Biohack DNA with Continuous Glucose Monitors Transcript

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Introduction to Continuous Glucose Monitoring

So today we're talking to Doctor Yates, and we're going to talk about something that I'm actually particularly curious about that I have not yet used, admittedly.

I've been very excited by the sort of progression of something that's been highly clinical in nature to all the sudden becoming almost recreational in nature, like it's something that you can just as a consumer use, but the information you can drive out of it can truly change health.

If you're looking at things from from a preventative lens. So first of all, Doctor Yates, thanks for joining us. Sure. I'm happy to be here. Thank you for the invitation I appreciate it. Cool.

So what I was talking about was, you know, continuous glucose monitoring. We know that you've done a lot of work around type two diabetes and helping people either manage or reverse, you know, those that believe they can.

First of all, and a lot of that now involves modern technology, which was difficult. You know, I remember growing up, my father was diabetic, and I remember the insulin injection.

I used to go to his belly every day. You know, I remember him tracking, glucose levels by driving to the local drug store and, you know, using whatever equipment they had, or you remember what it used to look like.

Okay. Yeah. And now we're at a place where you can literally have a patch on your arm with real time data after every meal, after every workout, if you didn't sleep properly, driving outcomes.

That's right. And that's so cool. So the work you've been doing. Has it been more around diabetics themselves, or is it around sort of wellness in general?

A little bit of both. What what do you get up to? Yeah, it's a mix. It's been both. It's for people who have diabetes, you know, type two diabetes, prediabetes for people who really are trying to get out of trouble.

Zone type one diabetes. Right. Okay. And now it's shifting towards people who are more on the metabolic side, or people who care about fitness and people who are really preventive.

They are trying to either optimize their current level of health, or they've watched their family's health become a complete train wreck, and they're trying to change that conversation that goes on with their blood sugar, you know, their glycemic response to get it to a healthier place and keep it there and to get their home.

And I can call it a secret decoder ring, their own personal secret decoder ring to know what's really sensitive for them. Is it stress? Is it nutrition?

Is it exercise? Meal timing? You know, is it sleep or some combination of those things? So all these factors can drive I mean really what you're tracking is glucose, right?

It's a continuous glucose monitor. Absolutely. So you're saying sleep stress all the it's not just about food or insulin. No it's not. It's more it's more nuanced than that. Right.

The the stereotype I think the people have in their minds around diabetes specifically might be that everything, is all about nutrition. Yeah. And or exercise.

Right. And yes, those are important, but there's at least three more things to consider at the time of what they're eating and timing of meals.

How CGM Reveals Lifestyle Triggers

Right, right. Their, exercise levels. Yeah, sure. Stress level sleep. Those all have quite, a quite an impact. Nutrition is going to be the bullseye of the target.

And so for people who are more fitness oriented or more on the metabolic side of this, who don't have a diagnosis, let's say if any kind of diabetes, they can get incredible insights actionable for their personal health and positive behavioral change.

If they have a CGM, a continuous glucose monitor, because it's giving them real time information via the sensor and the app as to what's going on. Like let's say somebody gets, gets in an argument and they see that their blood sugar rises, they might find that a 10 to 20 minute walk, something really simple, will bring that blood sugar beautifully down back to a healthy, normal blood sugar level range.

I mean, it doesn't have to be some sort of huge effort to do it. In fact, some people will find out they're over exercising right? Which is shocking for some people, right?

They might be pounding themselves into the sand for no real reason, and they're not more fit. And they might be causing their own blood sugar problem.

It's just so fascinating. So being able to use the CGM to guide you with data along with behavioral change habits, you can really get this stuff dialed in.

And so then if you're talking about DNA and genomic responses and epigenetics, wow. Now you can really, you know, with confidence, know what makes sense for you as a person to do, even if your family history is not favorable around certain chronic illnesses.

So I want to ask you about a couple of those things. Yeah. Because you're getting my head spinning. Now, why would an argument drive glucose level when you haven't consumed anything interesting? Right.

So anytime the body gets activated into fight or flight, you know, when we get that threat response going in our bodies, our neurotransmitters, there's release of the hormone cortisol.

All of those things are happening. So of course, all is released. Adrenaline is released, noradrenaline is released and your body is convinced that you're in a fight or flight mode, right? Right.

So if you're in an argument, if it's really intense and you fight, your heart's pounding, you know, maybe you're starting to sweat and you feel really involved.

The problem one of the problems with that is simply the fact you're not working off those chemicals. Those chemicals are meant for you to work off, either because you're fighting or you're fleeing, right?

And so if you're arguing with somebody, most of us aren't also fighting or fleeing. We're not using those big muscles. Therefore we're not making use of the release of blood sugar, glucose.

That happens when you have that fight or flight response. Cortisol goes up in response to cortisol. The body gets a signal, says, oh, we're being stressed.

Fat release white blood sugar. We need instantaneous energy to respond to the threat. When you're arguing somebody, you don't have the physical. Component to let you burn off that glucose.

That's why I going for a walk. Something simple can bring that blood sugar back down to a healthy range. But that's why it's spiked up to begin with. It was responding to the threat.

It's so simple, but it's something that none of us think about, you know? Which is if you're body response is what

you're asking for, right? And if you're demanding the ability to fight or flight, both require energy.

Guess what you can say here it is. We'll burn some fat and give you some glucose, whatever it may be and whatever it's going to do it. Yeah. And then adjust the insulin response and then everything goes haywire.

And then there's a cycle you end up. And so I guess are you is that the same picture or painting when it comes to over exercising that you're putting yourself into just maybe a little bit too much stress?

Is that why you say there's a response there? Yeah, there's a response there. For a number of reasons. One, working muscles need to be fed and, you know, glucose would be their preferred food. Right.

And so you're either going to get it from the bloodstream. You'll get it from the stored forms in the liver. You know, glucagon. There's other ways that the body will figure out how to get the energy to feed those working muscles.

And this is how some of us become, frankly, metabolically inflexible. There's a lot of people who work really hard. They exercise a lot, and they can't lose a pound.

In fact, sometimes their weight goes up. It's really unfortunate. So, you know, when you look at how all of these things, are interwoven together, a CGM, a continuous glucose monitor can really help give you some powerful insights on what are the most sensitive lifestyle aspects that you actually have control over, or some hope have control over, and you can make your changes.

And I would caution people data is great and actual data is even better. Don't be too obsessive. Don't beat yourself up and you know. Then decide that you're a loser, that you somehow have failed because you don't have perfectly even blood sugar 24 over seven.

No one does. And in that realm, I've seen people use this as yet another way to feel bad about themselves. And I don't want that. So I want to be really clear.

It can give you insight. You're looking for trends. You want to know if every time you eat that pasta, what did you get on the blood sugar rollercoaster or were you pretty steady?

Were you okay with pasta? Prince I think it's challenging for people to hear. The outcome most people seek is perfection, I think, which is impossible.

Yeah, it's a broken box with you. It's like I want to turn the switch off. That's that's the belief. And that's not the way the body works. The body works.

So, I mean, even getting there, you shouldn't even do it that quick. It should be incremental in terms of your habit changes. They're not going to stick otherwise.

That's exactly right. All the research and our live personal experience. Right. As people we know it needs to be the baby steps. You know, babies don't just get up and walk in three months.

They fall, they roll over. They do all sorts of things before they actually get up and walk. Yeah, yeah, yeah. No kidding. So you use this term couple times and people need to better understand this.

You talk about metabolic health right. And the difference between people believe well now there's there's better knowledge and there ever has been. But still too many people believe that diabetes is a thing, that they might get it.

In my family, it's yeah, it's in my genes. My grandma and grandpa had it. Everybody had it. Right. But what you're talking about is diabetes is an outcome of poor metabolic health.

But that is something like two diabetes. Two type one is autoimmune onset.

Metabolic Health and Everyday Movement

I want to make sure we're clear here. Yes. Type two diabetes. So but I think most people don't understand where the metabolic health starts and how much that's actually in their control.

So can you speak a little bit about what that means. Like what are we what does metabolic health mean. What are we measuring. What is a red flag. How do we know that shape.

Yeah. So metabolic health is one of those things that I think creeps away from us gradually over time. It doesn't usually sprint or run out of our lives right?

So often, if we're relatively healthy as children, and in our teen years, we probably enjoyed some level of metabolic health. And by that I mean you probably weren't counting calories.

You probably weren't on any kind of a diet that completely excluded certain food groups and made them available. Right? Right. Like you probably weren't doing any of that.

You probably ate your food. You probably ran around with your friends. You may have exercise, maybe at school or through a sports activity, or just living your life.

If you lived on a farm, you were definitely going to be working because that's the nature of being on a farm. If you're in a city, maybe walking around, going from streets and transportation, you know, there's always opportunities for movement.

And then for a lot of us, as we get older and into our adult lives, basically, if we have jobs that are relatively sedentary, we're sitting on our butts all day.

This is where the problem creeps in that normal activity tends to drop, you know, if you think about it, right, there's playgrounds for kids. Yeah. And we need something similar with adult sized equipment because we lose a lot of the range of motion.

Most of us just go from seated to standing to seated to standing. We lie flat and that's pretty much it. We move in two dimensions. I have this conversation with my chiropractic friend all the time.

You know, if you're a bicyclist, right? You're going like this all the time, but you're not using your whole range of motion. And this is one of the ways in which our metabolism starts to slowly, unfortunately, reregulate and start to decrease.

In other words, we're not burning our calories as efficient because we don't put the same demands on our body. Yeah, you know, that's interesting. You say that because when I go to the gym, the people that look the healthiest to me, I don't I don't mean that they're the biggest or the strongest typically do have strength.

They typically do have definition. They're not the people that and I'm guilty of this myself. You go in the gym with your bro workout, which is push pull legs right.

And then there's a little bit of cardio sprinkled in there. They're doing more complex or like CrossFit style stuff where their body is actively engaged and doing things functionally in the way it was supposed to move.

And they have zero belly, you know, you can see every fiber, muscle. They look healthy on their face. They have more energy. And they're they're not there to build a muscle.

They're there to build their body. Right. You want to build all of the movement or the kinetic chains, right. And so in that, that means, you know, making sure you preserve your balance.

I personally think that's one of the reasons why when people hit their 50s, 60s and 70s, particularly 60s older, they

are so much more vulnerable to falls.

And it falls when they happen, can be so severe and often life changing and sadly, life ending because they haven't preserved this capacity through their 20s, 30s, 40s, 50s.

And as we get more information now, as we continue to better understand what really does the genome tell us and these lifestyle things and our habits, hopefully we will be able to turn around that trend so that people don't fall apart as they age.

So we can come to expect to live long and live well. That's one of my taglines. You know, living long but living creepily feeling horrible. Yeah. What's that? Right.

And having a shorten life. Who wants that? But I personally want and I hope everybody listening wants to live long and live well. That's why we're here.

Yeah. Your last part of your life shouldn't be a punishment for everything you did wrong, right? It should be. We should be a celebration of what you did. Right.

That's a great point that you make, you know, can we begin a little bit on that? I've heard this. The saying or expression. I bet you have to. How many people have you run into in your life who said things like, If I'd known I was going to live this long, I would have taken better care of myself.

Yeah, yeah. They deeply regret what they didn't do based on what they knew at that time. And now, my gosh, we've got so much more info. But that info is useless unless you take action.

You got to do stuff about it. Yeah, exactly. You mentioned genetics and there you kind of sprinkle it in there a couple times. And I know, a lot of the work you do uniquely is around epigenetic expression.

And actually using CGM to understand what's going on in the body. So talk to us a little bit about, sure, sure. Thank you so much for that opener to that I think rich and developing conversation, you know, something you mentioned at the beginning, which is that a lot of people have this saying or this expression, you know, that's a diabetes, type two diabetes, diabetes, things like that.

Alzheimer's disease, asthma, whatever it is, runs in my family, fill in the blank, runs in my family. Right? I still process any of those chronic illnesses.

And with that in mind, people sometimes feel doomed. Their their mental state, their mindset is such that no matter what I do, I will be targeted. This is going to happen to me, you know?

And instead, I would invite anyone who's watching this to consider if you know something runs in your family, you've got a head start, a huge fat head start, you know, a gift for your own personal health because now you know you need to focus.

Instead of it being a broad brain, you can focus with specific activity. Yeah, that's incredible because that's where I think one of the challenges there is that when people believe and this is not everybody, but for the most part that it runs in my family.

Yeah, it's coming. It's not you know, they feel it. They don't feel the empowerment that it's early warning sign. It's more just like it's a sentence, like it's prescribed.

It's going to happen. Yeah. That's not at all true. So if you're if you know young then there's no reason it should happen. Absolutely. I'll tell you.

You know, I got reconnected to my father's side of my family in my adult. Years. One of the gifts in that, aside from obviously the additional loving people in my life, was the reality that I needed to pay attention to all things related to

blood sugar, glycemic response and resistance, etc.

because they all seem to have. In my father and all of his siblings, he was one of 13. They all had some kind of diabetes. I would never have guessed I was at risk for that.

My mother's side of my family. The issues have been heart disease and cancer. So with the three of them together in my personal genetic mix, I know I have to pay attention to lifestyle.

I'm not getting a pass there. Yeah, thankfully I was already in the process of becoming a naturopathic physician, and that was a huge gift because it underscored that transition from electrical engineering to naturopathic physician.

Right. Like, I am all about that lifestyle thing because I know that you can influence it and make these changes. And for a family members who made that choice, who were in my, my tier, my age, they're my cousins here, so to speak.

Yeah, you can see this playing out. You can absolutely see this playing out. So hold on one second. You went from a electrical engineering to a naturopathic.

What what triggered all that? What happened? Well, I was working in Silicon Valley, and my fiance and I moved from Silicon Valley to the Silicon Forest in the Pacific Northwest.

Genetics, Epigenetics, and Personal Risk

Right. And then I found out, because of the nature of the environment, the Pacific Northwest, I'm actually quite sensitive to mold. And I went and got allergy shots for like a year for mold.

And I, I just grew increasingly uncomfortable with that approach because first off, when I would ever see the doctor or the nurse, I would ask, what's in these injections?

And nobody wanted to tell me. I'm like, look, I come from science world, you know, science and scare me. Chemicals don't scare me. What do you all shoot me up with?

And they just would not have a forthcoming disclosure. They wouldn't even give me the piece of paper. You know, it comes with this time I was like, okay, you guys, you know, I think this is not right.

So anyway, long story short, my husband works with a guy who had seen a major package physician there in Oregon and who got dramatically better, who had very similar symptoms to mine.

So I went to meet with this man. We had a number of consultations, really a handful. It was three visits that made a huge difference in my health, my energy came back, my zest for life.

I was in my early 20s at that time. I mean, you should be feeling amazing in your early 20s. I used to be so fatigued sneezing all the time, all these classic mold kinds of, symptoms.

It turns out the house that we were renting had mold. And voila! I'm a very much a results oriented person, so I changed from electrical engineering over the course of, several years.

I had started, working with a wild crafter learning about herbal medicine. This is while still working as electrical engineer is amazing. And I felt that my heart, my soul, was better fed in doing the work of naturopathic medicine.

And so I went to school and got my degree in naturopathic medicine, sat for my board exams, became board certified, and all of that good stuff. In fact, I even founded and led.

And here in California, the first ever fully accredited integrative and naturopathic medicine residency program. So

sometimes life calls you in a different direction.

I still love science. I'm a big fan of science and data and facts. I don't struggle with them. I simply bring them now to this lifestyle piece for chronic illness, because I know these are things we can affect and help people live a much better quality of life and quantity of life.

And and in some cases, maybe we can even put this thing in the rearview mirror, depending what we're talking about, and just put it behind people with no magical thinking.

So if we're talking about type two diabetes, prediabetes, if you get out of blood sugar trouble, you get back to healthy. You need to continue to do the things that preserve that.

And you cannot go back to any old habits and expect you will magically now suddenly not have it come back. Right? Like that's just real. People get sometimes a little silly here, but I think the things this is incredible was your work.

I mean, you went from what you were doing and now all of a sudden people don't maybe don't know yet, but, they'll know soon that literally there's tens of thousands of people that you're affecting this year through, you know, the advocacy you're doing and online, some of it and you're driving traffic towards understanding this.

And, you know, if you didn't exist, there's literally 50,000 people out there this year alone that would have, not been helped or benefited from your knowledge.

So it's amazing the work you do. Thank you. Yeah, I notice you're also. Is that the offering on your finger? Yeah. And do you incorporate that with the CGM or is it a patch that you use or what do you.

Yeah. So CGM I'm not wearing right now I, I was, I was going to grab on in the closet here. Okay. So either that or this or sometimes both. Yes, I do incorporate them. I have fun with data.

I like information, okay. Give me a sense of how things are going. And I look to see does it match how I'm feeling. Right. So for instance, right now I'm finding that the aura ordering for me is providing, closer match to how well I slept.

Then the information I'm getting from the Fitbit, that's how this is working for me. I absolutely compare these gizmos. So how does somebody like the layman who just grabbed they're ordering.

They're relying on the data that's on the platform. They don't even know how to dive deeper. Beyond that, how do they take CGM and aura and start to sync up and sort of geek out on it?

Yeah. So how you start is here. You look at, you know, and just experience both look and sense. How are you feeling? Get that dialed in. Right before I hopped on this call, I just finished a call with a wonderful client of mine who is a type one diabetic.

This woman. It's just so amazing. I have so much respect for her. She has figured out a lot of things about her health, and one of the most important was to manage her own expectations around what do the gizmos mean and not feel overwhelmed.

So if you're brand new to all of this, I say pick one. Whether it's a continuous glucose monitor or an oral ring, look at the information it's giving you.

Take a deep breath and then say, how am I feeling? Right? What preceded it? What came after it? Like, for instance, I love, basketball in particular. I'm watching right now the NBA, Western Coast, Western Conference Finals and my home team doing great.

But sometimes these games are run long and I know how excited I get as a fan. Right? So I'm just saying, having

been a former athlete, I know, I know how my body works.

I'm just dialed in around that. So I make sure after the game ends, I have a solid half hour before I actually put my head on my pillow to calm down. So I kill this lady, right?

Yeah. No kidding. Think you know? So you have to know who you are. If you're someone who has a slow start in the morning, you know, you might consider, maybe you need to give yourself more time to get up and be ready for your day, rather than push yourself to what I call the heart attack squeeze sequence, where you try to pop up and pretend you're a perky person in the morning and, you know, be ready to do your day in 20 minutes when that's not you, maybe an hour and 20 minutes.

You got to build that into your schedule, right? That's part of self-care. So your ring will let you know around, if you are ready for your day or not, what's going on with some of your other trends?

So just look at the information, friends. Keep checking in. How do you feel? How you feel is telling you a lot. Yeah, and I think it goes back to one of the things we touched on earlier of slowly adopting habit as opposed to trying to be perfect on day one.

Right? So yes, if you take the CGM, it's very different metrics than the wording. You're looking at your continuous, instantaneous response to everything.

Like you said, it's not just food, it's also emotion. It's also environment, sleep, everything. And then the aura is more giving you a report on how you did.

Right? Yeah. More call it a midterm. You know, it's not instantaneous, but it's and the data is presented in a very different way. Yes it is. You know, you're like, I want to be tracking glucose and you're just trying to then understand what did I just do?

What did I just do? What did I just do? Because, you know, I did is the thing that caused it. Or the ordering is kind of, you know, putting it into a platform where it's already kind of interpreted for you. Yes, yes. Very to said. Yeah.

So I guess the easy answer is just one thing at a time. Baby steps, like you said, right? One thing at a time and pick one. So I would encourage people to do one of these things at a time and not all of them at the same time. Be kind to yourself.

It's too stressful to try to merge all of this and then figure out what's going on. Untangle, right? Yeah.

Doctor Yates' Career Shift to Naturopathic Medicine

So if you want to start with any of the gizmos, you know, if you start with an aura ring or a Fitbit, see how that's working for you. Does it correlate to how you're actually feeling and how you live your life?

And then you can add in a continuous glucose monitor. So if you don't have diabetes, then this is another way to get insights for your metabolism. Or perhaps a developing problem with say, insulin resistance.

Right. So many more people with the situation of the pandemic are just not as physically active as they had once been. And you can just see that people are starting to have even more in way of metabolic struggles.

So with that in mind, whether people calling it Covid weight or other things, however it's framed, look at any of these tools and use that information to help underpin those healthy habits with those baby steps.

So if you know that sleep is a problem to work on, that first make sure you have a saying process for going to sleep as well as being kind to yourself when you awaken.

Those are your bookends of your day. You know if you're a parent, if you have kids and I know you do, you know

that I do. You know the little ones. You have to have a routine.

If you don't have a routine, it is chaos at home. It's good for. Yeah, yeah. And, you know, touching on the Covid stuff, we did a lot of interesting work there when it comes to metabolic health.

And we looked at the you know, the why behind a lot of these things. And I know you'll appreciate this stuff. And when it comes to incident response, we can literally look at the genes that drive that. Right.

So there's there's a very specific genes that drive starch metabolism. And how well do you do that converting starch into glucose. There's some people, which isn't really medically spoken of, but that the saturated fats will actually trigger an insulin response.

Right. It's necessary. Right. And yeah, you know this, but a lot of people don't look at it. But your CGM will tell you then there's, you know, insulin response.

How well are you insulin resistance or not genetically, you can figure that out before having to go through the pain and struggle of learning in another way.

Then there's all, like you said, the Covid wait, are you a binge or do you graze at the pantry? Are you that person that, for example, if you have a really good relationship with dopamine and are just constantly used to being happy and satisfied, then the Covid lockdown and anxiety of not seeing people is just much more severe for you.

Because you're not used to bad news, you're not used to that crack where somebody who's, teetering on the edge of not feeling good, it's just another day for them.

Right? So we've learned a lot about true why people have different outcomes and why there was so much of this, like you said, Covid weight type phenomenon.

It wasn't the same reason for everybody. But there are very specific, clear genetic reasons why. But then they need the help of somebody like you to coach them through.

What do I do about all this stuff? Right. So yeah. Exactly what what do we do? You know, the reality is, is that we really aren't identical. Even identical twins, I would argue, are not identical because they can have different health responses to the exact same input.

Yep. You're exactly right. Yeah. You mentioned type one diabetes a couple times. And the general thinking is type two diabetes is preventable. Reversible shouldn't ever happen if you do things right.

Type one diabetes. The general narrative is very different. You have it. But I'm hoping from what I just heard you say, that you have some secrets that haven't been revealed yet.

Because the way you're talking about people working with you, as is, if you're coaching them through their autoimmune response and helping them win type one diabetes, is that is that right?

Oh goodness. No no no no. So to be clear, I'm not saying I'm hearing type one. I would never say that that's not true. I don't know any technology, Crispr or whatever.

I don't know of anything yet that could make that claim. The reason I work with people with type one diabetes is because so much of lifestyle puts them on a roll of the blood sugar rollercoaster, just like it does somebody who has prediabetes or type two diabetes. Right?

For me, it's the diabetes spectrum. Type one is autoimmune onset prediabetes, type two diabetes. Definitely are induced by lifestyle habit and nutrition and things people just frankly don't know.

I never blame anyone in any way, shape or form, regardless of the issues or the diagnosis, because I know a lot of

times, we are just not taught. We don't know what's healthy for us or what's not healthy for us. Right?

So with that, the beauty about any kind of diabetes is that because they are all so lifestyle sensitive, you know, someone can have a healthier life and live longer, live a better quality of life.

If they get their blood sugar to a healthy range, they're able to keep it there as much as possible. Type one diabetes will have a more challenging time of that.

It's not impossible, but they will. But they will need to continue to take insulin. I don't have anything to offer today. So someone who has type one diabetes that says you don't need insulin, you do.

I just want to be really clear. So there's no ambiguity here. No. That's very helpful. So essentially what you're saying is that we know what it is clinically.

We have to keep on the insulin. But there is a layer of functional thinking that you could apply to that, that delta value of the peaks and valleys can be a little.

Yeah. Or you can get that. Yeah. Yeah. You're making the delta smaller. While we're talking about deltas. Shout out to people with type one because you're going to you might be more likely to be awakened in the middle of the night, maybe multiple times with blood sugar lows. Right.

And the good news in working on these very things that we are talking about right now is you can avoid the disruption of that. So the alarms and the sensors, the insulin pump, the Dexcom or whatever they're using to, as a CGM device upgrade to continuous glucose monitoring because it's essential for type one.

And they can die because if you can go too low, this is for real here. So with that in mind, because if you have more even blood sugar, then you don't have lows at night, which means you get a full seven, eight, nine hours of sleep and awake refreshed and restored, which is awesome for all kinds of health.

So for type one diabetes. And we can help people figure out the balance for them of exercise of the kinds of nutrition, and then whether or not they would benefit from a snack, let's say an hour before bedtime, one that is super blood sugar friendly.

So they avoid those lows and instead aren't, you know, ripped away from sleep with a freak out situation around, oh my God, my blood sugar is low. Or the people who are perhaps caring for them if they're younger.

Everybody gets better. Sleep like this is good for everyone, right? Yeah, yeah, that's part of the work that I'm doing people right now. It's just it's so exciting to have that data to prevent the problem.

And you're mentioning nutrition. You said earlier that we don't we aren't told. Right. It's not really the fault of the average American, say, because it's not part of our education.

We don't know. But there's a whole other layer also. Yes. We don't we aren't taught, we don't learn. But we also, when you go to the average grocery store, the options in front of you that you assume somebody here and oh, this is this could might add another hour to the class.

Wearables, Sleep, and Self-Tracking

How long do we have. Yeah. Because I can tell you also I'm in Toronto, Canada. Right. And for the most part, obviously the good and the bad. Everything is mixed up.

But I was in Austin a couple weeks ago and I went into a 7-Eleven, and I've been into a 7-Eleven to get it. All right. So I was just horrified. I was horrified at what I saw there that is, I'll after I'll.

I'll just poison being sold. Good, right? It was incredible. And so 100% the education needs to be there, right. And

now that we know more, it's going to be there.

But once you have the education and you think you know, when something is labeled as an apple or whatever, treat that sound with the how do you get people to actually understand what food is?

Oh yeah. Okay. So I'm going to try and make this simple, right. Make it sound bite friendly. Real food is food that you can easily recognize. You can spell it and you can touch it.

If I always teach my patients, my clients to look at labels. Yeah. Not to look at labels, to be a nerd or to be weird, but to look at labels from the point of view of Will I live long and well?

Or will this shorten my time on this earth and make it miserable? Yeah. Really clear. Right? So if you look at the labels of things and it's full of strange chemicals, yeah, you can't spell it.

You can't pronounce it. It's got eight syllables and a hyphen in it. You probably don't want it. Yeah. Hey, here's the challenges. When people think, then they see it in the context of food, there's an assumption that it's safe.

But if I gave you a dropper with a label on it that you didn't understand, I said, eat this, you wouldn't eat it. No common sense, right? No, you wouldn't, you wouldn't.

So why are you doing it? Just because it's in the package? It looks good because it's convenient and it's often cheap. A lot of these industries, at least in the US, perhaps in Canada, are subsidized.

So the government pays them money to do stuff, and it is not in the service of our health here in the U. S., our health care system is 100% oriented towards disease management and profiting off of disease.

There is absolutely no incentive around people being well and healthy right there just doesn't. Let's just keep this real. And I think that's one of the reasons why people, let's say, who don't have any kind of diabetes are gravitating towards using things like a CGM, a continuous glucose monitor over rings, Fitbits, whatever the gizmos might be, because they're trying to decode and unlock the benefit of what is the best health for me at this stage of my life and at this age of my life, they're understanding that they have to take control of this.

This will not come for free, so to speak. It really does. And it's unfortunate, but that's the honest to goodness truth. So what do you say to that person that you know, they get it the cognition of what you're saying, no problem.

But then they go to Whole Foods and like, I can't afford this stuff, right? Right. So I say this, get dialed in on, eating plan. And if snacks make sense for you and I'm in general, to be clear, not a fan of snacks, but if you need them, you need them in some.

There are situations where it make sense, and eat as healthy as you can. It does not have to be super expensive. Yeah. So for instance, if you're someone who processes, legumes in a healthy way, like lentils and chickpeas, those are inexpensive.

That's cheap. It's much cheaper, let's say, than, cut of steak or organic chicken or organic turkey. Right, right. And have your nutrition centered on that, but also find out how you feel.

Is your energy even is your mood even you get the hangry. Are you the kind of person where if you don't eat, your family clears out in the workplace, nobody wants to be around you because you're angry, right?

Yeah, and that's a big clue around blood sugar response. If you're hungry, you know that your blood sugar responds. Your glycemic balance. Your insulin resistance issues are now starting to be red flagged.

You should have an even keel. And then you feel hungry without being angry, right? You don't have to be hangry. And then it's time to eat your next meal.

We get clues all day long about this stuff. Yeah, yeah. And I think to your point about just shifting what's on your plate, people, I think they don't realize once you start to eat high quality food, you don't need as much.

Right? The reason it's more nutrient dense. Yeah. And so the cost kind of evens itself out because first of all, there's two things. Nutrient density 100%.

You're eating real food that when if you eat the right stuff that's plucked out of the ground from the right ground, first of all, it's so dense. If you if you get a proper egg with a deep orange yolk, it is so satiating because it is full of micronutrients.

Right. But right. Like and after that is, if you're not eating that and you're eating the stuff we talked about for 711, it consistently, it's makes you so metabolically unhealthy that you need more food.

You're constantly craving more of the response responses driving your desire ever more and more and more and more. So this is the most common when people are taught by you.

Here's what your meal plan should look like. They're thinking that in the volumes of what they used to eat, right? Just not the volume they actually need.

That's exactly right. They're getting false signaling, you know, the chemicals, the strange stuff that's on the labels, the stuff you can't pronounce don't you can't spell, you don't know what the heck's they're on the labels.

Right? A lot of that is things that stimulate your appetite and or trick your taste buds. And here's the thing. You're not tricking your taste buds. It turns out your taste buds in your tongue are in constant conversation, right?

Your taste buds, your tongue. They do. They work in via the nerves. They go back to the brain. They tell the brain, hey, we tasted a certain kind of flavor, like sweets.

Therefore calories are coming. That's how the brain interprets that. So if you're drinking or eating something that has artificial sweeteners in it, fake sugars, your brain's getting a real signal around sweetness.

Type 1, Type 2, and Blood Sugar Management

Yes, you've done yourself no favor. So either have plain herbal tea, water, whatever. If you need variety in terms of what you're drinking. Because here's the thing, friends.

When your body is taking in these fake sugars, these artificial sweeteners, whatever your brain registers that there's calories attached at some point in time, usually within an hour or two, the brain's like, whoa, hold on, where's the calories?

I did not get those calories. I'm going to make you hungrier, right? Increase your appetite. Decrease your ability to feel satiated or satisfied. Then you get these cravings that go on.

And that could just be a nasty cycle. And sometimes it gets pinned to people's emotions. Some people eat when they're emotional, and this can be work, real work to untangle the good news, you can untangle it, but just know we really are wired that way.

There's all kinds of interesting research, and it turns out the taste buds on the tongue turn over every 10 to 14 days. That's why most health programs are at least 21 days.

They are trying to get you a chance to refresh, quite literally. What's going on here? Very cool. I admittedly, I'm guilty of the same thing where I found this, drink that I really like that was flavored with stevia.

So I found, I thought, okay, it's harmless, zero calories. Right? Yeah. Sparkling fruit thing that had some natural flavor in it. First of all, the natural flavor gave me a headache because I don't detoxify that well.

But second, that I was drinking this in the evening with my dinner, and then I felt like I. I realized that I was just snacking the rest of the night because of that exact response you said were the empty calorie flavor shot.

Brain is confused. It doesn't know our ancestors didn't have such a thing as the no calorie. Well, you know, no, they did not. Yeah. And we've even learned that metabolically, like the genetics of it, that something sweet with no calories, no sugar will still trigger an insulin response.

You know, even even though you're no longer CGM. Yeah, you're CGM, you're of saying you can look on the app and see. Right. So and then if you, you know, when you do the genetic studies and you know this about yourself, right?

You've already done your decoding our genomic self. Right. How powerful is that insight. Now you understand that this is really important for you. What if you're someone who's sensitive, like you said earlier, to saturated fats, maybe that spikes a good and insulin response for you, etc..

Right. And when you have these fried foods, these hydrogenated foods, trans fats, all of those adds your oxidative burden. What have you been running and preparing, let's say for a half marathon or marathon?

And your idea of a train had that 7-Eleven and shovel and a whole bunch of 7-Eleven food full of hydrogenated fats, all these high oxidative, low or no nutrient density foods, you have created a metabolic nightmare now, right?

Of course, you're not going to be well, even know you think all that running is going to save you. You've completely undone the health benefits with the nutrition.

In fact, you overwhelmed yourself for sure. And when you talk about metabolic nightmare, just the thought sticks out to me is the you know what we just went through with that viral infection, you know, wreaking havoc everywhere.

Yeah. And co-morbidities and diabetics fearing so much worse than other people. So what's going on there were metabolic poor metabolic health causes a greater susceptibility to the worst or most adverse outcome with something like a viral infection.

You know it's all about inflammation right. Over the years my patient base and clients have come either from people who have heart disease or diabetes.

And some of them have both. An intersection. Right. The good news is in working with them and being able to help. And being that still at MIT, scientists around what's the most effective thing.

So we don't overwhelm people, but they can actually get back to healthy and stay there. Right. And so then on the news, when they started talking about cytokines and inflammation and, you know, interleukins and more inflammation in my patients, my clients are like, you've been telling me this for years now I get it.

I'm like, yes, I'm looking out for you. And they're fine. They're doing great because we have been doing all of the right things along the way. And when something new popped up where they got a life shift, you know, life smacked them upside the head because it happens.

They've been able to get back on track again because we're always working on those habits. And the educational piece, the idea of the Latin word of dosing is the root for doctor, doctor as teacher and naturopathic doctors in particular, focus on teaching people their own personal decoding so they can understand what is going to be the most sensitive 1 or 2 things.

Usually they really have to get dialed in and then the rest will come along. You know? So because you've seen so many people, you know, we try to make it easy for everybody.

Not everybody has access to a genetic test. Or it could be a funding issue, could be a jurisdiction issue, whatever.

Yeah. What are the you've you've learned so much from helping so many people.

If you didn't have access to anything about anybody, what are the sort of three things you would tell them? You got to start doing this tomorrow? Oh, that's a great question.

Number one. Believe it or not, top of the list for me would be sleep. You must prioritize sleep. All healing comes from sleep. Your body, your gut. Everything resets when you sleep.

Your joints, your musculoskeletal system, your heart for sure, your brain, your mind, your soul, your spirit. Everything resets when you sleep. You must sleep.

You must find a way to prioritize that and improve your sleep. And if you're struggling with sleep, get help. You know if you have sleep apnea or some other sleep disorder, please get treatments that can be effective for you and keep working at it until it works.

If you are a person who has sleep apnea, let's say, and are struggling with, your the apparatus, the face mask or the nose pillow or whatever that attaches.

They have so many varieties now compared to, say, 15, 20 years ago. Try out different ones. You find what you can tolerate because you got to get oxygen.

Oxygen is not optional and we must breathe. This has been reinforced in so many ways. Whether it's the current, you know, viral threat or some other viral threat needs on next, whatever it might be, we must threat.

Food Quality, Labels, and Sustainable Eating

Humans are obligate anaerobes. We have to have oxygen. We must get that in. Right. So sleep number one. Number two on my list, believe it or not, would be staying hydrated.

Sometimes people get confused, think they're hungry. They're actually thirsty, right? So make sure you stay hydrated. And if you have a busy day, the day before, the night before the evening before, set up all your water in your fridge or on your counter.

Yeah, have the to go containers, stainless steel or something that's inert. Preferably just set them up. And that way all you do is just grab them and go put them in the car the night before.

Whatever makes sense for you, take away the things that will distract you. If you aren't someone who's naturally thirsty from staying hydrated. Because I've seen people have blood pressure issues, all kinds of things that come up and they're just not.

Hydrated, right. That's number two. You want to guess what number three is? I don't know. Every year everything you're saying is blowing. So I don't know why. Number three, believe it or not for me would be eat the food you love as long as it loves you back.

Wow. In other words, eat food that you enjoy in the healthiest manner possible, right? So for me, I'm an African American. So some of our foods, because of the conditions of the history of the US, are such that it was the scraps in the worst, the crappiest, worst quality food.

Here's the good news today. Hundreds of years later, we can enjoy some of the same bass food, but done in a healthy way. So let's say if we were making, recipes with collard greens instead of cooking it in fatback and lard with lots of pork, etc.

instead, you can cook your collard greens. You can just steam them with water. You need a lot of time. You can add in all your other seasoning. You can add in your onions and your leeks and all the other good stuff you probably put in your collard greens, right?

If you add peppers, etc. if you want to have meat them, you can have add in, turkey legs. You know, it can be organic turkey like we can do this in so much of a higher quality level of nutrition.

Now it doesn't have to have a meat product. And collard greens can be so health giving. It's a nutrient dense vegetable, that's for sure. We just want to prepare it in a way that's unhealthy.

So when I say eat foods you love, they love you back. I'm talking about whatever your cultural heritage may be, those foods that you love, you can preserve that.

And now we want to do it in as healthy a manner as possible. That's so cool what you're saying, because that's the biggest challenge for people when it comes to shifting their diet, is also shifting their palate.

Yeah, because you end up taking on somebody else's recommended diet based on their palate. Right? Right. And that's hard. That's that's years of un rewiring and rewiring.

People don't do it. Yeah. People don't do it. It's hard to comply. So versus here's what I enjoy. Now how do I make this healthier right. Right. And even that there's a challenge with okay, you're taking away the soul food of collard greens with the meat and the fat and everything, and you're steaming it.

Those palette changes. And I can testify to this myself once you make the shift. Yeah, it's hard to go back. It is right once you feel, once you start to.

And once you unravel whatever's going on in your tongue where you couldn't taste the good version, you're like, oh, this doesn't taste. But then you start to get used to it.

You go back to the old stuff and you can taste the poison. You can taste. Yeah, you know what was what was slowly killing you. Whether it's sweet, fat, whatever the thing, you know.

Right. I experienced my I can't eat a chocolate bar anymore. Yeah, it is disgusting to me. No. Right. I don't want it. Yeah. My kid, I thought it was amazing.

Now my gut. Yeah. So that's what just to. For anyone listening that's going to attempt this. Just appreciate that no one's asking you to. Like we said earlier, flip a switch. Nope.

It doesn't work that way, especially when it comes to your tongue and do. Because the thing is, you've heard it here today. It takes 14 days for your tongue disorder to reset.

Yep. Right. It's kind of like a long jet lag feeling. So you got to work on your tongue. And if you give it that time upfront where you preplan that this is going to take me a couple of weeks as opposed to, oh, I cooked this and it's horrible, right?

That's hard. Right? But if you realize it's a couple weeks of grind to get to a point where you're going to value and appreciate the new version of your meal so much that you actually won't want to go back.

Yeah, you won't, you won't. You'll no longer enjoy. You'll taste every chemical, your taste. When I switch from, you know, whatever milk was available to like really great, high quality, pure organic milk and even then, goat milk.

When I taste regular milk that somebody is home now, I literally taste like, what did they put in here? I couldn't tell the difference. You can tell a difference. Right?

So so that that I think is, wisdom that everybody should lean on because it allows you to keep doing what you enjoy, which is it's difficult to take the pleasure away, especially from food.

It's such a great source of pleasure as it should be, right? We shouldn't suffer. Who wants to suffer? Yeah, yeah. And you're making it easy because no one's telling you to stop to change your diet.

It would just tell you to replace the ingredients and just switch it around for things that are the way you cook it. You know, what is there? Is it in water? Is it oil?

Is it like, is it in a microwave or is it on the stovetop? Yeah. You know, it's these little nuances that as you adopt them, you're not going to want to let them go either.

They're they're right. Yeah. I mean, you can live with oils, you know, and when you're not eating them at a high heat, then now you're not you're not taking that risk that you're going to turn that oil into complete poison.

Yeah. For I added at the very last as the food is cooling down. Yeah. You'll use less. So, you know, you'll have less in the way of empty potentially calories.

You can have more health benefits. And if it's a delicate oil like olive oil, that's really important, right? You don't want to cook that thing in a high heat. Totally.

Not for a long time. It'll it'll burn and smoke and, you know. Yeah, you just kind of learn how to do the timing of things often. And then it's easier for portion control for people struggle with over eating.

There's so many benefits. Yeah. So many benefits. So when is your cookbook coming out?

Practical Habits and Group Coaching

I don't know. It's a good question. I have a few PDFs that have some recipes on them, that, that show stepwise, you know, these differences, whether it's preparing Collard greens, lentils and doll dishes, things like that.

You know, I, we borrow from cuisines from around the world because everyone, I feel has innate intelligence around food. We just need to make sure this modern world doesn't interrupt with us being able to live long and live well. Right.

That's cool. So if I I'm sure people listening, or, you know, excited by all of what you're saying, just like myself, how would they do? You would work directly with patients who I'm at at this moment as of this recording, transitioning out.

And probably by the time this airs, we will have exclusively group programs, available with my health coaches. And I'll certainly be active in that format, to work with people in a group setting.

And the reason I'm changing, going from one on one care and putting a stop to that and going to the group format is because my experience is that people can make their changes more quickly when they realize that they aren't the only one with the problem.

Yeah, no, for sure. That circle of care helps a lot, right? The accountability resonating with other people and their stories and learning, you know, that we're all in the same boat fighting the same stuff.

We are it's about community. Yeah. And then it becomes gamified with tracking your wearables and and there's leaderboards and who's on top? Who slept the best last night?

That makes it all fun. So yeah, this was amazing. Thank you for for coming on today and sharing with us because your perspective is truly unique. We're not talking about I have a disease.

It's more like I have a choice, right? And often with chronic illnesses you do have choices and so you need to make them. Please do. Thank you so much. This is amazing.

You're welcome. Thank you for the opportunity. And I hope that someone has been profoundly impacted. And we'll take those actions and make their own self-care number one for sure.

Oh, sorry. One last thing. Yeah. Where do people find your website? Yeah. They're welcome to go to my website. And it would be Dr.. Like the deviation for doctor and then Beverly Beverly Wyatt's dot com doctor Beverly yates.com perfect.

Thanks again. This was awesome. All right. Thank you so much. Take care.