EPISODE 27 - MNT for Diabetes with Holly McDonald

Transcript

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[Music and Intro]

Hey, there. On this episode of the RD Exam Made Easy podcast, you're going to learn about diabetes. I'm so excited for this week's episode for a couple of reasons. For one, my dear friend who's worked with patients with diabetes her entire career is here to talk about diabetes. But more than that, the stories and information she shares go far beyond the RD exam, because chances are you know someone with diabetes, and if you don't, you'll definitely work with people with diabetes in some capacity. So the topic is super relevant, and I know you're going to love what she shares. So let's get started.

Jana: I'm so excited. On today's show, I have Holly McDonald, who's been a dietitian for many years and specializes in diabetes, but more than that, she's one of my dearest friends. So, Holly, why don't you share a little bit about yourself and your journey so far as a dietitian?

Holly: Okay, well, first of all, Jana, I wanted to thank you for inviting me to take part in your podcast. I'm super excited for you. I think this is a great opportunity for many of your listeners to learn a lot. You are an extremely smart, young lady, and I am just so pleased that you are my friend. But my name is Holly. I work at a fairly large county facility in the greater Los Angeles area, and I've been in the same job for 23 years because I love it. I work in an outpatient clinic. I've worked in several outpatient clinics, I should say, but the bulk of my time was spent in the nutrition clinic, where I saw countless diabetic patients. So many that I decided, like, I better learn more about this because I really want to be able to help my clients. And also I have a lot of family members that have diabetes. So I have probably upwards of between six to eight. I think I lost count of family members with diabetes, but I just have a real passion for this population. You know, there's the potential that I could get it one day because of my family history. But through our conversation, hopefully we'll kind of learn together how important taking care of yourself is to prevent this chronic disease.

Jana: Absolutely. Yeah. And it is very prevalent. And something that we were talking about before we started recording is that in school, a lot of times when you work through case studies, they give you a patient and they say the patient has diabetes and you kind of work through the case. But when you get into the real world, a lot of patients don't just have diabetes, they have diabetes and something else. And sometimes they have diabetes and multiple other comorbidities.

Holly: Absolutely.

Jana: It’s not so cut and dry. Like, here's a patient who has diabetes only while of course there are patients who just have diabetes. It's not the most common thing that you often see, especially in the hospital setting.

Holly: It’s funny that you mentioned that, because honestly, I mean, they would be referred to nutrition for, like, they had a heart attack recently, or they are obese and they want them to lose some weight, or I mean, it runs the gamut. They would come in with, like, five or six things. I mean, yes, diabetes was one of them, but there was just so much happening in the world, and they're so overwhelmed and so many medications. So I really go about counseling these type of patients, like, just in the most simplest fashion, I think, is just showing them that eating a particular way, whether it's for diabetes or for heart health, it's all the same. It's eating as healthy as possible, as whole food as possible, real food, not processed food as possible. And that really it's a blessing in disguise, following this diabetic, quote, unquote, diet, because really, it's a healthy way of eating. And I think when patients see that, like, okay, I'm not being punished. I'm not like having to eat this way. I encourage the family members of patients with diabetes to follow in their footsteps and eat the same way, because it really is a healthy diet. Less saturated fats and less, you know, carbohydrates or unhealthy carbs, I should say, you know, you know, we make it so that all things can kind of fit in there by the end of it all, but still, yes, you're right. It's just like they're coming in with so many other health concerns. It's super important, I think, for all of us to learn a little bit more about diabetes, because most of our patients will have it or prediabetes, which to me is diabetes.

Jana: Yeah, I was going to say that the family affair thing, how you brought up it's important for the family, too, not just from a health perspective, but especially when you work with kids, it can feel punishing to them because they don't really understand when they're diagnosed with diabetes that they're all of a sudden not able to eat whatever they want when they want, and that there's some more steps that go into it now with the counting of carbohydrates. So having the whole family involved really helps with their success.

Holly: Absolutely. And, I mean, I actually do work in the pediatric diabetes clinic, so I've seen little ones as young as two years old with diabetes, Type 1. And I've also worked in an adult setting, and I've seen people get

diagnosed with Type 1 diabetes at age 40, which I know isn't the norm because they call it, like, adolescent, and for type two, they call it adult onset. But really in today's day and age, that no longer is the case. So, you know, unfortunately, with the uptick in obesity, we're seeing more and more children getting Type 2 diabetes or they're being diagnosed with prediabetes insulin resistance. But, yeah, Type 1. Well, I think in all cases, family is extremely important, but especially in type one, because when they're that young, their parents have to have a pretty good understanding of the importance of carbohydrate counting, especially when they're on a carb to insulin ratio. Or for example, if they're on a pump. It's not super common, but in my particular clinic with pediatrics pump therapy is extremely common. So I'm not sure what some of your listeners, if they've had much experience with pumps

Jana: Maybe you could explain a little bit about pumps. And if you have a patient in particular who's on a pump kind of excuse that as an explanation.

Holly: Absolutely. So the one that comes to mind, she's now 15. I saw her when she was about five and she came in with her little pump. And of course, I asked her what she ate the day before, because that's what I do. I asked her for a 24 hours food recall and just to get a better sense of the types of food she likes, the types of portion sizes. So for lunch, she had had a half of a PB and J, she had a carton of milk and she had an apple. And I said, well, do you know how many carbs is in that? And she said, Well, it's three servings because I have one bread, one carton of milk and one apple. So those each are another serving. So I had three total. And my mom said, if I have three, then that equals 45. So I have to put 45 in my pump, and then my pump will distribute, will give me the right amount of insulin. So I thought, hey, that's pretty savvy for this little five year old. But I was really quite impressed with her, and her mom was like, well, you know, it's important for her to learn because I'm not going to be around her all the time, especially when she's a teenager. Teens don't want their parents following them around and telling them how many carbs they ate. But she also had this little app on her iPad. I think it was called Carb Counting with Lenny. And it was like a fun little game that she had. And she can go online, and it will kind of have, like, Flashcards with pictures of, like, an apple, and then next to it will say 15. And then she'd have to basically play this little game with Lenny and Count carbs. So I thought that was really pretty ingenious at the time. You know, now they have so many more apps for kids, but back then, that was, like, one of the first ones for kids. And she nailed it. She had it all set, and she was playing that game and learning how to card count.

Jana: Yeah. That is so much fun. Super interactive. That’s how kids learn.

Holly: Yeah. So to me, every patient that I come across, i, as a dietitian, want to learn from them. I mean, that's the whole point. And that's what I think makes this profession, like, so rewarding, is, like, if you go in with the

idea that there's more to learn in life from everybody that we come in contact with. And so the thing that I learned from her was that, hey, you can be really young and know how to card count. You don't have to be an adult. And I use her, actually, as an example when I have some of my older kids who still don't hard count, who don't get it or don't want to get it, and their parents pretty much take all the responsibility on for themselves. And it's real shame to tell you, honestly

Jana: Oh, yeah, because it's very hard. And at the end of the day, they ultimately need to be in control of their own body and be able to manage their condition, because once they grow up, like you said, teens are harder and then they become adults, and that's it. I mean, they're the ones who are responsible for taking care of themselves.

Holly: Absolutely. And really, it's called diabetes self care, but really it's self care for all of us. I mean, we all have things that we do brush our teeth, hygiene, the whole nine yards. We do things to take care of ourselves. But with diabetes, self care is checking their blood sugars, being able to give them the right amount of medication. So for those type ones, if they're not comfortable with calculating out how many carbs they're consuming, it can make figuring out how much insulin to give themselves a real challenge. And I have actually one example in mind of this young man. He was 15, I think, young boy, and he he just really relied on his mom and wasn't willing to learn. I'm not quite sure why, but he just felt like his mom was always going to be there. And we kind of went through his 24 hours recall and he had had some pizza and he was on a carb to insulin ratio. So I was like, well, then, if you have this pizza and you don't know how many carbs is in it, and you're going to guesstimate it, because that's what he did. He just kind of guessed at how many carbs he had. I go, well, how do you really know how much insulin to give yourself? Because he was on one unit of insulin for every 10 grams of carbs. So this is super common with our Type 1 kids, especially teens. They want to eat more, they're growing. So the doctors will put them on insulin to carb ratio. Sometimes it's one unit of insulin for every 10 grams of carb. Sometimes it's one unit for every 12 grams. Sometimes it's even one unit for every 15 grams of carb. So obviously, the lower that number, they're getting quite a bit of insulin.

Jana: Right

Holly: So he was on a one to ten. So he had this piece of pizza from Costco. He had a Diet Coke, a diet soda. I think it was a Pepsi. I don't know. It was one of those. So I said, well, how much insulin did you give yourself? And he's like, Well, I needed just my three units because the pizza was like 35 grams of car. But he was basing it off of a different brand, basing that off of Pizza Hut that he had already looked up before. But unfortunately, that Costco pizza was double. It was 64 grams for the slice. So he didn't give himself enough insulin. So, you know,

knowing exactly how much carbs is in that food item is extremely important because he undershot, for sure. But on top of that, he was supposed to give himself a correction. So correctional insulin is super important with our type one diabetics. Some with Type 2 that are on insulin will use it as well. But basically, what it is is you're correcting for a high blood sugar. So if you're starting out your meal, you're ready to eat your lunch, you check your sugar, and you see that it's out of range. Maybe it was like 280. Well, most correctional for kids is you got to give yourself one extra unit of insulin for every 50 over 150. So if your blood sugar was at 151, you got to give yourself an extra unit. So you would give yourself, let's say, in that example, he would have to give himself one extra on top of the three that he calculated.

Jana: Okay.

Holly: But his was like 285. He'd have to do three extra units of insulin. So it's super important for them also with that self care to be checking their blood sugars.

Jana: Yeah. And I wanted to go back to what you said earlier about how you learn from all of your patients. It's so true because any time you have a patient that you see, you learn from them, you hear their story and you do your interventions with them and what you learn from that interaction, you can then carry on to help patients that you'll see in the future. Or maybe what works for that patient will also work with somebody else who might be struggling to control their diabetes. And you figure out that, okay, this strategy works for this person, maybe it'll work for the next patient and the one who's particularly struggling. So I always say teaching for me, when I teach, my students are my best teachers. And when we work with patients, they too are the best teachers. We learn from them all the time.

Holly: And I think when they understand too, that this is a combined effort, the provider, the dietitian, obviously we also have social work involved in many of our cases. Everybody. It's a team effort and we really want the best for them. We're learning from them as well. So I really do feel like if we go in as practitioners, like we're going to learn from them, they're going to learn from us. It's not like we know everything. We're going to learn quite a bit from our patients.

Jana: Yeah. So do you see a lot of people now who are on the pump?

Holly: Not too much. What happens with the pump is a lot of the parents really want it early on, but as the kids get a little bit older, the pump draws attention. So people start asking questions like, well, what is that on your cause it looks like a little pager, like attached to their hip. But oftentimes too, if they're very active, the actual

tubing will kink whether they're sleeping or if they're in an activity. And if the tubing kinks, that means they're not going to get the insulin. So they end up running with some high sugars because their body didn't get the insulin. So it's frustrating to them. Like they just would rather do the injections. I think it works wonderfully. And the ones that do use it, many of them are happy with it, but I'm seeing as of late, many that are switching over to just doing the injections and then they do the injections when they're at home. They don't want to take anything to school, they don't want to bring attention to their diabetes.

Jana: Yeah. So how does it work? Able to explain to the listeners who have never used a pump or had a patient who's on a pump? How exactly does it work?

Holly: So with the pump, they have to actually, the patients have to know exactly, like I said, with the carb counting, this is super crucial, because there's already insulin put into those into the pump. And so when they are getting, let's say, you know, a certain amount of carbohydrates, they have to make sure that they're counting correctly, because they're going to enter in that number to the pump. And then that pump is going to distribute out a certain amount of insulin based off of that meal size. But all the while, it's also giving them what's called a basal amount of insulin. So it's constantly giving them small amounts, just like us, because it's trying to mimic - the pump is trying to mimic what we do, what we have going on in our in our body in the natural sense. You know, the pancreas will secrete the insulin once a meal is consumed. So that amount that they're giving, that bolus amount is the amount for that meal, but they're constantly getting the basal amount, which is the amount that their body would naturally be secreting throughout their day.

Jana: Yeah. And so what happens for people who are really active? Like, I know a lot of athletes who have diabetes will use a pump. So does it get adjusted for their activity level?

Holly: Yes. So there is an activity mode. In fact, we just had a little guy, he's about, I think, nine, and he just needs to learn how to put that in activity mode. When he's at baseball, his dad will do that for him, and his numbers look beautiful. But unfortunately, when he's at school, he's running into some lows because he will participate in his recess or they'll have activities going on, and he doesn't know how to put that in activity mode. So there's different modes that they can put it in so that it will adjust and it won't give as much of that insulin because they're gonna end up with lows if they don't adjust for the activity.

Jana: Yeah, and I can see how it could be hard because teenagers don't want any attention on them unless it's positive attention or particularly the attention that they want. And I can see how it would trigger questions. And curiosity.

Holly: Because the technology is there. That's the thing. The technology is there. But everybody, it's so personal. Everybody is so different. I did have a young gentleman. He's now working. He's out of school. He's 19. And we really had to persuade him on this one because we really did need the data. But he was using what's called a CGM, a continuous glucose monitor. And he had it on his arm. And it's a small little device that's taking the subcutaneous glucose so we can find out real time, like, what his sugars are. And that information can actually be transferred to the doctor or his phone that he can send to whatever family member might need that information. But he was really thinking like, well, I want to go back because people are asking me questions. I want to go back to just checking my sugar manually with the lancet and do the finger stick. But we really did need more data in order to help him with his insulin regimen. So he's agreed to stay on, but move the sensor to his belly area so that he could cover it with his shirt. So there are lots of different options.

Jana: Yeah

Holly: I think that it's a great technology to have the sensor. And I think actually most insurance companies are covering for that now because they see the benefit of having that continuous monitoring of blood sugars.

Jana: And I can definitely see that because we know what can happen with overtime, long term, poor glucose control. It can lead to some really horrible outcomes. And so controlling it and covering that part just makes sense.

Holly: Absolutely. Absolutely. The more that we can tap into the way that the body is working based off of the individual, their activity level, their food intake. So it's not so much they have to follow, like, the set meal plan, because that was back back in the day. I'm quite a bit older than y'all, so back in the day, we had to do these calculations and then we had to do a certain percentage of carbs, protein, fat. Honestly, nobody follows it. It's tedious work that nobody really followed. And so I feel like having these tools of being able to check their sugar more regularly. If they need insulin, we can do that. Certain medications like metformin help with insulin resistance. Glipizide actually stimulates the pancreas in our type two to make a little bit of their own insulin. Gives them a little push there. So there's just so much more out there with regards to medication that people have some flexibility with their nutrition.

Jana: Yeah, and that's really the hardest thing. Well, first of all, you are wiser.

Holly: Okay

Jana: But anyways, that is so good with the flexibility, because that is really the hardest thing. People don't want to have these big interruptions in not being able to participate. I think that in my experience, that's been one of the hardest things. Like, wait, I can't participate in Thanksgiving meals, or I can't participate at Christmas time, or I can't participate when there's whatever family celebrations, and I'm not going to be able to eat any of the food. And so trying to create an environment where they can still follow what they're supposed to and eat relatively within the recommendations is beneficial, but also to let them know that they can live as much of a normal life despite their diagnosis.

Holly: Absolutely.

Jana: So Holly, as a CDE and a dietitian, if you see a patient whose blood sugars are out of control and it appears that they are doing what they should be with regards to following the recommendations for Grams of carbs to units of insulin, what role do you you have as a dietitian in making an adjustment or communicating with the physician about any need for adjustment for those patients?

Holly: So that's a good question Jana and the great thing about where I work is we work as a team, so it's actually my responsibility to, as well, give my input with the team. And so when I go in and I can assess a patient and see that they're doing a great job, they know how to carb count. They're doing everything with their nutrition that they should be doing. And I just let the doctor know. I think that we need to tweak this insulin. I think that given their activity level or possibly their sleep pattern, we can make some adjustments and we kind of discuss it together. Of course, the doctor makes the plan, but oftentimes they're in agreement, like, oh, yeah, that's a good suggestion. We just wanted to know whether or not they were following, because we don't want to tweak something if it could be changed from a nutrition standpoint. But if they're doing everything correct and they're on the right track, yeah, we're going to change the insulin. So I really like working as a team, and so your input matters. So don't feel like doctor knows everything. They want your advice as the dietitian. So they want your input. They want your advice and your knowledge.

Jana: Yeah. And that is so important. And I do agree. Working as a team is really the best, really the best part about being a dietitian, honestly, for me, is that interdisciplinary team and coming together, because that's what we want, the patients in the middle, and we're all here for the best interest of the patient, and that's when you have the best outcomes.

Holly: Absolutely. And I do feel, though, because I've been, like I said, at that particular position my whole career, and I know early on, the way that I counseled was much different than the way that I counsel now. And I think it

just comes with experience. We have dietetic interns that rotate throughout our facility. Usually we have anywhere between two to three every year. And I see the change, I see when I have them early on, and then I see when I have them later in their rotations, how much more confident they feel and how much they're willing to bring to the table. So it takes time, I think, to gain that confidence, but really, they're the expert. And that's what I always tell them. You've gone through four years of schooling. You're doing your internship. You know more than the doctor does, because they don't get very much with regards to nutrition in their studies. So I just think over time, they'll feel more confident in expressing their opinions or their suggestions.

Jana: Yeah, it definitely comes with time.

Holly: So right now, Holly, you spend a lot of time working with parents or people with gestational diabetes. So maybe we can talk a little bit about gestational diabetes.

Holly: Absolutely. That's kind of my current passion. I actually work in a clinic where it started as just gestational diabetes. I was only there on Wednesdays and then they saw the value of having an RD in the clinic and now I'm there full time. So I do see quite a bit of gestational diabetics still, though. And unfortunately it's becoming more and more because the risk factors for getting GDM are increasing. And I could kind of just zip through like a few of the risk factors, I guess, for becoming a gestational diabetic.

Jana: Yeah, that would be really helpful.

Holly: So, a couple of things. Many of the patients that I see when they come in, especially that are pregnant, they feel like it's their fault. They feel like they did something wrong and they don't understand because they didn't have a lot of the symptoms that maybe other family members had when they first were diagnosed with diabetes. So it's because of a shift in their hormones. And I tried to explain that to them. First and foremost, they didn't do anything wrong. I know have their baby's best interest at heart, but there's these hormones that are shifting in their body and they're making them more insulin resistant. So I try to kind of let them know first and foremost, it's nothing that they really did, but there's a flip side to that because there are some risk factors. And so if a woman is coming in and she's obese, there is a higher chance that she could have gestational diabetes. If she was prediabetic prior, she was diagnosed with prediabetes, there is a higher risk. If she has polycystic Ovarian syndrome. I didn't really know about that, but it turns out that puts them at higher risk and having a previous, what we call macrosomic baby, which is a very large baby, which I had one of those. I had an almost an eleven pound baby. And so my second go around, I kept getting tested for diabetes over and over again because I had a large baby. But that would also put you at risk for having gestational diabetes. And unfortunately, this

particular one we can't change, but basically our ethnicity. So if you're African American, Hispanic, Asian American, you are at a higher risk. As well as Native American, you are at higher risk for becoming a gestational diabetic. The good thing is it usually will go away once you deliver the baby. The hormones go back to normal and everything is as it was. But the next go around, you will be at higher risk.

Jana: Yeah, and that's just something. But then do they get screened a lot sooner? Or is there a different protocol for consecutive pregnancies when they are higher at risk? Or do they still just do the glucose testing at the same time for any future pregnancies?

Holly: So that actually is a really good question. For sure, they're going to get screened sooner. So if they're an average risk, there's no issues, they’re going to get screened in their second trimester. So anywhere between 24 to 28 weeks, that's the norm. But if they're in the high risk category, then you're going to get screened right away within that first trimester, almost probably within their first visit. So where I work, we're doing A1C’s, that first visit, like, they're going to go ahead and check because they want to know if there was already an issue with blood sugars. Because remember, the A1C is going to give us like a three month window from the date that that sugar was checked. So that gives us an idea that they are maybe already came into the pregnancy with it higher, but then they're going to do a 50 gram glucose challenge. Which they're going to basically drink some liquid sugar and glucose formula. It's about equivalent to a sandwich and a glass of milk. 50 grams. And if the blood sugar is over 140, then they're going to have to now do a three hour glucose tolerance test.

Jana: Okay.

Holly: If it's 190, then they're just going to say, okay, she's got gestational diabetes. I mean, if it's that high, they don't really even need to go to the three hour.

Jana: They just determine that they have it and then put them on a plan to control their blood sugars.

Holly: Put them on a plan. Exactly. Now, if they just were slightly over, they were like, maybe 141, 145, they're going to go ahead and do the three hour challenge, and they're going to have them come in fasting. So in that 1 hour, they didn't have to worry about fasting. But in the three hour, they want them coming in fasting because they want to do a fasting sugar check. And then they're going to do a blood sugar check every hour from there on out. And if they get too abnormal, It's diabetes. It's gestational diabetes.

Jana: Okay. But that's good that they're getting screened sooner, especially if they're at risk that way. They just know to make some adjustments right away.

Holly: Absolutely. And I think that's why I'm seeing more, because they are doing those 1 hour. I mean, they are doing the hemoglobin A1c's so much earlier. So if that's coming up a little bit high, then that's going to prompt that doctor to go ahead. And especially because so many more of our clients are obese, so many of them are coming in with these other risk factors. So I think we're just catching them earlier. So that's a good thing because then we can provide care, because care is so important with this situation. I mean, I know you worked in the neonatal unit and so you could see on the other end what happens. But there's a lot that can happen to baby if mom isn't getting things in order.

Jana: Yeah, like the really big babies that would be born and they come into the NICU pretty much, you knew, without even opening the chart and looking into the maternal history, that there's a history of poorly controlled gestational diabetes. So the babies got tons of extra glucose and that's, you know, they end up with these really big babies. And also the babies have a really hard time controlling their blood sugars. So then we have to put them on a whole protocol for that. So it is really important for the mom to also understand that it's not just her body. It does impact the baby. And so doing the screening so that they're aware. It's really hard because when you're pregnant, speaking from experience, I would feel bad too. I can understand you're, hormonal, and you want everything to be right and what did I do wrong? How did I cause this or what could I have done differently? And so I think that's a natural thing for us to do. And I don't think anyone wants anything harmful to happen to their baby. So having that early intervention so that we can decrease the risk is so important and also job security for you, Holly. A lot of patients to see who needs you.

Holly: And you know what the difference too, is, is when with these pregnant moms, they really do want what's best for their baby.

Jana: Oh, I agree.

Holly: Even beyond themselves, because they could have had prediabetes, really didn't do what they needed to do. But now that babies there, this maternal instinct just kicks in and they really are making every effort. And we're asking a lot. We're asking for them to test their blood sugar four times fasting. And then every time they eat, 2 hours after they eat, they need to do the finger stick. They need to go ahead and jot that down in the book. They need to record what they're eating. They need to bring that book with them. And they do it because they really do want the best for their baby. One of the other things, when you were mentioning the complication to

baby also, I'm finding in the research that there is a higher chance for baby to become more obese and to have Type 2 diabetes in older life later on in life. So I think that there is this connection, and maybe this is partially why we are seeing this uptick in type two diabetes in these kids because they were products of their mom being gestational, having gestational diabetes.

Jana: Yeah, it is a lot. So if something were to come up on the RD exam about dawn phenomenon, can you explain a little bit about what that is so that the listeners can nail any of those questions?

Holly: Dawn phenomenon is very interesting and we get a lot of patients, believe it or not, with the situation. And it can happen with type one, it can happen with type two. It can even happen, you know, with these gestational diabetic moms. And it's like, the patients will come to me and they're like, I don't know what I'm doing wrong. Like, literally, I'm eating everything right, and I still wake up with these morning high blood sugars. So basically what it is, is in the wee hours of the morning, between 03:00 A.m. roughly, and 08:00 A.m., the body secretes these hormones, cortisol, growth hormone, what not. And it's basically telling the liver, like, wake up. And it's going to help the liver produce glucose, because you've been fasting all night. And the body does need a certain amount of carbohydrates to get going in the morning that needs glucose. I mean, so your liver will produce this glucose, but unfortunately, if you have impaired resistance to the insulin, because once you have this surge of glucose that's rising, your pancreas then will say, oh, okay, well, now the glucose is rising. I better make enough insulin. I think of insulin as like a key. That's how I kind of describe it to my patients. And that key is going to help that sugar get into the cell. It's opening up the door. But you can have all the keys in the world, but if there's a problem with the lock, which is insulin resistance, that key is not going to work. So if there's one, not enough keys, not enough insulin, or two, there's a glitch in the lock, the insulin resistance, then the sugar is going to remain high. And so they get frustrated, very frustrated, because they're trying their best, but they're still coming up with high blood sugar is in the morning.

Jana: That’s a great way to explain it.

Holly: Yeah. And I think I really get into a lot of simple biochemistry with my clients, and they appreciate it, they actually do, because they say, oh, nobody has ever explained it to me that way. I think don't shy away from some of your biochemistry. Don't get too crazy with it, but definitely try to explain it in the simplest way you can. But I think patients will understand it and maybe be more proactive in their care if they understand how the body works.

Jana: Yeah, that's so true and so valid because people want to be able to understand. Sometimes it's the big question, but why? I don't understand why? And once they can put that together, they can close the gap between what they're being told and why it's so important. It helps them be proactive and really be able to push forward with their care. So I think it's a really important piece to have.

Holly: Yeah, and I don't know why. I thought when I was in school, I was like, I just really don't understand this thing called the dawn phenomenon. But I think after working with patients and kind of seeing the practical end of it, it really does make more sense. It's not just the stuff we learn in school and the terminology and what not. I think it's really being able to use again, like we talked about earlier, the patients are teaching us like we're learning more from these experiences.

Jana: Yes, it is so true. I mean, there's something to say about getting the experience and really working with people, because you learn so much, it's so valuable, and it really can't replace anything that we learn in a textbook. I mean, school is so important, and that's how we get to this point. And I do love, I think, back to my many courses I took in college, and I love all of them. It was so fascinating. And then being able to really put that into practice, it was different. I mean, you could pull on the stuff that you learned in the classroom, but really putting it into experience and practice. It really helped drive everything forward. That's one of the purposes of the internship. And then when you move forward with whatever area of expertise you want to work in, you really get to make a difference and also learn and really understand more. I think a day where you learn something new is a wonderful day. I just love learning new things.

Holly: Absolutely. Yeah. And, you know, with the changing times as well. Technology. I remember back in the day when The Calorie King was a book and you had to carry this book around. Of course, kids didn't want to carry a book around with them. And it was a thick book at that. But now it's in your pocket, it's on your phone. It's so easy. I love the Calorie King. I downloaded it. I use it with patients. Honestly, when I show them how easy it is to find the grams of carb in foods, they download it right there in front of me on their phone. So that's awesome, because then I know they're going to use it.

Jana: Yeah. And it's true. And I mentioned in many of my episodes, about how science is always changing and how awesome science is. So science changes, technology changes. We continue to learn more and have access to newer technology that can help us. And it does make a huge difference because yeah, it is hard for especially kids to have this change in lifestyle and to be able to put something on an app that they can easily access without it being broadcasted to all of their friends that there is something different with them. Or they have this

condition that they have to control, which could lead to teasing or questions that they just don't want to answer. It does make it a lot easier for them.

Holly: And I think this is another reason why I do my best to kind of show them how healthy eating in general, like how we can make it work into their lifestyle. To me, like, clean eating doesn't necessarily it's not like you're a vegan or you're a pescatarian. Clean eating is just that. I mean, you're eating your food in the most whole form that it is. We're going to pull away from a lot of the processed foods that are really exacerbating the problem. And if you're taking the medication, whether it be metformin or Glipizide, if you're type two and again, you could be a type two and needing insulin, that's kind of what we're seeing. They just need a little extra help. But really just focusing on healthy eating. I think if we go in with that attitude, it really will help the clients because nobody wants to feel like they have to eat a certain way and then the rest of the family gets to eat another way.

Jana: Yeah, I agree. Plus, you know, we have to figure out how, how to adapt to while we educate and do the best that we can. Also just showing how to make it practical because when it's practical and easier to follow, they're more likely to actually follow.

Holly: Exactly. Well, like, for example, with the GDM that we were talking about, just gestational diabetes, there is a bit more structure. And I let them know we are going to have a little bit more structure here because the goal with this is to be able to provide enough nutrition for you and baby. So it's not like we're restricting per se. We are dividing up this certain amount of carbs through the day that's going to be best for you and baby. So when they kind of understand like, okay, I can't just do my two big large meals a day, it's not going to be healthy for baby. And then I explain, of course, why two large meals is going to drive up the blood sugar and then that blood sugar passes through the placenta to baby. Now, baby can continue to get larger and larger. And I said, you know, having a healthy baby is one thing. Big baby doesn't necessarily mean healthy baby.

Jana: Right.

Holly: Sometimes it's cultural, I have to admit. So it can be. And we really focus on health. So, you know, for that meal plan, it's typically three meals a day, three healthy snacks. Some patients, we only will do two snacks just depending on their schedule, especially if they work graveyard And we like the carbs to stay somewhere around 15 to 30 in the early morning. Again, because of the hormones making the body more insulin resistant. And then as afternoon comes, things kind of level off. So we can go with 45 grams of carb for lunch and 45 grams of carb for dinner. And then we usually do 15 to 30 for your snack. And I kind of give them an example of what that snack might look like. But especially in the morning hour, if they're used to eating cereal, for example, and I give them

other options and they're like, oh, okay, so I still get to eat enough in the morning. I'm getting eggs and toast with, let's say avocado on it. They feel like, okay, I'm not going to be starving because and I tell them, actually, you're going to probably feel more fulfilled with the avocado, toast and eggs and some spinach versus just a bowl of cereal.

Jana: That's right.

Holly: But the blood sugar is going to be set up for the day much better than having a bowl of or cereal in the morning.

Jana: Yeah. And showing them what they can eat and giving examples really helps with that, because otherwise people can feel so defeated when they leave.

Holly: Absolutely. And I do like doing the recall because I try my best to tie in all the pluses, all the positives that they're already doing, like, oh, perfect, all we need to do is tweak this. Like, why don't we do one toast instead of the two? And then why don't we add if they see that we're adding, it's like, oh, okay, I need to have that now. So, you know, instead of the taking away and taking away, because most providers, the doctors will say, oh, you can't do this, or family members, you can't have this. When I talk to them, they're like, oh, I didn't know I could have that, or I didn't know I could have this. So it's refreshing because then they feel like now you've partnered with them, you're not one of those that are saying, no, no, no.

Jana: See, that's why you're perfect at your job, and the patients love coming to you, because I always feel so good when they leave.

Holly: Oh, thank you. Well, and I think this is why we all kind of become dietitians, you know, that we have a passion for helping people. Bottom line.

Jana: Yeah, there's so many things out there, and you can try something. I mean, I'll speak to that, try many different things, and if it doesn't work for you, you can try something else. Or there's pluses and minuses, I think, with everything. But I just think finding that thing that really works for you and it might work even for a while, and then you might find, hey, you know what? This isn't my thing. And that's kind of been my journey. And you're an example of how you found your thing, and that's just what you love to do, and you continue to do it. And so I don't think that there's a right or wrong way. You find what works best for you, and you just go with it. And that's really the beauty of this profession. Is just you can continue to pivot and do your thing, or you can just really

continue to perfect the thing that you love to do, the thing that brings you joy. And you definitely have found your niche, and you are fantastic at what you do. I've personally witnessed you in action and see how patients feel so good when they leave and feel inspired, and you're very comforting, and so it's definitely the perfect job for you.

Holly: I just feel like we're all given gifts and talents. I mean, this is just kind of how we're made, and it's a journey to figure out what that gift and talent is. And I just feel like this passion for diabetes, I think, because of family members having it. I think I shared with you before about my grandfather. Well, actually, both my grandparents fathers had diabetes, and one didn't have a good result because he really did not follow much of any recommendations. But I was very young when he passed, but I remember him being in the hospital and visiting him and him having something called gangrene, and I just really didn't know what the heck that was. I just knew it was bad. And then the next time I visited him, his foot was amputated, and then the next time it was his leg, and then the next time it was his other leg, and just a whole of problems because he really didn't follow any kind of a plan. And I think that's the thing with diabetes, you know, you think it's kind of like, that's the end. And it can be for some. But the thing is, my other grandfather, he lived to be 93, and he had diabetes as well, but he followed the diet. He would call me very frequently asking me for advice, and I feel like he made a lot of efforts to improve his care, and he lived a very long life. So it's just a passion of mine. There's, like I said, so many family members with diabetes, and I just feel like I could get diabetes. I don't know. I do the best I can, but because we do know risk factors, I do the best at making sure that the things I have control over, like my weight and like, what I eat and exercise, I will control. But obviously, I can't control genetics, I can't control ethnicity. So you just got to kind of roll with it. But I just have this real passion for diabetes, I think, because I've had to counsel so many family members with it that I feel like I'm geared to do this.

Jana: You are. It's perfect for you. Thank you so much for being here, Holly. It means so much to me. And I know that it is meaningful to the listeners, too, to hear stories, that's kind of my thing. I like to teach through stories, and I think that's how it really connects everything. So I really appreciate you sharing today some stories of patients that you have and experiences that you have and really trying to bring everything together, you know, the textbook stuff with the practical world that we work in as dietitians. And I really do appreciate everything that you do. I appreciate you being such a dear friend to me. And thank you so much for coming on the podcast.

Holly: Absolutely. And I would really hope that your listeners will kind of walk away with a new understanding of really allowing for their contacts, the patients that they come across to really learn from them. So I feel like it'll make life more rewarding for one, but they're going to learn a lot when it comes to taking that exam if they can use the practical things that they've learned from their patients.

Jana: Well, thank you, Holly.

Jana: Isn’t Holly amazing? She's so kind and nurturing, and she's not just like that with her patients. She's always like that. Such a beautiful person and really in the perfect job for her. Dietitians, like I say, are amazing and do so much important work. And you, my friend, are no different. You're here for a reason, and you're making a difference already. Keep going and stay on top of your study game. There's no limit to achieving the success you so deeply desire. Until next time.

[Music and Outro]