Diet Doctor Podcast
with Dr. Roshani Sanghani
Episode 54

Dr. Bret Scher: Welcome back to the Diet Doctor podcast, I'm your host Dr. Bret Scher. Today I'm joined by Dr. Roshani Sanghani and she is the founder of Aasaan Health in Mumbai, India. Now, she's a US trained endocrinologist who specializes in type 2 diabetes as well as metabolic disorders for women and founded this clinic where her focus is not on medications, but on getting people off of medications by using lifestyle therapy.

Now, she's also gone on to get her training as a personal trainer and in meditation, so it's clear she takes a very broad approach to help people transform their health. But as you'll hear in this interview, she has a lot to overcome in terms of the culture in India.

Whether it's the multigenerational families or the culture against protein and meat and how she can help her patient overcome that and show them the benefits that she can get by improving and reversing type 2 diabetes, improving PCOS, helping with weight loss and so many other benefits that she finds from low-carb intervention.

She's a bit of a pioneer, it sounds like, in India, so I was fascinated to sort of get her story about how she came to be and how she integrates her practice with the Indian culture. So I think you're going to learn a lot especially if you like Indian food, if you're from an Indian culture or if you just like knowing how different ethnicities and different cultures approach low-carb. And I think this is going to be a great episode that you'll enjoy.

And she has such a warm, kind and generous manner about her that it's hard not to really root for her especially how she's helping her patients. So, enjoy this interview with Dr. Roshani Sanghani.

Dr. Roshani Sanghani, welcome to the Diet Doctor podcast, it's a pleasure to have you here today.

Dr. Roshani Sanghani: Thank you so much Dr. Bret, I'm so excited to be here. I've learned so much from Diet Doctor, so it's awesome to be here.

Bret: Oh, I'm glad to hear that. We're excited to learn a lot from you today. Now, low-carb... we talk about low-carb all the time and keto all the time, but one thing that we have to realize is it's not the same for everybody. It's different depending on a person's personal beliefs and of course their cultural beliefs, how they were raised, where they are living and that's one of the reasons I'm so excited to talk to you today.

A US trained endocrinologist in Mumbai dealing with the population in India, which I'm sure has some of its own challenges when it comes to low-carb. But before we get into all that, give us a

little bit of your background. How you came from India to the US to get trained, then back to India. I am really curious to hear more about your story.

Roshani: Yes, it's been a globetrotting life. I had a record of... every decade was in a different continent. I was actually born in Chicago and... yes, and I grew up in the 70s in the States and early 80s and was in Chicago until I was about 10. And then we moved back to Mumbai with my family as a 10-year-old back in the 80s.

And then I stayed here in Mumbai, finished my med school and after that decided to come back to the States for residency and higher training. And that was fantastic, I felt like I was able to get a lot of rigorous medical training in India and then apply that to a very nice structured learning environment in medical residency in the US; I was at Cook County in Chicago.

Bret: Oh, okay.

Roshani: And that was a lot of fun. And then I went on for my endocrinology fellowship also in Chicago. And after a couple of years of practice came back to Mumbai and I've been practicing here since 2011 now.

Bret: All right. As a trained endocrinologist focusing on diabetes, on thyroid, also having focused specifically with women, is that correct as well?

Roshani: Yes, a large population comes to us with polycystic ovaries, you know, PCOS, and irregular periods basically or abnormal hair growth and they come because it's a hormone imbalance and being an endocrinologist means I'm super specialized as they say in India or super trained in the hormones.

Bret: So, when you were going through your endocrinology fellowship in Chicago, did anybody talk about low-carb? Did anybody talk about keto?

Roshani: No, not at all.

Bret: So, this is something you had to learn on your own then. So tell us how that transformation happened and how as a practicing endocrinologist who has taught nothing about this, how did you come to realize, "well, this is a powerful tool I can use with my patients"?

Roshani: Yeah, you're so right to catch that because I didn't even realize... I had blinders on. I thought I was a well-educated evidence-based doctor and I used to take a lot of pride in saying I'm an evidence-based doctor. I used to put it on my LinkedIn profile, you know, and then what actually happened... and I grew up in that same 70s and 80s when carbs were everywhere.

So, I've eaten carbs, lots of them, unknowingly and I don't think that being a doctor means you're really qualified in nutrition. I learned that also later. So, what really happened was in 2014 in India.

I was practicing and I had a general preference to be low-carb. I'm not really sure how that happened, I didn't have any health issues, except for just maybe some stress related I think, because my food had been unchanged when I moved and there was nothing really going on when I moved from the US to India, but my HbA1c spiked up to 6.1.

Bret: Wow! So, in the pre-diabetic range. Not quite diabetic, but certainly not normal.

Roshani: I reached into pre-diabetes and I thought this is not funny. I am an endocrinologist, you

know, and I had no issues in pregnancy. Both my pregnancies... gestational nothing, you know, I passed all the tests... There was no diabetes there... so I was like, "What's this?" And I figured it was stress related, so I didn't really changed my food patterns.

I just went back and sort of cleared my head out and things and started exercising. But the low-carb thing I actually learned from a patient, oddly enough, because it was 2014 and his HbA1c was 16.7%.

Bret: Wow, that's about as high as I can possibly imagine.

Roshani: I really thought... And he was walking, talking and, you know, he'd been sent to me by his physician saying, "Refer to endocrinologist, refusing insulin." And so we had this chat and he said, "No, doc, I'm not going to take more insulin." I was like, what am I supposed to do? I had my blinders on. And I was like, "I've given you four different pills. Now the algorithm for treatment says I have to write insulin for you. Your pancreas must be burned out by now."

This is what we were trained to think, that diabetes is chronic and progressive. And he said, "No, I'll do anything." And I said, okay fine, you know... I had some understanding of what my diabetes educators used to do in the US because I wanted to learn that before coming to India. So I actually trained in diabetes education.

So I said, fine, let me talk to this guy about his nutrition. And he was eating like 4 chapatis, you know, four Indian rotis or like Indian flatbreads per meal. Which is wheat. I said, you know, "You're on four chapatis and four medicines a day "and you're refusing insulin and your diabetes is sky high. So can you reduce your chapatis?" And he said, "Okay, I'll do that."

And he came back a couple of days later because I was really worried about him, I called him back again sooner. And his blood sugars have dropped from like being in the 350 range he brought his blood sugars into the 180 range just by going from four chapatti to two.

Bret: Wow! That's impressive. Those were some powerful chapatis.

Roshani: Powerful chapatis. And he then proposed the idea to me. He was like, "Doc, I will go to one chapati. I want you to reduce my medication." I was like, if his pancreas is burnt out, how's this going to work? But he did manage to bring his blood sugars down, so his pancreas can't be all that dead, you know.

And I was sort of thinking this through in my head without any textbook guidance at all and just basically listening to the patient passionately trying to convince me about it, and I said, "Okay, let's try it, but you got to stay in touch with me because I'm worried about you."

And luckily, you know, he came back with one chapati and we managed to like avoid insulin all completely because he said, "I'm just going to stop chapati. I don't need these. I don't want insulin injections."

Bret: That's a pretty powerful patient experience and I like sort of how you reference it that there was no textbook guidance. Like you were kind of flying by the seat of your pants to work this out. But the crazy thing is literature does exist for it. Like there have been studies written about it, there have been clinicians who have been doing it for... while you were doing this and decades prior.

But it wasn't really talked about in the medical community, so you probably felt a little bit alone and then once you discovered sort of this low-carb community, I'm sure there was like this awak-

ening. So tell us about that when you discovered other doctors were doing this, other dietitians were doing this. And it's a thing. It's not just something that was created.

Roshani: Absolutely. And so there was the awakening. There was also a lot of guilt that all men, I have sat and had so many conversations telling them that insulin is the right treatment for them because they had such an emotional reaction. And you know, you go to doctor meetings where there is a lecture series on insulin resistance and a lecture series on injection resistance. And now I realize that yes, I am glad I listened to the patient and thank God there are other doctors who also believe this and other health professionals.

And then I think when you start sending that signal out, you realize you're not alone. And so 2018 is when I found Dr. Jason Fung's work and Diet Doctor so I kept doing low-carb with patients. I was like, "If you don't want insulin we need to get to low-carb."

So, that became a very big part of my practice. And I started to be known for that in the city also. And so nutritionists who were very interested to have a supporting doctor because sometimes it's a mismatch that the nutritionists would want to do low-carb to get them to lose weight, but they can't, because the physicians medication list would cause hypoglycemia, would cause a low blood sugar reaction. So the nutritionist would be stuck. So it was nice to meet like-minded professionals and talk about this.

Bret: Yeah, it's such an important point. And anytime anybody hears a podcast or reads information, it's always for general information, not direct medical advice, but we have to sort of emphasize this here. Anybody who's on blood sugar lowering medication, who goes low-carb with their nutrition is at risk of having severe dangerous low blood sugar levels.

And that can really turn people off to a keto diet or low-carb diet, saying, "See, look, it almost killed me." But that's just because it works so well. It works so well that it can actually lower your blood sugar, so you need to come off or lower your medications. And that's where working with someone like you is so important.

But again, not taught in endocrinology residency. Hopefully starting to be talked about a little bit more at The American Diabetes Association meetings or maybe some of the European Diabetes Association meetings. Hopefully starting talk about it, we've got our continuing medical education courses at Diet Doctor designed to instruct physicians about it.

So, you became sort of the beacon in India, it sounds like, for people to come to, to work with, because you had the knowledge that others didn't. So, did that sort of help you develop the practice even more? Did people refer patients to you?

Roshani: Yes, and you know, putting ourselves on the map with the Diet Doctor website and the IDM website, both of those helped people in India who were looking for low-carb physicians, reached out and contacted us. So, the Internet has really changed things and, you know, to credit, there are many physicians in India I've met now, dermatologists, pediatricians, anaesthetists... low-carbers, who understand this now and so I'm yet to find more endocrinologists or diabetologists.

There is this field in India called diabetology. And I'm yet to meet people who are mainstream in treating diabetes come to this side of the low-carb world, but it is growing. And maybe it's sometimes that the physician has gone through their own health experience where the guidelines, 'didn't work on me'. And then they were looking for answers. So sometimes it's been through

their own personal experience. But yes, I think the community's growing and people are able to find us now, thanks to the Internet.

Bret: That's great, yeah. And I think you're right on, that most doctors either have to have the personal experience or a profound patient experience or two in order to have the 'aha' moment. And that's where we're trying to get away from that, it doesn't have to be that slow progress, but we can serve disseminate the information, which is why having you on a podcast like this is so helpful and hopefully many endocrinologists will sort of take note.

But as you've built the popularity of your practice and of using low-carb, I'm sure it's not without its challenges. So challenges from within the medical community and challenges from the population in general. So give me a sense first of the medical community in India. Do a lot of people sort of look at you and think you are crazy? What you doing? Like what is this wild woman doing? Or is there more acceptance?

Roshani: Yeah, so I'm so glad you used that terminology, because that's what happens. People have said, "She's okay, she's unconventional." And I'm like, "You know what? That reminds me of Mark Twain's quote." Is that if you're on the side of the majority you need to reconsider, you know, I'm paraphrasing. But if you're doing what everybody else is doing, maybe you should reconsider.

So, I take that as a compliment, if someone says, 'she's unconventional'. You know, but I actually in 2014, after I learned from this chapati experience, I tried talking more and more aggressively and I used language like 'reverse diabetes' and I gave a talk saying 'reverse diabetes' in 2014, which was aimed at a physician doctor audience. And I got some flack or making bold claims.

And something that was told to me was what if someone hears your talk and suddenly eats a lot of mango because they think they reverse their diabetes and their blood sugar goes high... we'll get into trouble. So don't say stuff like that. You know, it'll take time. I'm okay rubbing some shoulders wrong because maybe this will groundswell from where the patients are coming, maybe the physicians... and I feel it.

You know, when a physician hasn't been trained in something it's like that cognitive dissonance where it's really uncomfortable to process the conflict.

Bret: Yeah, it's hard for people, especially physicians I think, to admit that we've been wrong in our teachings and we don't know everything and we can learn new things and new treatments. Yeah, it's a powerful understanding.

Roshani: Sometimes what happens is you get asked, "Where is the evidence?" And I really feel a bit of struggle... I struggle with that, because I don't have an RCT behind my name and the tragedy is like if you look at the DPP study, the lifestyle intervention stops once your HbA1c goes into the diabetes range.

There are no more lifestyle studies of scale sponsored by governments, you know, where you divided people into medication versus no medication. That was only done for the pre-diabetes population. So, how much evidence do I say if I have anecdotal evidence?

Bret: Yeah that's a great point you mentioned earlier that you'd put on your website you are an evidence-based doctor. But that can mean so many different things. And then all of a sudden if you start acting on clinical experience and a compilation of anecdotal experiences, does that

mean you're no longer evidence-based? Or you--?

We have to admit that evidence doesn't exist for everything and so it is tricky but now we are getting more evidence about this whether it's from nonrandomized trials or even smaller randomized trials we're seeing the effect of low-carb at reversing type 2 diabetes, normalizing the number as getting people off medication. So, hopefully you have more support now from a literature standpoint.

Although I'm sure for some of the old guard it's never going to be enough... it's never going to be enough evidence if they really dug their heels in. And that's a reality that we have to live with but hopefully can overcome at some point.

Roshani: Yes.

Bret: So, in addition to some controversy within the medical community and I'm sure there's a lot within the population in general, but first give us the scope of the prevalence of type 2 diabetes in India and what you've seen since you've been there and kind of what you remember from when you're in med school and the difference between the two.

Roshani: Exploding. Again if I don't quote exact numbers... it's exploding. I just talked to a low-carb pediatrician who also has come back from Chicago and she's in India, and she said that one in three children is showing metabolic syndrome in India. One in three... kids.

Bret: One in three kids?

Roshani: So, there's going to be no room left for infectious disease, noncommunicable disease is taking over. So, really it's a very big concern that the next generation is still being pumped with carbs and the sugary drinks and sugary treats and I opened up a science book from my daughter's sixth grade... You know, it was an advanced textbook... advanced textbook. And it says carbohydrates are energy giving foods.

So, the children are still being told and the parents are looking at the science books saying, well, carbohydrates are energy giving foods. So, the knowledge at the grassroots level is still going in a way that... we a very big problem with awareness. And so be the prevalence and the incidence of diabetes is absolutely skyrocketing.

Bret: Yeah, and tell me about what you experience in the Indian culture in terms of the food that is possibly contributing to this and may present a hurdle for helping people adopt the low-carb lifestyle to stem this rise in diabetes.

Roshani: I think India is struggling with the same sort of dogma that the whole world fell into with the low-fat. Everybody here is scared of egg yolks. The entire country is scared of egg yolks I'd say, you know, except for maybe a small percentage of community that are okay with eggs. The majority of people are scared of egg yolks even now, including doctors.

There is a large fear or misunderstanding around protein and, you know, I give this example that what we've done in India is we've kind of put our ears across the Atlantic Ocean and said high protein diets might harm your kidneys. But we didn't check the numbers. Where high protein is maybe 2 g per kilogram and when we do the math on a food recall with our patients, individual food recalls, they are touching about 0.4 g to 0.5 g and if I try--

Bret: That's very low.

Roshani: It's extremely low and these are good homes not well-to-do homes... any home you would take... there is protein malnutrition going on in all levels of society. And taking them to 0.8 g per kilo they feel I'm putting them on a high protein diet because it's higher than where they were.

Bret: Well that is a big stereotype or a big misunderstanding for you to have to overcome. I mean, just for reference, for our listeners, the RDA, the recommended dietary lounge for a minimum to prevent protein deficiency is 0.8 g per kilogram per day here in the US. And at Diet Doctor we recommend a moderate protein diet, 1.2 g to 1.7 g per kilogram.

So, for people to be at 0.4 to 0.6 and feel like 0.8 is a high-protein diet is a huge hurdle to overcome. So, I mean how do you go about educating people that despite what you've heard low protein puts you at risk for muscle wasting and sarcopenia and frailty as you age and is not optimal for health? How you educate people when the internal belief is so strong?

It's a big challenge and what I end up doing is saying looking at their symptoms, look at what they came to me. They come to me with hair fall, with frailty, low energy, low immunity, they can't build muscle, they're trying to go to the gym, and they are like I can't build muscle. And then I just have to make them zoom out and I am like... you know what? Today go to your local supermarket-- and, you know, here we have open-air markets and open vegetable vendors... I said, go to the market when it's crowded... of course, pre-Corona...

But, you know, go have a look at a crowd of people and tell me how many muscular Indians you see. How many Indians do you see with any kind of muscle definition? Except for the labor workers who are doing repair work of building construction sites there's nobody else who has muscle.

And so they are like, yeah, you're right. Or hair, I tell them hair is protein, you know, immunity requires protein, so when I show it to them through their symptoms and then like try for a week... And the other contradiction that they face is somewhere in the Indian nutrition books. I don't know which book; I need to go and like make those publishers retract that chapter where they have been convinced that uric acid will go up if you eat protein. That you will get gout. And everybody is scared of that.

And I'm like, you already have a high uric acid. That's coming from your insulin resistance and your high carb diet, which would get better if you moved to protein. But they don't see it logically. I don't really understand where this fear of gout and uric acid has been through society.

They are popping allopurinol and gout reducing medications and they are scared, they are really scared. So, you have to go very gingerly and say can you take--? You know, in India we have a lot of lentils and dals. Can you take instead of 1 cup, can you go to one and a half cup, and just make small increments?

Bret: And what about the percentage of vegetarians? So I read somewhere that India is the country... the second low-- Wait, let me phrase this right. Of the countries that are vegetarian, basically it is number two. And Bangladesh was number one. But then I read somewhere else that only about 30% of the country is vegetarian. So, what do you see in your patients in terms of vegetarian and resistance to meat because of the social constructs around meat?

Roshani: Yeah, it's a very important question. So, when they are asking a population, "Do you self-report yourself as vegetarian?", it might be 30%, because the ones who call themselves non-vegetarian they still might be taking-- So, the word here is, the default here is vegetarian. If you

eat meat, fish, or eggs, it's called nonvegetarian.

Like you go to a fancy restaurant, the menu will have the veg menu and the non-veg menu. That's the way it is. So, it just puts a paradigm where even meat eaters don't call themselves meat eaters. They call themselves, "I'm nonvegetarian".

Bret: So, the default, the assumption is everybody's vegetarian and if you're not, then you are sort of the special case, the minority.

Roshani: That's the culture. Everybody will-- In India there will be no confusion when you say nonveg, everybody knows what that means. But even someone who self-reports as non-veg, when we do the diet recall they're not all eating meat at lunch and dinner every day. They might make meat once a day.

They might make meat in the house twice a week and the rest of the meals are all vegetarian. So they're self-reporting as non-veg, but their protein intake is still as low as what we were talking about; 0.4 to 0.5. And it's almost a bit sheepish the way some of them will say, no, no, I only take one or two pieces of the chicken. I only dip my chapati in the gravy and I just take the curry flavor. But it's almost like they're apologizing for taking meat.

Bret: Yeah, and so that must be the culture that's been around for generations in India to keep promoting that and pass down from the elders down to their kids that you do have to be sort of embarrassed or apologize for eating... and not just meat but is also chicken and fish that plays on all that.

So, when you are working with somebody with type 2 diabetes and you are educating them about the importance of a low-carb diet and restricting the carbs and they have to fill those carb calories with something else, do you have to get creative with vegetarian sources of protein and vegetarian sources of fat? I mean, is that really what-- your sort of balancing act?

Roshani: That is... that really is. Because you have to work with the family. You know, still in India usually people are cooking at home, that's the default. It's not still a sort of grab-and-go food culture. So, you know, the working people are maybe grabbing lunch from outside, but there's a very large tendency to cook at home.

So, that helps because then you can start providing them recipes. So, we use a lot of the keto recipes from Diet Doctor now that the database of low-carb vegetarian recipes is going up. There are now books and books, so we like, you know, using the healthy fats. And coconut has a high acceptance here because of the coastal climate.

So, coconut is something that we use a lot. Tofu, a lot of Indians will cringe at the idea tofu. They don't seem to like it. They find it bland. So I try to get them to accept, you know, at least a non-GMO form of tofu as a good protein if you're going to be plant-based.

Bret: Yes, so tofu is an interesting one and I wanted to ask you about that, because really tofu takes on the flavor of sort of whatever you cook it with. So I'd imagine, there's such Indian spices, there's such good spices, I'd imagine you could get creative with tofu.

But my guess is again, if sort of culinary guidance gets passed down from the generations, the grandparents don't know what tofu is, they never ate tofu, so they are not going to educate their kids about how to cook with this. So, maybe there is something lost there among the generations, I'd imagine.

Roshani: You are you're absolutely right. And, you know, maybe another contrary example is when I said low-carb to one of my school friend's mom... she's Gujarati, so cute pure vegetarian, which means no eggs. And she wanted to have the spicy Indian flavor profile on her pallet while trying to go low-carb.

So, they made an Indian spice bread with psyllium husk, coconut flour, almond flour, flaxseed meal and then all the Indian spices. And it was super spicy.

Bret: Are those ingredients harder to find in India? The psyllium husk, the almond flour... are those kind of rare and makes that a challenge for you to recommend that to your patients?

Roshani: Yeah, almond flower is very hard to get and it's quite expensive. So, it's not something you would tell everybody to go by a bunch of almonds--. Of course it's cheaper to make it at home but it is an expensive item to buy. The coconut flour has a higher acceptance because a lot of Indian recipes use coconut milk.

So, when you're making coconut milk at home, you're getting the coconut meal already and then that's your coconut flour. So, that acceptance is there. The psyllium husk, we do have easy access to and the flaxseed is a very popular after dinner sort of a snack... like a mouth taste change, you know, in your mouth after the end of the meal, people chew on flaxseeds here, so, that's easy to find.

Bret: Interesting. So, I've definitely heard a number of challenges that you have to face, but I've also heard some potential benefits and things that can help and that people are eating at home and cooking at home, which is very different from the American culture, where so many people are grabbing-go, especially for lunch, and a large percentage for dinner too if people are eating at home.

But then you have to overcome the cultural barriers of what they are cooking at home. And things like flaxseed and coconut that can sort of open the door to giving healthier sources of fat to help reduce the carbs.

But then let's talk about bread. I mean different versions of bread are so prevalent and like you said with your patient, having them go from four down to two, down to one... I mean it must've been a struggle in the beginning and you probably struggle with that with so many of your patients. So, how do you help them sort of wean off their bread to improve their type 2 diabetes.

Roshani: That's an important question and, you know, everybody calls themselves a foodie, everybody likes that sort of high that you get from your carbs and that's probably global. And so the Indians love their breads and their Indian breads, or even their toast with the eggs in the morning. So again, I do a trade-off.

So, sometimes when you ask them, they'll say I take two pieces of toast and one or two eggs. Like can you make it one piece of toast and three eggs? You know, just swap quantities. So, I tried to create a barter system with them. Again, with the background goal of, I'm here to help you get onto as little medication as possible. How do you want us to do that?

That you should have no diabetes and no medication. Clearly we have to work on food in a big way. And being from the endocrine perspective, I look at the other hormonal effects of... sleep, exercise, stress management... not only hammering them only on nutrition so that they're not feeling overwhelmed with the volume of changes I'm asking from them, so that it becomes a

little manageable in terms of habit change.

Bret: That's a great point. We spend so much time talking about food because it's something that we encounter multiple times a day and has such a profound impact on our health, but these other aspects of our health also play into insulin resistance, blood sugar management, stress hormones.

So, I saw that you got trained as a personal trainer and in meditation and that warmed my heart because I also got trained in personal training and behavior modification, because these are tricks that we don't learn about, again, in medical school and residency. We think, you know, the trainers can handle that, the health coaches can handle that.

But it's so much more powerful when it comes from a physician and when you can help coordinate the whole plan. But tell me, again, I'd imagine there are some barriers to personal training in the culture in India. Like you said there aren't muscular people walking around. People probably don't go to the gym on a regular basis. It's not part of the culture. So, what are some of the hurdles you have to overcome with the Indian population to get them to start exercising?

Roshani: Yes, again a huge piece there because the first reaction... because we don't have a fitness culture yet, although it is growing, on the optimistic side, the fitness... what do they call those?... Influencers. We do have Indian influencers now, a growing population of influencers were representing the fitness industry now, which is a great thing.

But I say, look, you're tired, you're not feeling energetic. it's just really sort of the behavior modification aspect. Just put their symptoms on the table and show them how if they want to have better insulin resistance, you know, better insulin sensitivity, building muscle helps that.

And in India one other very big thing that happens is we live in joint families and a lot of us have seen our elderly grandparents fall and break a bone and never recover from a broken hip or a broken leg, that that was almost a near fatal event in their parents or grandparents life.

So, like to prevent those falls and fractures you need to build muscle now. You're not going to be able to build it then when you have the fracture. So it's going to help with your diabetes, it's going to help with your energy levels and fitness and strength levels, and it's going to help you prevent falls. And it's going to help you get off medications.

Bret: Right, right. So sad that they would require an example like that, but is a very powerful example when you see it firsthand. Let me ask you have you seen anything in terms of medications, in terms of interventions, that works as well for type 2 diabetes as a low-carb diet combined with exercise?

Roshani: No. My prescription profile has been shrinking. I don't remember the last time I wrote an SGLT-2 inhibitor, a GLP1 analog, long-acting insulin, premixed insulin for type 2 diabetes, TZDs. Sulfonylureas I didn't use at all. But even all of those other medications, I haven't prescribed them in a very, very long time. It's Metformin and lifestyle change.

This has been the biggest shift in my practice. Although I am trained, you know, they say give me the other medication. Like, no, if you can't change your lifestyle, maybe you should change your doctor.

Bret: That's so powerful to hear. Someone who is trained in endocrinology specializes in diabetes, you know all the medications better than anybody, but you don't use them, you don't need

them. And you're still seeing success with your patients, despite having to overcome a lot of stereotypes and a lot of cultural barriers you're still seeing that success; that's incredibly powerful. And not just with the type 2 diabetes.

We started off by talking about how you also specialize in women's health. So, tell us some of the effects you've seen for women, specifically what are the challenges you see with them and what are some of the successes you've seen?

Roshani: Yes, so the same insulin resistance is affecting young women at the level of acne and at the level of irregular menstrual periods, at the level of infertility, that's a big concern... of course weight. You know, I don't want to gender stereotype here, but it does tend to come in that the younger women are more and more worried about their weight, especially at the time of marriage, you know.

I will more often see the average Indian family bringing in a daughter of marrying age saying she needs to lose weight before she gets married. Not so many parents bringing in their sons, although the weight issue is on both sides.

You know, it's unfortunately a bit of a dogma or a stigma, expectations of what people should look like. And it's not the way we want to endorse things, but it's on the woman's mind, whether I like it or not. So, these are some of the challenges. And another specific issue that comes up is because of a historically patriarchal culture, the woman ends up being a centerpiece; she's the one cooking for the entire house.

And they unfortunately sometimes take on this role of, I have enough energy to cook especially for my in-laws and my husband and my kids. They have three different needs and then on top of that if you want me to go make low-carb for myself, it's not happening because everybody else wants their carbs.

Bret: Yeah, so the importance of bringing in the whole family together is even-- I mean, I always talk about that in terms of getting your family on board when it's just your spouse and your kids. But then when you have in-laws on top of that, because of the multigenerational family living together, that makes it that much more challenging, because I'm sure they are like, we've been eaten this bread for 50 years.

Why are you telling us to stop now? No way. That's a lot harder than telling a 20-year-old, 30-year-old that they need to change. Well, that's one more hurdle you have to deal with.

Roshani: Yeah and so again I have to kind of relate to them at their level and speak from a place of self-love, and that's where the spiritual aspect comes into play. You know, you're trying to give them what they want because you care for them. And it's not like they want to harm you.

And sort of build that compassion where you allow yourself to create a bubble for yourself and say that, you know what? Once you transform yourself, it's inevitable that the others are going to take notice that your health is getting better and they're going to start looking around at you... that what is she doing? She's doing something.

Bret: Yeah, that's so powerful that having success be its own educator basically, that watching some person with their success can educate others. And that's something we like to do at Diet Doctor by promoting the success stories on our website. So, I wonder, you know, is that something that you can start or that we can help start even in India to help promote success stories,

so people can see, oh, they are reversing their infertility or their PCOS, they're getting off their diabetes medications.

Look at all these examples, it's not just some crazy concept that goes against my beliefs, but it's actually happening. Like is there room to start that sort of groundswell in India?

Roshani: Definitely and, you know, at a very small level we're taking testimonials from patients one to one, saying the same thing to them. As you know, there are probably 100 other women out there who could benefit from your story and a lot of people are stepping forward because they want people to benefit from being able to do this yourself.

Let your body start healing itself. And a happy story is a lady who had PCOS she had irregular periods five, six months at a time. She would not have a cycle and so she and her husband have kind of given up trying on for a baby.

And she was working with us on diabetes reversal. And so she went low-carb, she started intermittent fasting and then five more months, no period, but she had back pain and she showed up at the MRI office and they were like, did you forget to tell us you're pregnant? Because we see a baby in there.

Bret: Wow!

Roshani: Yeah, she didn't know.

Bret: Oh, my goodness, that's crazy. You mentioned intermittent fasting, so let's talk about that for a minute. You know, in the United States, the culture for a number of people had become you know, breakfast, snack, lunch, snack, dinner, snack.

This constant snacking and grazing. Has it been the same in India? Has that made it a challenge to talk to people about time restricted eating, intermittent fasting and the benefits that those can have on insulin resistance and weight and so many other metabolic markers?

Roshani: Absolutely, it's such a huge barrier, because especially with the diabetes prescriptions causing low blood sugars, everybody's brainwashed into eat because otherwise your sugar will drop. And, you know, it's culturally expected that wherever the person with diabetes goes, they need to be fed on time because otherwise their blood sugar is going to drop because they need to take insulin. And now you see that whole thing backwards.

You're like, no, if I stopped giving you insulin, you wouldn't need to keep eating. So, it takes some time for people to buy into that and doing the fasting C-peptide test really helps them because that test shows to them that I can tell them, "Your pancreas is making insulin." So, you don't have high blood sugar because your body is not making insulin. It's because you're eating too much food.

So, how are we going to set that back into balance if you keep eating all day? So, it takes take some time and I have to really make it simple and go across literacy barriers, health understanding barriers. And Dr. Jason Fung's analogy of the train, pushing people inside the crowded train, that picture really helps because in Mumbai we have crowded trains. Everybody relates to that picture.

Bret: That's funny. In Los Angeles or in like San Francisco people just wouldn't get that analogy, but in Mumbai it works. So, just to clarify for the listeners, C-peptide is a measurement of your

insulin, but only the insulin that you are making. So, if you're getting injected with insulin and you're measuring insulin level, it's a combination of your own insulin and the insulin you're being treated with.

But the C-peptide is specific for the insulin your body's making. So, if you have a detectable C-peptide then your pancreas is making insulin, so, you can safely lower the insulin as you're changing the lifestyle and nutrition.

Well, you've certainly educated me a lot about the hurdles that you face in India and some of the opportunities that you're facing and the impact you're having on your patients, I'm sure is outstanding including the impact you're having within the medical community. And really, it sounds like you are in India, sort of like where Dr. Westman or even Dr. Atkins or some of the pioneers in the United States were, you know, 20+ years ago.

So, you're blazing a trail and I'm sure it's not easy, but I applaud you for your efforts and the impact you're having on your patients. If you were going to give just some basic advice to people from an Indian culture who like Indian food, who live in a multigenerational family, what would be sort of the best advice on a way to get started, safely and efficaciously to help improve their type 2 diabetes, their PCOS, their insulin resistance syndromes?

Roshani: So, you know I like to start where they are. So, you know, if someone asks me "what's the perfect diet plan that you're going to give me?" I will say there is no perfect I plan. My clinic does not have a one-size-fits-all diet plan, because all the four people in my house, me, my husband, my two daughters, we all eat differently. So I can't get three people to agree with what I like.

So, I'm not going to expect to convince you to eat my way. So, we start where you are and we ask you to start a list of where your carbs are at and what are the proteins you like. So again, there are some cultures in India that do prefer meat and it's inherent in their ancestry, based on their religious background, they are okay eating meat.

So, I am like, let's embrace that. Let's go for grass fed, let's go for free range, pastured, you know, hormone free, eggs, meat, fish... let's do what your culture allows. If you're vegetarian we start listing out... again, these are your carbs... we make a list of all the carbs that they thought were healthy and low-fat and we say, we're not doing low-fat.

Let's cut all of that to half today. And then in place of that, we'll add your proteins from your preferred list. So, we really co-create the preferred protein list for the clients, remove the drugs that cause the low blood sugar, that's our role. Is on day one for type 2 diabetes remove the drugs that cause the low blood sugar. So, they are safe to reduce the carbs; that's the doctor's responsibility.

That's from the nutrition standpoint. Sleep, we have a lot of gadget use, a lot of late-night screen time which is messing up people's sleep. And then the tiredness is coming from low protein intake, it's coming from low water intake but it's also coming from horrible sleep. Instagram is in India too, Facebook... So, everybody is on Instagram, so they use that as their way to fall asleep.

And that's really very bad for insulin resistance. Sleep apnea, I think in India, at sliver body profiles, we are seeing a lot of undiagnosed sleep apnea. So, if we do a screening for that with-- I just thought it was a snoring problem. I've been living with my room partner for decades and thought it was normal. Like no, we probably need to check if you have bad sleep apnea. Because that's making your diabetes worse.

And this is happening at much slimmer body frames than Caucasians. Stress management, again, we have a very spiritual backbone, but a lot of the next generation has lost contact with the very rich spiritual tradition. So, sometimes just asking them what their beliefs are and maybe if I have permission with them to invite some small mini meditation to just back in center...

And I think if we as doctors emanate to them more of a loving environment rather than this punitive doctor kind of racking, you know... you're not eating right, and the patients relatives are complaining, the patient is not eating right and we're just scolding the patient all the long versus you sort of get out that energy that you're safe and accepted and loved and I want you to feel the same about yourself. That vibration helps offset so much stress.

Bret: That's such an important point; something I think that is overlooked. Because people are sort of uncomfortable themselves maybe with that advice, so, giving it to others is a challenge, but boy it sure can go a long way and help all the other recommendations you're making fall into play so much easier. So I think that's a wonderful message to conclude with. If people want to hear more about you, learn more about you, where can they go to find you?

Roshani: So I think the Instagram way is where people go these days, so it's my first name and last name at Instagram. And we have a website that's called Aasaan Health. The word 'aasaan' means easy in Sanskrit. So easyhealth.com, A-A-S-A-A-Nhealth.com

Bret: Very good and we will include those in the links of the podcast. But it's been a pleasure, I've really learned a lot and enjoyed this conversation and I'll look forward to hopefully collaborating with you more in the future and seeing all the wonderful things you're doing.

Roshani: I'd love to help you with that. Thank you so much.