Insulin Resistance 101 + Women’s Health Deep Dive | Lindsay Venn, PA-C, RD, MPH Transcript

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Podcast Introduction and Mission

What if optimizing your metabolism was the key to unlocking your best life? Welcome to the Life Possible podcast where we bring you cutting edge insights, real life transformations, and powerful strategies to help you win the fight against obesity and metabolic disease.

Join host Dr. John Barnes as he explores the science and stories of transformational metabolic health. Because when you fuel your body right, you unlock your greatest potential.

From leading experts in nutrition and wellness to inspiring success stories, this is your go-to resource for education, motivation, and empowerment on your journey to a healthier, more vibrant life.

Your best life isn't just possible, it's within reach. Let's make it happen together. Here's your host, Dr. John Barnes. Hey, ideal protein nation. Welcome back.

I couldn't be more excited for this episode. I am super excited to bring you this person. So I'm just going to try to get through these intros as fast as possible so that we can get on to really this is going to be such a great show for you.

The life possible podcast for those of you who might be new. I started the Life Possible podcast about five years ago and I did it to help spotlight clients, coaches and clinic owners who had used the Ideal Protein program to reset their body and reset their mind and reset was actually possible for their lives.

But then it evolved and I got to tell, well, who am I and why am I even doing this? My name is Dr. John Barnes and about 10 years ago, I found myself in a place that I never thought I'd be.

Years of stress had driven me to overeating and over drinking and into a place called insulin resistance. The worst part was I didn't understand what had happened to me.

I had gained weight. I was obese. I was unhealthy. I just like to say I was fat sick and depressed. And the challenge of it was is I didn't see a way out.

But I truly believe that God brought me the ideal protein program is kind of the answer to a lot of my prayers, both personally and professionally. And so now I am on a mission.

I am on a mission to help as many people as possible get this information and transform their lives. And with this podcast, I am on a mission to bring you the world's leading experts in low carb and ketogenic nutrition and metabolic health, along with the real success stories of people who have changed their lives through ideal protein.

So who do I have today? I am so excited. I have for you today, Lindsey Venn. Lindsay is a certified physician's assistant and a registered dietitian, and she also has her master's in public health.

Lindsay Vennu2019s Career Journey

She's a founding member of the Society of Metabolic Health Practitioners and co-founder of the company Insulin IQ, along with one of my metabolic heroes I talk about all the time, Dr.

Ben Bickman and others. She right now is the sole owner of Venn Integrative Medicine, which is a telehealth practice where she's licensed in many states and we'll talk about that.

I met Lindsay through one of our mutual friends, Shannon Davis, who you might remember was a guest on my show in episode 81. I've seen Lindsay give a couple of presentations on YouTube, but one in particular about the metabolic foundations of women's health issues really inspired me to ask Shannon to introduce us so that I could in turn introduce her to you here in Ideal Protein Nation.

So once again, shut up, John. Let's actually just bring Lindsay out. Hey, how are you, Lindsay? I am great. How are you, John? I am doing great. As I shared with you before the show, it seems like technology is working against me today, but we've powered through And again, I'm going to ask you you can read life possible up there.

Okay, well, I'm taking your word for that. Thank you. Thank you for being on the show today. I wanted you to very first just kind of talk to us because I don't even know all of the story but talk to us about how you decided to follow this path and where the different degrees came in and how you ended up where you are today.

Boy, it's quite the story. I back in high school, I was a soccer player, loved to play soccer and struggled a lot with what we call rebound hypoglycemia.

And so really turned me to how much diet can impact things like performance. And so I wanted to be like a trainer for professional sports teams like that.

My mother was very kind and guided me in a better direction and sent me to my dietetics degree first because his degree, you know, you don't go anywhere with that.

So I did that, um, registered dietician certification and degree. I went on to get my master's actually an exercise physiology after that and ended up in the hospital facilities.

So I was a clinical dietician in hospitals for 15 years where I watched my advice make people worse. Oh my, I know it. Yeah. It was horrible. And so, you know, weight loss particularly was one of my least favorite things to talk about because, and we'll talk about it during this conversation, but all of my eat less, move more advice got nobody anywhere except frustrated and upset.

Right. Right. And that's, it's no fun. I mean, you're not changing any, you're not helping anybody. And I've had very similar experience. Yeah. I keep going.

Yeah. No. So after those 15 years in clinical, you know, I was primarily in the ICU, the pediatric ICU, and you watch that it was the metabolic stick that were landing in these situations, you know, aside from those with trauma of some sort.

But it was like, I want to be able to do more. And as a dietitian, I could only do so much by just giving nutritional advice. So again, my sweet mother, I did not want to go.

It was the best thing that I've ever done, thankfully, because I have way more control over what I can offer my patients. The education I received, of course, was a little bit different than what I do now, you know, the traditional medical world versus the integrative medical world.

But yeah, prompted me to go back to school at 40 years old. And thankfully, it was a great decision. Oh, my God, that's absolutely amazing, though. And I love this story.

Because again, I kind of feel like a lot of people start with a personal story. And you know, when they find themselves in a place in healthcare, where their advice is just not working, they, they've got to seek answers, because this is not why you got into this.

And I love how you climb that chain to be to go on to become a physician assistant, a PA. And And so, you know, shifting gears, then from the traditional medical model to integrative and functional medicine, talk to us a little bit about that.

Yeah, I knew I wanted to go more into the integrative world when I was in school, just because of what, of course, my nutrition courses were the same old same old.

And so I branch into that. We got to pick a specialty rotation and that was my first job. It actually turned into a job, thankfully, was with a functional medicine doctor who was also double board certified OBGYN.

And so the women's health plus the functional medicine piece. From there, I actually went and got into the regenerative world as well. I worked in a physiatry clinic where we were helping people improve their outcomes with stem cells and things like that by also improving their hormones.

and their metabolic health through diet and lifestyle change. Wow. Yeah, a lot of really cool experience over that period of time. But again, you know, when you're limited, I was in a small little Idaho Falls, Idaho, and you're limited to this tiny population.

And it was like, I want to do more. And so that's where the telemedicine piece kicked in. I got to meet him, and that's where really my world really started.

I met him at a conference, got introduced into the insulin IQ piece, and I've gotten to take this now worldwide. Oh, yes, that's so amazing. So for those of you who don't know, insulin IQ is kind of an educational arm, if you will, for Ben Bickman.

And I actually, so I've been following him for ever since he started the website, quite frankly.

Understanding Insulin and Insulin Resistance

I just recently became a pro insider. And it's been such a cool experience because when I can, I get on there, he does office hours, he does zoom hangouts.

And to be able to be in a zoom room with like six people and Ben and have his ear for some of these questions that I have has been amazing. And I've seen you show up in the insulin IQ website.

I'm like, Lindsay keeps showing up everywhere and I've got to connect with her because I know that there's just something that we're meant to collaborate on.

And so this is the beginning of that. That's awesome. Well, and we say that insulin IQ too bends the science. He does the research, He explains so eloquently, it's fantastic, but I'm the application piece.

You know, how do you actually turn that? Yeah. And so important. And I love how you've kind of got that. I love that. It's such a great synergy. Yeah.

No, we love it. So Lindsay, again, as I was trying to talk about in the intro to the show, I brought you on the show because I truly like as often as possible to bring us back to the topic of insulin resistance or the topic of metabolic dysfunction, because that truly is at the center of everything that our clients who come into our ideal protein practices, it's truly the foundation of what they're struggling with, whether they know it or not.

And I just don't I don't think we can be educated enough on this on the situation. And I love the way that that you're able to translate that science and make it applicable to to people's daily lives.

And especially with respect to women's health issues. So let's let's dive into that. Let's let's go ahead and talk about insulin and the good and the bad and the insulin resistance and all the things.

Absolutely. Perfect. So yeah, so in my practice, I have found that this is the most important piece, like you just mentioned it. People don't understand when you say, I want you to eat this and not that.

I want you to exercise this way and not that way. If they don't understand why, it's so much harder to do. And so if

you can explain to them why this matters and why these recommendations are important in making this change physiologically and biologically, then they just don't do it.

So understanding the whole thing is so important. though. So yeah, so I, first of all, you know, insulin is this thing that most people, I'm sure you've heard it too.

Most people think of insulin as something you inject into grandma to help control her blood sugars. Right? Right. She's, she's got a touch of the diabetes.

Exactly. I always just laugh and I just tell them, if you think about it, if insulin is there to lower the blood sugar, what does that mean? Where is that blood sugar going?

It doesn't make you pee it out. It doesn't make you do anything. It makes you put it somewhere else, which it helps you put that sugar into your fat stores.

When we have too much insulin or if we're injecting insulin or making too much insulin, which is what with, we're doing exactly that. We're keeping blood sugars under a little better control, but all that sugar is getting stored and because we don't want it to like our liver, our muscle, our fat, things like that.

So the basics are real simple. It's a peptide hormone and peptide is like a hot buzzword nowadays. And so people find it interesting that insulin itself is a peptide.

Yeah. Yeah. Yeah. Yep, so it's something that's made in our pancreas, specifically the beta cells of the pancreas, and it's only supposed to be elevated when we've been fed.

So every time you eat, no matter what it is you eat, you're going to get a little surge of insulin that comes out. And the problem is that we have told people, and we'll talk about this too, for decades, eat five or six small meals a day, don't skip breakfast, it's the most important meal of the day.

So you're essentially in a fed state all day long, which means your insulin is being pumped out all day long as well. So it's sad. Yeah, absolutely. So yeah, well, like you said, we'll dive into that a little bit more.

But this is the way that we've been brought up. Yeah. Yeah. And we're that age where that's the food guide pyramid and everything was exactly and that's what I taught as a dietitian for 15 years, you know, all of those little dogma pieces.

Oh, my goodness. Yeah. And people don't understand, right? Like you said, it people know insulin as something that brings down your blood sugar when it goes high.

But it's the storage hormone. So it shifts your body into storage mode. Yeah. And if it's elevated when you're fasting, you know, even if it's just an overnight fast, if your insulin is still elevated, you will never burn because it's in storage mode again.

So it shuts off the ability to do what we call lipolysis, which is fat burning. when it's elevated. And I test people for fasting insulin levels all day long, every day.

And it's amazing how many people have not just no higher than normal insulin, but exceptionally high insulin. And that explains a lot of their symptoms that they're having.

So we focus on. Yeah. Well, and I don't want people to miss this, right? Maybe we can talk about this now. You know, I can go for my physical with my doctor every year.

And if my blood sugar seems like it's in the normal range, You know, my A1C might be borderline or what have you, but you know, I still kind of get the, okay, watch your diet, you know, blah, blah, blah.

We'll see you later. You're fine. Well, but doc, why do I feel this way? Like I feel terrible. I've got X, I've got Y. Um, it's this fasting insulin piece, right?

Like this is a test that the doc in a box is not really, it's not a part of your usual physical exam, right? Right. And even if I have my patients request it from their doctor, 50% if not more will say no, because they don't know what to do with the value when it comes back.

That and the reference range on insulin is enormous. It's anywhere from four to 24. And honestly, you're metabolically sick if you're above a six. And so even if they talk their doctor into it, if they come back at 20 or 23, their docs like, Oh, you're doing good.

And they're not. Yeah, no, it's a fascinating piece that when you start to understand, and I've worked with other doctors that I've talked about this with and their mind is blown.

It's like, oh my gosh, yeah, you're right. And I just had a patient, a type two diabetic patient that I've been co-managing with a primary care doc. And in the past five or six months, his blood sugars have been in the normal range.

His average blood sugars went from being like 160 down to, to being a hundred and his, uh, a one C came, I forget what it came down to like nine to 5.6. And, uh, he had a fasting insulin of 13 and it's now four.

Wow. Yeah. And he's, uh, he's off everything but metformin and that's, that's coming off now. That's fantastic. I see that every day. I had a guy yesterday, he was on 28 units of insulin, long acting insulin, switched his diet, dropped him to 14 units immediately.

He's down eight pounds in three weeks plus his now on half the insulin, his blood sugars average from 170. Now they're at 119. It's just so exciting. and again, you related this from the beginning part of your career.

It's just so exciting when you tell people to do something and it has that positive impact on their health and you can test it and you can see it, right?

Yep, it's fantastic. It's so much more rewarding than traditional medicine. Right, absolutely. So I digress, let's move on. You're good. So yeah, so I love this slide when I explain insulin to people.

And so I use this analogy of a lock and a key. And so first image is the image of like a cell membrane. And every cell in the body has this same composition on it that allows insulin and glucose to work together.

And so the door on your cell is that insulin receptor that's sitting there. There's a lock on and receptor as well and insulin acts like the key that unlocks the door that will then open the door to let glucose in and that's kind of image depicts but with insulin resistance this doesn't work the way it's supposed to so a normal person insulin inserts glucose goes into the cell we're great and insulin resistance that lock is broken.

And so I tell people it is exactly what it sounds like. The cell has become resistant to the effects of insulin. And so when it goes to try to enter into that, when that key insulin, the key tries to enter into that lock, the locks broken, it doesn't work and glucose cannot get into the cell.

So it's hopefully that helps make people understand it a little bit better. Yeah, absolutely. And, and, Insulin is trying to get glucose into that cell to provide it with energy, right?

Is that? Absolutely. And what happens when it doesn't work? You know, one in the early phases of it, we have the early symptoms, which are things like fatigue, brain fog, weakness, different things.

I think about every cell in the body has this on it. And whichever cell is impacted is going to have some kind of lack of energy to it. That's the key right there, right?

So insulin doesn't just affect certain places or certain cells. It actually affects every different type of cell in the body because they every cell has receptors.

Is that what you're saying? That's exactly right. Well, on the other piece of it that I tell all my patients, it's funny because they come into the office or they see me online and they say, I eat something and I'm hungry two hours later.

I just don't understand what's going on. Well, it's not them that is hungry. It's their cells that are hungry. Those cells don't have any fuel in them because the lock is broken.

The cell is sending signals to the brain to say, go eat boss I don't have any energy so not only go eat but eat something that's high in carbohydrates so I'll get some glucose so then I'll have some energy and so it triggers that hangry thing that we talk about all the time because the cells are literally starving oh my god like that is that that's That's brilliant right there.

And nobody has said this on the show yet. And so that's why I really want to stop and highlight this. So this is how the carbohydrate insulin situation creates those cravings and that constant cravings and hunger.

Is that what you're saying? That's exactly right. So every time you eat, if you're making more keys, I'll keep using that analogy, you're making more insulin, and yet the cell is still resistant, the lock's still broken.

And so you make more insulin, you're still hungry because the cells are starving, you go eat something, you make even more insulin, still resistant, and it becomes this vicious cycle until you've made so many keys that finally one will work, that's why you don't die, but it creates this hunger cascade, especially with carb craving.

Wow, wow, wow. And that's something else that I've heard Ben talk about, I talk about all the time, is that like you're making all of those keys, right?

Insulin resistance is always accompanied by and or preceded by too much insulin or hyperinsulinemia, right? Always. Yeah. And, and so again, insulin itself is not an issue.

It's supposed to do it. It's got plenty of functions that we rely on it for, but when there's too much sitting around that can cause us some issues. Is that right?

That's absolutely correct. Our bodies were designed. You know, we weren't designed to be fed and making insulin all the time. Back to the caveman days, you know, insulin was elevated so they could store all their feasting for later when they were not able to hunt the buffalo or whatever it might be.

And so we've not, our bodies have not adapted to this frequent feeding issue that we have that still functions this way. Got it. Got it. Got it. All right.

Well, so how common is insulin resistance? Like what, what are we talking about here as far as the United States goes? Yeah. The two studies that I'm aware of have this percentage.

So only somewhere between 93 and what is the other one? 88 and 98 of this. Yeah. And so it's very, very common. If you don't have it, someone you know, absolutely does.

It's that common. So and I, sorry, if there isn't where they want it to be or where they think it should be, they can almost diagnose themselves with insulin resistance.

Metabolic Syndrome and Early Warning Signs

Right, right. Well, and here's the thing too, and I think that people miss this, right? This many people have this metabolic dysfunction to a certain, a varying degree, right?

Like it is a sliding scale. And so some people have a little bit, some people have a lot. Some people it shows up that they're overweight. In fact, I would say maybe the majority of people show it shows up as they're overweight.

But I've heard is it is it true? I'm trying to throw yourself a ball here. Is it true that regular weight people people have a healthy weight can still be insulin resistant and their body just isn't getting fat right now?

Yeah, absolutely. We call them toffee. So thin on the outside, fat on the inside. So that's where that visceral fat piece comes in. I often point to like the dad bod kind of people, you know, are a little bit scrawny, but they've got this little bit of a beer belly and they just go, what is going on?

Well, it's all of that fat, that insulin, they still have high insulin levels. insulin is driving that fat to all be stored in the abdominal cavity, which is so bad for your health.

But it may not impact that subcutaneous fat, which is what looks like the jiggly stuff that we get. Yeah, yeah. If you can pinch it, it's subcutaneous.

And if you can't, it's on the inside. Yep, and that's the number one problem, I think, with insulin resistance is because that's where the body wants to store the fat.

When the liver becomes insulin resistant, it actually turns its own glucose into fat and stores the liver, which we don't want. And that's why this non-alcoholic fatty liver disease is prevalent.

But if you think about all the other fats surrounding your kidneys and your liver and your pancreas, you can get fattiness of any organ in there. So visceral fat's the real demon when it comes to insulin resistance.

Wow. You know, you and I talked about this in our pre interview that these studies are super impressive and scary. But in order to determine like how did they measure if this person was insulin resistant or not, they used they use five factors that your your that your doctor is aware of and does use to determine if you are either metabolically healthy or if maybe you've got metabolic syndrome, can you can you Teach our listeners and viewers about that.

Yeah. And this has been around for a really long time, 20, 30 years that they've been using this criteria for metabolic syndrome. And so they do, they look at things particularly for me, the BMI, it can be a little bit inaccurate, but that waist circumference is important.

That's that visceral fat piece that we just talked about that they're trying to. Insulin resistance is the number one cause of high blood pressure. And so that very fittingly fits into this, this criteria, the blood sugar piece, unfortunately, like you've seen in your patients too, people can be, I mean, I have had patients who have insulin levels in the forties and fifties, which is super hot.

A1C was like 4.9. Well, and if you think insulin's job is to lower blood sugar, blood sugars are not only gonna look good, they're gonna look excellent.

But if the rest of the picture doesn't, then there's the problem. Right. Yep, so can't rely on that one by itself, but it is a marker that they'll look at.

And then thankfully, when they look at the cholesterol panel, the LDL is not here, which I love. The triglycerides in HDL are, and the triglyceride to HDL ratio is what I call the poor man's insulin resistance measure.

Most people know their triglyceride, they know their HDL, divide by HDL, and if you're greater than 1.5, you have insulin resistance. Okay, that's super powerful.

Because like you said, these are tests that your doctor is going to run on a yearly basis when they're when you go in for your physical, or for that matter, anytime really that they're running blood work to find out what's going wrong with you, right?

Absolutely. And that's why I love it. Because people have this, you know, usually at hand, they know these numbers, and they've just never done the calculation.

You know, the lab that prints out they have a total cholesterol to HDL ratio, and that doesn't mean as much. It's the actual triglyceride to HDL that you have to calculate yourself.

That is fantastic. You know, when I was in chiropractic school many, many years ago, they taught us that triglycerides was one of the best indicators as to someone's nutrition.

But it was assumed and or we were taught that it was more indicative of the amount of fat in their diet. And there was actually their dietary fats that, you know, drove bad cholesterol issues, et cetera.

And the triglycerides, you know, was, was kind of an indicator of that. Now that I understand what I understand, I know it's exactly the opposite, right?

Like it's, it's the amount of carbohydrates in your system or your body's inability to manage those carbohydrates in your system that drives this triglyceride number.

Absolutely. And when you put someone on a lower carbohydrate diet, you can watch a triglyceride cut in half within a matter of weeks. I mean, it's huge.

Yeah. I've seen that. I had a patient literally walk from his primary care office to my office and he's like, I know you got this diet program. My doctor says I'm pre-diabetic and my triglycerides are bad and my cholesterol is bad and I need to lose 30 pounds.

Let's go. And somehow he conned his doctor into doing his blood work three weeks later. And that was the thing that was almost the most amazing was not only was his glucose, of course, in the right place, but his triglycerides were cut in half.

And his HDL had elevated already. It's it's fast. And that's that speaks to the power of the low carb world is that you can change these things very, very quickly.

The body doesn't want to have high triglycerides. It will correct that with proper nutrition. And to me, too, you know, that's insulin as it is taking excess sugar excess out of our bloodstream.

It's converting it to triglycerides before it stores it away as fat. 100% Yeah. Yeah, and so that's super, super important to understand, especially for people who are coming into our clinics about that.

So to me as well, and what I really wanna help our listeners and viewers is I want them to be able to identify other signs and like common things, other signs and symptoms that they might look for that would give them indications that they are some degree insulin resistant.

Yeah. And, and this slide's nice because it has pictures of it, but the, the two that I see the most frequently that people don't attribute to their diet.

Um, one, the fatigue fatigue is huge. There's a lot of, you know, your cells are starting, you know, you're going to be tired if your cells are not fed.

Um, and then to the hunger, the hunger piece, big one, if you are, hungry quickly after a meal or if you feel like you could never fast for like 12 hours you're going to have insulin resistance for sure but these other pieces are interesting too and back to the part of insulin being a growth hormone growth happens and so growth on the skin tags that's aggressive growth of the skin insulin is making that happen so if you have skin tags you have insulin resistance Same with the, uh, that, um, Oh, I'm going to drop the acanthosis nigricans, the darkening, the pigmentation.

Yeah. Darkening. Yeah. Yeah. And this one happens a little bit later, but a lot of times people don't know the thing. It's a little dirt or something like that, that just won't come off, but this is just excessive pigment.

So stimulated. And then of course this bottom picture with the excessive growth in the abdomen, that's visceral fat all driven by this. Yeah, no, absolutely.

Skin tags were something that I had been previously unaware of. But when I went on my litany of issues that I had earlier, certainly I started developing skin tags.

What's interesting is my dad had always kind of had them. And I thought that was more of a, oh, it's a genetic thing, you know, happens to people in the same family, etc.

And now it just totally blows me away because I don't have them anymore. Yeah. Isn't that the cool part? They go away, you know? And our, our skin regenerates, right?

I forget what the time period is, but you get new skin all the time. And yeah, I just went to the dermatologist, uh, about last month and the guy said, uh, you know, well, what brings you in?

I said, well, my wife, she scheduled the appointment cause we've met her deductible and like, we're ready to go. And, uh, he's like, well, it was six years since you've been here.

I'm like, Oh, I'm on the every six year plan. And literally he, he like, he didn't dictate anything to his nurse because and I was blown away. I was even I was blown away because I had no idea that things had changed that much.

Yep, it's a very good early indicator.

Insulin Resistance and Chronic Disease

Yeah, skin tags. But so here's the thing, right? insulin resistance is not as, as benign as just gaining weight, or skin tags or dark patches on my skin.

This can actually now it's actually been linked to many more important things, many more devastating things. Talk to us about this slide here. Yeah, that's, that's Ben Bickman's plagues of prosperity.

So if you haven't heard that before, I love that phrase because it's true. What prosperity has brought us are all of these plagues. And so insulin, I always tell people if you have a condition that you cannot catch from your neighbor, it's probably related to insulin resistance.

that another, you know what, hang on a second, because this is going to be something that we are going to know. All right. We're trying to get clips that we can actually pump out as reels.

Right. And we want to get these powerful quotes to get people to realize why they need to watch this episode. Lindsay, I would love for you to say that again.

Perfect. Yes. If you have a condition, any condition that you cannot catch from your neighbor, it is probably linked to insulin resistance and insulin resistance being the root cause of that problem.

Wow. So yeah, let's bring that graphic back and see kind of what we're talking about. But yes, the non-communicable metabolically based diseases. Yeah, and these are what is driving all of the problems that we see with health care expenses, with hospitalizations, you name it.

These are the conditions that are doing it. Heart disease, whether it be coronary artery disease or high blood pressure or stroke. things like dementia and Alzheimer's disease, which we now call type three diabetes, which is just insulin resistance of the brain.

So, yeah, obesity, of course, other mental health issues when it comes to depression and anxiety, all play a role from insulin resistance. And then as we get into like women's health or even men's health, any kind of dysfunction there, PCOS, erectile dysfunction, you name it, insulin resistance is the root cause and the cool part.

And I always say this to my patients because they look at me like, You want me to stop eating bread? And I say, but look at all these things you can fix and prevent with that one intervention.

Right, right. I mean, look at like you said, look at the importance and look at the impact. And the challenge of it is, is they don't believe you for a second.

Right? They don't believe that that diet can have that big of an impact on something so important, something so devastating as what we're seeing here in some of these bubbles.

And you and I have seen it happen and you and I understand that. And that's what drives whenever you talk about to somebody in this field, they're so passionate about it because they've seen it.

and they're just trying to teach as many people as possible, you can do this. Yep, and quickly. That's the coolest part. You can get off your medications, you can lower your weight, you can improve your fatty liver, you can fix your erectile dysfunction.

All those things pretty darn quick would just change in the food. You know, you're going to have to tell me when a really great quote is coming up so that I can like shift because you're dropping bombs here, Lindsay.

Just some really, really great impactful stuff. So, yeah. Well, but but how did we get here as a country? Let's let's move on to one of my favorite slides that I have in a lot of my presentations.

Talk to us about this. Oh, and you know, the funniest part about this for me is my dietitian background. You know, if you were to talk to the normal dietitian out there, they're still teaching this and they believe it.

It's just completely ingrained to their education. And what does your doctor do when you need to lose weight or when you need to improve your blood sugars?

He sends you to a dietitian and you're going to get the same piece of information. And the most life-changing moment in my career was probably when I took a step back and I said, I've been teaching eat less, move more for decades and nobody is getting better.

Maybe it's the advice I'm giving, not that the patient is non-compliant. Because that's it, time out. That is any personal trainer or many people in the fitness industry especially, that's their assumption.

Like you're coming in and okay, I'm working with a personal trainer, but I'm not losing any weight. What's going on? Well, you must not be doing what I'm telling you when you're at home, right?

No, I'm eating low fat. I'm eating my complex carbs, especially to power my workouts. And nothing's happening. And I love that. It's a humbling period in your life when you say, Oh, this isn't this isn't them.

It's me. It's me. You know, give it there. But it was gonna say don't don't take the blame yourself, right? Because it's what you've been taught, right?

So none of this is our fault. But unfortunately, all of this is our responsibility. They would. So, you know, but the good news, like you said, is we can take control and we can change this.

Yep, and we tell people just flip this pyramid upside down. Thankfully, I don't know if you know, Ben's part of the new Dietary Guidelines Committee for the government.

You know, I heard that he was talking about he was talking about that in one of the office hours. And I'm just I am

so hopeful for that. And Nina Teichholz and you know, everybody who is working on those things.

And actually, I'm just 10 miles from Washington, DC. So not for nothing. I'm going to stalk Ben when he's in town. I just just say. These people finally have an ear, but do they really?

And I'm hoping they're gonna be able to have the impact that they should have. Yeah, me too. But as you know, I mean, and dogma, you know, all of these things that are listed here, you know, you have to eat the many servings of healthy whole grains and five or six small meals a day.

Breakfast is so important. All those things are very, very strong dogma from the low fat days. You know, and as we move into women's health, same thing with like HRT, you know, that dogma of you can't do HRT because of breast cancer.

It's all, you know, finally, we're getting some people and some eye opening acknowledgement that what we've been doing is wrong. And we just need to change and people need to advocate for themselves.

Because if you don't, your doctor is just going to do like I was doing and teach all the things they were taught in school. Yep. And assume that you're just not doing them at home.

Yeah. And so I love this next graphic that you're that you gave me. I love this graphic. And I've used this before as well. Right. Like once you've seen this, you can't unsee this because it truly tells the story.

Talk to us about this graph and what we're looking at. Yeah. So this, that arrow in the middle is where we are implemented that food guide pyramid. You know, it became not only just us guidelines, you know, the rest of the world took it on to, you know, believing that we were teaching the best stuff.

And look what happened to the rates of obesity. And if you go back and you just Google beach pictures from 1950 versus beach pictures from 2025, you can see it.

I was a lifeguard my entire high school and college career. There was one fat kid at the pool. Now, it's at least 50%. And you just go, what happened?

And it was these darn guidelines, the dietary guidelines.

How Diet Guidelines Fueled Obesity

Yeah, the angle of incidence there is just so crazy high. It changes so fast and it goes so high. It's unbelievable to see that impact. And I've seen people post those pictures and the befores and afters, so to speak, of the beach.

And you cannot not see this. No. And this is where people, and this is what I encourage, think critically. I mean, use your own thinking skills to say, what makes sense here?

Keep doing what I've been doing that got me to where I am today or do something different. And maybe that change will make the big difference. You know, too, the other thing is if we look at the incidence of most of these non-communicable diseases that are on the rise in our country, it mirrors the, like, again, the angle starts and the angles mirror what's happening here with weight and obesity.

Yeah. And the two biggest ones I have the most empathy for are the diabetes, of course, because those are just, but also the mental health piece, just because that too is just treated with medications.

And it's so powerfully impacted by nutrition now we're finding. There are some pioneers in that field and I'm dying to get them on my show. Insulin resistance of the brain now as we understand and as you've laid the framework for the concept that energy is not getting into those cells for them to use and that's why they're struggling.

in so many different ways, from anxiety, which is part of my story, all the way through to bipolar, schizophrenia, and

all of the things. However, we digress, and we could do this all day long, but I'm gonna try to get us refocused because I brought you on here, because I truly, I just, I love the way that you talk about insulin resistance as it's related to women's health.

And I will tell you, when I look at the demographics of my practice, as well as ideal protein clinics across the country, we're kind of, this is the biggest population and they stand to be impacted the most positively from your talk.

So let's talk about women's health issues. Yeah, so I love this picture too, just because this is a chicken and egg scenario. Is it estrogen causing more insulin resistance, or is it insulin resistance causing problems with estrogen?

And it's both. And so really, if you can fix one of them, which is fairly easy to fix, the insulin resistance piece again, you can positively impact the estrogen piece as well, which is through…

I'm sorry, say it again? It's through what? Throughout the lifespan, it's not just in menopausal aged women, it's in our PCOS. You know, even our young, you know, these young girls who starting their periods at eight years old, you know, there's, there's issues.

So yeah, this image is really talks about that because we're dealing with estrogen or lack thereof. for a very, very long time, you know, throughout a female's lifespan.

And I think in my opinion, it's probably the most underserved, undereducated upon population because we're not taught menopause in medical school. We're not taught PCOS in medical school.

What? No. I know. Really? No. No, and that's the unfortunate piece. And that's why it's really cool what I do, because I get to actually really focus on these populations and help.

Wow, that's just absolutely crazy. All right, I'm going to move on to the next slide. Prepare yourself, because that's an ovary. And as I was telling you before, I've never had an ovary actually on my show.

But yet there it is. It took 98 episodes and Lindsay, you're the one that brought us an ovary in all of its glory. Let's discuss this. Yes, because this is the important piece for women.

I think a lot of people don't understand. There's one really important piece to understand. We are born with all of the eggs that our ovary holds. So we are born with those.

We don't make more, you know, men make more sperm and more testosterone and things like that as long as they're alive. We're born with a set number of eggs in our ovaries and that number of eggs dictates things like our again our hormone production but also when we stop ovulating when we get into menopause all of those things and that's why they say you know maybe it's better not to have kids later on in life because those eggs you know if you're 50 years old so are those eggs you know and so you know the younger the egg the healthier it is oh wow yeah that's something i hadn't considered keep going i'm fascinated It's interesting.

But the other major, major role of the ovary besides storing these eggs that help with recreation of life is hormone production. And in women, we create these three different classes of hormones, estrogens.

And there is an S on there because we make more than one kind of estrogen. extremely important, particularly during pregnancy, but also for things like mental health.

And then of course, testosterone or other androgens. And honestly, this is where the problem lies in both, well, primarily, I guess in PCOS, but also in menopause.

So people probably don't know. And I think it's on the next slide, John, if you want to switch. Let's see what we got there. Oh, yeah. Um, so this is what I was pointing towards too.

So PCOS and menopause, those are the two most common hormonal problems with women. And so PCOS, if people don't know is the number one cause of infertility in women.

And it is skyrocketed. Like you had said, when you see all the data coming out on fertility in the U S it's horrible. It is. Yeah, it is. It's, it's, it's diving, right?

Yeah, yeah, it's huge. And I've been, I consult for a couple of different fertility clinics, you know, so IVF and things like that are becoming more popular and more necessary for those.

But the number one step is if you have PCOS, let's fix that. Let's save you those thousands and thousands of dollars for IVF. and fix your PCOS with change in the insulin resistance.

And then there's the menopause piece. But where these two interlink is that both have low estrogen. So we have the symptoms that come from that. Both have, you're okay, both have higher insulin.

We see higher insulin in both of these populations. We see mood changes, we see skin changes, we see weight changes, weight distribution changes. And so they're very, very commonly linked.

And I love this slide just because, go ahead. No, I, this was when I was watching the talk that you gave on YouTube, this slide to me, just, I was, I was sitting here with this huge aha moment.

And I love how you've drawn this, this parallel, um, because here we've got women of two totally different age groups or age brackets. And, and yet they're, they're suffering from a lot of the same signs and symptoms and how this is all just so related.

So please keep going. Yeah, it's all insulin resistance and hormone depletion.

Womenu2019s Health, PCOS, and Menopause

And that's why these two, you know, like you said, very different age ladies look like they could be twin sisters because they both have the abdominal fat piece.

They both have the mental health piece. They both have things like hair loss and changes in skin. You know, one might be acne while the other one is creepiness.

But there are all these changes because of the change in hormones that's impacted by insulin resistance. Wow. Yeah. No, it's it. And especially acne, right?

So that's one of the things, and adult acne too, like that's one of those things that people don't understand is so related to nutrition, insulin, and insulin resistance.

A hundred percent. And hormones and that hormone piece, you know, if you're what you're supposed to be doing with your hormones, or if you have inadequate hormone because of your insulin resistance, you're not going to, you're not going to like how it turns out.

And so too, if we reach back into, I'm just thinking about my daughter's struggles growing up and all what. if we reach back to high school and middle school and starting to get some of these things, and very commonly, dealing with the acne is almost one of the most embarrassing and challenging issues.

And it's more nutritionally related than it is necessarily, and or hormonally nutritionally. That's the coupling there, right? Hormonally nutritionally.

Yep, they go together and when I actually worked in a dermatology office for a little while and that was my strategy, instead of putting these people on Accutane which is going to tank their liver, it was like let's look at the causes.

Number one, do you have an inflammation based diet? Fix that because inflammation can lead to acne. Number two, do you have hormonal problems? Let's look at what we can do to fix the hormones including lowering insulin resistance.

And number three, there's always the bacterial piece that you can spot treat, but those those interventions were far more powerful and long term compared to these medications that can be so negatively impactful when it comes to other pieces.

Yeah, so wow. So let's continue on. So in PCOS, what what what is happening there? Yeah, as far as estrogen goes, why is estrogen decrease decreased in these patients?

Yeah, so what happens is when we have too much insulin, too much insulin will inhibit an enzyme called aromatase. And a lot of people don't know this, but we don't make estrogen from the very get-go.

We make androgens. And so androstenedione or testosterone are the two primary hormones that our ovaries make, but we very rapidly convert them to estrogen by way of aromatase.

Well, if a piece is inhibited because we have too much insulin, we're going to hang on to all of those androgens and we're not going to have enough estrogen.

And then not enough estrogen piece leads to abnormal periods, whether they be missing or heavy or painful. And the too much testosterone leads to all those other symptoms of PCOS, things like the facial hair.

Yeah. So it makes a big difference, but it's all 100% related to the too much insulin shutting off aromatase. too many keys, the body is making too many keys, trying to get all of that glucose into those cells that are, the locks are broken and that cascade again, if we even take it back that from a high carbohydrate, high carbohydrate nutrition or nutrition above what your body is able to handle, right?

Absolutely. Number one cost. Wow. And so, but here's the thing too. estrogen is lower in PCOS but it's also estrogen drops in menopause and talk to us about that.

Yeah and so obviously again like I mentioned with the eggs when we stop ovulating because we don't have any more eggs to ovulate our estrogen production goes down.

It's very normal it actually starts before you even notice it symptomatically typically it'll start between the ages of 35 and 40 in women when they start to just go a little crazy.

But when we have lower estrogen and menopause, it's this vicious cycle because like Ben quotes in this book, lack of estrogen actually leads to more insulin resistance.

And that's all of my patients that come to me who are peri and postmenopausal are like, I cannot get rid of this spare tire on my midsection. What is going on?

It's that insulin resistance piece. This is why men carry more weight around their midsection than women do. We tend to carry it early in age around our hips and our rear end.

Men have more in their abdominal cavity because of a lack of estrogen. So when we now, now we have a lack of estrogen. Boom, here comes that abdominal fat.

Another one of those bombs that you dropped that I have not heard yet and and I love the fact that happened on my show. Dang that is an absolutely amazing correlation there and it's making so much more sense.

Yep, the estrogen is a powerful piece here and that's why it is important in my practice and in my opinion to optimize estrogen through peri and postmenopause because not only one are you battling things like hot flashes and night sweats and all of those things, you're also battling those plagues of prosperity that that insulin resistance

will bring.

Yeah, so from what I've gathered, and most of it is from watching Ben reading his book and putting all these things together, right? Insulin resistance is such high insulin, has such a powerful effect on female hormones, very specifically.

And so we're seeing this in both PCOS as well as menopause. Yep. Yep, and both are fixed by fixing the insulin resistance to an extent. Menopause is a tougher piece just because you can't, you know, those ovaries have died and they're not coming back.

But with PCOS, I mean, we call them insulin IQ babies or vent integrative babies because you put one with PCOS on our diet and all of a sudden they're pregnant when, you know, they haven't been able to get pregnant for years.

And we call them ideal protein, we call them IP babies. And I've actually, I've had two episodes, it's really neat. I had one 20 something year old lady who reversed her PCOS, you know, again, getting ketogenic and all the things.

And then a 40, I think she was 43 year old woman who had given up. She and her husband thought, ah, never gonna have kids, had to deal with it and all this stuff.

And she just wanted to lose weight and boom, turned up pregnant, out of the blue. Yep. Yep. It's powerful. So powerful, so powerful and so exciting. Yeah, no, we love it.

And here I put on here too, and maybe a little segue into what we'll talk about later too, Ben does put in his book that, you know, it is, if you can artificially maintain estrogen through menopause, you'll actually have less insulin resistance and then less of those, like I said, plagues of prosperity, which if you notice, I mean, women don't have heart attacks in their 20s and 30s.

That's because estrogen is cardio protective. You know, we don't have osteoporosis in our 20s and 30s. You know, all of these things are so important that estrogen really plays a huge role with.

Wow, you're dropping these bombs. I'm going to want to use them as clips. I literally just have to sit with those for a moment because that it's other things that I had never connected the dots between.

Um, one of the other things I wanted to bring up in the middle of PCOS and menopause pregnancy, right? Because in pregnancy, as I've been taught by Ben, that's one of the few times that insulin resistance is actually a natural reaction and part of that process in a, in a woman's body.

Can you speak to that a little bit? Yeah. So if you think about it, we have two, what we call physiologic times when we are insulin resistant, at least women do, um, adolescent and pregnancy.

And that's because insulin remembers a growth hormone. Those are both periods of growth where we want to promote growth. And so, but the problem is, is when you combine physiologic insulin resistance, adolescents or a pregnancy with pathologic insulin resistance, which is your diet, then you end up with things like gestational diabetes.

There it is. That's another clip we're going to clip. Yes, absolutely. And that's the thing, right? So I've had women come into the clinic and it's kind of two different sides of the, of the coin is number one, never had weight issues before all the things.

And man, you know what had happened with baby one, two, or three, you know, one of the pregnancies, they gained weight and they find themselves stuck and they can't lose the weight.

Right. And so then it was the light bulb that went off when I read Ben's book and I was just like, Oh my God, that's exactly it. So their body went into insulin resistance naturally, but not having been there before, but was not able to bounce back.

Right. Right. And then the other women who went in the insulin resistant and then boom, they're worried about gestational diabetes. They're gaining the over gaining the weights and it really creates other health issues for them.

Yeah. And unfortunately, traditional medicine treats gestational diabetes with insulin injections. So we're augmenting the problem, making it worse. And two, a very frequent eating protocol, which includes specific carb intake.

So it's, it's unfortunate. Wow. Yeah. Okay, well, so let's continue this because just some let me get back because you've got some really great here we go graphic next one.

Why hormones matter in menopause. Let's talk to talk to us about that. Yeah, this is the huge piece. And when I talk to my patients, I say to them, think about all the things that happen as we get older that you don't like.

You know, what are we worried about symptom wise and health wise? And so symptoms, of course, the hot flashes, the vaginal dryness, different things like that occur.

But even more importantly are these issues. So osteoporosis, like I said, we don't get it when we're young. We get it when we're old because we lose estrogen.

Um, our cognitive function declines that too. Estrogen is very important in brain health. Um, people, one of the biggest recommendations, I don't know if you've ever heard of, um, Dale Bredesen and the end of Alzheimer's.

He has a wonderful book out on how to reverse or prevent people from getting Alzheimer's disease. And one of his number one strategies is optimized hormones.

And so, and I've done, we've watched some of this reverse. So it's very important if you're worried about your dementia, Alzheimer's hormones play a big role.

So does insulin, um, cardiovascular health. Like I mentioned, we don't get heart attacks when we're young. We get it when we're old because we don't have those hormones, our sexual health, our pelvic floor function, all of those things.

Um, you know, urinary incontinence, all those things that we don't want happen because we lose hormones. Wow. Yeah. And you could fix it. I mean, that's the coolest part is you can prevent these things pretty simply with both diet and potentially some HRT.

So you just bring us to a really great segue. So let's just kind of walk through this because I want all of our listeners and viewers to understand potentially they might be able to contact you to help co-manage their healthcare and become a patient of yours And if they were to do that as part of your process to kind of help them debunk so much of this stuff, you know, what kind of testing might you do or what kind of markers might you be looking at?

Maybe that their doctor's not. Yeah, so these are the three most common ones that I order. They're just blood tests, which are nice because they're convenient.

There's more extensive testing that you can do for sure with like a Dutch test or other saliva tests, but they're expensive. They're not covered by insurance.

So I tend not to go that route. But follicle stimulating hormone is one of the most important ones, especially if you're worried about peri or postmenopause.

This FSH, the follicle stimulating hormone, is what comes from our pituitary gland in our brain. Its job is to yell at our ovaries to say, come on, make more estrogen, right?

Okay. So when you're not making enough estrogen, this follicle stimulating hormone will become louder and louder and louder. The number will get higher and higher and higher.

And eventually, you know, depending on where you're at in menopause, the brain will give up and that number will come down. But this is the best way to diagnose somebody, especially if they've had like an ablation or a hysterectomy, you know, with their ovaries still intact.

This is the best way to figure out where they're at in menopause and you know, is it time to start or is it not time to start? It also helps me to dose if we're going to be doing HRT.

How do we dose their estrogen based on that? The other markers, I love to get testosterone in women because testosterone is that feel good hormone that women just, we don't have enough.

So things like brain fog, energy, workout, workout, recovery, libido, much, much better.

Hormone Testing and Metabolic Markers

I had mentioned in the previous slide that I didn't, or I put it in there, but I didn't mention it to sarcopenia, you know, muscle weight. Yeah, that's the number one thing that'll put a woman in a nursing home is lack of strength and testosterone can be very impactful in preventing that sarcopenia.

So, and then oftentimes I'll measure an estradiol as well, though this isn't as important because estradiol is not supposed to be in our bloodstream, it's supposed to be in our tissues.

And so sometimes I'll measure it to get a complete picture, but most of the time it's just that FSH and total testosterone. Got it. Got it. Wow. And so even in general, when we're just talking about men and women, if you're helping to try to determine the significance or the depth of their insulin resistance, talk to us about some of these markers that you might do.

Yeah, fasting insulin is so important. I just cannot recommend that people get a fasting insulin enough. Again, that reference range on there is so unfortunate that your doctor will see.

So I did put on here, the goal is to be less than six. Even though you're normal, if you're at 20, we want you. Nothing normal about 20. It's common. It's not normal.

Talk to us a little bit about that, too. I'm going to pull from another one of your talks. When they're standardizing what the normal ranges are for blood work, how did that happen?

How did they come about with that? Yeah, and this is very unfortunate as well. So there's two pieces that I always make sure to mention. Number one, they took X number of people, I don't know if it's 10,000 or whatever, that they had this blood marker on and put it underneath a bell curve.

And if you fall within the 95th percentile, that means you're not in the 2.5% outliers, you're considered normal. I oftentimes will tell my patients, I look at it like a grading scale, A student versus F student kind of scenario.

So if you're perfectly normal, you're a C student. Who wants to be a C student for the rest of their life, especially when it comes to- Right. So the other piece is think about who the population was that was getting measured.

Who has labs done frequently? Who's going to be generating the majority of those labs? It's people who are in at the doctor. Right, people who are not healthy.

Healthy people don't go to the doctor. Right, and so these reference ranges, unfortunately, they give us an idea, but they certainly don't give us a guide to optimal, and that's what we look for.

You know, one of the things I'll pass by you is that it strikes me, and a lot of times I have to go back to this and ask myself, even when I'm reading studies, et cetera, also, what is the nutrition of these people?

And, you know, again, to me, And what we're finding since there are so many more people who are staying low

carb ketogenic now for, for longer times and for their lives.

And we get data from those people versus data from people that are eating the pyramid. Right. We've got to kind of revisit and understand what the normals quote unquote should be.

Yeah, for sure. Because they weren't studying our super healthy population, for sure. So it would be great if somebody did that. 100%. And I'm sure that there are people starting the process.

Talk to us about HOMA-IR. I hear about this all the time. Yeah, so that stands for the homeostatic model assessment of insulin resistance. It's a mouthful.

But what it is, is it takes both your fasting glucose and your fasting insulin, puts it into a calculation and can give you a severity score of your insulin resistance.

It's not a perfect measure. I've had lots of people who will go get the real gold standard, which is the glucose tolerance test with insulin. That showed insulin resistance, but the HOMA-IR did not.

But the vast majority of people, the HOMA-IR will give you at least a scale of how bad is my insulin resistance with this indicator. So that's a good one.

A1C, I don't even like anymore. Well, this is a trend. And Ben was talking about this during one of the office hours the other day. And it's kind of like, wait, so A1C might not even be as accurate as we assume it is.

And I would tell you, thanks to Ben, I see people from all over the world and the majority that come to me from Ben are super healthy. I mean, just they've been low carb ketogenic for a long time.

They do everything right when it comes to supplementation, exercise, stress management, all that. And nine times out of 10, their A1C is high, even though their continuous glucose monitors show they never go above 110. And so, and that's because they're healthy.

The red blood cells. Yeah. I'll explain it. The reason this happens is, is this a one C is based on the assumption. And I say assumption very strongly here, the assumption that your red blood cell lives 90 days.

Well, again, unlike my one patient, the one with the. you know, insulin at 50 and her A1C was 4.9. She was 18 years old when she was 100 pounds overweight.

Well, how does that happen? Well, her red blood cells don't live very long. They're, they're healthy. And so therefore there's less time. And I should go back.

What it measures is how much damage has been done to that red blood cell by glucose. And the more glucose exposure that red blood cell has, the higher that number is going to be.

But the two factors that play a role is how much glucose is in the bloodstream, number one. And number two, how long was that red blood cell in the bloodstream?

How old is that blood cell? Wow. Yeah. And so for the super healthy people, A1C is high because that red blood cell had more exposure to glucose over time versus- Because it lasts longer than 90 days.

It's got a longer lifespan. What? Yep. Yep. And then the unhealthy people, it's a false low A1C because that red blood cell was only around for 60 days.

Oh my God, that's mind blowing. Wow. All the time. Oh, man. This is so much fun. Alright, so let's do this. We talked about it a little, we touched on it, right?

The triglyceride HDL level. Maybe I'll let you talk about LDL just a little bit. Yeah, thank you. Not much. I've got

people lined up for that and we're going to do a whole shows on those.

But yeah, talk to us about why it's just not the LDL. It's just not. And the hard part is the statin industry has driven the importance of LDL up so much.

To make money, of course, because then they can prescribe more of these glucose or cholesterol lowering medications. LDL is extremely important in how we function.

It's an immune health, hormone health, mental health. I mean, you name it. LDL is really, really important and the goal of driving it down. I have patients whose doctors are trying to drive them below 40 and it's like, Yeah.

But yeah, LDL is not the main marker. We have healthy LDL and we have unhealthy LDL and that's all driven just like that red blood cell. It's all driven by the close exposure it has had.

Wow. And so really, it's the triglycerides in the HDL, and that's why they're part of the main five factors of metabolic health. And we want this ratio to be lower.

We want it to be below, you say what, 1.8? Yeah, there's 1.8. I try to make all my people A plus students, so I say 1.5. I love it. I love it. Well, the interesting piece is if you look at the reference ranges again, a normal person will have a triglyceride of 150 and a HDL of 50. You do that math and that's 3.0 on your ratio.

And yet if your doctor saw a 150 and a 50, he'd be thrilled. Wow. Wow. Okay. So as we're going through this, and you and I kind of talked about this before, it doesn't seem like we can have a complete show unless these days we address kind of the elephant in the room.

And one of the biggest elephant in the room these days is talk to us a little bit about, man, everybody is all fascinated and just obsessed with GLP-1 medications.

Can you kind of talk to us about your experience with them, your perspective on them? Yeah. And like you said, it's such a hot topic anymore that we have a lot of people asking for it, but GLP one, just like I got earbud problems.

Can you still hear me? Oh, yes. Yeah. Sorry. The one was going to die. So hopefully we're good. No, it's all good. So GLP-1, just like insulin, is a peptide hormone.

It is exactly the same class of hormone as insulin, and so it's very important to actually have in the body. Unlike insulin, GLP-1 is made in our intestinal tract where insulin is made in the pancreas, but it has a very important function.

when it comes to our insulin resistance and metabolic health. One of the main factors is it improves insulin sensitivity. It makes that lock work again and so it can be very helpful with that piece.

The other piece is that it can help a lot with calming down food noise, getting rid of cravings, improving satiety. The other piece is it really helps lower glucagon and glucagon is another pancreatic hormone that makes your blood sugar go up.

If we can keep that down, it helps a lot with blood sugar regulation for that.

GLP-1 Medications and Natural Alternatives

The hard part is, do we look at natural GLP-1, which is what we make in our body, or do we look at natural GLP-1, which is all of these shots that people are crazy over?

In my experience, and I have actually quite a bit of it, sad to say, people come to me for these injections a lot. Well, but also too, like this isn't quite as new as we think it is.

It's the GLP-1, and again, it's GLP-1 receptor agonist medication. It's not GLP-1, if you could talk about that. They've been around for quite a while.

Yeah, so yeah, GLP-1A, like you said, agonist, is the actual medication that they're giving you. The other name or word you could use is mimetic. It mimics the effect of GLP-1.

The problem with these medications, well, and like you said, they've been around a long, long time. Bidurion, Biada, I'm sure you've heard of those before.

Those dietitian 20, 30 years ago, people were on them. But the interesting piece is they weren't losing weight. Right? They were, they were on them. It was helping to manage their blood sugar because it's a diabetic, but it wasn't helping with the weight loss piece.

So now what they've done is they've created these superhuman doses. And that's what all these new medications are, is it's levels that are exponentially higher than what our body can produce or what those old, I had a, we're able to do.

So, okay. So that makes us, that makes sense. Yeah, the problem is is that not only do you get the weight loss benefit with these injections, but you also get all the negative side effects that come along with it.

So things like. gastroparesis or slowing down of the intestinal tract, which is one of the main drivers of the weight loss, because people are no longer eating other food.

And I don't know if you know this, but like, if I have somebody on these medications, and they're scheduled for surgery, they have to stop this medication 14 days in advance.

Yeah. Yep. Because they don't want them, they're worried that they're going to still have food in their stomach from a week ago, that they could aspirate during their anesthesia.

Oh, my god. Yeah, that's one I just I sharing too much information. I had just had a colonoscopy last week. And they were they asked, I don't know how many times they asked me, you know, you're not on a weight loss medication, you're not on a GLP one, because they want your colon clear for sure.

Yeah. So yeah, that would make sense if food can be in there from that long. Yeah. And it's, it's sad. And the number one complaint I have from patients who are on it and I only microdose it.

So I don't even get up to these superhuman doses like others, but constipation is a real, real problem with. Yeah. So other things, and Ben speaks to this one quite a bit too, is the studies that they've done on this is that when they talk about calming down cravings, they're not just talking about calming down cravings, they're craving for anything.

Craving for being with your spouse, craving for social interaction, craving for your hobbies and your lifestyle. I mean, those go down as well too, really high doses.

And then the other piece I'm sure you've heard Ben speak on is the osteoporosis and the Yeah, is it ridiculous? Um, it's hard. So, yeah. Yeah. Yeah. I always like to provide my patients with options.

You know, when I have this discussion, if somebody comes to me and says, I want to have Ozempic, I say, well, let me talk to you about your options because that's not the only option out there.

There's natural ways to boost GLP-1 in the body. Number one, change the food. Right. I mean, that's right. Yeah. I mean, this is something the body is producing.

And like I said, every single cell in the body can become insulin resistant. And so if your intestinal tract and those L cells that actually make GLP-1 become insulin resistant, you're going to have problems.

And so we want to improve that. Wow. Yep. Step number one. And I don't let anybody go on these medications without changing their diet anyway, because we don't want to continue to perpetuate, you know, there's people online that talk about, Oh, I eat Taco Bell three times a day, but I just take my shot once a week and I'm skinny.

Yeah. Yeah. Yeah. Right. So decaying then just they're decaying from the inside out. Yeah, it's really sad. And I'm worried that the ramifications of this 10, 20 years from now are going to be quite significant, which is sad, but maybe I'll be wrong.

So the other benefit to boosting it naturally is there's lots and lots of benefit. You're going to get the same insulin sensitizing benefit. You're going to get the same kind of calming of cravings, especially carbohydrate.

You're going to get the glucagon piece. And that's a place where I do see quite frequently people with unexplained high blood sugars. If I lower their glucagon levels, they have improvement.

That's simply, again, with diet and this GLP-1 benefit. But there's a lot of natural things that you can do that can impact this that are not going to give you all those negative side effects that you get with the injections.

Yeah. Well, and that's the thing too. We see that when we shift people into ketosis in our, our phase one weight loss phase, um, hunger goes down, right?

Being in a, in a ketogenic diet, it goes down because your, your insulin resistance is dropping. Your body is producing your own GLP one. We're eating more protein or protein also helps that.

Right. Yep. And ketones themselves, the actual beta hydroxybutyrate that's found in your bloodstream actually also has appetite suppression capabilities, right?

Yeah, yeah, it'll suppress your appetite, but it's also a wonderful fuel source. You know, I call it high-octane fuel compared to unleaded. You might as well feed yourselves the high-octane fuel rather than the crappy carbs.

Yeah, yeah, yeah, yeah. But then there's also, we're finding out there's also supplements that will help do this. Yeah, and there's two in particular that Ben has done research on, which are really helpful.

Allulose is a wonderful natural sweetener, non-caloric, that actually really helps boost GLP-1. And then chlorogenic acid found in different things like green tea or yerba mate can be very impactful as well when it comes to boosting GLP-1.

Yeah, you know, we've been pretty excited because in our office we've we've got a couple of the products that Ben has actually been doing some research behind, and we're finding that they really do provide the benefit tremendously.

And again, from the inside out, right? It's getting your body to produce GLP-1 instead of putting something in there that's pretending like it's GLP-1.

Well, and the other interesting piece, and I've had many conversations with Ben about this, peptide hormones in general, insulin being the one of main topic of discussion, you can become resistant to, right?

You can become resistant to the peptide insulin. So the question I asked him the other day, you become resistant to glp1 peptide and he started listing off all these peptides and it was like yes yes yes yes and he says well i don't know for sure but there is a potential to become resistant to this so my question to my patients is is by taking these super high doses and not making it yourself and i compare this to like testosterone replacement in men think of it yeah if i give men testosterone their testes stop making it right so will the testes come back to life yes eventually will they come back to the same potential maybe maybe not but are we doing this to our intestinal tract too are we one becoming resistant and that's why these doses have to continue to creep up over time because you know people become tolerant or resistant to the dose they're on they stop losing weight or whatever so they keep ramping up the dose are we resistant to it number one and number two are we shutting off our own production of

glp-1 by giving it So right.

Wow. Yeah. And I use, I use his products and allulose all the time and helping people come off of these GLP-1 agonists, just because if, if like with testosterone, I'm stopping a testosterone replacement in a man, I'll give them clomaphene to boost their own natural production.

Well, if you're coming off of a GLP-1, if we can give you something to boost your own GLP-1 production, that's better. That's awesome. You know, Lindsay, I hate to do this, but we deal with ADHD world and attention spans can only go so long.

And I could be I could be Huberman with you and like we could go for four hours. Literally, I would just love to do that. But what that means is we're just going to have to have you come back for another show.

So let's let's let's kind of wrap this up in a neat little package for people. So that, you know, they can kind of walk away maybe with some some helpful hints on what they can do first, and how they can start.

And again, if they're in our program already, then we're, we're, we're hitting a lot of these things. But if they're not, This is my number one message to everyone Insulin resistance is an easy thing to fix by changing the food and it's a lever that you have complete control over you You get to put what you pick what you put in your mouth versus, you know menopause You don't necessarily have as much control over that.

So number one fix the insulin resistance our mantra is at insulin IQ is prioritize number one. Number two, lower your carbs. Number three, fill with fat and fiber and fast frequently.

And so those things anybody can turn around and do and fix that insulin resistance piece. Next piece, I'd say get your markers checked. It's always good if things don't change that you can measure at home, your waist circumference, your weight, whatever, you can see it a little bit more quickly when it comes to your markers.

And so get into fasting insulin, get the triglyceride to HDL ratio, because those may change before you see it on the scale or in the mirror. Um, consider optimizing hormones.

I mean, and this can be for any phase of life, you know, whether it be PCOS, pregnancy or menopause, you can optimize them with, with supplements for sure, with change in your diet.

And then if for my menopausal women, I cannot recommend bioidentical hormone replacement therapy more. I just is a huge piece to help you age. And I hate to say age, we call it lifespan versus health span.

We want you to improve. Yeah. by helping optimize those hormones. And then the most important piece here, and people will know it, especially if you're wanting to get into HRT, doctors, they were not educated on this.

They don't know what to do. They'll throw a patch at you maybe or say no or whatever. Do the research or come see me. Do the research to find a well-versed provider because it can be done incorrectly.

Yeah, yeah, absolutely. This is again, it is such a hot topic these days.

Practical Steps and Closing Remarks

And, you know, it did the edict did come down reversing the bad science that led everybody to the scare with hormone replacement so many years ago. And so that's why so many years are perked up to hear and understand what their options might be.

And I do love the fact like I said so so Lindsey if if someone were interested in potentially connecting with you getting a consultation and maybe becoming a patient.

Because the telehealth thing is so awesome you shared with me these are the states that you're actually licensed

in and you're working on a couple more.

Yep. Yep. I've got 14 current states and New Hampshire and Montana are pending. So hopefully soon. So I can work with anybody in any of these states through insulin IQ.

If people are just seeking nutritional advice or lifestyle advice, they offer a wonderful 90 day course on how to reverse insulin resistance as well as community support.

Direct access to me. We have it's like Facebook. You have a chat that you can get into. You've experienced that with the pro insider. That's a nice, wonderful, cheap option that's based primarily on lifestyle.

But if somebody needs help with getting labs ordered or with starting prescriptions like HRT, then then integrative is the place to come. Yeah, absolutely.

I'm so excited about this because I didn't even know about this when we got connected by Shannon. And the fact that your license in Virginia is so wonderful.

And I'm going to extend this to all of my patients who may or may not want help, who want somebody who understands low-carb ketogenic nutrition and what we're trying to establish in insulin resistance.

And so, yeah, I hope that other ideal protein coaches and clinic owners, if you see your state here, that you might consider reaching out to Lindsay or me.

And, you know, we can kind of talk about how to get you connected. Excellent. Oh, thank you. Thank you so much, Lindsay. I truly appreciate your time.

I will tell you this show has exceeded any of my expectations. It's one of those shows I'm going to have to go back and take notes on doesn't happen all the time.

And so but I definitely you said some things like I said, you connected some dots for me that had not been connected yet. And I'm so thankful for that.

It's so super exciting. Well, thank you to you. It's I love is get the word out, get the word out and get the right word out. More people doing it, the better it'll go.

Right? Absolutely. I tell you what, I'm gonna send you backstage real quick. Let me close up the show. And I'll be back to talk with you. All right, well, ladies and gentlemen, like I said that that show absolutely exceeded my expectations.

I knew that she had so much great information to share with us. And so I hope to that this is a show that was impactful for you, especially if you're dealing with some women's health issues and we're questioning your approach or what's going on.

I think that there's some really great information in there. So as always, like I said, please like subscribe to the show if you're not already. Share this with your friends and family people in your family and your friends that you know are struggling with these things.

So that we can help them as well. Get them on the road to better metabolic health. And as always keep striving and keep thriving towards your That's a wrap for this episode of the Life Possible podcast, where we unlock the power of metabolic health to fuel your best life.

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