ÍNDICE

RESUMEN DE LA SESIÓN CON TESS RICHARDSON

Instrucciones para Biohackear tu Cuerpo y Estabilizar tus Niveles de Glucosa: Lección de Tess Richardson

Hola, soy Tess Richardson, ex entrenadora de biohacking en Bulletproof Upgrade Labs, líder de metodología y ciencia en Habits.ai y profesional de nutrición funcional y entrenadora de glucosa en sangre.

Introducción:

Soy una profesional de nutrición funcional y actualmente trabajamos en construir hábitos en LATAM para biohackear tu cuerpo. Esta conferencia se centrará en comprender cómo afecta la glucosa e insulina a tu cuerpo y cómo podemos biohackearlo.

Importancia de la Glucosa:

El 80% de las principales causas de muerte están relacionadas con la alta glucosa en sangre. Enfocarse en reducir la glucosa puede tener un impacto significativo en la salud.

Metabolismo y Biohacking:

El metabolismo es la transformación de los alimentos en energía en el cuerpo. Biohacking implica aprender a utilizar la glucosa de manera eficiente para mejorar la salud y el rendimiento.

Impacto del Estrés en la Glucosa:

El estrés es uno de los principales factores que pueden causar resistencia a la insulina, lo que lleva a aumentos en los niveles de glucosa. El estrés puede incluso afectar la glucosa sin consumir alimentos.

Glicemia Variabilidad y Resistencia a la Insulina:

La variabilidad glicémica es crucial; menos de dos picos de glucosa al día es el objetivo. Alta variabilidad glicémica puede conducir a resistencia a la insulina con el tiempo.

Cambios en el Cuerpo al Subir la Glucosa:

Cuando la glucosa aumenta, la insulina también aumenta. La insulina es la clave para que las células absorban la glucosa como energía. Demasiada insulina puede llevar a resistencia, acumulación de grasa y falta de quema de grasa.

Objetivo Principal: Flexibilidad Metabólica:

La meta es ser metabólicamente flexible, donde el cuerpo puede alternar entre quemar glucosa y grasa eficientemente. Reducir la glucosa ayuda en la pérdida de peso, mejora la energía y previene problemas de salud.

Impacto de la Alta Glucosa e Insulina:

Ganancia de grasa y obesidad.

Envejecimiento acelerado debido a la formación de productos finales de glicación avanzada (AGE).

Prediabetes y diabetes tipo 2.

Hipertensión debido a la retención de sal inducida por insulina.

Diabetes tipo 3: Alzheimer.

Marcadores de Salud Metabólica:

Glucosa en sangre en ayunas.

Presión arterial.

Triglicéridos.

Circunferencia de la cintura.

Colesterol HDL.

Biohacking y Estabilización de la Glucosa:

Seguimiento:

Utiliza dispositivos como Freestyle Libre.

Registra eventos, alimentos, ejercicio y estrés.

Identificación de Patrones:

Analiza datos para identificar patrones.

Comprende cómo tu cuerpo responde a diferentes hábitos y alimentos.

Eliminación de Alimentos Desencadenantes:

Si un alimento provoca picos de más de 150 mg/dL, elimínalo por al menos dos semanas.

Estas son las instrucciones clave para comenzar a estabilizar tus niveles de glucosa y biohackear tu cuerpo. ¡Sigue aprendiendo y experimentando para optimizar tu bienestar!

SECCIÓN DE PREGUNTAS Y RESPUESTAS CON TESS RICHARDSON

Preguntas y Respuestas sobre la Regulación de la Glucosa en el Cuerpo: Implicaciones para la Salud Metabólica

Introducción:

En la reciente sesión con Tess Richardson, se abordaron diversas interrogantes relacionadas con la glucosa y su interacción con factores alimenticios y de estilo de vida. Este artículo resume los puntos cruciales de la discusión, brindando información valiosa sobre cómo la glucosa y la insulina afectan la salud metabólica.

Importancia de la Glucosa y la Insulina:

La glucosa, un carbohidrato fundamental en la dieta, desempeña un papel crucial en la obtención de energía para las células. La insulina, por su parte, es una hormona responsable de regular los niveles de glucosa en la sangre. La interacción entre ambos elementos es esencial para mantener un equilibrio metabólico adecuado.

Factores Alimenticios y sus Efectos en los Niveles de Glucosa:

Durante la sesión, se compartieron experiencias sobre alimentos específicos que causaron picos en los niveles de glucosa. Ejemplos incluyeron alimentos ricos en azúcares, como salsas para barbacoa y sushi. Se destacó la importancia de seleccionar opciones de frutas que no generen picos significativos, evitando consumirlas diariamente.

Alcohol y su Influencia en los Niveles de Glucosa:

Se exploró el impacto del alcohol en la glucosa, destacando que, aunque el consumo puede no generar picos inmediatos, puede afectar los niveles en las horas posteriores. Se aconsejó limitar la ingesta de alcohol y seleccionar opciones con menor impacto glucémico.

Consideraciones sobre la Dieta y la Pérdida de Peso:

Se abordó la relación entre la dieta, las calorías y la pérdida de peso. La calidad de los alimentos, en lugar de simplemente contar calorías, fue resaltada como un enfoque más efectivo. Se alentó a centrarse en proteínas, grasas y fibras, y a mantener la estabilidad de la glucosa para optimizar los resultados de pérdida de peso.

Hábitos de Comida y Orden de Consumo:

Se discutió la importancia del orden en que se consumen los alimentos. Consumir carbohidratos después de proteínas y verduras puede reducir los picos de glucosa debido a la digestión más lenta. Se recomendó evitar consumir grandes cantidades de alimentos con un índice glucémico alto.

Estrategias para Estabilizar la Glucosa:

Se presentaron diversas estrategias para mantener niveles estables de glucosa. Estas incluyeron la incorporación de proteínas en cada comida, la eliminación de aceites vegetales procesados, la evitación de edulcorantes artificiales y la adopción de hábitos de vida activos, como baños de hielo y saunas.

El Papel Fundamental de la Musculatura en la Regulación Glucémica:

Se enfatizó que los músculos desempeñan un papel crucial en la utilización de la glucosa. El aumento de la masa muscular puede contribuir a un metabolismo más eficiente y a una mejor regulación glucémica. Se alentó a realizar entrenamiento de fuerza y entrenamiento cardiovascular de manera equilibrada.

Consideraciones sobre Medicamentos y Suplementos:

La discusión abarcó el uso de medicamentos como Ozempic y metformina. Se expresaron reservas sobre soluciones rápidas y se recomendó utilizar medicamentos con precaución, preferiblemente en dosis más bajas para permitir una comprensión clara de los niveles de glucosa.

Factores de Estrés y Sueño:

Se abordaron factores de estilo de vida, como el estrés y la falta de sueño, que pueden impactar los niveles de glucosa. Se sugirió la suplementación con magnesio para mejorar la calidad del sueño y se enfatizó la importancia de reducir el estrés mediante la exposición solar y la actividad física.

Conclusión:

La sesión proporcionó una visión profunda sobre la relación entre la glucosa, la insulina y la salud metabólica. Se alentó a los participantes a adoptar un enfoque integral, incorporando cambios en la dieta, la actividad física y la gestión del estrés para lograr una regulación glucémica óptima. Este resumen sirve como guía informativa para aquellos interesados en mejorar su salud metabólica a través de un enfoque consciente y basado en datos.

Notas:

Se recomienda la supervisión regular de los niveles de glucosa mediante dispositivos especializados.

Se aconseja consultar a profesionales de la salud antes de realizar cambios significativos en la dieta o el régimen de medicamentos.

Las estrategias sugeridas en este artículo son generales y pueden requerir adaptaciones según las necesidades individuales.

SESIÓN EN VIVO CON TESS RICHARDSON SOBRE LA GLUCOSA Y EL IMPACTO EN EL METABOLISMO

En este espacio se agrega la transcripción de la sesión que se tuvo en vivo con Tess Richardson

José Antonio Torres fundador y Tess Richardson jefa de ciencia y entrenadora de salud de bio hacking, de parte de nuestro aliado Habits.ai

Tess ha diseñado un proceso que cambia la salud metabólica y cofundadora de Habits.ai

My name is Tess Richardson, former biohacking trainer at Bulletproof Upgrade Labs, head of methodology and science at Habits.ai, and functional nutrition practitioner + blood glucosa coach.

I am a functional nutrition practitioner. And I don't know if anyone here has ever Heard of a Bulletproof coffee before. So yeah, I started my journey at Bulletproof. That was a while ago though, now. And now we are building habits here in LATAM, which is basically how can you biohack your body. So this applies to all of you, I'm sure. And I'm sure you're already biohacking if you're doing the blood glucose monitor.

So you all have glucose monitors on right now, right? That's what's happening. OK, so everyone has seen data for about a week now. Pretty much. So you guys are all ready to learn. This will give you an idea of how to understand what's happening with this.

This will be super helpful, especially if you already have your glucose levels because you can start analyzing them as we go through this presentation.

So I'm going to talk a little bit about biohacking in general, biohacking blood glucose, But yeah, just like I already got introduced.
But I want to, before we begin, since you already have a week's worth of data, you probably know if you're having a lot of spikes.

But before we begin, I always ask these questions so you can do a self analysis, right?
So there are a few things that when it comes to glucose dysregulation, if you have a few of these things, it's most likely that you have some sort of glucose dysregulation.
So count how many of these you do actually have throughout the day.
And then I want you to at the end of your program or whatever, it's good to look back at these and say how many do I have now once I fix my glucose, right.

So the first is, do you get tired after eating carbs, also known as malde puerco after in Mexico?

Can you go five hours between meals? If you can't go five hours between meals, then that's then answer yes to that one.

Do you get a midday crash after lunch every day? A lot of people get really tired after lunch.

Do you have do you need snacks throughout the day? A lot of people have like bars in their bags because they have. They have those sugar cravings throughout the day.

Is fasting ayuno super difficult for you?
Is it hard to function without coffee or tea throughout the day?

And do you have entejos or cravings for sugary foods or carbs?

So if you have more than two or three of these, it's most likely you probably have seen with your glucose that you have some sort of glucose dysregulation.
And So what we're gonna talk about today is what does that mean?

So how is that impacting your metabolism and also how we can begin to start changing it, right. So both sides of it, OK.

So the first thing I always start with is 8 out of the 10 leading causes of death are related to high blood glucose. So this is heart disease, cancer, stroke, Alzheimer's, diabetes, kidneys disease. And most of the time we don't look at these diseases as something from glucose, we look at it from you know, other aspects.

But all of these can be linked to high blood or all of these diseases can be linked to insulin resistance and high blood glucosa. So it's really important if you have any of these in your family that you are paying attention to your glucose, especially if you have diabetes in your family that makes you genetically more open, like your genetics are are more basically primed to have diabetes down the road.

And so the mindset shift is that we should look at ourselves like high performance machines. You wouldn't put a can of Coca-Cola in your Ferrari, you would get it oiled, you get it serviced. And we have to look at our bodies the same way. And I want you guys to take that mindset because it's super, super important that we stop putting Takis and Coca-Cola, all of these things into our bodies, that our body and our cells are literally made out of what we put into it.

And that's not one of those cliche things. It's literally our cells are not made from air, right. It's made from the food that we're putting in the building blocks. So if you're putting in Coca-Cola, Bandul says all of these things. Yes, it's OK in the short term, but in the long term, that's what your body is made in, being made out of. So just think about that as you're going, OK.

So when we talk about metabolic health and metabolism, just very quickly, your metabolism is how the foods you're eating. So your dinner tonight is going into your body and how that's transforming into energy, that's pretty much all it is, how the food you're eating, the things you're doing are transforming into energy or power in your body.

So if, I don't know if you went over this, this will just be a quick overview. But this is the the basics of glucose and insulin. So I'm guessing everyone here has seen at least one spike in the last week. So when you're having that spike, so you're eating carbs and sugars, maybe you're having like a pan de muerto or something, you eat a carb and sugars. What happens is those carbs breakdown into glucose and they're released into the bloodstream. And that's when you have that spike.

But the thing to understand is at the same time you're having a spike of insulin. And so when you're having that glucose, you can imagine that the same line is happening for insulin. And insulin is the hormone that's telling the cells to take in glucose as energy.

So what is causing these spikes? Maybe you've reviewed this, but and maybe you have seen it is carbohydrates, obviously carbs and sugars like breads, pastas, fruits, all of these things. But the main thing that I see more than anything, and the most important for most people is stress.

We're all living our lives with, you know, breathing and doing all the things we need to do. But stress is one of the biggest things that can cause insulin resistance, which we'll talk about in a second

because stress cortisol, that hormone wants our glucose levels to be high because it's giving us energy to fight the stress.

But if you're just sitting at your desk and you're being stressed by whatever the problem is, and you're getting a release of glucose and it's causing that increase in glucose and insulin without even eating. So you might as well eat a cookie instead of being stressed because it's the same thing. At least one of them you will enjoy a little more and then also sleeping.

If you don't get a good night of sleep the next day, you have 40% more insulin resistance. So imagine if you're not sleeping well over time, your body is not dealing with glucose well.

So those two things can impact your glucose levels. So I want to focus on insulin because it's the key to everything. Pretty much the reason we talk about glucose is because we're talking about insulin. The only thing is we can't track insulin. We can't track it in real time. So we have to track glucose.

And So what happens is when glucose increases, insulin increases. And insulin is like a key, it's very simple to understand. It's just a key that tells your cell open up and take in the glucose to use as energy. That's all it is. It's just a hormone.

But what happens is when we have a lot of insulin, it's just like a mom with a child and the child is always screaming, right. Your brain starts to become resistant. Or if you drink a lot of coffee or you drink a lot of alcohol, over time your body becomes resistant. Anytime we have too much of anything, our body becomes resistant to that thing.

And in this case what happens is when we have too much insulin and too much glucose all the time, our cells say no more, we can't take any more in and so they close to the hormone insulin and that means they close to glucose as well, meaning that you have higher glucose for long periods of time.

Has anyone here seen a spike that goes up but stays high for like 2-3 hours? Usually you'll see it with sushi.

If you want to experiment, sushi will give you one of these spikes where you go up. But it your spikes stay high for many hours. And this is because your body just can't handle that much glucose.

And So what happens when we're in this insulin resistance cycle is we eat food, we make insulin, but then our cells cannot take in any more of the glucose or insulin. So it has to store somewhere and it has to store as fat.

And so then we feel tired and we feel hungry, and then we eat more food, but we're never actually using that that food and fuel efficiently because we can't actually get that energy in the cell.

Does this make sense? This is why we're looking at glucose. 40 to 50% of people in Mexico City have insulin resistance.

So there's a high chance that you or someone you know has this insulin resistance that's causing issues in the body.

And I'll talk about what it's causing in a second, but glycemic variability is the the metric that you should be looking at home. So when you see your glucose, glycemic variability, I'm just going to, yeah, there you go. Glycemic variability is how many times a day are you going up and down?

So how many spikes are you having a day? The goal is to have less than two spikes a day, so if you're

having more than two spikes a day, you're most likely having high glycemic variability. And high glycemic variability is what causes insulin resistance over time, OK.

This is what the spike, the glycemic variability looks like. And a lot of people, you would be super surprised how many clients and how many people we see that have this extreme curve throughout the day, right. So this range that you see and this is what we have in habits is that range. It's like the the healthy range, right.

That's where your brain and your body, they want to be, your brain and your body want to be in a stable range. They don't want to be up and down and all around because when you're going like this, a lot of things are happening.

So when you're in the stable range, maybe in the morning when you wake up, what happens is you eat breakfast. Let's say you have pancakes and you spike and and for a second you feel actually really good. You feel super, you know, energized. You feel good. But then you have a crash. And normally people have a crash around 11:00 AM and they drink more coffee. That's when your second coffee normally is. And so you have this crash, and then you eat more, or you drink something with sugar, and then you have another spike, and then you have another crash, and then you have a spike in a crash. And this causes mood swings, cravings, depression, low energy and weight gain.

Because when you're having these crashes, you're actually releasing adrenaline into your body to get your glucose back into a normal range.

And when you're having these spikes, you're releasing a ton of insulin to bring the glucose back down.

So I don't know if any of you have seen where you have a spike and it goes up and then it goes crashes down further than where you started.

So you started at 80, you spiked and then you ended at 60. And that is reactive hypoglycemia. That's just you're having a hypoglycemia where you have cravings, you have anxiety, depression, all of these things.

So when we start to stabilize these levels, you start to feel so much better because you just are not on this roller coaster, the Monta, Rosa, Montana Rosa.

So with with reducing these, these levels just in five weeks, we were able to reduce 62% of glycemic variability in a group just by reducing blood sugar and that is super impactful because it reduces risk for diabetes by about 35% just if you can reduce this up and down throughout the day.

So when you're having this high glucose, high insulin, you can take a picture of this. Just so you understand when you're having a spike, this is what's happening in your body. So just to just to understand in your muscles, your fat burning is going down, OK.

So if you're trying to lose weight, if you have insulin in your body, you are now in a sugar burning mode or a glucose burning mode. If you're having a spike when you're stabilized, you're in a fat burning mode.

Insulin. All it wants to do is put things into the cells. If you're trying to take energy out of the cells and insulin is present, it's impossible. So when we reduce insulin, we're able to increase fat burning.

But when we have high insulin, we decrease fat burning to eat and increase carbohydrate burning. Or

in this sugar burning mode in your fat tissue, you reduce fat metabolism and you increase fat formation. You decrease fat burning in the liver and increase the conversion into fat in the liver.

So This is why it's so important to reduce those glucose levels, especially if you're trying to lose weight.

I've seen people lose weight with only just reducing glucose levels and not really cutting that much out, but just stabilizing and they lose so much weight because there's no insulin to hold on to that fat.

So the number one goal is to become metabolically flexible, right, where we can eat, let's say, a little bit of bread or something, but then our body just utilizes it, we're insulin sensitive, we're able to use it efficiently and then we switch back into a fat burning mode.

That's the most important thing to be able to make that switch throughout the day.

Most of the people I see are in a sugar burning mode all of the day.

So you eat breakfast, you have a spike in glucose and insulin, and before that insulin even comes down two hours later, you're having another snack and you're going up a little bit and increasing insulin.

And then you're still in that in that sugar burning mode throughout the day. Yeah, go ahead.

What happens when your glucose goes up, but not because you're eating, but because you're exercising? Yeah, So that's different. So when you're exercising, that just means that you're actually using the stored glucose in your body. And that's not a bad spike. That's actually a good spike. But that means that you're utilizing the stored glucose, which is good because then later it'll be easier to have this, which is metabolically flexible metabolic flexibility, because you're burning through all the sugar that's in your body.

So it's the same as when you're stressed. But in this case, you're actually using the glucose. So if you were stressed, you had that spike and you actually went for per run, it would be OK. But we're not. So it's the same exact thing.

When we have that stressor, we need glucose and we release glucose. And that's just that you're you're using glucose during that workout.

I know it's a lot, but this is important for you to understand if you're tracking glucose.

So what happens when you switch from a sugar burner to a fat burner?

So in your mind right now, I want you to think, how many spikes am I having a day? f you're having more than two or three spikes, like a little bit more than 30 milligrams per deciliter increasing, then you're in a sugar burning mode for most of the day. So this is maybe where you're at, where you're feeling hungry every two hours because every time you drop you're getting cravings or you're getting hunger, You're having energy crashes throughout the day, maybe mood swings.

I know a lot of people that they think it's their personality, but in reality they're just angry because they're having blood sugar crashes.

So maybe it's not your personality, maybe you're not like an unhappy person, Check your glucose first.

Because I used to be very Moody and it would it's 'cause I was dropping so much, and so that's important to understand.

And tojos or cravings for sugar is the worst. And a lot of people feel like they can never quit sugar. But as soon as you stabilize your glucose, you won't have cravings anymore because you're not having these ups and downs anymore.

And weight loss resistance and then fat burner.

When you switch, you make that switch. The hardest thing is that some people, if you've been in a sugar burning mode for years, say like 2-3 years, you're always in this.

These spikes to switch to this fat burner can feel like you're going through withdrawal, like you quit cigarettes. Like you quit something because sugar is so addicting for our body. So if you're making the switch and you're getting headaches, maybe you're getting a little tired. It's normal, OK?

Just drink a lot of water and continue to try to stabilize and eat as much as possible. Love the good things. So you can go four to five hours between meals, stable energies, very little cravings, easier fat loss and better mental energy. That is the goal for all of us, right?

This doesn't mean that you need to be doing this to lose weight, right? You just, it's more just being in a fat burning mode where you're using a different type of energy to sustain yourself.

OK, So what are the main ways that blood glucose, high blood glucose and insulin resistance are impacting our population? All of the people around us, right? So fat gain and obesity. Obviously when we're in this sugar burning mode, if we have too much glucose, we are storing it as fat, right?

It's the easiest way to gain weight is drink Coca-Cola, right. And so that is and and it's it's such a problem right now 50% of kids in in Mexico are overweight or obese. So this is not just you know a small problem. This is huge and in the US as well we have a huge problem.

So fat gain and obesity, I feel, I see like within you know a few weeks of reducing glucose you can reduce weights, accelerated aging, I know we all want to age faster, that's our goal in life is to age faster.

But if you don't want to age faster then you need to reduce glucose. Because what happens is when we have these high levels that sugar actually hits our our proteins in our cells and our collagens in our cells and it actually breaks the collagen in our skin cells.

And this causes something called advanced glycation end products, meaning and they're literally, they literally spell age. And this is when we get wrinkles, we get sagging skin, we get like dry skin and it's most of the time because sugar is breaking the collagen. So what you can do is reduce glucose, eat things with more collagen and also take some vitamin E as well to help that process be better.

But you have to reduce the glucose first, right?

Three is pre diabetes and type 2 diabetes. Pre diabetes, Most 80% of people don't know that they have this insulin resistance and pre diabetes, pre diabetes is insulin resistance. Just so everyone knows, the difference between a healthy person and a person with diabetes is 1 tablespoon or one teaspoon of sugar in the bloodstream.

So our body regulates sugar so closely that if you have that just a little bit more sugar in the bloodstream, you're in this pre diabetic, type 2 diabetic state. So if you want to prevent that, you need to just make sure that you're not having those high glucose levels.

And lastly, hypertension. This one no one really understands until you reduce glucose if you're on

high. If you're on high blood pressure medication and you reduce your glucose for 3-4 days and you go super keto, your blood pressure will drop way faster than is probably healthy.
And so a lot of people have to work with their doctor when they're reducing glucose because it will drop your blood. It will drop your blood pressure so fast. And that's because insulin holds more salt in the body.

And so when you release insulin, you actually have to eat a lot of salt when you're on a keto diet because of this. So if you have hypertension, reducing your glucose is one of the most important things you can do.

And the last one is type 3 diabetes, which is diabetes of the brain, which is Alzheimer's disease. Unfortunately, it's very sad right now that a lot of people are developing Alzheimer's disease. And it's not from what we think it is, which is genetics or the plaque or whatever. It's this inflammation and this insulin resistance of the brain.

Imagine if your brain cells are not getting that efficient energy. What's happening? It's the same as your body. All of those systems are not working. So if you want to prevent Alzheimer's, this is the first place to start.

OK, so if you want to assess if you are metabolically healthy, here are the markers. And you already did these testing. If you already have these markers, you can know. But these are the five markers that in the United States were using to determine the metabolic health, right?

And in the US right now, 88% of people have one of these markers out of out of the range. And what that means is every single one of these markers can cause metabolic disease over time.

So imagine if you have one or more out of the range, you're going to be on this pathway towards metabolic disease.

But if we can get them all back into range, then we can be sure that our metabolic health is in the right place.

So blood sugar in the morning, if your blood sugar is over 100, that is your fasting blood, blood sugar, blood pressure. We all probably know our blood pressure triglycerides. Your triglycerides will drop so fast when you start reducing your glucose and that's because our liver makes triglycerides from insulin and from glucose, waist circumference or waist size and HDL cholesterol.

OK, so these are the markers.

You already did the doctor's assessment, so I will let that be, but these are the markers you can look at.

So the key is to balancing glucose, right?

First is learning how to stabilize your glucose spikes, which you guys are already learning how to.

Learning your glucose is first, and then learning how to stabilize it through muscle mass and through other hacks.

So the first is tracking, and I know you guys are tracking with freestyle Libre, but in habits you can all, you can track and add your events and all of these things.

So hopefully we will be able to do that with the next groups, but you'll be able to see your food, your exercise, your stress.

But the most important thing is that you track, right.

My biggest thing, the reason that I am a biohacking coach, is just because I use data. Most people don't use data. They just kind of guess, right. We're like, oh I'll try the keto diet, I'll try a vegan diet and it it we always end up not being on the right path because you're not learning your body.

Every single person here has different genetics, different digestion, different lifestyle. So how am I going to give one diet to all of you, right? No, you have to track and test it out.

I had a vegan person who was literally causing pre diabetes in his body because he was vegan. I have another one, totally fine. So you just have to test these things out, right?

So identify those patterns for yourself and then learn how to stabilize. So this is probably what you'll be doing throughout the program.

But I'm going to go over 5 things you can do to begin stabilizing, and this is what we have within our program. Is these taking you step by step on how you can begin to stabilize, right?

So first, if you have a food that is spiking you over 150 milligrams per deciliter, you need to take that food out at least for two weeks.

QUESTIONS AND ANSWERS

Does anyone here have a food that spiked them that high? Like, super high.

- I took some BBQ, for example, they spiked me to 157. It's probably the sauce. Like the the sugar in the sauce.
- Yeah. Full of sugar.
- I mean, not this time, but the first time that I did this with with you, it was a sushi for me. And sushi got me to almost 200.
- Oh yeah, it's so bad. It's the worst. It's it causes. It caused one of our clients the other day a three hour spike throughout the night. It was like a mountain. And I told him I didn't even have to ask him what it was. I was like, you had sushi on Saturday, didn't you? Because it's for everyone. It's pretty much everyone amazing.
- For me, the red wine?
- Well, you can try it for sure. So the thing with alcohol is usually you won't see a big spike, but you'll see a spike afterwards. So during the night, if you have it at night, you'll probably see an increase afterwards. But in the two hours that you drink alcohol, you might actually see it decreased. And this is because alcohol is a macro nutrient and but our body can't store it. And So what happens is if we drink a bunch of mescales, our body has to use that as energy first because we can't store it anywhere. We don't have any place to use it. So we're using that energy and we stop glucose from going in that time And so then three hours later you have the spike from whatever other foods you were eating. So sometimes you'll see a decrease. Usually, at midnight you'll start to see the spike. It is what do you qualify as a spike upper than 140 or what's the the measure an actual spike is is just when you increase more than 30 milligrams per deciliter. So if you go from even 80 to 110, that's you're in a glucose burning mode. But what I think is like an unhealthy spike is when you're outside of 130 is usually like a you don't want, you don't want your glucose to look like this here. You want it to look like little hills, you know, like this. You don't want it to look like mountains. So any of these foods that you guys are seeing these spikes

- I had a huge spike from fruit the other day. It's insane.
- And and fruit is one of those things where it's not that it's bad for you, but it's we can't have it every day or else you're just gonna or you have to pick fruit that doesn't spike you as much.
- Like, oh, I went to the snowing with the grapes, for sure.
- So grapes are pretty much the worst. Yeah, because they're literally just water and sugar in the bowl. A pineapple is terrible, too. Pineapple, watermelon. So try out those different fruits. It's not that don't ever eat them, it's just make sure you're not eating them every day.
- That's the thing, right?
- So for at least two weeks, take out these things that are 150 or more. It's not helping your metabolism. Just take it out and then see how you feel.
- I have a question about the fruit. There's this guy that I watch on Instagram and he says that if we ate the sugar after we ate the veggies and and our protein, then nothing will happen and we won't spike. And so I'm trying that. If we manage to have those results, is it OK we eat the food as long as we don't spike, Is that OK?
- Yeah. So what's happening there? That's ordering your food in the right, and that's because of the digestion. So when you have carbohydrates on an empty stomach, they're going to digest very quickly and give you a spike, right? But if you eat the salad and then the proteins and then you have your carbohydrates last, which is a really good hack, it actually just slows down that that digestive process. So then that those carbs will take, it will be easier for your body to handle because it's taking a longer period of time time for it to to digest, which is perfect. The only thing with fruit is that I wouldn't eat it after a full meal because fruit does need to be digested in a different way a little bit. So I would just eat less of those fruits that spike you a lot and just, you know or just change the fruit for berries or even bananas don't spike that much sometimes just fine fruits or plantains, things like that if that makes sense. But all of the other carbs after a meal, a full meal is best, yeah.
- And then can you explain a little bit later if we're interested in losing weight, what happens if I have AI don't know, maybe a 14 lbs right calorie diet and if I just take it all over the place and whatever I want just eat that amount Or if I do it without the spikes, will that impact my my weight or not? Will I lose a little bit faster?
- Maybe you can leave this or later. I don't know if anybody else is interested, but that's one of my issues that I asked that nobody told me.
- Yeah, it's a great question. So it's interesting. So with calories in, calories out, our body isn't run, our fat isn't run, or our fat burning is not run by calories. It's run by hormones. If you have insulin present in the bloodstream, you cannot lose weight. It's impossible. Insulin is an anabolic hormone, meaning it's building. So what I would say to you is more than anything, stop counting calories. You can continue counting calories. But The thing is, when we continue reducing, reducing, reducing our calories, we're reducing our metabolic rate.
- What I would do instead is focus on proteins, fats and fibers for the next two weeks.
- Don't focus as much on calories and just focus on keeping your glucose as stable as possible. And I think you'll have better results because you'll feel nourished, You won't have cravings, you won't be. You'll have, like all of your body knows what it needs. And so if you eat enough at each meal of proteins, fats, and fibers and keep your glucose stable for the next two or three weeks, I think you'll have better results than counting calories. Because if you ate 100 calories of brownies and 100 calories of meat, those two one's gonna cause you to have cravings later, different things. And the other one is gonna cause you to have glucose stable, which is not, which is gonna help you to lose weight.
- So the calories I don't believe that matters.

- It's more about the hormones that you're activating when you're eating the foods. So that, I don't know if that makes sense. It's a little bit of science.
- Do you recommend that keto diet.
- It's good to do keto it's good to if you want to try it go for it. I don't think it's necessary. I think just finding ways to stabilize your glucose without having to go fully keto because keto is rough. I mean it's good for medicine like if you really need to lose a lot of weight or if you want to do it cyclically which means like 3 weeks on one week off 3. The problem is people do it for three or four months and then they gain all the weight back when they start eating again because you're not actually focusing on what's going on. So do if you want to just do just work on stabilizing your carbs, taking out the things that are spiking it and increasing proteins and fats and fibers and you'll be OK without going on keto.
- Yeah, I mean, I personally, especially for women, it's pretty intense.
- OK, let's go through the spikes and if you have any questions, let's do it.
  So the first thing is you probably have already learned this. And if not, then the the number one thing for increasing your metabolism and stabilizing your glucose is protein. And this is the most important because protein is first of all it it boosts your appetite reducing hormones. So it will make you, we have not to get too sciency. We have a threshold in our body. If we don't hit that threshold of protein at at every meal or every day, we have more cravings. So if you can just focus on 30 grams of protein at every meal, that protein helps to reduce slow down digestion of carbs. So it helps to lower glucose spikes, but it also keeps you full and then you should be able to go 345 hours being full, right. So just focusing on protein I'm of the approach of adding in instead of taking things out. So instead of saying like, oh you can never eat carbs, just making sure that you're having every meal that you have carbs, you're having 30 grams of protein. OK next, changing out seed oils. I don't know if anyone here cooks with canola oil are we? If you're cooking with canola oil or seed oils, I get a lot of questions with this one. Please change them out because good quality fats are the proteins and fats are the most important for your your metabolism.
  We actually, our cells are made out of fat, so our cell membranes are made out of the fats that we eat. So when you eat olive oil, avocados, things like that, that's going into your body and creating your cells. So when you eat highly inflammatory fats, so fried fats, canola oil, seed oils that are highly processed with hexane, imagine that's going into your body and it's creating your cells. So focusing on fats from fruit, so that would be olive oil, coconut oil or fats from from animals. So ghee or like ghee is the best or you can use grass fed butters or avocado oil is also great. So just focusing on ones that don't have processing behind them. And if you don't believe me, just go to YouTube and look up how is canola oil made And you will never eat it again.
  And then the artificial sweeteners, if you drink Diet Coke, please stop.
- This, I know it doesn't make sense because it doesn't have sugar, so it doesn't impact my glucose levels.
- But it's changing your gut microbiome, and that is causing you to not be able to deal with sugar better. And it's also sending signals that you're eating something sweet without you eating something sweet. So it's still increasing your insulin and increasing those things. It's probably the worst thing you can do is eating artificial sweeteners like sucralose aspartame because it's changing the entire microbiome and that's changing your metabolism.
- What question is the same for example for the fat?
- For example, coffee in a Starbucks that is vanilla latte with the sugar free and is the same as as the Diet Coke. Yeah, Ask them what they're using for sweetener. If they're using stevia, then no. Or monk fruit, then that's fine. But if they're using sucralose or any of these, just ask them what sweetener they're using and see what they're using, 'cause sometimes maybe they're

using stevia or I I don't know specifically, but just ask them and see, see what they're using. But any of these that are like Splenda, things like that we want to stay away from.
Also, has anyone done an ice bath here?

- Yeah, we're doing ice baths.
- OK How did you feel? Have you done it with the glucose monitor on or?
- I only did it once. It was a 3 minute, you know, in ice. But since then I take at least one one minute daily. My shower is cold.
- Perfect. I would say for all of you, if you want to try and do an ice bath in the next few weeks, when you're using the monitor, it's amazing what happens to your glucose. It it goes down in two seconds, right? You're using so much glucose when you're doing something cold to reheat your body. So even if you do one minute of cold shower in the morning, you'll see your glucose go straight down. You'll see it. Have you seen it in the morning go down?
- It's the same as the, I don't know how it's, it's called, like I said, where you put like a freezer.
- Cryotherapy.
- Yes.
- Yeah. Anything cold and also saunas as well. You will see a spike with a sauna, but that's because you're using glucose. So it's both ways. Hot and cold can help to reduce glucose super fast. So get your body uncomfortable is one of the best ways, pretty much.
And then the last thing if you have really if you do have issues with glucose, one of the best two things you can use is berberine or barberina and bitter melon. Bitter melon is a supplement that most people have never heard of, but bitter melon extract will reduce your glucose levels super fast. So try something like that and then Berberina is more common. And apple cider vinegar, if you want to do the normal glucose hack, which is doing one una cultrada, they the apple cider vinegar in water before before you eat a meal, like 10 minutes before. These are all glucose disposal agents. All that means is they're your friend when it comes to glucose. They're helping you to utilize glucose more effectively. OK, green tea, all of those things. So any of these, if you want to add them into your supplements, it will really, really help. But bitter melon, I've been studying a lot and it's really effective.
And then the last thing I want to talk about, is there something in your body that utilizes 80% of the glucose you eat and increases metabolic function daily?
- Muscles.
- Yeah, good job. I already said it. Most people don't even see it from before. So your muscles are your number one tool. No, because your muscles use 80% of the glucose you eat. So the more muscle mass you have, the more glucose you can eat. Pretty much your muscles are your biggest tool for lowering glucose and that's because when your muscles are active, you literally your muscles just eat up glucose without insulin. So if you focus on one thing when you're monitoring your glucose which is increasing muscle mass and maybe that's part of this program, I don't know. But increasing muscle mass, you the more just think of the more muscle mass I have, the more place I have to I have to put glucose. So the more flexibility I have with eating carbs, pretty much if you do the equation, I've seen people that monitor their glucose and they have no spikes and it's because they work out every day.
That's pretty much it because their muscles are using the glucose, especially around the holidays. Christmas, Thanksgiving, If you work out the day of like the holiday, so let's say on Christmas morning or the day before Christmas, I don't know if you have an event work out in the morning and then you go eat whatever you want, it's going to refeed your muscles. So it's the best hack because just work out in the morning and do a strength training and the rest of the day the food will refeed your muscles instead of, you know, causing inflammation and all the things we don't want.

OK, So when you say exercise, do talk a lot about really doing gym exercises, like doing muscle exercises.

- What happens with the people that do more of a tetanus or more of a paddle or run or don't do weight lifting? Is that the same for you or does it really have to be something that you use specifically the muscles, like in the gym?
- What I would say is if you can cross train a little bit, just do some resistance bands. You don't have to do like weights, but just doing some sort of the thing that the difference between cardio and strength training is that with cardio you actually are maybe with tennis or some things where you're using both like it's cardio but it's also muscle activation and resistance you're fine. But if you're running, you're actually burning through muscle mass sometimes and so it's important to cross train and make sure that you're activating. So cardio does not activate afterwards muscle protein synthesis, which is what you want to create more muscle. But with resistance training, if you just did bands for like 20 minutes one or two times a week, you can activate that muscle protein synthesis so that your muscles are regrowing and rebuilding. We can talk more about it, it's a little bit complex, both are amazing, right?
So it's not one or the other it's it's doing both so that you have not just cardio or not just Forsa if that makes sense. So the minimum effective dose and I live by this is at least two strength training sessions per week and then during those strength training sessions two to three sets per exercise and then one day of hit or cardio. This is if you really don't know what to do workout wise, you're like I I don't know where to start. Just try this two days of strength training, maybe 30 minutes, 45 minutes and then one day of hit cardio or cardio and that will give you enough balance to be like have longevity. Obviously if you're training for something that's not going to get you to where you want to go, but that's the minimum effective dose for for health and metabolic health.

  So the last thing is activating your metabolic muscles post meal. So going for a 10 minute walk, walking stairs for 5 minutes, or moving or dancing throughout the day, I find that a lot of people, maybe this is you work out for one hour or 45 minutes and then sit for like 8-9, ten hours, no. So you work out, but you're sedentary because you're sitting the rest of the day. So better to move throughout the day and do a shorter workout, like going for walks, doing. Sometimes I do just like push ups or squats like in between meetings. Just moving your body throughout the day so that you're activating your your muscles throughout the day, not just one time and then sitting right. That's probably the worst you could do.

So this is a little bit that's kind of all of the the hacks. This is how we we look at it is basically finding your data, like seeing your data. This is how you can start to reduce it, right? Finding your data, doing a program, this program or whatever it is, getting that program and then building those sustainable habits. I just had a client before that was like it's little habits, right?

It's not huge things. It's not going on a it's some, you know, a lot of people like to do big diets and things and then they do it for a month and they feel they're like, OK, I don't want to do this anymore.

If you can learn your data, then learn how to change it and then just build that into your life. It's so simple. It's really not that difficult. And at the end of the day, you'll realize that because you have the data, you don't want to eat the things anymore. You're like, I don't want to see a spike. You're like, I don't want to see my glucose Go to 180 after this, this, whatever, you know? And so you'll start to build habits because you can see it.
It's like a window. You're like, OK, I can't not see it anymore. I now want to do these habits because part of my lifestyle. So this is all I have for now.

I hope you guys got something out of it and I would love to take any questions or anything you have. But yes, I'm excited that you're all tracking your glucose and on this journey, it's super exciting.

- Oh, quick question. So for example, in those cases that you have a huge spike, what is better, like to have a slow coming back or or you don't want to, you.
- You don't. You also don't want it to keep it high for a long time. The quicker you can get it down, the better you want it to be like up and down, Yeah. But you you do want it to go up and down. You don't want if you're up, the worst thing you can do is stay elevated because imagine that's glucose in your body causing inflammation. Like the longer that that glucose is high, the more damage you're doing.
  So that's the best time to do some squats or go for a walk, something that gets out that glucose and it's your muscles, just activate them. You basically like don't do a full workout. But I do sometimes if I'm spiking that high, I'll do like 50 squats and it will go, it will go down. But especially with a meal like that, 'cause you don't want it to be high for a long period of time, yeah, go ahead and make what?
- Hey, Tess, if I have six meals a day, is that good? But I but I have seen in the presentation you prefer not to have too that many meals in the day. I don't know.
- Yeah, it's better to let your insulin come down. So the more time, it depends on your goals as well. So if your goal is to to access fat more effectively or just be in a more stable state, it's better to have bigger meals with a lot of protein, fats and all of these things like a big meal where you're satiated for four or five hours because you're letting that insulin come down and then you're in this stable state for longer. So what I see a lot of times happens is, yeah, you're you're having a food and it goes up. And then by the time you get down, you're having another food and you're on this little. That's why the two meals a day or the one meal a day for men works really amazing because I wouldn't recommend it, but it's because you're giving your body so much time to, to reduce insulin. So just combine those meals into the three and I think you'll feel, you'll feel really good.
- I was just curious about the first hours while I'm asleep, it's all up and downs as opposed to the the final hours where it's very smooth curve. So what would be some reasons for that?
- Yeah, so there's a few things if you're Are you having any drops that are in the red at night?
- No, no. They're basically within range.
- Because if anyone's having a drop where it's going red during the night, you'll see that it's normal. It's because you're in REM or deep sleep. So that's when you're actually using a lot of glucose. When you're recovering your body at night with the spikes at night, it depends on your dinner. So are you having a higher carb dinner or is it a normal dinner? Like, what are you having for dinner?
- No, I think sometimes, I don't know, maybe a chicken salad or something like that. I think not too much carbs but and it's not not like a lot of peaks, you know, but it's clear that the first two or three hours there's a lot more curves than that's three, for example.
- Do you work out a lot?
- Yes.
- Because that's probably because the first three hours of the night is when you're getting the most muscle recovery. So it's probably that your body is just using a lot of glucose during that time. That's probably what's happening. See, cuz when we work out a lot, the first three hours is when we release the most growth hormone which helps our muscles to recover.
  So what's probably happening is you're just using glucose and then it's going down and then

you're releasing more glucose and then it's going like this. If it's not huge spikes, then it's probably just your R.E.M. or deep sleep cycles. Do you have a device that you can track?

- Yes, I have a OK if you can see on the charts you can probably see your R.E.M.
- In deep sleep on your potentially on your charts. And you should see if it aligns most of the time. Full line. Check it out.
- Thanks a lot. Another question, Stevia is ok?
- I would only say the only time when stevia isn't fine is if you are trying to basically conceive or have a baby because it can impact fertility sometimes. But other than that, as long as your stomach. But as long as your stomach is fine with it, it's OK. I rather monk fruit, honestly, just because of the processing. But stevia, if you can find a good quality one, I'm totally fine with it.
- Of course, I want to go back to alcohol. So what you said is that if you drink and then we go to McDonald's and we don't spike, it's not really true.
- Yeah, alcohol. This is a good one for everyone to listen to because I know in Mexico and, well, in the world, but especially in Mexico, we like to drink socially throughout the week. So what happens is, is every time you drink, you're taking your body out of a fat burn or fat metabolism. So you're actually turning off fat metabolism every single time you drink. Now if you drink one glass of wine, maybe it's only for, you know, a few hours until you deal with that glass of wine. But if you're drinking a few mezcals here and there, whatever, you're turning off your fat metabolism for about 12 hours. It's it can be anywhere from 12 hours to 48 hours. So what I always say is just pick one day a week that you're going to drink instead of drinking like beer here and mescal here and wine here. The second part of that is it when you eat and you drink alcohol, your body has to deal with the alcohol 1st. And so that glucose is just basically it's it's being processed, but it's not being your liver's not releasing glucose into the bloodstream because it's releasing alcohol as a fuel instead. So it's kind of like keeping that glucose until you've done use, you're done using that alcohol as a fuel and then you'll switch back into glucose and that's when you'll process that glucose that you just ate and that's when you'll see a spike usually like two or three hours later. Alcohol is the worse for fat metabolism. I'm sorry everyone, but just just that's why I just, I always tell all my clients one day a week. Like just pick a day, Don't do every like Tuesday and then Thursday and then Sunday. Like, no, just pick one day, please. And that's all I ask. I mean The thing is, is when you stop drinking so much too, you just don't want to as much anyways, 'cause you're more sensitive to it. So you drink 1 mescal and you're fine normally. So that's also a plus. When you start being more conscious of it, it's great.
- What about homemade kombucha?
- You have to test it with your glucose. Depending on the kombucha, it can spike or it cannot. You just have to test it. I don't know if it spiked you.
- Yes, you mentioned before that there was 22 main factors, right? One was the the glucose and and and the second factor was the stress and the lack of sleep. So any recommendations on the stress and lack of lack of sleep?
- I think for stress sleep is a little bit harder because there's a lot of factors. It could be your sleep environment, it could be that the main thing is that most people look at their phone when they're in bed and that's decreasing your melatonin. So I would have to see like usually it's two things with sleep magnesium deficiency. So taking magnesium before bed is one of the most important things everyone should do that. And the 2nd is not being on your device because this is blue light and this comes from the sun in the morning and the sun in the morning is telling our body suppress melatonin because we want to be up. But if you're doing that at night, that's going to obviously be bad. So watching TV, watching, looking at your

phones, looking at computers, you got to get some fancy red light glasses, they're the best. And then for stress, Magnesium #1, if you have a high stress or and minerals you need to get be getting minerals in your water in your body that could be electrolyte drink. And then the other thing is getting stun in your face throughout the day. It increases serotonin which decreases cortisol. So that's one of the best hacks you can do is just is take a time, take a second in between meetings and go for a walk in the sun and you will reduce your your stress. But just start tracking your HRV on a device and you'll see how it how it is.

- I was going to ask about Ozempic. What do you think about the use of that?
- Well, I'm obviously highly against it because I'm just unfortunately just because I think that it's doing the same thing that you're doing now with a lot of side effects. So what I what we've seen in practices and what we've seen in a lot of studies is that anytime there's a quick fix, there's a lot of things you're paying for with that quick fix. So most of the weight you're losing is from muscle mass and they you basically breakdown, you're in a catabolic state. So you're breaking down all that muscle mass and then when you go off of it, you gain weight faster and it's harder to get it off because now you've broken down the one thing that's increasing your metabolism all the time. So what I would say is if you have a big problem and you want to use something like ozempic, use something that you use a low dose and do all the rest of the things. Don't just use it as like a Band-Aid. Because if you do that, then the results like you're going to go back into a circle and it's going to be vicious and it's not a good circle to be in. So just just try to add in muscle like strength training, all of the things that people are usually trying to avoid by just taking a medication, those are the things that do it both, right?
- It's kind of like if you're going to do it, how about metformin?
- Metformin. If you're on metformin and you're tracking your glucose levels right now, I would definitely come off of it as much as possible so that you can see what's actually happening. If you're on metformin right now, you're not seeing your real levels. So just for anyone that's on it, I would just if you can, I mean obviously I'm not your doctor, but usually with metformin you can dose it a little lower so you can see what's actually spiking you because with metformin you're not able to see so much. I don't have that much of a problem with metformin. The only problem is that and it's used in a lot of longevity books and things right now, but the problem is, is that it does impact your gut and it does impact your muscle protein synthesis. So it does actually impact your muscle growth. But if you're using it at a lower dose, I don't think it's that big of a deal. I think it's OK. It's just high doses like 1000 milligrams or more. I would say like less than 500 milligrams or 250 would be good to just have that, you know, you can do it at a lower dose I think and then stabilize your glucose levels just like Ozempic do the actual work as well.