



## Using a Sugar Detox to Break Carb Cravings

Guest: David Jockers

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**Dr. Mowll:** Hello, and welcome back to The Diabetes Summit 2018. This is Dr. Brian Mowll, The Diabetes Coach, certified and master-licensed diabetes educator, and IFM certified functional medicine practitioner. And I have with me here today, for a repeat performance, that's my good friend, and someone that we always get rave reviews about, and that's Dr. David Jockers. So, Dr. David, welcome back to The Diabetes Summit this year.

**Dr. Jockers:** Brian, always a privilege and honor. I always enjoy connecting with you and your audience. And, you know, we've got the same mission – just helping people to balance out their blood sugar. Because we know how big an impact that has on their overall health, their brain function, their quality life. So, really glad that you're doing this summit. Thanks for inviting me to be a part of it.

**Dr. Mowll:** Absolutely, and you're right. We do have a very a similar mission to spread the word, to change lives, with really good powerful health information. And one of things I love about you in the interviews that we do together is that they're packed with action steps and they're practical. And today's going to be no exception. So, we're going to talk all about how to do sugar detox, how to break through sugar cravings and addiction, and how to

use the right process/program to help yourself get over sugar and carbohydrate cravings and addictions and get on the right path towards good blood sugar control. So, I'm going to introduce, Dr. Jockers. And then we are going to dive in and get started today.

So, Dr. David Jockers, is a doctor of natural medicine, functional nutritionist, and corrective care chiropractor. He currently owns and operates Exodus Health Center in Kennesaw, Georgia. He's the author of the best-selling book, *SuperCharge Your Brain*, the complete guide to radically improve your mood, memory, and mindset. And the *SuperCharged* recipe book with over 180 full color recipes to help you take back control of your health.

He's developed six revolutionary online programs with thousands of participants that include a variety of resources for you: things like the sugar detox program, navigating the ketogenic diet, how to do an elimination program, boost brain function, and many others. He's a sought-after speaker around the country on such topics as weight loss, brain health, functional exercise, natural detoxification, and disease prevention.

And, as I mentioned, he sees patients at his clinic, Exodus Health Center, in Georgia, as well as doing long distance consultations, by phone and Skype, to help people improve their health. So, Dr. David Jockers, again, welcome to The Diabetes Summit. Really excited to have you on again.

**Dr. Jockers:** Awesome, great to be on with you, Brian.

**Dr. Mowll:** Alright, so, let's dive into this topic – sugar. Sugar is certainly a complex issue that a lot of people deal with. People want to eat well. They want to get better blood sugar control, but they're, I think, first of all, confused. Not everyone, but a lot of people are confused, because there's a lot of confusing information out there about what exactly they should be eating and what constitutes a good blood sugar control diet, but then, also, how to actually do it.

And if they want to give up sugars, certainly processed, refined sugars, added sugars, how do they do that? Because, there are so many things that bring us back—temptations, and habits, and addictions, and cravings, that bring us back to eating foods that maybe we know we probably shouldn't be eating.

So, again, I think this is a really vital topic and I'd just like to start by asking you, maybe just to give a little bit of information about this. You obviously work with clients and patients in your clinic on breaking through sugar cravings and addictions. What do you see in this area?

**Dr. Jockers:** Yeah, this is a really big deal. What most people don't realize is that sugar is as addictive, in a sense, a drug as any anything out there. I mean, it is the number one addiction that we have, particularly in westernized countries. Our ancestors, if we go back many generations, hundreds of years ago, maybe a thousand years ago or so. They barely ever got access to sugar. Sugar was, like, a rich, a wealthy person's—only wealthy people, and kings, and what not, would have access to sugar.

Really, over the last thousand years or so we've got more, and more, access to it. And now it's just unparalleled with the immediate access. And we can literally consume foods. And many people in our society do. They're consuming foods that are elevating their blood sugar every single time they put it in, foods that have at 10-20 grams plus of sugar. We're drinking sugar. I mean, this is unheard of in the history of mankind. And our body is doing the best job that it possibly can at buffering it.

The body is this incredible intelligent system. It releases this hormone, insulin, to try to take the sugar out of the bloodstream. Because we know when sugar goes way up, sugar in our blood, we need it, we absolutely have to have it. But if it goes high, if it goes elevated, then it's toxic. In fact, it combines two different protein molecules and creates these things called advanced glycolytic enzymes, these AGEs, that do exactly what that acronym is.

AGE, that's ages, they accelerate the aging process because they damage all the different tissues. They create massive free radical stress and damage all the different that tissues they come in contact with, including our blood vessels, our brain, different organs, like the kidneys are really affected by it, the liver. So, they're just basically like battering rams going through the body and just destroying different tissues throughout the body.

We know that that's the case. So what happens? The body produces insulin to try to take the sugar out of the bloodstream and get it into the cells. And, for a while, it can do a good job. And then, of course, over time though, we just

damage all the cell membranes. We end up with insulin resistance. And we get worse and worse at being able to clear the bloodstream. And then, of course, we end up developing diabetes, which, of course, you're an expert in. We know that this whole sugar cascade is really hazardous to our body.

And most people out there know that sugar is bad, but why are we still consuming sugar the way that we are? It goes back to this idea that sugar is really a drug. When we consume sugar, we get this hit of neurochemicals, such as, dopamine and serotonin, that make us feel great. We know, for example, when somebody does cocaine, they get a massive rush of cocaine—of dopamine, I should say. And when they continue to do it they end up, in a sense, creating dopamine resistance in their brain.

It's kind of the same thing with sugar. We just keep doing it. We keep stimulating these neurotransmitters. And then, basically, the brain, the receptors, kind of like with insulin resistance, we start to get more resistance with the amount of dopamine and serotonin.

Dopamine really helps us to feel good, right? So, dopamine is this great feel good neurochemical. It also is really important for drive. It gives us more energy and focus, and we feel good when we get dopamine elevated for short periods of time. We need, kind of, the right cycling of it. If we are just constantly blasting it up and just raising it really, really high, over time, we end up developing dopamine resistance. And now we need more and more stimuli to create the same kind of feel good experience.

And same thing with serotonin. And what can that lead to? That can lead to, over time, just chemical dependencies, in a sense, right? So, for many people, they feel like they need the sugar in order to feel good. In order to have, like, the sense of feeling good. And we end up eating emotionally, right? So, we get depression because our serotonin and our dopamine goes down. So what do we do? We're so used to turning to food. So, we eat sugar, something with sweets, and boom. We get this blast. And we feel good for little bit. And then, a few hours later, we're down again. And we just continue this cycle. So, it becomes a really big problem.

You know, I've identified, really, three big things that lead to sugar cravings. Number one, is that emotional eating, right? Number two, is poor blood sugar balance, right? Because for many people they end up, when their blood sugar

goes way up, they secrete a lot of insulin. The blood sugar drops and they end up in this state of hypoglycemia. And they have these massive sugar cravings. That hypoglycemic type reaction is actually—I mean, I'd love to hear your thoughts. I mean, it's controversial, in a sense, on, like, what's worse for the body, like, hyperglycemia or hypoglycemia?

We, kind of, need this normal balance. But we know when we're hypoglycemic, now we know we've got tissues that are literally dying because they're depending on sugar, particularly the brain. Brain cells start to die. So, we get more irritable. We get this rush of stress hormones that comes out. Sometimes we'll have our heart racing. And we'll be sweating. And it's just, kind of, this unwanted experience. And it's really hazardous in the body. So, that's number two.

And then number three is, it really has to do with adrenal insufficiency or, basically, when our brain is not able to communicate well with our adrenal glands. We call this, in functional medicine, we call it HPA dysfunction. Or the part of the brain that's like the antennae of the blood stream, kind of, sensing the blood stream, seeing what's going on in the environment, it's called the hypothalamus.

And it signals to another part of the brain called the pituitary gland which then tells the adrenal gland what to produce. Produce stress hormone at this, you know, we need this quantity of stress hormone for this period of time. And, so, it's communicating with it. And we get kind of a breakdown in communication then that can also lead to sugar cravings as well as a dependency on sugar.

**Dr. Mowl:** Yeah. You just described, really, the physiology of addiction. And, as you mentioned, sugar and other foods can be as addictive as drugs. So, for that whole description, almost, you could have substituted alcohol or any type of drug instead of sugar. And it would be much the same with dopamine desensitization and so forth.

**Dr. Jockers:** Yeah, I mean, sugar is, before you say it, sugar is the accepted addiction, right? We know what alcohol does to people. We know how it can just alter their behavior. We know what cocaine does to people. We know what these things do. But people don't realize that sugar creates a lot of changes in

our brain, creates a lot more irritability, aggressiveness, aggressive behavior, depression.

When we've got these blood sugar imbalances it causes a whole host of problems. I always tell people, if we could get everybody on the planet, if we can get their blood sugar stable and living a lifestyle that keeps their blood sugar stable. Our rate of violence, I mean, we're talking about domestic violence, we're talking about violence at a military front, would go down so significantly, like 99% drop, just people's blood sugar stable.

**Dr. Mowll:** Well, certainly, food largely determines mood. And I know, personally, when I'm not eating the best I can, I can feel it in my body, for sure. It changes my mood. It changes my motivation levels. And add into that all the hormone balances, and fluctuations, and blood sugar disruptions, and you can certainly see how that could trigger some very bad behavior that people really don't want to have. But, again, they're driving it through their diet without maybe even ever realizing it. So, this is a huge topic as you said. I want to dive deeper in just a minute and talk about maybe these three areas. And then we're going to go over some action steps on how you can actually detox from sugar and break some of these cravings.

But, can we first just take a step back and get really simple and talk about what sugar is? Because I think, people often times, when they hear sugar, they see the bowl of sugar. They see the sugar cubes. And I think it's much more complicated or complex than that. Can you maybe give a broad description of what sugar actually is?

**Dr. Jockers:** Yeah, exactly. And so sugar in the blood, obviously, is called glucose. But, obviously, there's other forms of sugar. Like, fructose, which is most commonly found in fruit. You have sucrose. These different compounds that when we consume them, they're going to have an effect. They're going to elevate our blood sugar. Basically, we're going to find these in a lot of common foods.

So, basically, grains. I mean, if you look at the typical American food pyramid, it's got grains and starches right at the bottom. And we're told, "Hey, we need these things for energy." And, of course, we definitely do use glucose for energy. We definitely do use that. But these starches, as well as simple sugars, like you were talking about, sweet foods and simple sugars, but also

starches, like we get in grains, potatoes, corn, different things like that. So, we get all these starches. They're going to have an effect. They're going to elevate our blood sugar. And they're going to elevate that hormone called insulin in our body.

Ultimately, when we keep our blood sugar stable—I think, a great first step is definitely avoiding things that we know that are easily identified as sugar, such as candy, pastries, and different things like that, and getting off of those things. I think it's a great first step. And it's hard enough for many people that are addicted, that's hard enough.

But, ultimately, for really good blood sugar stability, we also want to be very careful on how much starch we're consuming. Because starch, whether, again, it's potatoes or even things like carrots have starch in them. And then you've got all the different grains, breads, and rice, and stuff like that, that are just so common in our society. So, we've got to be careful. Not to say you can't ever have something like that. But you've just got to be careful. And you've got to consider that in this category of, hey, these are higher carbohydrate foods that are going to raise my blood sugar. So, I need to, kind of, eat those in a certain level of moderation.

**Dr. Mowll:** Sure, yeah, I agree. There is a difference between natural sugars and some of these added, refined, processed sugars. And certainly the refined, processed sugars will hit your blood stream very quickly and can cause an insulin surge or spike. There's very little fiber typically in foods with added refined sugars, and at the same time, very little protein and often times very little fat or the wrong types of fat. There's problems with packaged foods, that those should be, obviously, eliminated first as a top priority.

But then, as you mentioned, Dr. Jockers, it doesn't stop there. Anything that's starch-rich or sugar-rich, even if it's a natural food, can have an impact on your blood sugar. So, we do have to be a bit careful with those. And while there are certainly redeeming qualities to fruits and starchy vegetables and beans and legumes, and so forth, we still have to watch the starch content because that does turn into sugar very quickly in the system.

**Dr. Jockers:** Exactly, and I always tell people sugar is an anti-nutrient. So, when you take fruit, fruit is loaded with nutrients. However, it does have a lot sugar. And if your body is struggling to break down sugar, then the overall

impact of that, it's going to actually deplete more nutrients out of your body than it's going to bring in.

Now, in general, you can still consume fruit, but you want to do it particularly on days when you're more active. That way, your body is better at burning it. It's better at utilizing it for energy and clearing the bloodstream more effectively. And you want to get the most nutrient-dense sources. So you want to look for fruit that is lower glycemic, has a lower blood sugar impact, and is loaded with redeeming qualities: tons, and tons, of antioxidants, unique antioxidants in it.

So, for that reason, I love berries. Because berries are extremely rich in very powerful antioxidants and they're lower glycemic, so those are great. For example, I would always take something like carrots or sweet potatoes or beets over something like a piece of bread, or even if it's whole wheat bread, or a white potato. Because there's just significantly more nutrients in those than what you're going to find in the white potato or the piece of whole wheat bread.

**Dr. Mowll:** Yeah, great description. And you're right about the hypoglycemia that you mentioned. Because eating a lot of these sugars that we just talked about, if you don't have diabetes, if your blood sugar isn't in the two and three hundreds, you can actually cause an insulin surge, which can then drop your blood sugar too low. And that can cause you to be hungry, crave more, irritable, "hangry" as we sometimes say. And then that can lead to this whole sort of hormone cascade, which then leads to more poor eating choices, and other poor decisions.

I think that both, as you said earlier, hyperglycemia (blood sugar that's too high) and hypoglycemia are bad things, much like blood pressure. Certainly high blood pressure is not good, but people think the lower the better on blood pressure. That's not the case. We need tissue perfusion. We need the blood to get to where it needs to go. And without proper pressure to push it there, we're going to get hypoxic or not have proper oxygen to our cells, like our brain, for example. So, I think we need, there's that sweet spot—no pun intended—right there in the middle where we want our blood sugar to be.

I'm glad that you mentioned that is sort of one of the things that can trigger sugar cravings and problems. You also talked about emotional eating which,



again, goes to the cravings and addiction. And you talked about adrenal health which is obviously a huge topic also.

**Dr. Jockers:** Yeah, and all three of those really go together. Most people that have sugar cravings, they're dealing with all three. But there may be one that's more of, a little bit, dominant driver. For example, that person that's, like, you know, "When I eat this, it reminds me of the time I spent with my mother who's now passed." They may have this kind of emotional connection where they're getting this comfort from that food. And that may be their dominant driver. And they need to really do a little bit more self-examination and psychological work and get fulfillment from other things outside of food.

For other people it's, again, this blood sugar kind of imbalance or taking too long in between meals. They're not consuming the right foods. They're not hydrating well. So, they're just not knowing how to take care of their body properly. And then, that's leading to the hypoglycemic-type reaction and then boom. They have the cravings. And then, there's a little bit of emotional eating that goes in with that, but it's more in response.

And then, for other people, they're just stressed out. And they're in a really stressful time in their life. That massive stress is leading to blood sugar imbalances that then lead to that emotional eating. To basically give them, to help balance their blood sugar for a moment. And then, also to give them some sort of little emotional pacification during that stressful season.

So, you want to identify which one of those is your major driver and really try to work with that. But they all really go hand in hand. They go together.

**Dr. Mowll:** Well, that makes sense. And that brings us to the idea of how to do a sugar detox. Because if you understand what we just talked about you'll realize that it's not as simple as just saying, "Okay, I'm going to not eat sugar now." Because there are things that underlie that, that drive you to eat sugar. And even if you have the willpower to make it through a day or a few days, if you don't handle those root issues, it's going to come back.

So, when we talk about doing a sugar detox, what does that actually look like? How does somebody, if somebody wants to get off sugar, or change, or break those cravings, how do we—what do you recommend for people to actually start that process?

**Dr. Jockers:** Yeah, well the very first thing you've got to do is, I always say, the three Ps. You've got to plan. You've got to plan ahead of time. You've got to prepare. So, you need to make sure that you've got an idea of what you're going to be eating. And for a lot of that you're going to be preparing it or have somebody else preparing it, some sort of strategy where it's there. You can't just have a good idea and no implementation process.

So you've got to plan, you've got to prepare, and then you've got to protect. And what I mean by protect is you've got to... Definitely, you've got to protect your home and the surroundings that you're in. So, I always tell people, "Go through your pantry and you've got to toss stuff. Like, don't try to hide it. You've got to toss it. Give it to the Goodwill or Salvation Army or whatever food bank is around."

You know what's funny is that we've given, like, healthy stuff, like, canned coconut milk to food banks and whatnot. In fact, my clinic, we donated over a thousand dollars' worth of food just, like, two years ago. And then we brought more in this past year. And they're like, "We still have all your stuff from last year." Because they don't even know how to use it. That's the unfortunate thing. There's nobody there that knows how to use it, which is really unfortunate. So, you've got to find what they can use, like, canned green beans or something like that. But that's a different topic. If you give them coconut milk, they're like, what do I do with this?

But going back, we've got to clear out our pantry, got to get rid of the processed foods. Because if it's in there, even if it's hiding in your closet, and you've got some sort of an addiction, addictive eating process, you're going to go back to it. So, you've got to just clear it out. You've got to get rid of it. Clear out the pantry. Protect your home. I always tell people, "Protect your home," or whatever surroundings you're around a lot, like, if it's your office, or whatever. Protect that because the moment you get out of that environment, when you're out with friends, whatever it is, you're going to be subject to a whole multitude of different temptations and it's going to be so much harder.

But what you can protect is your home. You've got to protect that. You've got to have a plan. Setting up a meal plan is super important. Going shopping, of course, making sure you've got the foods that you need. And then preparing, whatever it is that needs to be prepared, whether it's dinner and having

leftovers, or whatever it is. You've got to go through that three P process to get started.

**Dr. Mowll:** Yeah, I love that. Plan, prepare, and protect. That's a good place to start. We need to know what steps to actually take once you set the basis with that good plan. Detoxification is sort of a broad description of different things that we can go through to make dietary lifestyle changes. Sometimes I think people get confused with the term. And they think, like, colon cleanse, or drug detox, or something like that.

Really, it's supporting the body in its ability to take toxins and internal materials that aren't helpful for the body, in fact, harmful, and eliminate them. So, part of that is not putting that stuff in and I think that's a good place to start with sugar but then supporting the body to eliminate some of those toxins also.

When we talk about doing a detoxification program sometimes we're talking more about an elimination diet. What are we going cut out of the diet? How are we going to change the diet to help the body to be able to detoxify itself? The liver does a good job with that, obviously, and we can support that.

So, when you think of a sugar detox, broadly, how does that look? What's, sort of, the goal and the purpose of doing a sugar detox?

**Dr. Jockers:** Yeah, really the goal with that is to help that individual have a healthier relationship with sugar, with sweet foods, with things that elevate their sugar levels. Sugar itself is not the enemy. It's really our overconsumption of the sugar itself. That's the issue. What we want to do with the sugar detox is re-train healthy eating patterns, give strategies, as well, for how to get rid of cravings. Because if you've got cravings and you don't have strategies to help you overcome them, then at some point you're going to cave in. You're going to feel like a failure. And then it's just going to start this whole cycle again.

We just have to realize, hey, most of us, most people on the planet are, in particular, in westernized countries have, at least in one point in their life, have had an addiction to sugar. I know I have. So, I'm the low carb guy, the keto guy. I teach and eat low carb. But, like, if I get going with sugar, it's like, I am hooked on that. If I have a high sugar meal one day, the next day I'm craving it. I'm thinking about it. I've got to really protect myself.

I really created a program for people like me that need strategies in order to keep that mitigated. I think that's really what it comes down to is just creating this healthy relationship with sugar. Not saying, "Hey, I can never consume that again. It's just, I want to have a healthy relationship with it. So I don't start a negative momentum cycle and end up in a really bad place."

**Dr. Mowll:** So, what are some of those other strategies? You talked about planning properly. What type of timeframe do you recommend that people follow for this? Do you recommend people do it for a certain period of time? Or is this a ramp up and then just stay off of it for as long as possible, or forever? And what's the process look like of actually starting this type of program?

**Dr. Jockers:** Yeah, that's a great question. My initial start is, "Hey, let's do this for 30 days. Why? Because, I feel like that's something that, that measurement, is tackle-able." People can say, "Okay, I can do that for 30 days."

In fact, when I met my wife—this was back several years ago—she really didn't know much about health at all. So, this is what I challenged her to do. I said, "Okay, I challenge you to drop sugar." Right? And also, she took gluten out as well, which would be a great thing to do in addition. But, "Drop processed sugar and gluten for 30 days and tell me how you feel right afterwards."

I kind of took poll. I'm like, "Okay, on a scale of 1 to 10, where would you say your energy is right now?" Like, if 10 is all, tons of energy. You could everything you want to do. Okay, one is no energy. You want to lay in bed all day. Where are you at right now? I kind of did this subjective poll, right? Where's your energy at. Where's your mental clarity at? What's your sleep, you're, how do you feel in the morning when you wake up, you know, your overall sleep quality? So, we asked just a couple of quality of life questions like that and did a poll. And she was seeing 20 to sometimes 50% improvements in all these areas at the end of 30 days. It convinced her that, hey, this really does work.

I would say that. I would say, hey, okay, think about it as 30 days. And just take a poll of where you feel like you're at right now. And just try to be as realistic as possible. And then poll yourself again after the 30 days. And I've never seen somebody not actually respond favorably after 30 days of doing this. Like I said, great first step, taking out processed sugar.

If you can take out gluten and a little bit more advanced step would be to take out grains in general. That would be a more advanced step. You may even be inspired to go further and take out starches in general. Figure out what you feel like is realistic. If it's just taking out processed sugar, that's a huge first step.

**Dr. Mowll:** Right.

**Dr. Jockers:** That's awesome if you can do that. That's so good. And you'll see big changes. So, figure out what's going to be best for you. Go 30 days. Poll yourself on the front end and on the back end. In my sugar detox program, we have that, kind of, built-in. Like, where, okay what, rate yourself on these things now. Rate yourself on these things at the end of 30 days. So you can, kind of, see. You want to make sure that you're seeing. Because a lot of times when we change, as we start to improve, we just, it becomes our new normal and we don't even think about it.

I've had so many patients over the years where they've, in a sense, life has completely transformed. But then, like, a year or two later, they just kind of forget about it and they go right back to poor lifestyle behaviors. And sometimes I tell them, "Hey, pain is your greatest teacher, right?" So, sometimes just realizing how certain foods are making you feel. And for many people, there is this, kind of, cycle of, "Okay, I do something for 30 days and then I, kind of, go back to doing some of these other things that I was doing and experiencing the pain."

And I think that's the most important part. Is not just, kind of, falling off the wagon or going back to doing whatever you want to do, but really just increasing your level of awareness of how you respond to the foods you're consuming. Because if you can increase your level of awareness and link cause and effect, where it's like, "Okay, when I'm depressed I'm noticing that often times it's because I'm engaging in poor lifestyle habits. I'm not moving my body well. I'm not getting out in the sun. I'm not eating good foods. Things like that. And it seems to affect my mood. I feel more sluggish."

We can link that level of pain and say, "Okay, yeah, the chocolate cake tasted great, but I didn't sleep well that night. I was tired the next day. I don't like feeling like this. I feel awful." And I can link that pain now to the chocolate cake that you're eating. Which you can actually eat chocolate cake but the

right type on this plan. But, with that said, I'm linking it to the old form of cake that you used to consume and saying, "You know what? The pain of feeling awful, not being, like, all in for my family, not having tons of energy, not having a balanced, stable mood, but being more irritable and just less enjoyable to be around. That pain there is not worth the pleasure I got from the cake."

**Dr. Mowll:** Right. Right.

**Dr. Jockers:** And if we can link that, and the pain, you know, that a lot of psychologists say, "Hey, we're driven by a pursuit of pleasure or a fear of pain." So, if we have this addiction that gives us amazing pleasure, then if we can link some level of pain we're experiencing from that addiction and that becomes stronger in our minds, we build it up. It grows stronger in our mind because we're aware of it. Then the pleasure, or the desire to go after that pleasure, significantly reduces.

**Dr. Mowll:** Yeah.

**Dr. Jockers:** And, so, we start for 30 days. And the whole goal is to create awareness. Create awareness of how much better you can feel. And then when you do go off of the plan, that's the whole idea is just learn from it. Just, kind of, think about how you responded to that. And you'll, kind of, understand over time your threshold level.

**Dr. Mowll:** Yeah, I love that.

**Dr. Jockers:** Yeah, like, for me, I could eat a meal that's not on my—at this point, I can eat a meal that's not, that's not a healthy meal and actually not feel terrible, right? But if I do that a few times in a row or, like, over a weekend, then I feel awful and I have no energy on Monday. So, you want to know your threshold level. And that way, that will give you, kind of, a little bit more freedom in your life without having the negative effects.

**Dr. Mowll:** Yeah, and also, I think, identify your food triggers too, because there are certain things that you can eat and kind of get away with. You can go out and do it one time and that's it. You don't have necessarily the desire to go do it again the next day and the next day. Where there are other foods that will have that effect on you. You'll eat them once and boom. You're right back into that addiction spiral.

**Dr. Jockers:** Yeah.

**Dr. Mowll:** So, we have to identify those.

**Dr. Jockers:** That's really good.

**Dr. Mowll:** If you can identify them in advance, that's even better.

**Dr. Jockers:** Yes.

**Dr. Mowll:** But maybe through that process, you can do that.

**Dr. Jockers:** Yes.

**Dr. Mowll:** So, when you have people go through a program or if people are interested in doing something like this, do you like the idea of replacing? So taking foods that they normally would eat, and replacing them with a healthier alternative, a lower sugar alternative, or do you like more of the idea of just sort of get rid of these foods and totally change your diet and eat completely differently?

**Dr. Jockers:** That's a really good question. I think it always depends on the individual, but I'm kind of a fan of the idea of replacement. Okay, I think it's just easier for most people to swallow, and it's more sustainable for people. So, I know there are a lot of programs out there. Where it's like, "Okay, just take all of it out." And people do it. And they step up to the challenge. And they do it and they feel better. But they're like, "I'm not going to go back to eating like that." It's just, to me, it doesn't feel as sustainable as somebody that has been eating a certain way for 20, 30, 40, 50 years sometimes.

On my website—and this is something I just am passionate about—literally, you can make almost anything that you love with healthy ingredients. We've got coconut flour pizza crust. We've got chocolate cake, like I was talking about. Strawberry cheesecake. We've got all different types of cookies and fudge. And all this stuff that's low carb. It's loaded with fat-burning ingredients that actually elevate something call ketones, which is this water-soluble form of fat, that our body uses for energy.

It's this bio-energetic state, is what they actually call it, when you're running off of ketones, in the scientific literature. It reduces inflammation in your body. These foods, like, you literally can eat, like, our super charged Oreos,

right? It's like an Oreo that actually is loaded with antioxidants, phytonutrient antioxidants, from raw chocolate. It's flavored with things like stevia, or monk fruit, right? These natural sweeteners that help stabilize/balance your blood sugar. And they support the production of ketones to keep your blood sugar stable.

You can actually enjoy sweet foods. And for myself, I would say most days, have something sweet, okay? And I heard this great, you know, this lady was telling me. She's like, "I think it's important to eat something sweet every day because it just keeps you happy." And I'm like, "You know what? I kind of like that idea." You do get a little bit of a boost of dopamine and serotonin if you keep your blood sugar stable. It's not like sweets at every meal, but maybe once a day, you have something that's sweeter, tastes good, really fulfills that desire. You get a rise in your dopamine and serotonin but not an overly excessive rise. And, on top of that, you keep your blood sugar stable. Because the blood sugar imbalance is what drives more of these crashes of these neurotransmitters.

So, you keep that stable, now you can, in a sense, have your cake and eat it too, right? So, you can thoroughly enjoy something that's sweet that is similar to—it's not going to taste exactly, necessarily. Sometimes you can get an exact, but it's rare. But it's going to taste very similar to what you may be used to and enjoy. It will give you a lot of pleasure and really make your life easier. Because once you start learning how to bake with things like stevia and coconut flour, and whatnot—it's a little bit of a learning curve. It's like riding a bike or learning anything new. You've got to expect it to just take some time, right?

And I always tell my clients the process of getting healthy is like taking a college course. You couldn't take the final exam—if you were in a college course, you couldn't take the final exam day one, right? But if you go through the process, okay, after 3 months, 4 months, you know, on something like this, after 3 or 4 months, it's like, you know this stuff. You know it. You're speaking the language. You know how many eggs are needed with this coconut oil, or this coconut flour. You know the ingredients. You know where to get them. You know how to use them. And you're off to the races.

Now you've got that skillset that's there for the rest of your life. And the more you use it, the more you're just going to get better, and better, and better with



it. Now you can make all these delicious recipes for your family members. You can get a kick out of surprising them because they won't know that it had an avocado in it, or something like that. You'll be the—at first you'll be looked at as kind of the weird one in your family, but over time, what I have seen with so many of my clients... You've probably seen this too, Brian. Is you're the one that everybody actually ends up going to.

**Dr. Mowll:** Right.

**Dr. Jockers:** Right? Over time. And asking questions. And wanting to learn from. And sometimes it just takes, kind of, like, just doing it and staying consistent with it. But that's what ends up happening. So, yeah, I'm a huge fan of just starting by replacing it. But, ultimately, you've got to figure out what's going to be best for you. If you feel like, "Hey, I just want to do 30 days." Coming off of all that stuff completely, do it, right? If you feel like that's what you can do, but then ultimately at some point, you've got to find a sustainable lifestyle.

And I know, for myself, using some of these natural sweeteners is really a sustainable life. So, I don't miss any of the other stuff. I go out to parties, or wherever it is, I see cupcakes. I have no cravings for any of this stuff at all. Whereas, 15 years ago, it was like, I couldn't eat enough sugar. That's the great thing about having this built into a sustainable lifestyle.

**Dr. Mowll:** Yeah, you're right. And we kind of break it down into short and long game. And the short game, something like the first 30 days of trying to make a pretty aggressive change. You may want to just totally flip the switch and cut out certain foods if that serves you. Some people do better with that type of program, as you mentioned. Others really like a softer approach where they can start to, sort of, ease into it and replace foods. But for short game, I think either one can work.

Long game, I really do think you need to find a way to make this sustainable, as you mentioned. Diabetes, even if you, even if everything falls in line perfectly, you have type 2 diabetes, and you're able to completely reverse it and get off of medications and everything else. You still need to sustain the lifestyle to keep it at bay.

**Dr. Jockers:** Yeah.

**Dr. Mowll:** So, this isn't something you're going to do for a month, or a year, and then somehow go back to a different, the way you ate before. So, it has to be sustainable. And I think using the incredible recipes you have on your site at DrJockers.com or picking up your recipe book which is just filled with incredible recipes, I think is a great strategy to make it sustainable. Find things that you actually enjoy eating that are healthy also.

**Dr. Jockers:** Yeah, absolutely. And I wanted to just kind of also go over just a few strategies too that I'll use with clients.

**Dr. Mowll:** Absolutely.

**Dr. Jockers:** So, one is, using lemons, limes, or apple cider vinegar in water, or even on food. We know that, for example, these acids, citric acid, in the lemons and lime or the acetic acid in the apple cider vinegar, actually help to reduce the glycemic impact of whatever we're consuming. Whether you put it on, like, if you're having, like, meat and vegetables, or something like that, or a salad, you can put apple cider vinegar, or lemons, or limes on that. And that's going to help keep your body from, especially if somebody that's diabetic, right, from getting this, kind of, massive increase in blood sugar. So, it's going to help keep that more stable. I think that's super important.

And also, like, if you're, like, going to eat something that—if you're testing your blood sugar and you're going to consume something, maybe you're at a party or whatever it is. Or even like for some people they sometimes when they have stevia, their blood sugar still goes up. So if you're noticing that, then what you could try to do is have some lemon water, like, 15 minutes before, or apple cider vinegar water. And it will lower the blood sugar impact. Studies have shown anywhere between 20 and up to 40%. So, huge, huge improvements.

So, 20-40%, you think about that, somebody like, blood sugar jumps up to, let's say, 200. Instead of that, 20% would be dropping down to 160: 40% would be like 120, right? So instead, again, a 200 rise, that's like you know in between that 120-160 rise. That's significantly less. That's a simple, easy thing any of us can do. And you don't necessarily need fresh squeezed lemon or lime. You could use like an organic lemon juice or lime juice that works too.

Number two, of course, low sugar diet in general, like a ketogenic diet where you do high fat, moderate protein, so not a real high protein, but moderate

protein levels and low carb, okay? Using that as your staple. That is key, right? So, you're consuming healthy foods. Lots of coconut, avocados, olives, olive oil, grass fed butter is really good. You're really trying to—every meal should have one of those in it. So, I always tell people, like, okay, what is your fat? It should either be coconut fats, avocado, olives or olive oil. Or it should have grass-fed butter, or maybe nuts, like macadamia nuts or something like that.

**Dr. Mowll:** Love those ideas.

**Dr. Jockers:** Yeah, it should have something in that and then you can build it around with vegetables and with some sort of a healthy protein, whether it's a protein powder or it's a piece of meat or something like that. You build it around the healthy fats. You be very generous with the amount of good fats that you use.

Number three is doing air squats. So, believe it or not, air squats are simple and easy. Now, of course, if you've got like you know a hip, you need a hip replacement or knee issues, you could still do some upper body work, right? But just doing something that puts your body in a state of oxygen debt where you've got to breathe deeply. That's going to stimulate the GLUT-4 receptor and the muscle cells which is going to act as almost like insulin kind of pulling the sugar out of the blood stream and using it for fuel quickly.

So, if you're going to have a high sugar meal or even if you're having cravings or something like that, if you just knock out like 20 air squats or if you were to just kind of like do like a minute of like shadow boxing or something like that, you'll see that it will actually reduce and your blood sugar will actually... You'll see positive changes in your blood sugar. Or you can do it like pre or post meal as well to get a better blood sugar response. So, something simple and easy like that.

And then, water and good salts. So, using good salts in general, like, pink Himalayan salts or Redmond's Real Salt or Celtic salt, something along those lines. Minerals. Believe it or not, when we're mineral deficient, we often times will crave sweets. Many people are having sugar cravings because they're mineral deficient. And that kind of goes back into this issue with the HPA axis Dysfunction. Because when we're under more stress, we drain more minerals, more B vitamins, different things like that. We need more of them.

And sometimes our body, the way it tries to tell us it needs it is it starts to crave sweets. For some people, they crave a lot of salty things. I tell them, “You know what, that’s a good craving. If you’re craving salty things, that’s great. Just don’t go for the potato chips. Instead, you can go with sea vegetable snacks, for example. Where, it’s like, sea salts, olive oil, a thing of seaweed.” Which, believe it or not, on the actual label, it says, “Strangely addictive.” And you look at it and you’re like, “What could possibly be addictive about seaweed?”

But when you eat these, it’s like, you can’t stop, because they actually taste amazing. And again, it’s kind of the olive oil, salt flavor out of them. They taste so good, and they’re so rich in minerals. So, getting mineral-rich foods into your diet on a regular basis, like, grass-fed organic meats are very mineral rich. Bone broth is a really mineral rich food. Fermented foods are very mineral rich. Olives are mineral rich. I mean, there are so many good ones. Avocados.

So, consuming these and then also being generous with your salt up unto a certain point. If you notice, it’s most people with, for example, people with high blood pressure. I know it’s The Diabetes Summit, so high blood pressure goes along often times with diabetes. Most of those people are not salt sensitive. Some of them are. You’ve got to see when you take the sugar out and you go on a lower carb diet and you’re using salt, do you notice that that your blood pressure goes up when you do that?

For most people, I actually see the opposite. Now, if you’re on a high carb diet, then we know you’re going to have higher insulin. And insulin’s going to cause sodium retention which is going to cause higher blood pressure. But if you’re on a lower carb diet, your insulin levels are going to go down. And when insulin goes down, your body actually gets rid of more of the sodium. It actually excretes more of it. So, you actually need more. And believe it or not, most people are actually struggling with mineral, and particularly sodium, deficiencies, not getting enough and not utilizing it right.

So being generous with the salt, up unto a point. Like, I tell people, “Salt to the flavor that you like. You’re not trying to, like, excessively salt; salt to the flavor that you like.” And if you are somebody that struggles with blood pressure, experiment, okay? Go on a low carb diet for about a week or two.

And then try, if you're on a no salt, let's say you're on a no salt diet, like many people are, then try adding just a little bit to one meal, on a low carb meal.

And then see how your body responds to that. Does your blood pressure go up, right? Take your blood pressure beforehand. Then take it 30 minutes after. Did it go up? Did it go down? Did it stay the same? That will help you to understand what your salt tolerance level is. Like I said, I think many people that are listening will actually be surprised that they actually do well with the salt.

Okay, use natural sweeteners. That's my fifth tip. So, again, stevia, monk fruit is good. Sugar alcohols, like, erythritol or xylitol, can be good. I find that people with, like, a history of irritable bowel, often times, struggle with them. I know, for myself, I have a history of irritable bowel. I don't do great with sugar alcohols. I can handle them in small moderation, but not a lot. But I do great with stevia or just kind of like a pure monk fruit. For other people, a lot of diabetics do great with the sugar alcohols. So, that might be something you want to try, like a xylitol or erythritol, would be the sugar alcohols to try.

I would avoid your artificial sweeteners like aspartame, Splenda, acesulfame potassium, monosodium glutamate, I would include in there. I would look to avoid those. Because a lot of research out about how they affect our neurochemistry as well as our microbiome. So, not good for the brain or the gut.

Number six is reduce stress and adapt stronger. So, obviously, as we're going through this, we should be looking for, what kind of triggers, what kind of things are really triggering high stress? Because if you are going through a really stressful season, it's hard to also make a lifestyle change. You've got to look for, what's the low hanging fruit? Some stresses you can't avoid, but what's the low hanging fruits that are out there as far as like things that are stressing you that you really shouldn't. Maybe you're just over-dwelling on certain little things that you don't necessarily need to.

Think about, like, most of us, we're really spending, most of our stress is on like, 90% of it, is little things. It's things that we don't necessarily need to stress. There are places in our life, where there's that 10%, where, hey, that's something that's going to be stressful and there's just no way about it. But

reserve your stress for those things and not the other 90% that ends up draining a lot of us. So, you want to really do that.

And when I say adapt stronger, you're looking for things to do like really good sleep habits, lifestyle habits. Good sleep habits, right? Try to get to bed early, making sure your room is dark, you might have an eye mask over your eyes, so you can get really good high quality sleep. Things, like, regular exercise, regular movement. That's going to help your body adapt and be more resilient to stress in general.

There may be certain supplements, like magnesium or B vitamins or adaptogenic herbs like rhodiola and cordyceps and ashwagandha, that can help your body become more resilient to stress. So you want to reduce your exposures to stress. Think about the little things and try to reduce that. And then find out ways, things that you can do in your lifestyle, again, whether it's supplements or you know, obviously, get the lifestyle in order.

I would definitely recommend good sleep habits, regular exercise, for sure. So, doing stuff like that to adapt, help your body adapt stronger. Chiropractic care, really good for that. Helping your body just adapt, become more resilient as a human being. Meditation can be really important. Having an active prayer life. Being around a good social group or building good relationships. Whether it's in your church or various organizations. All these things just help your body become more resilient and adapt stronger to the stresses in your life.

And then the last thing there is sometimes we need some extra support for dopamine production. This is kind of the last step. I typically won't always do this for people, but sometimes certain supplements can really help, right? Like, a phenylalanine, certain amino acids, sometimes, can help people. Chromium is a good one, right? Just balance out blood sugar and also dopamine levels so you've got less cravings in general. Again, the first six are easier. The last one, I would definitely, supporting dopamine production.

There are some things, low hanging fruit, like chocolate, for example, raw cacao. So, you can get raw chocolate which helps stimulate dopamine production in your brain. Some of you guys probably do good with coffee. So, doing like a fat fuel coffee or bulletproof coffee can also help, right? Can help support dopamine. And for some people, it can help reduce cravings. For other

people, it can increase cravings. So find out what works best for you as far as that goes.

If you're still struggling after doing all of those, definitely reach out to a functional medicine provider, functional medicine practitioner, of some type, whether it's a health coach, nutritionist, doctor, like, Dr. Brian, or myself, to really go through and make sure you're following these strategies right. And then also, possibly, that you might need some advanced testing, and possibly some unique supplements that you might not have known about before.

**Dr. Mowll:** Man, you just threw some major fast balls there, doc. Tons of value, as always. I think we saved some of the best for last in our conversation today, but incredible information. I hope you guys were taking notes. If not, go back and listen to this again. Get a pen and paper handy and write a lot of that down because that is some powerful, powerful information from years of experience of working with patients and clients doing this.

So, we are at the end. So, we're going to wrap up with all that empowering and powerful content. So, as always, Dr. Jockers, I want to thank you for being part of The Diabetes Summit 2018. If people want to find out more about you and grab your programs or your books, your cookbook, what's the best the way for them to do that?

**Dr. Jockers:** Yeah, Brian, always an honor to be on with you. You can find out more about me on my website [DrJockers.com](http://DrJockers.com). That's D-R-J-O-C-K-E-R-S dot com. I've got an active Facebook, YouTube, so check me out there. And I'm excited to have you as a guest for our upcoming Keto Edge Summit as well.

**Dr. Mowll:** That's right.

**Dr. Jockers:** Phenomenal presentation, really breaking down how to use a ketogenic diet and lifestyle to help balance and to help people, basically, overcome diabetes naturally.

**Dr. Mowll:** Yeah, and that's coming up. So, watch out for The Keto Edge Summit. Really, right around the corner and we'll be certainly talking about that. And you can watch my presentation and many others, all about ketogenic diet and ketogenic lifestyle. So, excited to see that myself. And for all of you who joined us today, as part of The Diabetes Summit, thank you so

much for being part of this event. Stay tuned for our next session. And remember, guys, keep climbing and don't ever give up. Thanks, everybody.