: Which leads to another topic about cheat meals. And I hate the terms cheat meals, but it's so commonly used that people understand it. So is there a role for a cheat meal if it's going to sort of help keep you on target? And how do you know if that's the case or if it's going to lead to a landslide of going off plan and really having a hard time digging yourself out of the hole?

Tro: Well, that's a tough question. Ultimately we know that ketones-- you know, we suspect that ketones likely have an appetite suppressive effect meaning they act centrally, we know they prevent seizures, we know they may modulate mood and depression. So, we know that ketones have a central role. And if you like me believe that ketones may also have appetite suppressive effect centrally then a cheat meal or consecutive cheat meals will take away from that appetite suppression of bank account of ketones.

So, they may actually derail you, but ultimately I think what we find is this. We try to limit "cheating" as much as we can. But we're very forgiving about it too. We liken it to getting a flat tire. If you're driving a car and you get a flat tire... that's fine. You take out the spare, use the spare tire. So if you're like really stressed out and you want something chocolatey... and, I mean, don't drive around, don't go eat Oreos, if you can make yourself a lower glycemic lower carb cookie. Maybe that may be better for you.

That's like using a spare tire. I wouldn't go around and pick up junk food and just eat it. That's like driving around with your ax kind of breaking the rims and breaking your axle. So we say but how long should you be using these alternative hyper-palatable foods whether they are low-carb or slightly less carb or a little bit healthier? For as long as you need until you get things fixed. So, if you drive around with the spare tire for weeks on end, I'm going to have to ask you and tell you maybe there's something wrong here.

Maybe there's something wrong here. So yeah, "cheat meals" I think... can you make those cheats into an appetite suppressive meal? Can you leverage the power of ketones and keeping your carbs low? So, if you can, that's great, if you can't, just make the-- Even if you use them or you go to the real junk food. Make the damage as narrow as possible. Use that spare tire for as little time as you need until you get the tire fixed.

Bret: I like that analogy.

Tro: So go back to real food as quickly as you can.

Bret: Yeah, that's a good analogy. Now in the same line you mentioned earlier that you do sometimes use bars and shakes. So, what you see is their role either for you or for a number of your

patients? Do you advise them to strictly avoid them? Do you use it as a crutch? How do you see their role?

Tro: Absolutely there's a role and I asked patients-- so whenever we see somebody we evaluate and there are a number of things. But one of the most key points we evaluate are the problem foods, the problem times and the problem situations and people. So, if somebody can't go to work-- I was going to work literally eating my colleagues' chocolate for several years. This is a doctor going to the hospital's lounge, eating-- I wondered, how the hell you keep chocolate in your cupboard for months? That was what I thought.

So absolutely when I use chocolate protein bars and shakes, they are quite helpful for me to lower my carbs and to not eat the chocolate that I had a problem restricting. So they can be helpful if they prevent-- you know, if they are lesser evil. But then when you get to the point where you are like, why am I eating two protein bars a day and two chocolate protein shakes a day? That's the point where then you have to take the next step. Do I really need these things? So, you have to constantly evaluate.

One of the other key points we focus in on are-- so, along with focusing on what foods do you need to replace, what are those problem foods you need to replace initially, we also focus in on asking yourself why am I eating and what's the best I could do about it? So if you are eating a shake because you'll otherwise be eating ice cream, that's a huge win.

Bret: Right.

Tro: Right? If you are several months later eating shakes and you're asking yourself why am I eating the shake, and you could do better, then do better. So I don't know if that helps.

Bret: It does. Again it comes down to introspection and being honest with yourself, which to be honest, a lot of people are not so good at. They definitely need help tapping into that because it's not something they've not thought about before. So, it sounds like a lot of people need a doctor, or nutritionist, or coach, someone to help them have that introspection a lot of the time.

Tro: Let me tell you I've dealt with this. There's such a an emotional baggage that my obese mind is still here. When I walk in somewhere that's narrow I turn my body because I still think my butt is going to, you know, like catch the-- I still think that I'm larger than I am. When I go to the gym and I'm on the treadmill and somebody's making a fat joke, I still think like they're talking about me. You know, there's so many other examples I can give of this, but that obesity mindset is a challenge to overcome.

And there's emotional issues with it. Sometimes people come to me and they're like, "Tro, I ate two protein shakes this week, I did terrible." And I'm like, "Why did you eat the shakes?" "Well, I was going to the ice cream "and then I remembered that you said that I could put two scoops of protein, some ice, some nuts, mix it up and it tastes like a--" I was like, "Well okay."

And they're beating themselves up about it and I'm thinking, "Wait a second, this is like a win." You noticed you had cravings, you did something to advocate for yourself in that moment against those cravings and it worked out for you. But a lot of times patients don't see that and so you're absolutely right. Sometimes you need that second set of eyes just to look and say, "Yeah, you are doing great. Keep going."

And sometimes the scale doesn't move and you're like, "I did everything right." And you may get

discouraged. Well, there's somebody telling you you're doing everything right. Just don't rock the boat, keep going. So I think the coach is needed.

Bret: Yeah, somebody would have to separate the behavior goals from the metrics and the health goals, because you can do everything right and not seeing the results, but still need that encouragement and sometimes it's the behavior goal that matters more and setting realistic goals. I mean it really is a sort of an art to that. It's not really the science that you learn, that's not the calories, in calories out, that's not that the science of nutrition.

That's the science of people and the art of dealing with people, which is definitely something that sounds like you and your practice really focus on and have down, so I appreciate that. But I want to transition for a second, because I met you a number of times in person. And you are a very kind and gentle and a person easy to speak to.

And then there's Tro on Twitter, which is very different. So first let me ask you, if someone met you in person what would they be most surprised about if they saw you on Twitter? And then vice versa, if they knew you on Twitter, what would they be most surprised about you if they saw you in person?

Tro: Well, let me tell you. A lot of my patients come from social media. Actually they find me on social media and they come to the practice and I ask them, how did you find me? And they say, I followed you on social media. The first thing I do is I apologize. I am like, I'm sorry you have to endure that. Yeah, look, we-- I cannot say like we put the patient first in these four walls.

The patient is first. We let patients text, email and we advocate reaching out any time. If we can respond, we will respond. If it's going to be the next morning, we will respond the next morning. Send us your meals, ask us your questions, we'll get back to you. We have two health coaches, Amy and Brian, both have lost incredible amount of weight and are incredibly supportive.

We co-manage diabetes, hypertension, weight loss, alcohol use, smoking-- I mean we are here, like we get satisfaction when we help people. So I get satisfaction from that connection and helping people, so that's the-- you know, we literally have, I have lupine beans, you know, chocolate and vanilla protein shakes, protein cookies and protein chips. I have all sorts electrolyte drops, we sell it right here.

We don't want make it easy for people to just implement lifestyle change. In the front off we got like... you need to buy it, all of it is crap. Eat real food if you can. If you have a problem with cookies we're sending you a cookie recipe. You have a problem with bagels, we're sending you a bagel recipe.

So the real Tro is somebody who wants you to lose a ton of weight, because selfishly when we're looking at your remote scales every day we want to see a go down and we want to know that we've done a great job and we've exceeded, you know, people's expectations. So, we try to do our best and that's it. So, when you come in here and you confess how you binge-eat pizza or you binge-eat chocolate or you can't go a day without eating ice cream and you share that weakness, well, we're sharing your weakness with you. We are sharing our weakness.

We are in this together. So that level of empathy is there for patients. My level of empathy for doctors and scientists who say food addiction isn't real and low-carb is all about calories, I have no empathy for them. Not that I don't have empathy for them; I feel sad for them that they don't know better. But that message is quite harmful to my patients. The message that calories are all

that matters is quite harmful to my patients.

So, I view them as harming my patients. So, what would you do if you saw somebody doing something wrong, that was harmful? You would go and you would correct them. And then when they called you a zealot, you'd say, no, I'm not a zealot. You're an X, Y and Z and this is why you're wrong. And if they still call you a zealot, you'd say, you're just in-- You'd you fight back. Because the message is harmful.

And if the message is harmful, I think we need to be very accurate. And the way that the convention has tried to pretend that their message isn't harmful is to say any diet that works is a good diet. But out of the same mouth they are saying eat lean meat and more whole grains. So, they are anti-low-carb and the bias against low-carb is very evident. We know this in the--

You know, the Nutrition Coalition knows it, the Low-Carb Action Network knows it, you know it, I know it, thereby there is a strong bias against low-carb modalities. So, I have a very strong passion in advocating in a public forum for these approaches, particularly intermittent fasting and low-carb. Because there's a strong bias against them. So, yeah you're going to get the social media Tro if you give a terrible message.

Bret: That makes sense.

Tro: I don't know, maybe that makes me a zealot... Maybe the right word is an evangelist. I recognize their point, calories matter, but I'm sorry... if you address food addiction you will lead to addressing calories. If you address calories you will not address food addiction.

Bret: That's a great way to sum it up right there. I think that's a great summary how you I said that. So what is a keto fanatic? What is a keto crazy? What is a keto zealot?

Tro: I think you may actually be a keto zealot so I don't know whether the long-term outcome of doing what I say versus what Bret says, versus what Elaine Norton says, versus what Yoni Friedhoff says, versus what the ADA used to say, I don't know the five-year outcome of that. We don't have that data, we don't have hard outcomes data. We don't have a lot of it.

Maybe there's five outcomes trials in the in the nutrition world, most of which are old, all of which have controversy. So we don't know what happens in the long run. So, one, you have to-- You're not a keto zealot in my opinion if you acknowledge limitations of your approach. And I think acknowledging the side effects. The potential side effects. If you're on an SGLT2to inhibitor you may get ketoacidosis. If you're pregnant, you know, and lactating you may get ketoacidosis.

May be at risk of kidney stones because in the beginning of a low-carb approach there's an increase in urinary calcium. So if you're not hydrating and you're not adding salt to your diet you may be at risk of these potential issues. If you have severe membranous glomeruli nephropathy there may be an issue with excessive protein.

You know, otherwise there isn't, but if you're not aware of these very specific-- if you have a history of pancreatitis and your triglycerides are very high, how should you proceed with a low-carb diet? I think these are all critical issues and if you're not aware of them then you're a keto zealot. I think advocating for low-carb diets when everybody else is kind of biased against them, that's not low-carb zealotry in my opinion.

Bret: Yeah, I like the comment about being aware of the limitations of our knowledge because, let's face it, it's easy to get caught up in your own biases, that's so easy especially when you've

had an amazing personal history. Especially when you transform lives of hundreds of people in your practice, you can start to believe that this is a miracle cure that's good for everybody and sort of put your blinders on and that's hard not to do.

I mean when I see a study that's anti-saturated fat, that's pro high carb, my brain immediately goes into, okay what's wrong with this study? And that's not always the healthiest approach. You sort of have to take a step back and say, I need to make sure I'm evaluating this objectively outside of my own bias, which is hard for humans, for you, for a doctor, for me, for anybody. So do you find yourself wrestling with that as well, just to have to sort of have your own introspection and say am I crossing that line of being a keto zealot as other say?

Tro: I try not to drink my own Kool-Aid and look I have to be honest, our program is designed like a clinical trial. Because there is no long-term evidence. We check labs at zero, two and four months and then very consistently for how long you're a patient. We look at your CIMT, we look at your calcium score. There are no long-term studies. What would you want to know? Don't you want to know that you're getting healthier or not healthier?

And you're absolutely right, you have to reevaluate. My second most common consult after, "I want to lose weight. Please help me with low-carb diet", is "I've been doing keto and I'm not losing weight." So, then you have to ask yourself, what are the limitations of keto? What are the limitations of low-carb?

And usually there are very recurring themes there, whether it's, you know, alcohol use, dairy fats, not snacking, you know, there's a lot of common themes there. So, I don't believe in-- I believe in low-fat diets. They have to be low and, you know, seed oils and trans fats, right? I believe in, you know, great avocado oil and high-quality olive oil and fats that you get with foods that are satiating like meat, fish, chicken, eggs and Greek yogurt.

I believe in you know diet of-- So, I'm both high-fat and low-fat. I am both high carb and low-carb. I believe in a lot of unrestricted fiber if you do well with it. So, go to town on green leafy vegetables and low-carb fruit, you know. But I'm not a proponent of, you know, needless sugar.

Bret: Well, how about the concept that to lose weight on keto all you have to do eat more fat and that's the key?

Tro: Not true, I see it all the time; we see it all the time. I think that we see-- very frequently people come to us, "I've been doing keto, I stopped losing weight, I still weight to lose." And we have a very pragmatic approach. Have you lowered your carbs under 30? Have you decreased your meal frequency and evaluated your snacking? And what is your role of added fat? And we tackle those month through month over time, because it's not easy.

You can't go through this in 20 seconds. I wish I could do it, I may say it in 20 seconds, but it's a complete curriculum. So, you're absolutely right. Keto is a framework to get you to eat in a way that makes you not hungry. Not eating, that's the-- I truly believe that the intermittent fasting and the limitations of snacking and the naturally eating less calories because you're more full, that's the weight loss.

So, I tell my patients low-carb and keto eating is an appetite suppressive... is a way to eat that suppresses your appetite. Then getting full more frequently, eating less frequently and snacking less is the weight loss tool. So, I don't know if that-- I think that's a little distinction there.

Bret: How often do you find people where you say, "I don't think keto is right for you"? "I think maybe you do need to eat more carbs and come out of ketosis." Is that something that you encounter in your practice?

Tro: Yeah, let me tell you when I think it is appropriate and the NLA doesn't. The NLA says don't use ketosis, the ketogenic diets and low-carb diets in severe hypertriglyceridemia.

Bret: So, NLA, the National Lipid association.

Tro: We are now publishing we are nearing submission on a case-series of patients that have dropped their triglycerides by 1,000 with low-carb and eating Wendy's until they're completely full. Just going to Wendy's and getting hamburger patties and cheese. So, that's not the main intervention, I am over typifying it, but, you know... that K-series is pending of 1000 point drop in triglycerides... case-series, sorry.

And we have another case where maybe we think that we had a case of very-- that will also be published, that we are working on... of a patient who had an LDL of 770 and an increase in their calcium score and an increase in their carotid intima media thickness. And they had xanthomas develop and you'd be surprised by the intervention.

This person, if you saw them, their phenotype was like you and me, Bret, like somebody very slim, sixpack or, you know, very slim. Exercising every day. And what it we do? We just periodized carbohydrate to exercise... not much. And we made a slight transition to Omega-3 fats and protein and we literally watched their LDL come down from above 700 or actually incalculable really should say, but probably above 700 to under 200.

Bret: Did the xanthomas go away?

Tro: Well, not yet. And I don't think they will. And why did we do that? We had direct evidence that, "This isn't working for you." He came to us with that. He came to us with LDL 700 right and I think he was looking for guidance and what we should do. And we said there's no evidence that we see that you should continue a ketogenic diet. I mean we have only evidence against that. So, that will be published too. What's that?

Bret: That will be an amazing study, an amazing case to publish. But that goes back to the keto zealot of realizing the limitations and realizing when okay this is not right for you and if you can admit that, that's a vote against the zealotry, which I think is important; to have open eyes. So that's why I asked the question.

Tro: We deal with it with like a clinical trial. I don't know what diet; I wish I knew. I wish I knew I could say eat this for the rest of your life so you can live to 150. So I have to just do my best and admit that I don't know.

And we do our best: we monitor you, we try to keep your weight low, we try to keep your-- these endpoints that we know are pretty good surrogates, we try to make sure they are not going haywire. And when they do go haywire we got to reevaluate. I mean this is a point of having a doctor help you. So, I can give you intellectual support. So we have to give intellectual support. You know, I feel strongly about that.

Bret: So now, in addition to your personal journey and your medical career you also are now a podcast host along with Brian Lenzkes, who has also been on this podcast... with the Low-Carb M.D. podcast you guys are a great team, I really enjoy your podcast. What are some of the either

sort of your most interesting, your most surprising, your most educational memories from the podcast, that you say, this really sticks with me, this really changed something, this really impacted me?

Tro: Yeah, I mean look, I have to be honest with you. You probably see this because you are the chief medical officer of Diet Doctor and you are a podcast host, so you get to appreciate also that you could elect so many brilliant minds. And each time you go on a podcast, you get a brilliant piece of information, or a nugget, or a different way of understanding something.

So, the personal educational value to myself has been amazing. I mean you have Rob Cywes talking about food addiction, Evelyn Bourdua-Roy talking about food addiction and the pragmatic struggles of being a low-carb advocate in a world that is biased against them. When you hear of stories of what Tim Noakes went through and then you hear about the awakening of Dr. Unwin and how he reevaluated his practice and now is reinvigorated and helping countless people.

I mean these stories... And then the patients and the people, you know... We had, you know, Seizure Salad on, who was going to have a lobotomy and found low-carb approaches. We had Palo who had done Optifast again and again and failed and failed and it was just miserable and found the way out through low-carb approaches. And each one of these personal stories from people who have found low-carb approaches that have helped them you learn something from it, a different approach, a different fact.

And these brilliant minds that come on... Nina Teicholz talking about the system against low-carb. I mean, Cate Shanahan talking about her approach in nutrition. And how can I forget Jason Fung? There's nobody better who cuts the BS like Jason Fung and just makes it simple.

You know, I love that he says, is it the food addiction real? I don't know... take your kids down the aisle, put them down the candy aisle and see what happens. You know, like just cuts through the BS. I let the scientist figure out how to make it a DSM diagnosis, but I listen to Jason Fung because he's just going to make it easy and understandable.

So, yeah, it's been such an honor. And Brian, you know, one thing I want to say about Brian is I have not met somebody with such a kinder heart, such a nice person, selfless, and a great mentor role model to me. And I'm so happy that I'm able to help him get his practice up and running now in San Diego doing direct primary care. He is an incredible kind and caring person, all the qualities that I lack. The finesse that I lack.

So, it's been such an honor. You know, the Low-Carb M.D. podcast is like it's been immensely valuable to me and immensely rewarding because I can't reach everybody. The people come to me and say, "Doc, I can't afford you." I say, "Look, you can't afford me, but we have these free townhall meetings and we have this podcast; it's like an educational series. This is something you could start with until we figure out how to get you in. So I feel like it's also a service that I do. So it's been valuable for me.

Bret: That's a great description and your description Brian of course is spot on. He is such a unique individual and such a wonderful person. But I also love how you mentioned Dr. David Unwin, because he's got such an amazing story that he was sort of burnt out, ready to quit his practice because he wasn't seen the benefits he wanted to see and then turned that around with low-carb that just revitalized his entire practice as a physician.

And I see that in Brian, I see that in you, I see that in so many doctors. They're not only learning

personally and helping personally but your whole home professional career is revitalized and more fun and more enjoyable, because you're helping people, which is why we got into this business in the first place.

Whether it's calories in, calories out, carbohydrate insulin, wars on twitter, it all comes down to how are you helping the patients in front of you and how are you helping the hundreds of patients in your practice. And I think one thing that came out in this interview is that that is you to your core and that is your belief and where you come from and everything you do and I really appreciate that and I hope you will get that message.

Tro: Well, let me tell you something, because people question my motives and my conflicts all the time. I took out a massive bank loan to start this practice, okay? A massive bank loan. I have not taken a paycheck from this practice. I have not taken one paycheck from this practice in the two years it's been open.

Not one. Okay? Not one paycheck yet. My wife who people say I have a conflict of interest, because she has a keto baking mix company, which I do... I have disclosed that conflict, I have disclosed it to Diet Doctor, on my publications I have disclosed this conflict. My wife has spent money to make low-carb replacements available to people. My family has spent money to advocate for low-carb approaches.

And we have not seen one profit, okay? We've not seen one paycheck. It's been over two years, three years in planning this physical location... I mean we've been doing remote medicine for four years, but physical locations two years, coming on two years. Not one paycheck. So, I don't know what more I can do than do what I'm doing. So, you know, it's like if we succeed and we're financially viable that'll be great.

Bret: I hope you do. I hope you find a way to make it financially viable.

Tro: I mean, it's not like... I mean the bills are paid for, it's not like we are struggling. I mean we are putting on conferences which had to get closed down because of Covid. We're able to do these things, but it's not like we're rolling in the meat industry funding here. It's not. It's my wife--

Bret: You're right, you had a big New York conference planned in June. So I guess you had to cancel all those plans unfortunately.

Tro: Look, we refunded every vendor and refunded every attendee and it was a big loss to myself, Low-Carb USA and, you know, The Fasting Method, who are all... But we want to be responsible and we want to do things correctly in the safe way. So, I'm not saying this like... you know, like we're in this because we believe in it. Yes, we do get paid from patients, but it's not like, you know...

There is no meat industry money here, there's no massive, you know-- My wife has got this small little tiny online business you know. It's like we are a little practice here. We have maybe 500, 1,000 patients. I'm mean it's like I don't know... I think people think a lot, you have these grand thoughts of low-carb conflicts of interest.

Bret: And you're actually doing something and helping people in other ways, because I know like I'll complain all day long about people dropping off doughnuts at the hospital for the nurses and the doctors as a thank you for working hard. I will complain about that all day long, but I have to be honest to myself, I'm not doing anything about it.

I'm not going to deliver them healthier food, but you did. You and your wife delivered low-carb treats to replace those doughnuts as a way to say, look, we appreciate what you're doing, but please take care of yourself as well. It doesn't mean you can eat all this garbage and then harm yourself. We need you there, we need you in good health to provide this service. So I mean that just shows that you're not just sitting on the sidelines complaining you're taking an action, being proactive and doing something about it, which I really appreciate.

Tro: Yeah, I mean like look, let's be honest. So, I was very critical of the doughnuts. And my wife was like put your money where your mouth is, Tro. And I did, we did... we donated... You know, the Greenwich Hospital system in the Yale network is very meaningful to us. And there's reasons why we supported them.

I got my surgery there very recently, I had a neck surgery. And so is our honor to be able to support them. And they loved it, everybody contacted us afterward. People didn't even realize it was lower carbohydrate and lower glycemic. So yeah, we put our money where our mouth is.

Bret: I think that's a theme for you.

Tro: Thank you for recognizing that. It means a lot. Yes, we are evangelists. We are not zealots, we are introspective, we consider, you know, side effects, we consider you know issues that may-- the limitations to our knowledge. But ultimately yeah, we put our money where our mouth is. We believe in this among, you know-- Yes, it would be nice to get our health coaches consistently paid, which we're doing.

Yes, it's nice to get my front desk staff paid. Yes, it's nice to start- now we are at a point where we can breathe financially. It's not like I'm struggling at all by any means, but, you know, it's like look, we took on a big personal risk and we're still living that risk. And it's because we believe in what we're doing. At the end of the day I want to look at myself in the mirror and be happy with the person I see. I want to go to sleep at night knowing that I did my best. It's selfish.

Bret: It's a great lesson. Selfish, very selfish. I appreciate that. Thank you, I really appreciate you taking the time to be on this podcast. I think we have learned a lot about you and your beliefs and your practice and I think a lot of people are going to walk away with some very clear nuggets out of this and what they can do to help themselves. If they wanted to contact you, hear more about you, learn more about you, how would you direct them to do so?

Tro: The best place is my website DoctorTro.com spelled-out D-O-C-T-O-R-T-R-O.com or on social media @DoctorTro, spelled out D-O-C-T-O-R-T-R-O on Twitter, Facebook, Instagram, we are on all of them. Tik-tok I think we even have so... And look here's the thing, we got free resources. You can afford our program.

The podcast, like you do Brett, you know, we have a podcast with lots of information Low-Carb MD podcast, we have these free townhalls where... you know, they are not medical advice, but we're getting people, hundreds of people come in, we just talk about our struggles and we have like the sermons and they are free for now.

Hopefully we'll be able to keep it free for some more time, but they're just ways to group together, get social support, community support, because I think that's really important. So, these are all the places, you can get in touch with us and obviously we have intensive programs that you can sign up for on my website, medical programs in New York, New Jersey, Connecticut, Texas, where we can medically treat you.

And if you're anywhere else in the States we have health coaches that can manage you, but you know, we're here. I mean, we are busy, we still have a little bit of a wait to get into our practice, but I will get you in if you reach out.

Bret: Very good. Thanks again and keep fighting the good fight and helping your patients and in keeping them central to everything you do. Thanks again.