Fourth Trimester Podcast

Episode 137: Prevent and Manage Gestational Diabetes With Certified Diabetes Educator Lily Nichols, RD

Sarah Trott: [00:00:05] My name is Sarah Trott. I'm a new mama to a baby girl and this podcast is all about postpartum care for the few months following birth, the time period also known as the Fourth Trimester. My postpartum doula, Esther Gallagher, is my co-host. She's a mother, grandmother, perinatal educator, birth and postpartum care provider. I've benefited hugely from her support. All parents can benefit from the wisdom and support that a postpartum Doula provides. Fourth trimester care is about the practical, emotional and social support parents and baby require, and importantly, helps set the tone for the lifelong journey of parenting.

When I first became pregnant, I had never heard of postpartum Doulas, let alone knew what they did. So much of the training and preparation that expecting parents do is focused on the birth and newborn care. Once a baby is born, often the first interaction parents have with medical or child professionals, other than the first pediatrician visits, is the six-week checkup with the OB/GYN. *What about caring for mama and family between the birth and the six week doctor visit?* What are the strategies for taking care of the partner and the rest of the family while looking after your newborn?

Our podcasts contain expert interviews with specialists from many fields to cover topics including postpartum doula practices, prenatal care, prenatal and postnatal yoga, parenting, breastfeeding, physical recovery from birth, nutrition, newborn care, midwifery, negotiating family visitation, and many more.

First-hand experience is shared through lots of stories from both new and seasoned parents. Hear what other parents are asking and what they have done in their own lives.

We reference other podcasts, internet resources and real-life experts who can help you on your own parenting journey. Visit us at http://fourthtrimesterpodcast.com

Sarah Trott: [00:00:00] Hi, this is Sarah Trott and welcome back to the Fourth Trimester Podcast. I'm here with a special guest today, Lily Nichols. Lily is a registered dietitian, a researcher, and a best selling author of a few books Real Food for Pregnancy, Real Food for Fertility, and Real Food for Gestational Diabetes. And so if you've ever felt confused about what to eat pre, during, or post pregnancy, this is the episode for you. All of her books have beautiful covers with delicious looking food on the front, but this episode is going to be a lot of fun. We haven't done a deep dive on gestational diabetes before, and that's going to be our focus on healthy eating and looking at some of the trends and the research around that. So I'm really excited about the conversation and welcome, Lily.

Lily Nichols: [00:00:46] Yeah, thank you for the invite.

Sarah Trott: [00:00:48] Yes, I'd love for you to go ahead and introduce yourself in your own words.

Lily Nichols: [00:00:51] So my background is in dietetics, and as a diabetes educator, I've spent the majority of my career in the perinatal space and childbearing years, supporting women to have healthier fertility journeys, pregnancy journeys, manage or prevent complications such as gestational diabetes, and have a smoother postpartum recovery as well. That kind of culminated gestational diabetes diet, and it's not enough to control their blood sugar, or so they think. And then you essentially have to go down the path of insulin and medication. and I found, especially from some of my early clinical work, I was working at a perinatology office running the diabetes care program and all. We had all the referrals for all gestational diabetes cases across this area of Los Angeles. And I found that when we just shifted the dietary intervention, we had way better outcomes, way less requirements for medication, insulin, fewer babies born large for gestational age, fewer additional complications like preeclampsia popping up. Just everything about it was all easier. And yet my recommendations were a lot different than the conventional. And so that's what led me to write my first book, Real Food for Gestational Diabetes, which has gone on to make a pretty big dent in the gestational diabetes world. And even the Czech Republic has changed their official guidelines as of

2016, following the advice in that book, and they completely shifted gears on how they approach carbohydrates.

Lily Nichols: [00:02:22] They used to have a mandatory minimum level of carbs. Now they have a maximum level of carbohydrates and have since reported way better outcomes. So essentially, to sum it all up, I mean, I'm giving you kind of the gestational diabetes really short version of the history, but I tend to be a person who looks at guidelines a bit more critically, not necessarily that they're set in stone. And I look at the newer research, I'm like, okay, well, this study is saying this and this study is saying that as well as what you're seeing in practice, like, okay, I'm following the guidelines and my client's blood sugars are not improving or they're getting worse. Okay, there should be more that we can do here. Are these guidelines really based on solid science, or is there an area that we can explore to maybe improve outcomes so we don't have to have such a medicalized pregnancy all the way through? So that's kind of snowballed into the other two books as well, just kind of diving into really what is the truth about nutrition and what is the new research, and where are the gaps in our guidelines and what we're finding in new studies?

Sarah Trott: [00:03:23] Yeah, what an inspiring story and has your own experience. I know we have kiddos similar age. Has your own experience in your own fourth trimester helped influence your work?

Lily Nichols: [00:03:32] For sure. My second book, Real Food for pregnancy. I started writing when my firstborn was about ten months old. So I would say, I would say still in the thick of postpartum. I mean, a lot of people view postpartum as just like, oh, the first six weeks or a couple months or whatever. But for me, like ten months, you're still in it. You're still not getting a full night of sleep, so that definitely influenced when I decided I was going to write that book. I was like, this one needs a long chapter on postpartum, because even having been in the perinatal space for so long, I had put so much energy into planning for my birth. So like, I took great care of myself during pregnancy. And I did all this planning on the birth and postpartum. I was like, oh well, I'll like get a couple freezer meals in, like I was more prepared than some people. But then he showed up at like just about 39 weeks. I was just planning to cook that last week, so that was not an

adequate amount of time to prepare. Everyone who said, oh, you'll go to like 41 weeks. That was a lie in my case.

Lily Nichols: [00:04:34] And he was fully ready to join us Earth side. And unfortunately, I was just not not prepared at all. Yeah. Even like having supported moms in postpartum, like, you just don't know until you go through it. So yes, it definitely has influenced the work for sure. and it is the reason that that particular chapter is really quite long. You know, fast forward to second time around. Like when I got to the halfway point in that pregnancy, I was like, I'm going to start getting a freezer meal and like, what is what is the way that I can make this work? Like once a week I'm going to make a double batch of some type of meal that does well with defrosting and everything. And I'll make a double batch freeze half. And I just did that for approximately every week, the last like half of my pregnancy. And I invited my mom to come be with us for a month. I mean, I invited all the support and made sure that nourishment was front and center, and that recovery was way easier. So yes, it definitely, definitely made an impact.

Sarah Trott: [00:05:38] Yeah. And I love what you're saying about double batching your meals, because it's such an easy way to then have additional food in your freezer ready to go.

Lily Nichols: [00:05:46] Yeah. And because I had help, like on the ground and like my husband knew what was coming to like, okay, her appetite's going to be like triple. You know, in the early weeks, there was just a lot more cooking happening. And so some of the freezer meals stayed in the freezer a couple extra months, and then it's great when, like all the help has disappeared after the first couple months, it was like, okay, we're things are crazy today. And oh, look, there's some chili in the freezer that I made like four months ago. Fantastic. So it worked out.

Sarah Trott: [00:06:15] Is there a recipe or two you'd be willing to share with us that we can put on the the site and the episode notes? Because it sounds like you've got.

Lily Nichols: [00:06:21] Yeah, totally. And actually, I have a blog article that you could link to called. I think it's called Real Food Postpartum Recovery Meals. I'll send you the

link. And that one links out to like 50 different recipes. Not all of them are my recipes necessarily, but like, I've collated a bunch of recipes from the internet as well as some of mine. They're all linked - there are freezer tips. So there's a lot of stuff in that article that's a really popular and totally free resource on my site.

Sarah Trott: [00:06:48] Perfect. Nice. Yeah, we have something similar because I like to ask guests, especially when they talk about food, because we've done the same. We've collected a great set of recipes. We have a postpartum soups and stews section on our site, which is awesome. Very popular. Okay, so let's talk about gestational diabetes a little bit. Where are we in terms of our knowledge of gestational diabetes and management of it? I know you spoke to it a little bit in your intro, but then also some of the trends that we're seeing. Is it going up or down or like what's happening there.

Lily Nichols: [00:07:18] Yeah. Our uh I think the understanding of this condition has, has changed a lot in the last like ten plus years. So first of all, there's different ways to define gestational diabetes. Some people just look at it as, you know, elevated blood sugar during pregnancy. That is a result of the physiological changes in pregnancy, the placenta hormones and like the natural shifts in insulin resistance. And it is just comes out of nowhere, completely random. Like you get it or you don't. You're lucky or unlucky. There's more acknowledgment now that there are often predisposing factors to gestational diabetes, and you can actually see the warning signs for it earlier in pregnancy. So there's been several studies recently that have looked at early pregnancy blood sugar patterns. Now that we have continuous glucose monitors more widely available, they've done studies where they put a CGM on a huge group of pregnant women. They follow them through their pregnancies, tracking their blood sugar trends, and then later they look back and see who ended up developing gestational diabetes. And did we see any differences in their blood sugar patterns early on? And yes, indeed, like at the time point that they stick the CGM on you 13, 14, 15 weeks or so, you can see different blood sugar patterns. You can see signs of insulin resistance, um, earlier on. Likewise in studies that have implemented screening average blood sugar levels with a marker called hemoglobin A1, C, or some people just call it a1 C for short. You can see that women who fall into or close to the category of pre-diabetic by their a-1c

levels, they have a much higher risk of getting a diagnosis of gestational diabetes if they go through a glucose tolerance test.

Lily Nichols: [00:09:06] And some of those studies, I mean, it'll vary depending on the study population, but some of them are like it's 98% predictive of a positive gestational diabetes diagnosis. And recently there was another study that looked at gestational diabetes subtypes like what's going on? Why is the blood sugar high? Because ultimately that's all. That's all that gestational diabetes diagnosis is like your blood sugar is higher than a certain threshold one we consider normal. And above this threshold we consider abnormal therefore gestational diabetes. But it doesn't tell us why it's happening. And that research looked at just different gestational diabetes subtypes. So is it an insulin resistance issue where your body is not responding to insulin, but insulin levels are sufficient or high? Or is it a low insulin issue, like you're not producing enough insulin to keep your blood sugar down? Or is it mixed? And 60% of the time it was insulin resistance issue that was the major subtype. And that lines up exactly with the population wide increase in prediabetes and type two diabetes that we've been seeing decade after decade. A lot of times we're simply catching a blood sugar imbalance in pregnancy. and yes, pregnancy has its own effect on increasing insulin resistance. But if you already have some predisposing factors and then you add on that sort of stress test to your glucose, insulin regulation and pregnancy, some individuals just aren't able to overcome that and achieve normal blood sugars with a typical or high carbohydrate intake.

Sarah Trott: [00:10:38] So is that something someone can look into with their doctor before they're pregnant to see if they're totally a higher risk. Yeah. Okay. Yeah. What would someone ask for.

Lily Nichols: [00:10:47] A hemoglobin A1, c and if it comes out at 5.7% or higher that's that's the cutoff for pre-diabetes. You're at higher risk for developing gestational diabetes. And so the steps that you could take to potentially reduce that risk would be eating a higher amount of protein. That's very satiating. It's very stabilizing for your blood sugar levels, eating better quality carbohydrates. So less processed, less sugar and more like whole foods and fresh produce. Just being careful on the portion size of

things like bread, rice, pasta those things give us a pretty big blood sugar spike, akin to what we get from eating a candy bar or something. So better quality carbs and in balance with the rest of your food exercise, moving your body. That's linked to a substantially lower risk of developing gestational diabetes. Getting your vitamin D levels in a good place beforehand can also be helpful. Adequate sleep. I mean, there's so many different factors that you can take in, but an overall pretty well balanced protein forward vegetable forward diet pattern does wonders for reducing our blood sugar levels. Those would be the steps that I would take in advance. We also have to acknowledge that sometimes it just happens despite all of our best efforts. Like, there certainly are cases where you could do everything you want. And like sometimes it happens. So, you know, it's important to know what to do either way, how to keep your blood sugar levels stable whether or not you get the diagnosis.

Sarah Trott: [00:12:15] Yeah. And give yourself grace. Right. You can't go ahead. You can't make yourself feel even worse by saying, okay, well, it's my fault or I did something wrong. It sounds like in some cases, it's just inevitable. Yeah. So those dietary tips that you're talking about, I mean, it sounds just like a healthy lifestyle. Good sleep, healthy foods, good portions. And. But you are saying there's a variance from how you might eat and live every day, versus if you're pre-diabetic and specifically looking to address that issue.

Lily Nichols: [00:12:41] I mean, yes and no. Anybody can eat that dietary pattern and be be just fine. Individuals who have some sort of underlying insulin resistance or borderline pre-diabetes or beyond. Your body is likely more carbohydrate intolerant. Like it can't handle as large of an amount of carbohydrates in a single sitting without having a blood sugar spike. That blood sugar spike then triggers an insulin spike, and it's like it's kind of a bit of a roller coaster. So some individuals who have that predisposition may have to be more dialed in on their carbohydrate intake. And if you're reducing those, you need to make sure you're getting enough food from other places. A big mistake I see people do is they're like, oh, I'll just go low carb. But then their interpretation of low carb is just like less food altogether. So you have these people on low carb starvation diets, and then they run into all these health issues and they blame low carb. And it's like, well, you got to eat something in its place. Which is why my message is often talking

about eating an adequate amount of the other things that don't raise your blood sugar protein, fat like low starch vegetables, low sugar fruit, nuts and seeds. Even beans as a carb source tend to be a pretty great for your blood sugar because they have fiber and protein in there as well.

Lily Nichols: [00:14:00] But like eating some of these foods that don't give you that big blood sugar spike helps immensely because you're you're naturally going to be improving your insulin resistance. The less you're spiking your blood sugar over and over all day long. You know, the big elephant in the room for Americans, though, is that 58% of calories consumed by the average American come from ultra processed foods. So you can get into all the weeds of all the nitpicky stuff. But at the end of the day, we simply need to be eating more of the good stuff to displace the ultra processed items that don't have much nutrition going on in them, you know. And the majority of the calories coming in from ultra processed foods are from the added sugars, the white flour, the low quality oils. That's simply what they are. They're they're usually pretty protein devoid items for the most part. So if we can get that shift to getting people over to more real food, regardless of even what the macronutrient makeup is, you will see an improvement in blood sugar and insulin.

Sarah Trott: [00:15:01] Yeah. And what I've seen is looking at labels. I mean, the more ingredients often really points to more ultra processed things, and especially for gluten free products, I've sort of noticed not to bash or pick on anything in particular, but some of those gluten free breads, they're just like, I don't even it's it's hard to recognize some of the real ingredients, to be honest.

Lily Nichols: [00:15:21] That is a good point because so many people went gluten free. I don't want to call it a fad because, I mean, I also had a time period of being gluten free, but a lot of those gluten free replacement products, like it's one thing to be gluten free and you're simply not eating wheat, rye and barley, and you're making like quinoa instead, like you're consuming things in their whole form. But if you get to a lot of these breads, not all because there are exceptions, but a lot of them are like potato flour, tapioca flour, rice flour. Sometimes the nutrient density of that product, like the vitamin and mineral content, is less than the less processed whole wheat bread. It doesn't have

gluten. True. And there are some individuals who do indeed need to avoid gluten. But you're getting a very dense slice of bread, right? If you've ever had gluten free breads, they're like they're like heavy, you know? So some of them have twice the carbohydrate content of a regular whole wheat bread or whole wheat sourdough or something. And so those can really add up. And, you know, our blood sugar response to different foods, it's very individual. And I've used myself as a guinea pig so many times, like wearing a CGM and seeing how I respond to different things. You know, I make my own sourdough at home with whole wheat flour that is like totally fine for my blood sugar levels. But if I have a gluten free piece of bread or for me like rice is is huge. For whatever reason, my system is pretty reactive to it. Like massive blood sugar spike. So for me.

Sarah Trott: [00:16:53] Rice or brown rice or both?

Lily Nichols: [00:16:55] Both. Both. Actually, the carb content is almost identical between white white rice and brown rice. The difference is the brown rice has a couple grams of fiber, and you have the intact B vitamins and minerals or whatever, but it's still almost exactly equivalent on carb content 45 or so grams of carbs per cup of cooked rice. So it's like three pieces of bread worth of carbohydrates. And, you know, there's certainly some parts of the world where rice is very much a staple food, and maybe some of those individuals have better tolerance for whatever reason. For me, it's a major, um, it's a major issue. I have to be careful with the quantity of rice. I have to be, you know, more careful of the carb content. If I happen to do a gluten free bread. You want to check the carbs? Is it like 25g of carbs per slice? Because the other breads are often like 15 or so grams of carbs, and that just adds up. You put those together in a sandwich, you know, for some people, that's going to take them over the edge unless they're like a, you know, very physically active person who's actively, like using their muscles to use up all that glucose that's coming in.

Sarah Trott: [00:18:02] Yeah, you sort of forget that carbs are sugar, right? That's how your body processes it. And then the gluten free on top of it, it's like it's not a one for one. So okay I'm glad we talked about that. So I have a friend who had four babies and she she was diagnosed with gestational diabetes for every single pregnancy. So I

wanted to ask you, is it possible if you've if you've had it for one birth, can you have subsequent births without gestational diabetes. Is there a way to do that or is it just that's kind of how your body's going to work for all your pregnancies.

Lily Nichols: [00:18:32] There are cases where it doesn't reoccur, but it is one of the strongest risk factors for having gestational diabetes is having experienced it in a previous pregnancy. So it does put you at higher risk. It is a risk factor. That said, I think we have to kind of look at the underlying issue with gestational diabetes, like if it is purely a case where there's no underlying insulin resistance, but the person's body has like their pancreas, doesn't adequately increase the amount of insulin that needs to be produced to cover those blood sugar highs in later pregnancy, because that is a natural adaptation. Everybody in their pregnant by the end, you're producing possibly double or triple the amount of insulin depending on what you're eating. The more carbs, the more insulin you're going to have to produce. But some people, if their pancreas doesn't adapt to pregnancy, well, they could be in one of those scenarios where they just have like an insulin deficit. So those covering those blood sugar highs is really challenging for individuals where the underlying issue is an insulin resistance issue and say, maybe there was a number of risk factors coming into that pregnancy, the prior pregnancy with gestational diabetes, maybe their diet quality wasn't super dialed in. They're just eating standard American diet. Maybe they were inactive. Maybe they were vitamin D deficient and magnesium deficient. Maybe they started their pregnancy at a heavier weight, or maybe they gained a lot more than expected during their pregnancy. All those things together would put them at a higher risk for gestational diabetes.

Lily Nichols: [00:20:03] But sometimes there's a silver lining to the diagnosis. And in some cases, again, if that underlying physiology is an insulin resistance issue, sometimes in the interim between the next pregnancy, different lifestyle changes will have kind of stuck from the pregnancy. So maybe it was like, okay, I figured out in pregnancy what I need to do to keep my blood sugar stable, and you continue those practices postpartum. And maybe you also nurse your baby, and you nurse your baby for a long time. That reduces your risk of gestational diabetes. And is is one way that your body kind of like uses up extra glucose. Making milk is very energy expensive. When we use glucose along with other fuels to make it right, maybe they start

exercising more. you know, all those different factors may play a role. And sometimes the next time around they don't get it. So I've, I've seen that over and over and over again in practice. I'm just cautious to say that. I don't think you can guarantee that all you can do is stack the deck in your favor. It's only of benefit for your blood sugar to be in a good place, because your quality of life is better all around. Your fertility is better. Your menstrual cycles are better. Everything's better when your blood sugar is in a good place. We just never can know for sure how your body's going to adapt in each pregnancy. So you do your best and then just, you know, take what comes.

Sarah Trott: [00:21:21] Okay, cool. That's good to know. And so what are we seeing lately in the data? Are we seeing trends of an increase in cases over time?

Lily Nichols: [00:21:30] We are as the population wide pre-diabetes and diabetes diagnoses go up. We're also seeing an increase in gestational diabetes. Some of that too can be attributed to changes in screening. So depending on which country you're in, many of them have universal screening where maybe they didn't have it before. There are different ways to diagnose. Some of them have more stringent criteria than others. So if your provider or your country happens to be using the more stringent guidelines, you're more likely to catch mild cases of gestational diabetes. But yeah, as a whole population wide, we are seeing a greater rate of diagnosis. It is the most common pregnancy complication by far. And depending on the diagnostic criteria used and the data set you're looking at, You'll see stats all over the map on what percent of pregnancies are affected. You'll see statistics as low as like 5% and statistics as high as like 22%. So yes, it is going up. It affects a lot of pregnancies.

Sarah Trott: [00:22:35] Yeah. So some differences in measurement and definitions that sounds like is part of that range. But I mean 5% up to almost a quarter. That's so high right. If you think about it it's really really common. And so what you're saying is it's not like suddenly there's this big spike we're seeing necessarily. But just as as the overall population is seeing an increase in diabetes, we're seeing that also in pregnancy. Right. Yeah. Okay. Interesting. And I like that you pointed out that there's hope. You know, if you've had it once you don't necessarily get it again. You are you can manage it. I also like, you know, the tips you're giving us around, what you can do to test yourself, to do

everything, to stack the cards in your favor as you put it right, to see if you can prevent in any way having that occur in your own situation, what about for folks who are in that fertility phase, who are looking to be pregnant for the first time or pregnant again? How can they help use diet to help support fertility?

Lily Nichols: [00:23:29] There's a lot of overlap for the diet that you might implement for managing gestational diabetes, or just keeping yourself healthy during pregnancy with what is helpful for fertility as well. So blood sugar levels preconception do make an impact on things like egg quality and hormonal balance. There are studies that have looked at it's a measure called fecundity, which is how likely you are to get pregnant at any given menstrual cycle. And when they've followed, like large groups of women over time in that, you know, trying to conceive, period, women who have slightly higher than average blood sugar levels, even if they're below the pre-diabetic level, they take, on average, a longer time to conceive than women whose blood sugar levels are in an optimal All range. So this is far below the diabetes or even prediabetes cutoffs it points to. You know, all of us, for the betterment of our overall health and hormonal health and fertility, should pay attention to where our blood sugar levels are at. So, you know, the general tips for blood sugar balance would hold true for the types of things you would do to try to prevent gestational diabetes from occurring, and also for the management of it. Protein forward. When you look at how different macronutrients affect our blood sugar. Protein is one that really stabilizes and keeps our blood sugar in a healthy range. Fat does not increase our blood sugar as well.

Lily Nichols: [00:24:53] So my recommendation is stop taking the fat out of all your protein rich foods. You don't need to eat huge quantities of fat. You don't need to like just munch on sticks of butter or something like that. But you certainly don't need to be concerned about the serving size of your avocado. You don't need to take the yolks out of your eggs. You don't have to take the skin off of your chicken, like leave the fat where nature has it cook with enough fat that things taste good. But you don't need to, like, guzzle bottles of olive oil protein other than the protein. Looking at produce, rather especially fiber rich produce is very helpful. When we consume fiber. It kind of makes like a almost like a mesh in our stomach that slows down the absorption of carbohydrates that we end up consuming during that meal. So they generally help to

stabilize our blood sugar. They're good for the bacteria in our guts, or probiotics, which that ultimately can have some benefits on our blood sugar levels as well. Fiber forward. and then, like I said, quality carbohydrates. And in a portion that is reasonable for your particular body size, activity level and whatnot. So for a lot of people, the way that an easy way to look at this without getting into the weeds of all the individual variations on it, is to think about your starchy foods like your grains and beans, legumes, starchy vegetables like potatoes, sweet potatoes, rice, pasta those sorts of things should just make up maybe about a quarter of your plate.

Lily Nichols: [00:26:19] You should have a solid portion of protein, maybe another quarter of your plate or so without taking all the fat out of it. And then the other half of your plate low starch, non-starchy vegetables, your greens for the most part, anything that's green for the most part. There's a couple exceptions tend to be pretty low carb, high fiber. And that in and of itself helps immensely with blood sugar levels. And you can take it a step further by eating the protein and the vegetables at the meal before you eat the majority of the carbohydrates at the meal, and that reduces your blood sugar response at that meal upwards of 30, 40%. then, hey, your blood sugar still comes out a little high after meals. Maybe add like a five ten minute walk after that, or do some squats, or some way of moving your body where you're using your muscles that can use up that fuel that's in your bloodstream like you've you've now done another, you know, taking another step to improve it. So that would be like the most general basic way of approaching it. But if you want me to get into any more specifics, I'd be happy to.

Sarah Trott: [00:27:22] What are the what are the exceptions? You said there are some exceptions to the green foods that are high carb green. I eat a lot of broccoli.

Lily Nichols: [00:27:28] Yeah, no. Broccoli is very low carb. Green peas would be the main exception. If you've taken the peas out of the pea pod and you just like frozen peas, that definitely adds up for the greens. That would be the major one people think of. Like some vegetables are really so high in starch that they should be counted as a carbohydrate. So this is separate from the greens issue. But winter squash for some individuals, even carrots are kind of a moderately low carb vegetable. But if you eat like

a lot of carrots or you juice the carrots, you'll end up with a pretty big sugar load. Corn, you know, technically a vegetable, but also kind of a grain. So if your vegetable side at your meal is one of those like frozen peas, corn, carrot bits, you know what I'm talking about.

Sarah Trott: [00:28:17] Yes. Yes.

Lily Nichols: [00:28:17] Kind of like borderline becomes a starch portion depending on how much is consumed at that meal versus if you had a giant plate of, of greens, like half of your plate is a giant salad. It's like, you know, one, two, three grams of carbs, like you're not even counting it. And most of that's fiber. Whereas if you had half your plate coming from all those corn, peas, carrot chunks, that could easily be 15, 20, 30, or even more grams of carbs, depending on how big the portion is. Right. So you can get nitpicky about it. You could use there's a free app, no affiliation called chronometer where you could track your meals and you could see exactly what the macronutrient breakdown is of what you're eating. My opinion is that the majority of people, unless they're actively coming at their diet from like a I want to eat low carb. The average person is consuming a lot more carbohydrates than they think they are, because you're getting little bits in from really almost everything. Like, the only things that are completely carbohydrate free are like your animal proteins like meat, fish, poultry, eggs, certain low carb dairy products like cottage cheese, cheese. But you're getting you're getting carbs in Greek yogurt, less than regular yogurt, but still, you're getting carbs in a glass of milk.

Lily Nichols: [00:29:37] You're getting carbs from your sweet potatoes. You're getting carbs in the. So it can just add up. Especially if the way people are eating is like there's always a grain at every meal. A lot of people, it's like, okay, my breakfast has oatmeal and a banana, and I've got my sweetened coffee. Or maybe I have an Add like a glass of orange juice. They could easily be eating 100g or more of carbohydrates just at a single meal. And it's just it's just a we don't typically have awareness over the carbohydrate content of our foods, because that was never a macronutrient that our guidelines really made us pay much attention to. Our guidelines suggest that half of our calories approximately come from carbohydrates, so we're encouraged to eat things like

cereal or oatmeal for breakfast and have as much fruit as you want. And it's weird for people to kind of switch to, oh, I'm going to have eggs for breakfast instead. Even if it's eggs with a side of toast, like the carbohydrate load of that breakfast might be a quarter or less than the oatmeal fruit breakfast that that I was talking about. It's just about like shifting what you pay attention to or bringing awareness to it.

Sarah Trott: [00:30:46] Yeah, you don't even think about it. I mean, is it relatively new in human history, the way that we're eating now versus kind of the way we used to eat. And that might be something that's also an impact?

Lily Nichols: [00:30:56] Well, yeah, for sure. I mean, you go back to pre Pre-agricultural era. Like paleo, all the people who used to follow paleo diets kind of fallen out of fashion. But until we turned agrarian, we were not consuming the volume of grains that we were before. We weren't growing huge seed crops and turning them into oils that are sold, you know, over the counter as vegetable oils like your canola, corn, soy, like think of getting a corn cob out of the field and like, how do you get oil out of it? Like, we wouldn't have been doing that as early humans. We would have consumed the whole corn, not it processed into maltodextrin or high fructose corn sirup or, you know, or or converting that into oil, which takes industrial machinery. Right. So if you go back far enough in history, humans were omnivores and we were eating what was available to us locally. And so we were eating animal foods that we hunted or fished. We were eating all parts of the animal food because food was, you know, a scarce resource, you're going to make use of the entirety of what's in there, including the organs and the skin and the bones and all the things. And then even the produce we were consuming was just whatever grew wild. I mean, maybe there were people who intentionally tried to cultivate certain things. But you look over the years of how we've, like, hybridized fruit to be bigger and sweeter. You know, you go to and find an old apple tree from the early 1900s, and the apples are like pretty teeny tiny.

Lily Nichols: [00:32:27] And now we have these honeycrisps that are like 15 times the size. Like, our food has, has changed as we've kind of like manipulated agriculture. And, you know, we have less food scarcity probably as a whole. But certainly the nutrient density has shifted and the macronutrient ratios have shifted a lot too. I mean,

historically, you had groups of people who lived in equatorial regions ate more carbs because you have, you know, pleasant weather and fruit can grow year round. And then as you go to the far north, like up to Alaska and Greenland. You have populations that are eating super low carb ketogenic diets because nothing is growing in the tundra in the middle of winter when there's no daylight. You are living off of your, you know, sea mammals and and, you know, whales and seals and fish and whatever you have, you know, gathered from the sea and then hunting land animals and maybe whatever berries or plant foods that you stored and fermented from the summer. But the carb content of the diet is very different. So that's another shift is like we're not necessarily connected to our ancestry or even living in a climate like maybe our ancestors lived in. And so our diets are really a lot more homogeneous nowadays than they would have been previously, where you're just eating what's local.

Sarah Trott: [00:33:45] Mhm. Yeah. And our bodies haven't evolved at the same rate of the food processing and the agriculture and the modernization of food creation and consumption for sure. Yeah yeah yeah. Okay. So blood sugar regulation that can really be impactful potentially for labor is my question. And also maybe for postpartum recovery. Let's talk about that.

Lily Nichols: [00:34:08] Yeah. So I mean the considerations during labor are that, you know, if your blood sugar is really high, there's a direct line from you in baby via the placenta and umbilical cord. So if your blood sugar is really high and this typically is something where it's usually in individuals who have some sort of diabetes diagnosis. But if your blood sugar is really high in labor or even the days leading up to labor, baby's insulin production will be really high because there's no filter for maternal blood sugar, like whatever mom's blood sugar is. That's what baby's blood sugar is. And their pancreas produces insulin to control their blood sugar. Maternal insulin doesn't cross the placenta, just just the blood sugar levels. So baby is born, they are very much sugar adapted, so to speak, and you cut the main line of sugar coming in, you cut that cord and their body is suddenly in a bit of a crisis because their insulin production is matched to account for that high, steady influx of sugar. So their blood sugar can crash and they can go hypoglycemic. It's called neonatal hypoglycemia. That is a major consideration. And one of the big concerns with inadequately controlled gestational diabetes. It can be

mitigated. And it doesn't always happen in everybody who's diagnosed with gestational diabetes, especially if you've kept your blood sugar in a pretty good range throughout the pregnancy and certainly milder cases of gestational diabetes, you see it much, much less often, but that is potentially a controllable risk factor if you can really keep an eye on your blood sugar in the days leading up to birth, you could lessen the chances that that would happen.

Lily Nichols: [00:35:50] Essentially, babies are Physiologically designed to be able to easily switch between burning fat for fuel or sugar for fuel, or lactate for fuel. But if they've been adapted and raised in this high sugar environment for the majority of the pregnancy and leading up to birth, they really have trouble switching into burning their fat stores for fuel, which is the biological design. You look at ketone levels in newborn babies and they are quite high, and they are especially high in that first few days after birth, before the maternal milk switches from colostrum to mature milk. They're not getting huge volume of milk from mom. And it's not as high in carbohydrates yet. So they really are tapping into their fat stores to burn. So in an ideal world, we are keeping an eye on our blood sugar during pregnancy so that our babies also are what some people call metabolically flexible, like their metabolism is already shaped to easily use whatever fuels are available, and then you don't have that potential crash in blood sugar happening immediately after birth. And then for postpartum, your follow up question. I will be honest because so much is going on postpartum. Even in clients who have gestational diabetes, I don't have them track their blood sugar closely in early postpartum because things are going to be all over the map. There's a lot of inflammation in early postpartum recovery, obviously, as we're recovering from birth and our hormones are shifting from the hormones of pregnancy to the hormones of lactation, and your thyroid is kind of figuring things out, and your adrenals are on 24 over seven duty as you're up with baby all hours of the day and night.

Lily Nichols: [00:37:27] It's a lot on your system. Generally speaking, we do see blood sugar levels drop down after the pregnancy has ended, but also our goal levels for blood sugar shift when you're not pregnant and you have a little more wiggle room for blood sugar numbers that maybe would have been concerning to your provider during pregnancy. They're not so worried about postpartum, So I usually give people like first

month just like eat, you know, sleep as much as you can, nourish yourself as best as you can, and then maybe start trying to keep an eye on it as as you get closer to that six week mark, usually your provider is going to have you come back and do some sort of a blood sugar check between 6 to 12 weeks. It's at your postpartum checkup, and the purpose of that test is really to rule out whether you have overt diabetes or prediabetes that might need immediate management, or you might need a referral to a specialist or something. It's really like mildly elevated blood sugar when you're in this crazy early postpartum newborn fog I'm not super concerned about. It's more about the long term impact, because we know gestational diabetes can be a risk factor for type two diabetes later in life. It's actually the number one predictor of independent risk factor for a woman developing type two diabetes is having a pregnancy where you got diagnosed with gestational diabetes, and as many as 70% of women who had a GD pregnancy will go on to get a type two diabetes diagnosis in the 5 to 10 years after delivery.

Lily Nichols: [00:39:02] Now, my message is that you don't have to be that statistic, but you want to keep an eye on it. So they usually do a check fairly early on, maybe earlier than necessary. But you know, the purpose really is to rule out an overt issue and you're already there for the visit. Okay. So it's a convenience factor for the medical system. And then they often want you to come back annually to check in and see how your blood sugar is. And that's again to identify like are you borderline pre-diabetic or type two diabetes. Like, do we need higher level care for this? In an ideal world, we've learned all these things about how we manage our blood sugar and how to eat to keep our blood sugar levels stable, that if you apply that over the long term, you don't have to be another statistic. But I will tell you, like just again, statistically there is a higher risk. And so even those individuals who have things really dialed in, they might have to work a little harder than the average woman to keep their blood sugar levels in check. And that will hold true for the long term. Again, it will depend on the severity of your particular gestational diabetes case. Women who have a more milder case, they're going to be less at risk. But if your case was pretty challenging to keep your blood sugar levels in range, pretty good prediction that you're going to have to keep an eye on it closer over the long haul.

Sarah Trott: [00:40:18] So you really don't have to be one of those statistics. You can with a lot of management, and it sounds like proactivity. There are ways to help manage and prevent the onset of other types of diabetes after you've been diagnosed with gestational diabetes, because, I mean, does it just go away after you give birth?

Lily Nichols: [00:40:37] Technically, and, you know, 90 plus percent of women, their blood sugar is not going to be at concerning levels once they have the baby again are like standards for what's problematic. Like shift, you know, when you're not pregnant, they're not as strict. And that really is in alignment with our blood sugar levels naturally go down in pregnancy, by the way, they're not just being mean. They're trying to they're trying to get you close to like the physiological norm in pregnancy. So we don't have these adverse outcomes for you or baby, but typically you'll have kind of a honeymoon period in postpartum where your sugar levels are not super high for the average woman. But you may start to see that insulin resistance creep up over time. If a woman is nursing that uses up so much energy that assuming her diet is is generally well balanced, that I mean statistically from the studies, that is one way to dramatically reduce the risk of type two diabetes if breastfeeding is.

Sarah Trott: [00:41:35] Yeah, okay.

Lily Nichols: [00:41:35] If over time you're able to lose the weight gained during pregnancy, that is helpful as well to reduce the risk. Generally speaking, the more we weigh, the more insulin resistant we are. Also, as we age, the older we are. Usually insulin resistance creeps up. So like it gets a little harder. Like over time you might have to put in a little extra effort. I mean, I don't know how many of your friends are in perimenopause, but like all the hormonal shifts of perimenopause start to kick in at a certain point too. And that makes it harder. But there's definitely things that can be done. There's even, you know, beyond like maintaining the general dietary principles and and moving your body regularly. There's even some supplements that can help with reducing insulin resistance, like inositol, for example, or alpha lipoic acid. So you could look into some of those other options for improving things long term. But yeah, there's there's things that can be done.

Sarah Trott: [00:42:33] Great. And so we've covered a lot. What else do you want to share with our listeners?

Lily Nichols: [00:42:38] I mean I would just like to say don't let the diagnosis ruin your pregnancy experience. It can have a silver lining. It can be a blessing in disguise. I've certainly learned over the years, not only from my own private practice, but I also have an online gestational diabetes course where, um, you know, women have lifetime access to it. So I've had some participants in the program who've been in for three or even four pregnancies, and there are so many, so many of them will will discuss how they actually felt like this was one of the best things that could have happened to them, because it forced them to really get dialed in on their nutrition, and they didn't realize how not great they felt until they got their blood sugar levels in a healthy place. And now it's like this night and day thing where if you kind of veer off path for a while, you're getting you're actively aware of that feedback of like, I don't feel great. That kind of like brings you back on course. And that can have carryover benefits for your children, like their metabolic health is better if your blood sugar was in a healthy level in pregnancy, but you're also now feeding them high quality, whole foods kind of diet. They have improvements with their partner's health as well, so try not to like spiral into all the doom and gloom.

Lily Nichols: [00:43:57] Like a lot of the resources on gestational diabetes. Understandably. Like you have to talk about the risks of things even I do in my resources as well, because it's like, why would you take this seriously if there were no risks? But once you've heard those like, let that go and focus on what you can do, because there is a lot that you can do with the dietary practices that I talk about in my course or my book, Real Food for Gestational Diabetes. I'm giving you the roadmap to take control of this, essentially, and there's a 50% reduced chance that you'll need medication or insulin. If you eat in this way, And then when you have, you know, the medication and insulin is not part of the equation, that opens up different possibilities for your birth, who you can birth with, where you can birth, how likely there are to be interventions which has carryover effects to your postpartum recovery. Right. Like there's a lot of things that kind of come down the line where I've heard from just over and over again, so many women. I'm so glad this happened to me, because it really has

had a net benefit, even though the first couple weeks after diagnosis are stressful and scary. It has been a net benefit for me, so I hope that that message comes through.

Sarah Trott: [00:45:14] Yeah, great. Thank you. Yeah, what a positive outcome for folks if they haven't paid attention to their blood sugar before. And then it sort of opens up this new awareness to their own health generally. Where can people find you and learn more about you?

Lily Nichols: [00:45:27] So you can find me on my website, Lilly Nichols that's the hub for all the things. So click the books tab If you want to check out any of my books, click the blog tab. There's hundreds of articles there. They're all free. There's no paywall on my site. The freebies tab is a whole bunch of stuff. I have a free three part gestational diabetes video series, which a lot of people like, so check that out if you're concerned about getting the diagnosis or maybe you've just been diagnosed, it'll give you a lot of a lot of tips on how to just implement some some changes to get it under control. Let's see. I also mentor practitioners via the Institute for Prenatal Nutrition. They're all trained in gestational diabetes. So I now have, you know, a whole slew of practitioners. If you need individualized help, you can go to Institute for Prenatal Nutrition and go to the Graduate Directory for providers. Yeah. As for social media land, you can find me on Instagram, Lily Nicholson. And yeah, I think that's that's that's the short list.

Sarah Trott: [00:46:27] Perfect. We'll have links to all of those resources in our show notes as well. Lily, thank you so much for the great conversation today.

Lily Nichols: [00:46:33] Thank you.

Sarah Trott: You can subscribe to this podcast in order to hear more from us. **Click here for iTunes and click here for Spotify**. Thank you for listening everyone and I hope you'll join us next time on the Fourth Trimester. The theme music on this podcast was created by Sean Trott. Hear more at https://soundcloud.com/seantrott. Special thanks to my true loves: my husband Ben, daughter Penelope, and baby girl Evelyn. Don't forget to share the Fourth Trimester Podcast with any new and expecting parents. I'm Sarah Trott. Goodbye for now.