

VIDEO Diet Doctor Podcast with Lauren Weiss (Episode 18)

Dr. Bret Scher: Welcome back to the DietDoctor podcast I'm your host Dr. Bret Scher the low-carb cardiologist. Today I'm joined by Lauren Bartel Weiss from lajollanutritionalhealth.com. Now as you're going to hear me say this is a special interview for me because Lauren and I actually grew up across the street from each other. How often does that happen? You know somebody practically your whole life, you go to school with them, you grow up across the street and then just lose touch for years and then reconnect over the low-carb lifestyle.

She found out what I was doing and she is amazingly qualified for what she's doing. So let me tell you about it. She got her Masters of nutritional biochemistry from Tufts, then she got a PhD in behavioral nutrition from Columbia, then she became board certified as a clinical nutrition specialist scholar.

Then she's done research with both academic and Pharma-based research and she has her own clinical practice where she's helping teens, she's helping adults and she's helping them improve their lives with a low-carb lifestyle. She has a number of practical tips, a lot from the behavioral side, which we probably don't spend enough time talking about.

So I hope you walk away from this interview with a lot of those little pearls, because she really has a lot of them and she knows what she's talking about, she has a lot of experience, a lot of education and her passion for helping people really comes out. So I truly enjoy this interview, it had a very special meaning for me.

I hope you can appreciate that and enjoy it as well. So if you want the full transcripts go to DietDoctor.com and of course you can go to learn all about our guides and our recipes and meal plans. There is a ton of information on DietDoctor.com. So enjoy this interview today with Lauren Bartel Weiss. Lauren Bartel Weiss, thank you so much for joining me on the DietDoctor podcast.

Lauren Bartel Weiss PhD: Thank you for having me.

Bret: Well, this is a very special interview for me because we grew up across the street from each other. We went to the same schools, we've known each other since we were little kids and then we sort of went apart during college and after college.

But now reconnecting through the world of nutrition and low-carb. Who would have guess this when we were walking to high school together?

Lauren: Right.

Bret: A pretty strange a situation how that worked. But you are training to get to this point in nutrition. It's pretty amazing, I mean a Masters in nutritional biochemistry from Tufts, a PhD in nutrition from Columbia and now a board certified clinical nutrition specialist. I mean you've got the training in nutrition, yet you're not singing the usual song that most nutritionists are singing. So tell us a little bit about your nutritional journey and how you got to the point where you are now with how your helping people with nutrition?

Lauren: Right, so the journey, my nutritional journey has not been linear whatsoever. I think there's been a lot of paths along the way that have gotten me to the place I'm at now as a low-carb... well, I consider myself a low-carb nutritionist.

In grad school I was more of a Mediterranean diet person, but I soon came to realize that the effect that carbohydrates have on our body and on our insulin levels and doing trial and error and myself I decided that low-carb was really the way to go and the way to have long-term success with weight loss and keeping the weight off over long-term.

Bret: Yeah, and you had mentioned, we were talking off-line, how a lot of people in the low-carb world seemed to have this personal journey. Because it's not been taught, it's not taught in nutrition schools, it's not taught in medical school. So we almost have to find it on our own. And that's why I think it's so important for people like you to now be promoting this message, to have the academic certifications and to be promoting the message.

Lauren: Right.

Bret: So when you started your career though after your PhD, you went right into research. So the clinical counseling came later and I want to get into all that. But you went right into research and tell us a little bit about your initial research project, the Omega-3 Omega-6 in hip fractures, right?

Lauren: Right, so my PhD work was-- I was really interested in inflammation so originally how it relates to bone health, the risk of osteoporosis. So I found a data set that had information on Omega-3 and Omega-6 fatty acids and I continued looking at that for my dissertation research. I looked at the ratio of Omega-3 to Omega-6 and how that affected bone health, I looked at Omega-3 intake and fish intake for the risk

of Alzheimer's disease and dementia and then I continued on with the Omega-3s for my postdoc which I did at Rady Children's Hospital.

And I actually looked at the intake of fatty acids in pregnant mothers and the risk of a birth defect, called gastroschisis in the babies and what I found pretty consistently was the benefit of the Omega-3 fatty acids and the detriment of the Omega-6 fatty acids.

Bret: So for the fractures, for cognitive dysfunction and for the birth defects. And you found all three of those related to a lower Omega-6-- Sorry, the beneficial effects would be related to a lower Omega-6/Omega-3 ratio and more likely to be at risk with a higher Omega-6/Omega-3 ratio.

Lauren: Right.

Bret: Is that what you are looking at specifically? The ratio?

Lauren: For the bone density I looked specifically at the ratio and with the Alzheimer's I just looked at the Omega-3 intake. And with the gastroschisis I just looked at the Omega-6 intake.

Bret: So I'm not all that knowledgeable about getting your PhD thesis, but usually I think people do one study. But it looks that you did three studies, all for your PhD?

Lauren: I actually did four studies and I also looked at leptin, which is a satiety hormone that you're probably familiar with. And at the effect on bone density for that. So I did kind of go outside the box and look at different studies just more to get research experience. But all kind of came back to that inflammation theory.

Bret: So you're looking at the data set. So the data has already been collected, the people have already gone through the process, it was observational, it wasn't randomized and you are mining the data for associations. So you have to do what you have to do to get your PhD thesis. You don't have a lot of funding, you don't have a lot of time, you need research experience and you need to publish. So what does that say about sort of the quality of that research though?

Lauren: So I used a prospective cohort study, it's about a 20, 25 year study, so you can imagine the loads of data that you have and the access to the data you have and I was always taught to come up with an a priori hypothesis and not to go on what we call a fishing expedition. So having that a priori hypothesis is super important, but that doesn't always mean that you stick with that hypothesis.

So yes a fishing expedition could happen. I think I was lucky and I really had my theory and my hypothesis ready and organized and I found something that I expected

to find, but as with another large data sets, and we know the issues in nutritional epi, that the observational studies and the cohort studies, it's really hard to assess diet to get accurate measurements of diet and to weed out individual nutrients and how those are related to disease. It's very, very difficult, but that's really all we have now.

Bret: Yeah, and when you're using food frequency questionnaires and looking at data that's confounded by so many confounding variables and healthy user bias-- I get it, you know, we need to get data from somewhere, but the problem comes taking that data and then shouting from the rooftops as if it is fact. So we can say from your study, your study showed an association between higher Omega-6 and hip fractures. It does not prove that Omega-6 causes hip fracture.

Lauren: Absolutely.

Bret: But you could see how, you know, Time magazine or something could run that type of cover. And that's what's happening so much in nutritional epidemiology studies. But then after that you transitioned into working with a drug company on a sarcopenia study. So tell us how that was different.

Lauren: I told myself I would never ever do a drug clinical trial, but somehow I ended up running one and it was a really interesting experience. You have to completely follow a protocol, even when I try to deviate from the protocol or share my opinion whether I thought something was right or wrong, I was knocked down immediately. So it was a little bit of a different experience for me.

But yeah, having everything completely controlled is different than going and analyzing data. You don't know who collected it, you don't know the participants that were involved. So it is a really different experience. Why I did do this clinical trial is because it was a drug plus an exercise program. My justification was if we're going to be doing some kind of exercise with these participants then I was okay doing do it.

Bret: So where they randomized into drug plus exercise or exercise alone?

Lauren: Everybody got exercise and they were randomized into three different levels of the drug.

Bret: I see.

Lauren: And everybody had to meet a certain criteria for protein which is big for sarcopenia and big for older adults. So most of them did not meet that criteria on their own and had to be supplemented with protein.

Bret: What was the age... The average age of the patients?

Lauren: It was above 70.

Bret: So do you remember what protein level you were shooting for?

Lauren: It was the RDA level, 0.8 kg per body weight but the research that I've done they're saying that's just really not enough for older adults.

Bret: So it's interesting, as the requirement should go up as we age, the recommendations don't necessarily reflect that.

Lauren: That is very true.

Bret: So then the quality of the data that comes out from the drug company sponsored randomized trial that was probably funded with plenty of money versus the looking through cohort study that had already been done on a shoestring budget, the quality is a little different in terms of what I can tell you.

Lauren: Right.

Bret: And I think that's what people kind of need to realize about the difference of nutritional research that is out there versus the drug company research that's out there and how the funding can impact it. But also how you are more of a cog in the wheel, I mean like you didn't have a chance to let your expertise and your experience guide how this could be a better study. They wanted it one way.

And the skeptic could say it's because they had it in a certain way to make their drug look better. So the skeptic would say-- yeah, I think it's really interesting. And so you're still on staff at UCSD still doing research, but now you've branched out to do more clinical work and actually help people one-on-one. And that's where your background as a behavioral nutritionist I think probably really shines, because we can talk about what to eat all day long, but if people aren't going to actually take the steps to make that part of their lifestyle, it doesn't matter.

I think a lot of people are unfamiliar probably with behavioral nutrition. I have to admit I was, I didn't realize you could get a degree in behavioral nutrition until we reconnected. And I think that's fantastic because it's so important. So walk us through sort of the thought process of what makes behavioral nutrition different from just nutritional science.

Lauren: So behavioral nutrition is really the link between nutrition and psychology. So as you said you can tell someone what to eat, but how to get someone to change what they've eaten for 10, 15, 20 years is very, very difficult. Not only that you have to educate them on what to eat, but you have to educate them how to incorporate that into your lifestyle. Everybody has different lifestyles.

One eating plan or diet will work for one and not work for the other, but in order to progress somebody to achieving long-term dietary behavior change success it has to be guided by some kind of behavioral change along the way.

Bret: Yeah, and so there are different stages of people being ready for behavioral change or where they are so... tell us about that, so people can sort of learn to sort of internalize this with themselves and kind of figure out where they are in that stage and I'm curious how you approach people differently depending on what stage they're in.

Lauren: So there is really two major theories that behavioral nutritionists use that comes from psychology research of behavior change for other conditions such as smoking cessation or... even for physical activity. You know, nutrition is different because everybody has to eat. So figuring out what to eat and how to incorporate that into your life is not as easy. So there's social cognitive theories which really look at and try to identify beliefs and attitudes about what they're eating, about how they want to be, about what changes they want to make.

So there's a lot of different determinants that can be identified in people as to what's going to create a change. There's health belief model that looks at perceived risk. So what's the risk of not making the change? So I do that with people who have family histories of chronic disease. Someone with a family history of heart disease or diabetes.

I say, look, you have a family history... Your father had diabetes, your grandfather had diabetes. You could be next in line if you don't make the change. So you have to kind of create this risk in their mind and that's a little manipulation but that's kind of what these theories do, is they bring this information out for people to really think about it or perceived benefits, what are the benefits of making a change?

Or the perceived barriers, what barriers do you see that are in the way of making the change? So we work through that and incorporate that into the straight nutrition education. Then you also have the stages models, which you're probably familiar with the trans-theoretical model or the stages of change.

Bret: Yeah, so before you get to the stages, I want to get into that, but this first model you talked about, sort of like the carrot-and-stick model, and I think it's interesting because, you know, read behavioral therapy that are-- or behavioral science that our brains are wired for the negative far more than the positive.

Lauren: Right.

Bret: So do you find that-- the stick... the "watch out this is where you're headed, this is where you could be" works better than the carrot, than these are the benefits you might get?

Lauren: It's really individual, it depends on-- you have to get to know that person and have to kind of get a feeling for what's going to work in that person. Sometimes I try one thing and I'm like, "Oh, that didn't work. I'm going to have to try another thing." So really is getting to know the person and trying to figure out how am I going to motivate them, how am I going to really get this information and then put it to good use.

And it really is a skill which is why I spent 10 years studying behavioral nutrition, because it's not just a book that I can read and say, I will try this and if that doesn't work then too bad. So it really is a skill that I acquired that took a very long time in trying to read the person and figure out which determinant and which motivator or mediator is going to work to get them to say, "I need to make this change", and along the way trying to identify the mediators that will help progress that person through the journey.

Bret: Yeah, the clients who I work with, their individual consulting in my six-month program, I always want them to write down their goals. A lot of people think it's kind of hokey...

Lauren: It's a great way.

Bret: And they are, "Why do I need to write it down?" But it's such an important step like you're saying trying to find their motivator, because it's something you need to come back to over and over again. And for some it could be avoiding the negative and people could be promoting the positive.

Lauren: Right, I always do goal-setting, that's one of the first things I do in my first sessions, it's short-term goal-setting, so goal-setting within a week, and so the next time I see them, I want to know if those goals have been met and what obstacles or barriers did not allow them to meet those goals.

We will go through that and work through that and then set new goals for every week. And hopefully by the end they have all these great goals that have helped them get through for long-term success and then there's always a few longer-term goals that are really more like 3 to 6 months out. And goal-setting is a super important part.

Bret: Yeah, great point about the difference between the short-term and long-term goals, because if all you set are six month or two year goals, it's so easy to get frustrated and give up when you're not progressing.

Lauren: Especially with my teenage clients we do a lot of goal-setting and there are very short-term goals.

Bret: Because that positive feedback is so great if you can achieve the short-term goal, it really gives you more motivation to continue.

Lauren: Absolutely.

Bret: Okay, I interrupted you, you were about to talk about the different stages.

Lauren: Yeah, so I was talking about the stages of change model and that really says that people in different stages, whether they are in precontemplation, or contemplation, or action, they need different motivators. Or we need to identify different mediators that will help them progress through those stages.

So I usually use a combination of all theories and all the mediators depending on what I see my client needs, but a big thing for the stages of change of self-efficacy, in other words for self-confidence. So it's really giving these people the self-confidence that they can make this change, because that's the biggest thing.

Making a dietary change is a huge lifestyle change, it's not very easy. So you have to figure out how am I going to increase confidence, how am I going to empower them to be able to be successful with this change and be okay with being out for dinner or in social settings and sticking to their plan and giving them the tools to get through difficult times like that.

Bret: So you mentioned the precontemplation stage, such as one of the first stage where they're not even really considering the change yet. There is not a whole lot to do at that point.

Lauren: There is not a whole lot to do. Unless there is a risk of some condition, unless there is an obesity or something that needs to be done that you can try to get them through to the contemplation stage. So that basically, they don't come to me in a precontemplation stage.

I usually have to seek people out or I hear, "I have this sleep apnea..." or some condition and I say, "You should do something about it" and then I try to work with them through that. So the other, precontemplation is hard to work with, but it's my goal to get them to contemplation and then to preparation.

Bret: I think unfortunately I see far more precontemplation subjects than you do because they're in with their heart attack or their complications from diabetes or high blood pressure and they are not even willing to consider changing their lifestyle yet. And unfortunately sometimes you have to use that negative as as the motivator but

once they get into the contemplation stage then you sort of get your hands on them, because now they're thinking about it, now it's in their brain. And so how do you help them transition to action?

Lauren: So that's when we start setting goals and talking about barriers and talking about perceived risks and talking about benefits of making the change. So depending on what the person situation is I really try to use those determinants of behavior change to really get them into action.

And then education is really important in the contemplation stage too. Educating them about nutrition and about food and using evidence-based research to really show this is where all the research is and this is where you are and we really want to be in a different place.

Bret: So they've gotten into the contemplation stage, they are starting to think about it, you are educating them, you are goal-setting with them and now it's time for action. So the action stage is more about the logistics like the recipes and how to do things...?

Lauren: Action is like I'm ready to go tomorrow. So that's really setting them up for long-term success. And it is a journey and it is a journey to get there. I have a lot of people that already come in action who have tried many diets, unsuccessful, have tried the keto diet or not doing it correctly, can't figure out what's going on. So I do get a lot of people already in action, I just have to have them take a step back, reassess and move forward correctly.

Bret: Yeah, it's not like it's a linear process. Nothing in life is linear. It's always going to be sort of back and forth and having to reassess and adjust.

Lauren: And the stages of change really incorporate the idea of relapse and setbacks. So there is determinants that are incorporated into that model too that when there is a setback or relapse, they haven't completely given up. You provide them with skills and tools... "Okay you had a little a little hiccup here, don't worry about it. "This is what we're going to do next time you're in this situation, this is what you're going to do."

Bret: Yeah, so if someone is just learning about keto on social media and they are in one of the social media sites where everybody loves keto, everybody loves low-carb high-fat, it's the best thing ever, you'll get all these benefits and then they start it and they don't necessarily see all those benefits at first, and they are going to get frustrated and they're going to give up. So that's where someone could benefit working with someone like you, because you would-- how would you prepare them for a different course?

Lauren: Well I mean I would explain to them that "You are not going to lose the 20 pounds in the first week." And with my keto clients now I'm in daily communication with them. They need to now-- I check in on them, I have a few saying, "We're not losing weight. I've been on it a week", and I have to keep them motivated and tweak things if they need to be tweaked but you have to keep them motivated especially in the beginning if they're not seeing the immediate effects and that's why I do what I do.

I love doing that, I don't mind being texted at 9 o'clock at night-- "I'm at this restaurant, there is nothing... what do I do?" Or, "I am not feeling that great". I like to keep them motivated and that really is an important part and really close to my heart that this is an individualized, personalized approach. And to get some people through it, I just have to be there for them until they can really go on their own and as I talked about having the self-efficacy to take it and run with it.

I love that passion, I love that commitment and that's certainly not what you'll get if you just ask your local doctor for nutritional advice. So speaking of which, just jumping around a little bit, you actually taught nutrition in medical school. If you want to call that, the way you describe your experience sounds like you're extremely limited on what you can do. Tell me about that experience.

Lauren: Right. I taught the only nutrition class at this certain medical school, and I was given 15 minutes to talk to 2nd year medical school students, basically about nutritional epi. There really wasn't time to go into anything about food, anything about insulin, anything about carbohydrates. It was basically different study designs that you can use for nutrition studies and different dietary assessment methods.

And that was basically it. I did sit in on a couple of small groups which where they bring in the simulated patients, they bring in an obese patient and the students have to assess the patient and the patient leaves and they come back with dietary advice. And I was just blown away by some of the conversations that the medical students were having with these simulated patients because there was no basis for the information. And it just really bumps me out, that these medical students are not getting more nutrition education.

Bret: But then you've mentioned that they've started to ask for it, is that right?

Lauren: Yes, I did read recent study that Harvard did and they've asked the medical students about having a lifestyle medicine incorporated into their curriculum; seems that everybody really wants it, because doctors are going to be asked about nutrition.

And if they don't have the right education, they really shouldn't be giving this information to people and they should be referred to dietitians or to nutritionists.

Yes, it seems that medical students want it, I just don't know how they're going to ever figure out the place to put it in medical school curriculum, unless it's totally revamped.

Bret: And what to teach in that segment? I mean a lot of the big push now is you have to teach a vegetarian low fat approach, and if that's what medical students are being taught as the one way to eat for health, and you're almost better off not teaching them at all. That's sort of a double--

Lauren: This is very true. It's very hard to get a really good education in nutrition stuck into a block somewhere in medical school. I think we have a long way to go with that, but hopefully we'll find the solution and really try to incorporate nutrition maybe into the different blocks, maybe a few nutrition lectures in the different blocks as it relates to that disease condition or that organ system.

Bret: Like the diabetes discussion has to have a low-carb nutrition... part.

Lauren: It has to have a low-carb nutrition part. It's a long way, and people I know are working hard, to go in that direction.

Bret: When you first were saying like the only class you taught was about the different types of studies in epidemiology, my first thought was like what a waste, but I guess if you only have 15 minutes that's probably the best thing to talk about because then hopefully you're arming them to make the decisions on their own. As long as they're not indoctrinated so deep in one dogma that they can't see, can't think on their own, interpret these studies on their own.

Lauren: Right, it was more on these are the types of nutrition studies that happen, these are the strengths and limitations of the different study designs, here's the strengths and limitations of the different dietary assessment tools, so at least it gives them some kind of skill when they are reading the nutrition literature to be able to critically think about the take-home message for those research papers.

Bret: Being published in peer review journal does not mean it is worthy of changing our life around and saying that this is the one way to do things.

Lauren: Right.

Bret: Yes, okay. Well, transitioning back to the more practical side of things... You're mentioning how you're constantly helping your clients sort of change and to understand that is not one straight line process which I think is so important. But what are some of the biggest road blocks you see in your clients, the road blocks to sort of get started and then once they've been added for like six months or something

and starting to slip a little bit. Give us some of the common road blocks you see and how you can help people through those.

Lauren: Right, a common road block, I think in the beginning it's just pure education, and knowledge about the different types of eating plans that are out there, talking about their goals and what kind of plan would fit in with their goals and fit in with their lifestyles. Upfront it really is about educating, and then once things get rolling, then we talk about the other barriers; time, money, family commitment, social commitments, there are really... I call them pros and cons, the cons being the reasons why I don't want to make the change but they're really excuses for not making the change.

I do a lot of pros and cons, this is called decisional balance kind of deciding which is the better way to go to list the pros, and these are going to be the benefits. Or to list the cons and be okay with, well it's just too hard, or I don't have time, or carbs are easy to get and cheap. And I go through those cons with them, and try to work through them, and turn them into pros.

Bret: Yes, and then you see some other things, when someone has been added dietary change for three months, or six months or is it sort of a new set of issues that popup at that point?

Lauren: Usually there are new sets which is why we completely set new goals. Almost every week we're setting new goals, and sometimes there are relapses and we have to work through those too. I think that social gatherings, family vacations, I think those are some of the big road blocks that we have to work through a lot. Travelling is very difficult, those are important road blocks that need to be addressed hopefully prior to the vacations, or the travelling, but sometimes they happen after and we have to reset.

Bret: And now you've gravitated to a mostly low-carb approach, but not necessarily for everybody, and definitely not keto for everybody and you see like a range, and you really approach people as individual. Give us some of the guidelines you use to say how do you decide what carb level is right for somebody or how aggressive to be with the low-carb approach.

Lauren: I am definitely a low-carb nutritionist; I don't advocate anything except some version of a low-carb. I discuss keto with people, most people are coming to me saying "I've heard that keto diet is fabulous, I want to get on it." When they leave, and I tell them how strict it is and how motivated you have to be, and that is really restrictive, a lot of them say, "I can't do this, what are my other options?"

Then I go into a low-carb Paleo, which is always an option, or a low-carb Mediterranean which is an option, so I do take some of these more popular eating styles, and just make them more low-carb... I'm big on low glycemic index. I think that most of my clients that come in and want keto leave doing more of a low glycemic index eating plan, because it's just better for their life style.

I basically have to figure out their lifestyle, figure out what they do on the weekends, and whether this eating plan is maintainable for them, and when I get someone that says, "I just can't give up my beer on the weekends", I have to re-think that, and find another plan that's going to work, keeping them on something five days a week, and letting them slip a little bit, teaching them how to slip correctly, and hopefully then having success with that. It really depends on each individual person.

Bret: Yes, it's so interesting. Every time I hear someone like you just did say, keto diet is very restrictive and very limited, and for the people who works for, it's not restrictive or limited at all. They like love it, they can't imagine any other way, but in our society, in our average society, it is extraordinarily restrictive and limited. But really shouldn't be, I mean it shouldn't be sort of the default, but our society has twisted that completely around so that it appears so restrictive.

Lauren: Right, for my keto clients that are successful, they absolutely love it and they couldn't think of eating any other way. For those, I'm not sure that keto for the long, long term is good for them, it just depends on the person, and whether they can sustain that lifestyle. For those people when they're closer around their goal, we try to find another low-carb version of another eating plan that they can incorporate without having the weight gain, but it's trial and error, it's not always going to be a perfect science. S

Someone could get off of keto stay on a low-carb diet, still gain a little weight back. It takes a while to figure out what works for somebody, and whether they're going to be happy with their lifestyle and eating lifestyle that they're choosing.

Bret: You also work with two different population sets which I imagine take a completely different approach, because you work with adults, and you work with teens. I imagine teens are a whole another species when it comes to nutritional changes, because their friends are going out for pizza and ice cream and they're having sodas with lunch every day, and their friends are-- and there's probably a lot of peer pressure and social pressure and a whole another mindset. How do you approach teens differently?

Lauren: Teens definitely have to be approached differently. Not only that I have to work with teens but I have to work and convince the parents that what I'm doing with

their teenagers is going to be beneficial. I have a lot of teens coming with, "My parents want me on the keto." And then I have to explain to them what exactly the keto is, then when your friends are out at McDonald's or having cupcakes you just can't participate, and I had a couple of clients saying, "All of my friends are eating cupcakes. I pulled out my seaweed crackers or something."

Bret: That's impressive.

Lauren: Right, so it just needs to be a plan that teenagers can withstand through social pressures, and through just being a teenager. I don't advocate keto diet for teens unless there is some major weight issue, and the weight needs to come off pretty quickly. But they have to be super motivated, the parents have to be on board, everybody has to be on board for something like that.

Most of my teenagers end up doing either a low carb Paleo, or a low glycemic index, which allows someone to enjoy a cupcake if they want to enjoy a cup cake with their friends, just knowing that you're going to have to find a fat somewhere to eat it with, and you may have a little bit of a blood sugar set back that day. But I educate these teens, they know what happens now when they eat something with the high glycemic index carb. They are aware, "I just ate in 20 minutes, my blood sugar is going to spike and I'm not going to feel that good." They have to make those decisions.

Bret: That would be really important connecting with teenagers and adolescents, connecting them with better understanding of how they feel and how's that related to their actions, because most of the time most people probably don't have that much of a good body awareness and cause and effect. "I feel kind of lethargic and tired, I probably just didn't sleep last night" as opposed to "I just ate a bunch of junk 20-30 minutes ago and that's why I feel bad."

Lauren: I do educate them on a biochemistry, biochemistry one-on-one. I do educate them in teenage terms, this is what happens to your body when you eat the different food. These are the food we need, and I think that that really helps. I mean we do a lot of behavioral interventions with teenagers, a lot of goal-setting, a lot of getting over the obstacles, a lot of them text me "I'm going out to pizza with my friends, what are my options today?" So we work through a lot, and I have to be there for them too.

Bret: Yes, and I remember you mentioned difference between like one-on-one consulting and group consulting. And how group consulting can be so beneficial for teens because then they see that connection. "Oh, yes, here's someone like me doing this." It gives them that sort of connection of building a community. Do you still do that a lot, group consulting with teens?

Lauren: I only have either two on one, so usually someone brings a friend. And they have someone to work with and someone to shoot ideas off with and then group setting are really good unless someone really wants to come in and see me alone which is kind of boring when you're not with a friend. I see mostly groups of teens, and they can all learn how to eat healthy together, I don't chose people out for what their goals are.

The goals they work with me are personal goals, they're not really shared with the group unless they want to be shared. But the overall nutritional education and working through some of these obstacles, they're basically the same with other teenagers.

Bret: And then how about athletes? Because I know we were talking before you saw a couple teenager water polo players and they actually wanted to go on a ketogenic diet, but you sort of talked them out of it. Tell me about your approach with athletes and how's that different as well.

Lauren: I think athletes are a different group. I think that if they are athletes, if they're not marathon runners, they can survive off some kind of modified low carbohydrate diet. I know when I was at Tufts in grad school and everybody became a triathlete, I said, "Okay, I want to become triathlete too" and I was working out three, four, five hours a day, and then go into Jumbo Juice and getting a smoothie and a bagel, and I couldn't figure out why I was the heaviest that I've ever been.

There is education for athletes, that there is a fine balance, and yes you might need some healthier whole grains and some lower glycemic index carbs to kind of get you through your sport, but the days that you're not really exercising a lot, you don't need to be carb loading.

And I think that this whole carb loading issue came about from marathon runners, but a lot of athletes think I absolutely have to carb-load and those recreational athletes really don't need that. Everybody is individual, I have to see how much energy has been expended, how quick they need the energy. And then on their off times I tried to get them to a low carbohydrate plan, if weight loss is a goal.

Bret: I think it's a good approach, selective carbohydrates right before a big workout or a competition and the maybe right after and then the rest of the time trying to go for a lower carb variety. I think it's an interesting approach, and again teenagers and adults probably eat a little different because for that teenager that football game will be the most important part of their life at that moment, where for an adult, they workout at the gym not quite the same emotional connection to it.

Being at your absolute best might not be the requirement. You can do that workout fasted or low-carb as an adult, but as a teen you may need those carbs for the extra energy. When you were talking about carbohydrates you've mentioned healthy whole grains and I think it's so interesting how it's almost become one word "healthy-whole-grains". I want to explore that a little bit with you. It's interesting when you look at the research of whole grain; give me your idea or your understanding of the research of whole grains, and what makes them healthy whole grains.

Lauren: Well the reason I call them healthy is they contain some important nutrients and fiber as a big one that I see on a keto diet. Some people are having issues related to not getting enough fiber, they are not going out of their weight with vegetables. Incorporating whole grains into a lifestyle the correct way on say low glycemic plan is okay, however the glycemic index of most whole grain is still very high.

Finding the right place for them, if they are required, because they do have important nutrients especially for the teenagers. I don't know if whole grains are required if you really seek out the nutrients that are in whole grains in other types of food. But fibers might be big for the whole grains, and that's really important to be getting regular fiber.

Bret: It's a good point, because I think an adult who's going low-carb and keto might be much more conducive to eating just a plethora of vegetables to get other fiber and get other nutrients, whereas a teen, might not, they might not want to do those vegetable, it's going to be a challenge to get them in them, so maybe they do need the whole grain from that standpoint.

And that's also interesting about whole grain research, if you compare to refined grains it's going to show a benefit. But, it's never actually been compared to a low-carb high vegetable, high meat kind of a diet.

That comparison hasn't been done. I think it's so interesting, but again the age of the patient might make a big difference. And fruit as well... fruit is promoted as healthy, and nutritious, and I'm sure a lot of the teenage athletes are having fruit with every meal to get their carbs. And again if your goals are athletic performance, maybe that's okay, but if your goal is weight lost, you approach it differently.

Lauren: Absolutely. I think fruit is sugar no matter in what form it comes in, it still increases our insulin, it still does the same thing as a normally carb does. I'm more on the keto bandwagon, the berries are super important, they are great sources of vitamins and minerals, antioxidants, I think there's a place where they are lower under glycemic index.

In terms of the normal adult, if they want to incorporate some fruit into their day, you can have some of the berries, have them early and teenagers especially if they're exercising, I think that fruits are an important part of their growth and development, but I think you can overdo the fruit thinking on I'm eating only fruit, because it's really healthy, and it actually is a carbohydrate.

Bret: Right, giving you sugar, insulin is raising and gaining weight, right. You said early in the day, tell me more about that, because that's a very important concept.

Lauren: It took me a long time to get to this plan that works for me and now I advocate to my clients. If I'm not doing keto which happens sometimes I develop this plan, after three o'clock is my last any type of basically carbohydrate meal. At three o'clock I can have a snack, if I want the carbs, the lower glycemic carbs I allow myself.

Usually I don't want them, but if I have to have them, or I want a bowl of fruit or something at that point, three o'clock is my last time. And the theory behind that is by five or around five o'clock my blood sugar, my insulin level have now tapered off, they're enough stabilized, and then I eat my dinner, basically a keto dinner with a glycemic index under 20 which I developed myself calling a very low glycemic index.

So, if you're eating a food which is basically a protein and green vegetable because there's really nothing left to eat. If you're eating a glycemic index under 20, then your insulin is low, and you're not building the fat basically while you sleep. It's kind of a mechanism to either not build or try to lose some fat while you're sleeping.

Bret: Yes, good point. And the research actually here at Salk Institute was such impounded in the circadian rhythm of our insulin cycles basically and that we're more insulin sensitive in the morning, less insulin sensitive in the evening and that makes sense as well.

Not only from a social standpoint, because if you don't have that restriction, you can snack all night long with carby food, or certainly kids could but you said that restriction is more in line with our circadian rhythm or insulin and keeps you from snacking any healthier food at night. I think it's really helpful, so you can burn that fat while you sleep.

Lauren: Right it's a really good plan for teenagers because they know if they're going to be studying all night that they can't be snacking on the goldfish and snacking on the chips. Coming up with creative low glycemic index snacks after dinner is difficult, but we do find some that teens are okay with it, and it really does, because they're snacking all night when they're doing homework, so it really is coming up with the plan for them and that 3pm cutoff seems to work.

Bret: Yes. Now with the lot of clients weight loss is sort of the biggest goal, but you also have clients who have trouble with weight gain or they feel better on the keto diet, but they're actually losing weight and don't want to, and you have to find tips for them to maintain weight? **Lauren:** Yes, definitely. I mean if I go on a keto diet for an extended period of time, I'm in a weight that is too light and not comfortable where I want to be.

It does happen the other reverse but it's finding ways to maintain that balance and everybody is different, and that's when I try to transition them to maybe a low-carb Mediterranean or a low glycemic index. It's different for everybody, people who want to stay on the keto, then I've got to figure out a way for them to eat or eat more, or get some more fats in. But it is difficult to get someone to gain too much weight on a keto diet.

Bret: I try to find macadamia nuts or any salty nuts is a great source of a snack for extra calories, but then if you're not trying to gain weight and you have that as a snack regularly, it's a huge impediment to weight loss.

Lauren: Right that's something I found with the keto diet, which has been little frustrating for me is all everybody talks about the saturated fats. I can eat eggs, I can eat bacon, I can eat sausage but there is not-- And my feeling there is not enough emphasis on the healthier fats.

They're harder to get, the Omega 3s, the mono and saturated fats like avocado and olive oil, it seems like those are not as readily used on the keto diet and I feel like those should be emphasized because they're just better for our health, and they give us more health benefits. I'm not anti-saturated fat but I think there definitely should be a balance of the healthier unsaturated fats with the saturated fats.

Bret: Yes, it's interesting and I think that's a great point that you make. I have a little trouble with healthier fats/ unhealthy... because it implies that the other fats are unhealthy which I don't think is what you're saying. But I think that's the implication most people get, if those fats are healthy, then the other fats must be unhealthy right? That's not necessarily the way it is.

Lauren: Some of the unsaturated fats just have additional benefits. Some monounsaturated fats are cholesterol lowering, or increase your HDL level. so there are additional benefits to the unsaturated fats and I just don't feel like there's enough emphasis in the keto diet that we really need some of these unsaturated fats and we need to kind of balance out the saturated with the unsaturated.

I don't think that saturated fats are unhealthy they're certainly better than a carbohydrate, but I think there are options and balance that need to occur during a keto diet.

Bret: Yes, it's interesting to put ourselves into perspective of someone who's learning about a low-carb keto diet for the first time, where they're going to get the information from and what that information is. It could be so variable depending on where you're going, social media or in the news. A lot of time it is butter, baking, cream, cheese and that's all it is. For some people that's fantastic but for other people that might not work as well.

Now let's transition for a second away from your role as a nutritionist and as a scientist, and in your role as a mom. You've got two daughters, who are very active and athletic and are kids, and will probably eat like kids, and act like kids. How do you balance that role as mom, letting your kids be kids, but knowing what you know about the nutrition and the science and want your kids to know that as well?

Lauren: Yes it's an interesting balance. I certainly do not advocate low-carb eating plans from my active children but we do on most nights of the week eat low glycemic. There are some nights, like today it's a no carb night, and we're just not doing the carbs, and we do the protein and vegetables, and they're okay with that and they understand they know what mommy does, they know what mommy looks like, they know that mommy is healthy.

I approach that in a very delicate way, I don't make a big deal about it, I don't talk about bodies, or weight or anything. But they do know what carbohydrate does, they're probably one of the two most educated 8 and 11 year old girls in nutrition, they could probably sit here and do a really interesting podcast for you one day.

Bret: We might actually do that, yes.

Lauren: But they understand what happens, they know about insulin, they know what carbohydrates do, they are educated and sometimes my eight-year-old would say, "I'm just not going to eat my carbs today." But not in a negative way, I think there is ways to approach that. I watched Peter Attia's podcast talking about his daughters.

That was interesting, my daughter and I actually watched that podcast together, and it sparked a conversation about the different eating plans. He said his daughters think he's crazy, my kids sometimes say, "Just eat one bite of this cookie." And I am like "I don't want it." "Come on, one bite is not going to hurt you."

You don't want to be crazy about it, but I say, "You know what? That's my rules." And they're like, "It's only 3:05" and I'm like, "It's after three. If I allow 3:05, then I allow

3:30, and I allow 4:00, and this is my rule." They have fun with it, I don't think it's going to develop any unhealthy eating issues but they're very educated. We had dinner the other night and my daughter said, "Who would ever dream of being a nutritionist for a job?"

Bret: She said that?

Lauren: I have no idea where that came from, and I said "You are so lucky that you have the knowledge you have about food and nutrition because this you can care with you for a lifetime." I said "People never learn information that you have, and how to stay healthy, and how to be fit and how to be a great athlete". I said "You guys have a really big advantage."

Bret: And you present it in a way that's great, you don't make it a struggle, you don't make it a you have to do this, you make it more of education, which I think is so important. And that's one thing I thought it's so interesting with my interview with Peter Attia, which was our second episode on the DietDoctor Podcast, but he said he wanted to stop being keto because he thought his daughter saw him as like a freak that he was doing this, and he was crazy and if she's going to have a cake, he's going to have a cake.

And I thought that's interesting, because you could look it in two ways; you could also look at it just as a teaching moment, to say "I chose not to do this for X, Y and Z" and you make your own decision. You can approach it, in other way, I respect you for making that decision.

Personally I take the other approach, and my kids know, daddy is not going to eat cake, daddy is not going to have ice cream, daddy is not going to have that. And, that's okay, I don't say, "You shouldn't have it either." Just say "This is my choice, and this is why, and you guys make your own choice." It's an education... they frequently ask me as they're eating their cake, "This have a lot of carbohydrates? This is bad for me?", and I'm like "Oh, yes..." as the the scoop goes into their mouth. But it's a process. You have to start somewhere.

Lauren: It's a process and loading them with the education will really help them in the future and without restricting kids at this point. You'd have to approach it very sensitively and I'm in your camp, mom is not going to eat that, I'm sure it tastes really good... so "Enjoy it."

Bret: And then again, for the parents that don't have the knowledge or the time, or the interest, you got to feel for those kids because they grow up not knowing anything, just all they know is that low fat milk they get at school, and the vending machines they get at school, and the chips, the Fretaleze and Chitos and whatever it

is. And that's why we have so many people that we need to work with as they get in adolescence and adults, and I wish there was an easy way to change it when they were younger.

Lauren: Unfortunately we grow up after food guide pyramid with the 6 to 11 servings of grains a day, and that's kind of how we grew up, that's how our parents grew up, and they don't really know anything different. And it's going to take a lot of time and education to change people's thought process about that.

And hopefully this low-carb movement and these low-carbers are really going to help expedite that process because there is a major weight and obesity problem and not only in this country but in this world, and how we're going to approach it, and try to change it and fix it, it's going to take just as many years as it took to develop 30 years of guidelines telling us to eat the carbohydrates. I'm glad to be part of this process, and I hope that I can really impact as many people as I can with my journey and with my knowledge.

Bret: I think that's a great place to end at, I mean your passion, your energy and your knowledge is very clear and hopefully you'll help a lot of people along the way. Again thank you so much for joining me and again where can people find you to learn more about you?

Lauren: Lajollanutritionalhealth.com is my consulting business.

Bret: Alright, very good Lauren Bartell Weiss, thank you so much.

Lauren: Thank you.