Balance365 Episode 222 Transcript

ANNIE BREES (INTRO)
Welcome to Balance365 Life Radio, a podcast that delivers honest conversations about food, fitness, weight, and wellness. I'm your host Annie Brees, along with co founder Jennifer Campbell. Together we have a team of personal trainers and nutritionists who coach 1000s of women daily and are on a mission to help women feel happy, healthy, and confident in their bodies on their own terms. Join us here every week as we discuss hot topics pertaining to our physical, mental and emotional well being with amazing guests. Enjoy.

ANNIE
Hello, everyone, welcome back to Balance365 Life Radio. Over the next two weeks Jen and I are going to be talking about type two diabetes. We are going to walk you through what type two diabetes is, dispel some of the myths, help you assess your own risk, and discuss what people can do to prevent or delay developing type two diabetes. And today we actually have a special guest Janelle Edwards. Janelle is a nurse, mom, and all around awesome human. I don't just say that because she's Jen's little sister. It's actually true. I've met her in real life and adore her so much. She helped us with this episode, a ton. And we decided to ask her to come on and share her experience with being diagnosed with type two diabetes recently herself. Now before you go thinking that this episode is not for you hear us out. In the United States, about 13% of the adult population has diabetes, and 90 to 95% of those cases are type two. Even more concerning is that 1/3 of the US population is pre diabetic, but 80% of those individuals have no idea. And that's not all. Type two diabetes is a risk factor for developing heart disease, which is the leading cause of death for women in the United States, which we're going to be covering in a future series. All of that to say that we probably should be thinking about type two diabetes. But as always, we want to make sure that you have the right information, and a balanced perspective. But before we get started, if you don't know, twice a month, we send out very personal -in my opinion - and impactful emails about health, wellness, psychology, and behavior change to everyone who has subscribed to our newsletter. If you want it on that go to balance365.com/email forward slash email to add your name to the list. I promise you will not be disappointed. Enjoy my friends.

ANNIE
Jen, we have a very, very special guest on today's show, don't we?

JEN CAMPBELL
We do.

ANNIE
And I think as we were joking before she's ready for takeoff with those headphones.

JEN
[Laughs]

JANELLE EDWARDS
Thank you for that.

ANNIE & JEN
[Laugh]

JEN
I wish everybody could see her. She's wearing her husband's gaming headset. [Laughs]

JANELLE
Thank you so much for that visual.

ANNIE
So, so happy to have you Janelle, welcome to the show what great hosts we are. [Laughs]

JANELLE
I'm already being harassed by you. Thank you.

JEN
[Laughs]

ANNIE
This is not the first podcast we've recorded. We recorded an amazing podcast, gosh, moons ago, many moons ago about the two of you. But this is a different topic. And you're here as kind of like serving two roles. Do you want to introduce yourself and tell us a little bit about who you are? Or why we want you here for this discussion?

JANELLE
Sure. So I'm Jennifer's sister, obviously, we know that. I am a registered nurse. And I was diagnosed with type two diabetes in January. So that is why I'm here. I'm kind of being the nurse and the patient today.

ANNIE
You're wearing two hats.

JANELLE
I'm wearing two hats.

ANNIE

Beautiful. So we've got a lot of information that we want to cover and that we want to share with today's listeners. I know you two have done a lot of the legwork on the science behind it. But we want to keep it pretty high level ish, right? To not get too bogged down by the science. But -

JEN
You could go down a real rabbit hole here. And you know, at some point it can get, become unhelpful when you get lost in some of the science.

ANNIE
Yeah, but explaining the basics of what is diabetes, doing some myth busting, all that is really influential, and then we'll get into also what people can do to manage the risk factors. Janelle is gonna share her personal experience, which I think is going to be really helpful for those listeners who are also wrestling with this diagnosis, too. So should we get into like what it is?

JEN
Yeah.

ANNIE
Okay, who wants to take it?

JEN
I'll start, and Janelle, you jump in whenever you want to add something that you think I'm missing. Okay?

JANELLE
Sure.

JEN
Actually, before I start, I'll say that Janelle helped me so much with this outline, that I ended up just saying, "Hey, do you want to come on?" [Laughs] So the first question is what is diabetes? And to understand that I want to give a quick biology lesson. So our bodies need fuel for all of our bodily functions, daily tasks, we get that fuel from food. Food is made up of three macronutrients: protein, fat, and carbohydrates. Carbohydrates are the main source of fuel for the body, or I should say preferred, and our bodies break down or convert the carbohydrates we eat into glucose. And that glucose enters our bloodstream, and is transported to muscle fat and liver cells to be used for energy or to store for later use. And so our pancreas secretes a hormone called insulin. And insulin is what moves glucose from our blood, also called blood sugar into our cells. So think of insulin as a key to the door. When insulin unlocks the door, glucose can enter our cells. And so diabetes is a disease in which your body either can't produce insulin at all, or can't properly use the insulin it produces. That means the door to our cells stays locked and glucose can't enter the cells. And this leads to a buildup of glucose in our blood, aka high blood sugar.

ANNIE

Well done.

JANELLE
Thank you.

ANNIE
That was great.

JEN
Thank you. Applause please.

ANNIE & JEN
[Laugh]

JANELLE
[Claps]

ANNIE
Janelle, anything to add?

JANELLE
No, that sums it up. That's how I would have said it.

JEN
So there are four different types of diabetes I want to cover really quickly. And as Annie said, this podcast will primarily be talking about pre diabetes and type two diabetes. But there's also type one diabetes and gestational diabetes, which many people listening may have heard about. So type one diabetes is actually an auto immune disease. What happens with type one is the body's immune system attacks and destroys beta cells in the pancreas, which make insulin. And so the body is left without any insulin at all, which means individuals with type one diabetes will be dependent on taking synthetic insulin to manage the disease the rest of their lives. Type one diabetes has a genetic and environmental component to it. That means you have a genetic disposition and something in your environment triggers it to develop. And nobody knows exactly what that is right, Janelle?

JANELLE
Correct.

JEN
Kind of a mystery, but they suspect that it might it may have something to do with vitamin D deficiency. And that's because type one diabetes develops more often in winter than summer and is more common in places with cold climates. Isn't that interesting?

ANNIE

That's fascinating. So we should all move to Hawaii?

JEN
Yes, we should.

JANELLE
Obviously.

JEN
Yes, yes. Another trigger might be viruses. So it's possible that a virus that has only a mild effect on most people, triggers type one diabetes in other people. And then there's also some evidence that early diet can play a role. So for example, type one diabetes is actually less common in people who are breastfed. And in those who first ate solid foods at later ages. Interesting? You guys look very interested.

JANELLE
I'm speechless.

JEN
[Laughs] And then type two diabetes is the result of not enough insulin being made in the pancreas, or insulin resistance. So that would mean that your pancreas is releasing insulin, but your body isn't able to use the insulin it makes right? The cells are not responding well to the insulin produced. Type two diabetes also has a genetic and environmental component to it, like with type one, but interesting fact, type two diabetes has a stronger link to genetics and family history than type one diabetes. The environmental trigger for developing type two diabetes is multifactorial, which we'll get into throughout this podcast, but it's related to a multitude of things including a person's lifestyle. But the great news about that is individuals can prevent or delay developing type two diabetes with some lifestyle changes, even small ones. And in addition to that, another area of type two diabetes we'll get into later is remission, which I'm like quite interested in. And there are interventions that some people can make that can put type two diabetes into remission. And like key word here as Sam, I don't want anyone to think that everybody can put their type two diabetes into remission. And just the fine print here is that we don't want anyone falling into the trap of believing that type two diabetes is a simple disease, and that your risks can solely be managed with lifestyle choices. If an individual is insulin resistant, there's a cascade of issues that can happen that they're completely unaware of that increase their risk for developing pre diabetes or type two diabetes. And we will also be getting into that in a little bit. But the bottom line is that type one and type two diabetes have different causes. But there are two factors that are important in both: one, you inherit the diabetes genes and two: something in your environment triggers it. And we know this because there's been identical twin studies, so individuals with identical genes, where only one of the twins develops either type one or type two diabetes.

ANNIE
Also fascinating.

JEN
Yes, you guys still interested? You still following?

ANNIE
I'm processing,

JEN
You're processing. Okay.

ANNIE
I'm with you, though.

JEN
Great. And then there's, so gestational diabetes. It happens in pregnancy. And it's when hormones produced by the placenta cause insulin resistance, and it happens in 2 to 8% of pregnancies in the USA. But it's also temporary. So as soon as somebody isn't pregnant anymore, that goes away. But all that said, this is important to know if you've had gestational diabetes, that you have a 50% chance of developing type two diabetes later in life, so important to be aware of. And then lastly, pre diabetes isn't actually diabetes. If you are told by your doctor that you are pre diabetic, it means that your blood glucose levels are higher than normal, but not high enough to be diagnosed as type two diabetes. And it occurs in people who already have some early insulin resistance going on. Right? Their blood sugar levels are rising. And so what will be happening here is your pancreas starts making more and more insulin, trying to get cells to respond, trying to overcome the insulin resistance. And that can work for a while but eventually your pancreas can't keep up. It gets tired. Janelle? Right.

JANELLE
Yep.

JEN
Do you want to do your impression of a tired pancreas that you did earlier? [Laughs]

JANELLE
Yeah, I just was like, "What do you, what do you need from me? What more do you need from me?"

JEN
And that's when your blood sugar rises, which sets the stage for pre diabetes and then type two diabetes down the road. So we're going to be talking about pre diabetes more, as it's like often or always, Janelle, a precursor for type two diabetes, correct?

JANELLE

Yeah, yes. But people often don't know they have it. So people are often diagnosed with type two diabetes. So surely, n the years prior to being diagnosed with diabetes, you had pre diabetes.

JEN
Yeah. And so I'm particularly interested in getting, in getting our listeners interested, or even excited about pre diabetes, because at this stage, there's still time to turn things around and avoid or delay a type two diabetes diagnosis, which I think is, like kind of exciting, but I'm pretty nerdy. So.

JANELLE
I think it's exciting, too, so I'm with you. Yeah.

ANNIE
I know we're gonna get into the details of your experience a little bit later, Janelle, but were you ever diagnosed with pre diabetes?

JANELLE
No, I, so in nursing school, probably about four years ago, I did, I was in a clinical and I did a fasting glucose just on the ward myself. And it was higher than it should be. And based on, there's a couple different models I was looking at, but it put me either in the high risk category or the prediabetes category. And that terrified me. So I proceeded to avoid it for the next -

JEN
[Laughs] Avoid going to the doctor. It happens.

JANELLE
Yeah, I was in school. I didn't have the bandwidth to take on like a health crisis, which in hindsight is kind of sad, but that's just where I was at in my life. So I'm sure that I would have been diagnosed with pre diabetes at that point, but here we are.

JEN
That's actually called, that's a cognitive bias called the ostrich effect.

JANELLE
Yes.

JEN
And it's like very common that people just avoid learning information that actually has the potential to help them, because it's just, it feels harmful to them.

JANELLE

Right. And when I got diagnosed in January, I had actually got the lab requisition from my doctor a whole year before, I just, but I just didn't have time. I maybe had a feeling that the results would be not what I was ready to hear, you know, just I ostriched. I ostriched hard.

ANNIE
I appreciate the honesty and transparency, because I have talked to women in Balance365 who feel feel similarly. I'm sure I can think of examples where I have avoided looking, I mean, even unrelated to my health, like my bank account. You know? [Laughs]

JEN
I do that when I avoid walking up hills, because I don't want to face my diminishing, like, fitness level, like, no, I'm gonna go around. I just can't face that evidence right now.

ANNIE
Yeah. And I think there, and this is a great segue into kind of the next section here is because when, if and when, you find out this information, you maybe have to face the consequences of continuing to, you know, turn away from it or take steps to address it. And so I think that that's a great segue into, like, why does this information matter?

JEN
Yeah, so a few things. Having high blood sugar is harmful to your body. It's not just this harmless thing. "Oh, my I got high blood sugar. Oopsy daisy." It's actually doing harm to your body. So high blood sugar causes damage to your blood vessels. And the organs most affected by this damage are the heart, brain, eyes, nerves and kidneys. So we're talking an increased risk of high blood pressure, heart disease, kidney disease, eye diseases, nerve damage, it increases your risk for heart attack, stroke, foot and leg problems. Even lower limb amputations, even blindness. So often, you know, we hear about this association and many people may not understand the underlying mechanism. But I think in Canada, it is, for anyone new here, Janelle and I are in Canada, and Annie is in the USA. I think the stat I read was that 70% of non traumatic amputations in Canada are due to diabetes complications. So, and that is the nerve damage. Correct? Janelle?

JANELLE
Yeah.

JEN
That's happening because of high blood sugar.

JANELLE
Yeah, so it'll start with diabetic neuropathy, which is, like really painful. So your feet and hands will hurt. And it puts you at risk for like infections, you're not getting that perfusion, the blood perfusion, because that glucose has damaged. Those blood vessels, you can see, like people with diabetes, you know, unmanaged or you know, or an advanced state of diabetes, like, can step on something like a tack and not feel it. And then, you know, like, infection can arise from

that, like, people with diabetes have to actually be really careful with their feet. And there's actually like foot care nurses who treat people with diabetes to make sure -

JEN
Oh gosh.

JANELLE
- yeah, that they're not hurting themselves, because they can't feel it. So it's kind of scary in that way.

JEN
Yeah. So to answer your question, why this matters, Annie, is that these are serious and life threatening complications and properly managed blood sugar reduces the risks of developing these complications.

JANELLE
And I just want to add that when I got diagnosed three months ago, and was kind of slowly telling friends and family, the reaction that I was getting was, "Oh, well, that's, it's okay. Like, it'll be okay. Diabetes can be managed." And with my kind of underlying knowledge of the pathophysiology of diabetes, I was like, "Whoa, whoa. Managed, yes. But I don't know if the general population really grasps the serious, harmful impacts of this disease and how it can progress if it's not, if it's not properly managed."

JEN
Yeah, and so that's not all I want to mention is the like, you know, the longer term complications, so untreated and unchecked, high blood sugars are going to feel terrible for the person day to day. So imagine what happens when glucose isn't reaching your cells to be used as energy your body is like, confused. So, untreated high blood sugar will likely cause chronic hunger and weight gain. Because your body's like, "Hey, hey, I need energy, I'm not getting the energy I need in these cells. Hey, let's eat again."

JANELLE
Exactly.

JEN
"I am hungry." So food, enough food is being eaten. But the glucose isn't reaching the cells, the body thinks it isn't getting enough food. This creates a vicious cycle where high blood sugar and problems with insulin causes feelings of hunger, which will lead to excessive eating, which in turn, raise blood sugar. And the interesting thing here is that a lot of people believe that excess body fat causes diabetes. And while there's some truth to that, I'm not denying that. But while there's some truth to that being a risk factor, there's also this chicken and egg scenario going on where someone with untreated pre diabetes or even diabetes is going to feel hungry, and be eating an excessive number of calories to try and satiate that hunger, making them more likely to be gaining weight. So not only does excessive body fat contribute to the development of

insulin resistance, or pre diabetes and diabetes, but having untreated diabetes also leads to accumulating excess body fat.

JANELLE
Exactly.

JEN
And then the second thing that is really going to impact a person's day to day life is chronic fatigue. So people with untreated diabetes are not going to be tired, they're going to be fatigued. And what I mean by that is, when you're tired, it's fixed by sleep. Fatigue is not fixed by sleep, it means you could be getting plenty of sleep or rest and still feel exhausted. So of course, when you're tired, you don't feel like moving around much, do you? Or exercising. So we have another vicious cycle here. You're too tired to exercise and yet being sedentary is a risk factor for developing diabetes, because being sedentary makes you more insulin resistant. And then we can kind of ask ourselves that same question as above, like, what came first? Did being sedentary contribute to high blood sugars? Or did high blood sugars contribute to becoming sedentary? And you know, maybe a little bit of both. Does that all make sense? Annie's really processing.

ANNIE
It does, and I'm just thinking, okay, so chronic hunger and/or weight gain, chronic fatigue. Those are pretty vague. And I bet a lot of people listening are like, "Oh, gosh, that could be me. But there's some other..."

JEN
We'll get into that -

ANNIE
Symptoms.

JEN
- like to look at, you need to look at it holistically. But like other symptoms people should watch for outside of hunger and fatigue would be recurring infections, blurred vision, cuts and bruises that are slow to heal, tingling or numbness in the hands or feet, excessive thirst, excessive urinating. Erectile dysfunction is another one. But that said, many people who have like, especially in the early stages of pre diabetes, or even diabetes, they don't have any symptoms or their symptoms are explainable for other reasons. Janelle, do you want to elaborate on your experience with that? Because I know you had quite a journey.

JANELLE
Yeah. So I can confidently say for about a year before I was diagnosed that I basically spent 2021 in bed, and I was hungry all the time, which, I'm a nurse, I work shift work. I had just finished nursing school and anytime you say, "Oh, I'm so tired." It's explainable. Everyone jumps

in and says, "Yep, shift work. You must be experiencing pandemic burnout because you're a nurse."

JEN
Which, there's truth to that as well. Right?

JANELLE
Yeah, exactly.

JEN
Lots of truths here. Yeah.

JANELLE
Or "Yep, that's adulting, you're always tired when you're an adult." And I have kids and I commute like, it made sense. For a while there, I thought I was really depressed because I couldn't get out of bed on my days off, I couldn't stop eating. Those are kind of traditionally like hallmark depression symptoms that I have. So for a year, I just explained it, I explained it away. And then I always pick a word for the year so leading into 2022, my word was going to be care. And I thought like a good little girl, I'd go and get my bloodwork, do my due diligence, and I didn't dream that that was going to lead to a diagnosis.

JEN
You were shocked when you were diagnosed.

JANELLE
I was shocked. I thought at worst, because I know I have some risk factors, I would be pre diabetic, and I was ready to tackle that, but to have been kind of tipped over the edge of the actual diabetes was devastating.

JEN
Yeah, I remember the phone call.

JANELLE
Mm hmm.

ANNIE
I think that's such a good point, Janelle, is that our culture has really normalized, being tired, always hungry, gaining weight. Like that's just like, you could -

JANELLE
Getting older, yeah.

ANNIE

- explain that. Yeah, explain that with a busy lifestyle. And I'm running kids here and there and I'm maybe working long hours in a pandemic, and it would be easy to overlook, like, why are these things happening? Oh, it's just a reflection of my lifestyle.

JANELLE
Exactly. Yeah.

JEN
And there's more, right? Like, we are often recommending members of our program to get blood work. There's many things underlying issues that can be causing fatigue, and, you know, hunger and cravings, and all of these different things. And it's like, "Hey, like, it's really hard to coach you, when you have underlying systemic things that are driving, whether it's driving this hunger or driving this fatigue, or lack of energy," which as Janelle said, like depression is one of those things. But I, at different points in my life have had low iron. And like, there's no amount of coaching or willpower, or whatever it is that I needed to have more energy, like I needed to restore my iron levels.

JANELLE
You're swimming upstream. So if you have any kind of goals, whether it's fitness goals, or weight loss goals or just overall health and wellness goals, if you don't have that information, your body, your body is fighting you. And you're not going to get anywhere and it's going to be frustrating. And we're not robots, there's always going to be that psychological piece to it. So when I'm spending days in bed thinking, "Do I have depression?" Well, it didn't take long before I really did have depression because that doesn't feel good.

JEN
Yeah. So there's a lot of vicious cycles going on because of underlying, unaddressed -

JANELLE
Right, and not having the information. I didn't stand a chance to address it properly.

JEN
Right. Yeah. Yeah. So the other thing I want to mention, when Annie asks, why does this matter, and it's that the prevalence of both pre diabetes and type two diabetes is a lot higher than people realize. So approximately 13% of adults in the USA have type two diabetes, and 25% of them don't know they have it. And this is even more staggering. I think it's estimated that a third of Americans have pre diabetes, and that 80 to 90% of those people have no idea they have pre diabetes. And the stats in Canada aren't quite as high, but they aren't far off. But I think, you know, when Janelle and I were discussing this as we were creating this outline, I remember you said to me, Janelle, like you said living in North America is a risk factor. [Laughs]

JANELLE
Yeah, it's just that we're sedentary, like we are, let's just admit it. We're more sedentary. We have more access to, you know, processed food, refined carbohydrates.

JEN
Saturated fats, and yeah.

JANELLE
It just is.

JEN
Yeah. Really, a third, I mean, maybe, a third of people listening could have prediabetes.

ANNIE
I just did the math. [Laughs]

JEN
Yes, did you? [Laughs]

ANNIE
I did. Well, let's just say like to make easy math. If a third of the people listening in on an average week, let's say we get 10,000 downloads, that's, you know, just over 3000 people, if 80 to 90% of those people have pre diabetes and don't know, that's about 2600 of you listening, potentially have pre diabetes and don't know it.

JEN
Yes. And we'll get into the risk factors, too, as we get through this outline, but because that will change, you know, depending on if you have the risk factors, then that'll kind of push you more towards that likelihood of, "Wow, this could be me."

ANNIE
All the non US listeners are like, "Well, that's not me."

ALL
[Laugh]

ANNIE
"That doesn't apply to me."

JEN
You know, I'm Canadian, Annie is American. And I concentrated my research around Canadian and American sources, and I mean, the ADA is, is really like the world's source, but there's some really great organizations around the world that are kind of focusing their work in their own country, the UK, Australia, New Zealand, but our lifestyles don't really differ from you know, Australia to Canada to US, to, you know, we're all kind of living in that same society. So. So that's the second reason, Annie, is that the prevalence is a lot higher than people think. So

there's probably, there could be a lot of that like, "Well, not me," going on. And it's like, hey, well, maybe.

JANELLE
I also think, even if not you, and that's great. I would advocate for anyone to go get bloodwork if they're able to, if they have access to, to get a baseline, because your blood work is going to tell a story of what's going on in your body. And it might be perfect today. But if, when you get that repeated in five years, and you see some trends, maybe certain values are trending up, you know, over the years, you can respond to that instead of just kind of being blindsided by...

JEN
Right, like Janelle was.

JANELLE
Yeah, I don't remember the last time I got bloodwork before this.

JEN
Yeah. I also want to mention here that the damage caused to the body by chronically high untreated blood sugar doesn't just start the day you get the type two diabetes diagnosis, right? So it likely starts during the pre diabetic stage, there just aren't any or very minimal symptoms, if you don't have any symptoms, then your blood work really is the thing that you need to see if your blood sugars are high. And that's why I think this is a really interesting area, the prevalence is very high, it is very damaging. And there's an early warning system, like pre diabetes really is an early warning system. So that's why I think all of this is really important to talk about because I care about our listeners, I care about people.

JANELLE
We all want like a crystal ball into our health when we're, you know, as we age when we're 50, 60, 70 and beyond and getting that bloodwork and seeing where things are at to me is the crystal ball.

JEN
Yeah, as is, what I would say, is like looking at family members, which we'll also get into.

JANELLE
And being honest with yourself.

JEN
And being honest, yes. So not everybody with pre diabetes will progress to diabetes, I also want to be clear about that. But the stat that I got from the CDC website is that about half of those with pre diabetes, will progress to type two diabetes within five years. So a lot will. And then the third reason I think this matters is that pre diabetes and type two diabetes may be completely preventable for some, and it may be delayed delayed for others. I want to say that there's different stats in different places. And I also want to acknowledge that there's a lot of, there can

be a lot of shame attached with talking about type two diabetes and your risk for it or even if you have a diagnosis. So, you know, I just want to acknowledge that before I share some of this because that is not the place I am coming from. When we hear that type two diabetes can be prevented or delayed, I think that is the thing that can cause the shame. But diabetes Canada set estimates that half of all type two diabetes cases can be prevented or delayed. But different organizations say different things. And I've read other organizations saying that 90% of type two diabetes cases can be prevented or delayed. But the bottom line here is that the sooner you know, the sooner you can start looking at your options for medical treatment or making the lifestyle changes that will support getting those blood sugar levels back in healthy ranges. And it also just means like speaking to the immediate effects that Janelle was talking about, like that excess hunger, that chronic fatigue, the weight gain, it also means like just having a better quality of life, like not in the future, but in the now.

JANELLE
I feel like I missed a year of my life, which is sad. And I remember during that year, like having this recurring thought of like, this isn't living. This isn't living. And it wasn't, and that's why we're here. That's why we're all here. We want to live a full, fulfilling life and I can assure you, sleeping 13 hours at night, napping during the day, and not being able to get out of your bed is not living.

JEN
Yeah. And I think, you know, I know several individuals with type two diabetes and getting the diagnosis and getting their blood sugar under control is like life changing, like it's quality of life changing, it's health trajectory changing, like the difference in how they feel. So should we talk about how a person can assess their own risks?

JANELLE
Let's do it.

JEN
Is everybody terrified now, after all this? [Laughs]

ANNIE
Everyone is like, "Okay, this grabbed my attention. This is important information. But I need to know, are you talking about me?"

JEN
Yes, I'm talking about everybody. It is important, right? So as mentioned, genetics and family history are going to be one of the biggest risk factors. If you have a parent or sibling who has been diagnosed with pre diabetes or type two diabetes, then you are at a higher risk yourself. And that's not just genetics, either. By the way, there's also the shared environment, like shared health and shared health behaviors that families have. So Janelle and I have an incredibly high family history of type two diabetes. It's like, it's like the Oprah meme. Like, you have diabetes.

ANNIE

[Laughs]

JEN
And you have diabetes.

JANELLE
[Laughs]

JEN
[Laughs] And you have diabetes.

JANELLE
Yup.

JEN
Yeah. So it is, like looking at your family can be very beneficial. Also, sometimes nobody in your family has it. But even listening to these stats, how you know, a third of people have pre diabetes, 90% of them don't know it, you could have family members that also don't know it. In addition to the family history, it would be looking at other risk factors. So as you get older, so if you are over the age of 40. If you are male, you are at a higher risk for developing type two diabetes. Ethnic background. So African, Arab, Asian, Hispanic, indigenous, and South Asian people are at a higher risk for developing type two diabetes. High blood pressure, high cholesterol, and high waist circumference, can all make you at higher risk for developing type two diabetes.

ANNIE
Can we circle back to the genetic component here?

JEN
Sure. Yeah.

ANNIE
So, because you shared that you have a strong genetic tie to diabetes, in assessing the risk, if you knew that about yourself, would you, is it recommended that if someone has that information, that they seek, I guess, get additional blood work done or blood work done sooner with that information?

JEN
Yeah, that's a really good question. Because screening guidelines in Canada are to test blood sugar levels, or test A1C, every three years after the age of 40. And in America, this is what I found in America, and I know your health care system maybe varies a bit, because you have a private health care system versus Canada has a public health care system. And in the USA, the guideline is every three years over 45. And I know Janelle has thoughts on that, because she's in her 30s. Right?

JANELLE
I'm 35. And right, clearly, this didn't happen overnight, I wish that I would have had bloodwork at 30. You can have pre diabetes for years, years before you develop type two diabetes. And like we mentioned earlier, that early warning system is there, and you just need the information. So 40 is too late. I would have had type two diabetes for five years, right?

JEN
And like, just think of the damage, right?

JANELLE
The damage. Like, physically the damage. That's terrifying, but also five years of my life, when I'm not feeling well, not able to engage fully in a life that I want. I mean, you don't get those years back. And the sooner you get a diagnosis or the sooner you get that early warning system that enables you to intervene, you know, you get life back, and I, that's the biggest thing to me.

JEN
Yeah, so, and you know, if you have any of the risk factors that we just spoke about, they should be and probably are, in many cases, testing you more often. So, my doctor, I'm 38. And my doctor is, you know, the last time her and I spoke, she said I will be getting tested every single year because of my risk factors. But years ago, I brought this up to a doctor and that doctor looked me up and down and said, "You don't need to be tested for it." And I was like, "Okay," but knowing what I know now, I think like, you know, back to the Oprah meme. It's everywhere in our family. And I personally feel it is incredibly important for me to keep on top of that specific health marker.

JANELLE
And it doesn't hurt, if you get that bloodwork and it comes back good. Well, okay, great.

JEN
Yeah. And I mean, in Canada, there might be, I think there's probably complexities when it comes to having a public health care system and a private, so maybe in America, Annie, with the private health care system, maybe doctors are able to do more. I don't know the background on that. And maybe they are testing every year, where in Canada, they might be more conservative.

ANNIE
I think, yeah, it varies, you know, from provider to provider. And probably insurance plays a factor, of course, but what I'm hearing you say is, if you're hearing this, you have some of these factors. And A, to is to see is this included in my blood panel when I go for a yearly physical. Are they checking? B, if they aren't checking, and I think they should be checking, inquire, advocate for yourself.

JEN

Yeah. And I think actually, Janelle, and I have a story. Do you want to tell the story of somebody...What happened recently, Janelle that you were quite surprised by?

JANELLE
Sure, so, being the kind of the family nurse asked me a lot of questions. So I was talking to a family member. And we were just talking about like health and wellness. And he said he had just had bloodwork done, and it was great. And I knowing that our health care system can be reactive, as opposed to proactive, I was like, was it and he offered to send me his bloodwork. And I was like, even better. So he sends it along. And I look at his A1C, which is the lab marker for diabetes. And his value put him in the category of pre diabetes. And his doctor didn't mention that, his doctor wasn't concerned, didn't bring it up, like gave him the two thumbs up, you're good to go. And so then I had a conversation with him about that. And yeah, he's feeling very motivated to change his lifestyle, and all that good stuff. But had that, had that not come up, I'm sure that he would have just been, you know, continued along the same path as he was, because as far as he knew, there were no issues. And in five or 10 years, whatever, he would have -

JEN
Could have been, right.

JANELLE
Yeah, could have been diagnosed with diabetes. And it would have been like, "Whoa, this is such a surprise." But. He doesn't have to.

JEN
Yeah. And that's fantastic. Right? He's doing what he can. And again, I want to be careful, because, Janelle, I don't know if you agree with me, but some, like there's just some people are going to develop type two diabetes no matter what they do. Right? But you know, we're doing what we can here. And that's great that this individual is doing these things, right? Because actually, regardless of, if it helps them prevent diabetes, type two diabetes, or delay it, they're healthy habits.

JANELLE
Right. It's going to contribute to a better quality -

JEN
Yes, to better health in many different areas.

ANNIE
Can we go back to the waist circumference?

JEN
Yeah, that is actually a great place to pause and talk and unpack that a bit.

ANNIE
Yeah, that's something that's come up for other other reasons as other podcasts. But how is it relevant in this conversation?

JEN
Yeah, so that is a really good question. And we should absolutely pause there and talk about that for a moment. So we do have other podcasts about this. We do address it in our program. And like big picture, there's a situation in health and wellness where there's like a hysteria around any amount of body fat, there's a hyper focus on BMI. And what we've always tried to say over the years is, look, it's a little more nuanced than that. And we're not saying that high body fat is, you know, like there's, there's going to be no health consequences of that. We're saying there's just like, we need to have a little further conversation. And one of those things is to understand that your BMI is a measurement of, it's like your, it's your height to weight ratio, right? And what is even more specific to negative health outcomes is waist circumference, even more so than BMI. And BMI was never supposed to be something that people use to assess individual health risk factors. It is supposed to be used on the population level to look at how populations are trending. So what waist circumference does is it indicates, it can indicate, that there is body fat being stored around the abdomen, the midsection, rather than in the hips and thighs, for example. And abdominal body fat indicates like fat accumulation around the organs. And the result of that is dysfunction, organ dysfunction, which, it produces impaired regulation of insulin, blood sugar, cholesterol as well as abnormal heart function. So it is a risk factor for developing insulin resistance. How did I do Janelle?

JANELLE
I think that sounds perfect.

JEN
Great. Another risk factor I want to mention that I actually forgot was having PCOS. And we could do a whole podcast on PCOS. But essentially, it's a hormonal disorder that occurs in people with female reproductive organs. And it increases insulin resistance. So if you have had a PCOS diagnosis, you also are at a higher risk for developing type two diabetes. And then the other risk factors, I want to mention now that we're circling back, are sleep issues can increase your risk for developing type two diabetes. And that would include, I think, Janelle, is like shift workers. Correct?

JANELLE
Yeah, absolutely.

JEN
Kind of like a forced sleep issue happening.

JANELLE
Right.

JEN
Yeah. Working in healthcare or, you know, whatever industry you're in that has, does shift work.

JANELLE
Yep.

JEN
Yeah. So that sleep deprivation increases insulin resistance. And then, you know, this is the one people always talk about is like, how does diet impact your risk for developing type two diabetes? And I want to make sure that, you know, there's not ever solely one thing that is contributing to somebody developing type two diabetes, but it is, what would be unfavorable would be a diet high in saturated fat, refined carbs and low in fiber. Alcohol is another one as well, alcohol consumption.

JANELLE
The other risk factor would be stress.

JEN
Yes, that is that is also a very, very good one to bring up. Yeah. So there's some, there's actually some great online tests that people can use to assess their own risk. There's one through Diabetes Canada and the ADA, the American Diabetes Association, we can link to those in the show notes. I personally preferred the Canadian one. I did them both. It's just, it's 11 questions, and it's just a little more specific and comprehensive than the American one. Are you headed there now, Annie? [Laughs]

ANNIE
Well, I was thinking, I'm looking at this. I'm like, over 40. Okay, I'm 39. I'm almost 40. My sleep is okay. My diet's okay, but stress, alcohol, like, you know, I check some of these boxes for sure. So it definitely should be on my radar.

JEN
Yeah, for sure. So the next question is, how can you find out if you have high blood sugar if you are pre diabetic, or if you have type two diabetes, and there's a couple blood tests that can be done to determine if you have it. The most common is an A1C test. And I think Janelle, you said that's also gold standard test as well.

JANELLE
Yeah, that looks at your kind of overall blood sugar levels over the last two to three months. So it's a really good indicator of where things are at with you.

JEN
And a normal A1C level is below 5.7%. Pre diabetes is A1C level of 5.7 to 6.4%. And type two diabetes is an A one C level of 6.5% or more. Right? Like, simple as that. Yeah.

ANNIE
So if you can't test yourself, like Janelle did. [Laughs]

JEN
Yeah, if you're not a nurse and working in a hospital.

JANELLE
I just did like a fast thing. Like I just a random glucose like finger prick. Yeah, maybe you have like an aunt that has diabetes. And you can test your sugar at her house or something. I don't know.

JEN
Oh, right. Because diabetics have those.

JANELLE
Yeah, they have all those -

JEN
Those tools in their homes. Yeah, yeah. Don't we have a family member that wears a blood glucose monitor?

JANELLE
Yeah, you can get one that just sits under the, under the skin like on your arm and there's an app and you can measure your blood glucose that way as well.

JEN
And I know the topic of this podcast isn't like treatment of diabetes, but it is, that is like an incredible tool, for type two diabetes, isn't it?

JANELLE
Yeah, it eliminates like daily finger pricks. And yeah, there's a whole world of tools to monitor.

ANNIE
I remember my mom doing daily finger pricks. And it's quite the commitment.

JANELLE
Yeah, and you, you can't go anywhere without your little diabetes pack because you need to be testing, you need to be ready for highs and lows. And to say it's life changing is an understatement.

JEN
And this is why our grandfather who had type two diabetes, he had candy all the time. And as a kid, I was like, that's just my grandpa with the candy. He's always got candy on him. But actually, he was just being prepared.

ANNIE
Were they Werther's Originals?

JEN
No, they were actually you know what? He had his Double Bubble. Janelle, do you remember Grandpa having Double Bubble all the time?

JANELLE
Not -

JEN
He had some in his bedside table. I knew that because I used to sneak in there and steal them. [Laughs]

JANELLE
No, I don't really remember that as much.

JEN
Yeah, anyways, and he always had little candies. And it was him trying to avoid like low blood sugar times too, which also becomes an issue as well.

ANNIE
Okay, let's do, before we move on, let's do a quick recap. First of all, Jen, do you want to revisit how someone can assess the the risk?

JEN
Yes, let's do this kind of rapid fire so people can think through it. So number one, genetics and/or family history of insulin resistance, pre diabetes, or type two diabetes over the age of 40 puts you at in a higher risk category. Males are at a higher risk ethnic background. So African, Arab, Asian, Hispanic, indigenous or South Asian people are at a higher risk, high blood pressure, high cholesterol, high waist circumference. And then having PCOS which I mentioned earlier, which is polycystic ovarian syndrome, will put you at a higher risk. And then here's the lifestyle issues that you may have that put you at a higher risk. Sleep issues put you at a higher risk of a diet high in saturated fat, refined carbs and low in fiber. Being sedentary puts you at a higher risk for developing insulin resistance. And stress is a big one as well.

ANNIE
Okay, and how can someone find out if they have diabetes or prediabetes?

JEN
Visit their doctor, asked to be tested. And as mentioned, Nurse Janelle here tells us the A1C test is the gold standard. So request an A1C test.

ANNIE
Beautiful. So we're going to wrap up part one here, we're going to leave you hanging and give you all the information, the what it is ,your risk factors, how to find out if this is relevant information to you at this point, and then in part two, we're gonna get into more of the lifestyle changes, the myths and Janelle is going to continue sharing a little bit about her experience. Awesome. Thanks, you too.

JEN
Thanks, everyone.

ANNIE (OUTRO)
Hey, everyone, if your mind has been blown while listening to this podcast, just wait until you work with us. Let us help you level up your health and wellness habits and your life inside Balance365 coaching. Head on over to balance365.co to join coaching.