Circadian Rhythm and Exercise for Brain Health

It's very powerful. Yeah. For brain health. You know, getting that circadian clock in tune. And we know that that's what orchestrates the proper rise in cortisol in the morning and cortisol going down in the evening, and melatonin going up.

Natural melatonin, which is what allows us to sleep but also orchestrates this beautiful detoxification process that happens overnight. And that all works well when our radiant rhythms are in alignment.

And to, you know, so that's super important. And of course, exercise, the data on exercise and brain health and mental health is enormous. There was a recent meta analysis of that.

You know, I think there was 1100 papers in that sort of analysis. And so there's so much data on that. And usually you see meta analyzes with, you know, maybe 20 studies or 30 studies.

We had 1100 study. And the effect sizes are really significant for exercise on these mental health disorders. Welcome to Doctor Talks the podcast where every episode leads to a healthier you.

Join us as we navigate the world of optimal health, uncovering groundbreaking strategies to conquer chronic disease.

Podcast Introduction and Guest Background

In each episode, we'll bring you the latest insights from leading health experts, medical innovators, and wellness warriors. If you're seeking to transform your health journey, or if you're looking for answers to burning questions.

You've come to the right place. Get ready to unlock the secrets of lifelong health and vitality. This is Doctor Talks, real talk from real doctors on the issues that matter to you most.

Welcome back to this week's episode of back to the basics. I have a treat for you guys this week. So I have found a psychiatrist who thinks like we do or like I do.

So Doctor Matthew Bernstein has agreed to be on the back to the basics podcast, and he's going to talk to us about all things psychiatric disease wise.

So we're going to talk about maybe some anxiety, depression, ADHD, all sorts of stuff. And he actually believes that a lot of this can be mitigated by talking to people about food and metabolic health.

He's also started this really, really neat program where you can go, stay and actually live in a facility that's medically supervised so that he can help get people off of some of these psychotropic medications that, of course, have side effects.

So he's a respected clinical psychiatrist for more than 20 years. He is also the chief executive officer of accord. And we're going to talk about that.

It's one of the leading voices in the emerging field of metabolic psychiatry. After graduate summa cum laude from Columbia University in New York, New York, with his bachelor's degree in English literature, he received his medical degree from, Pennsylvania in Philadelphia.

He trained as a psychiatry resident in Belmont, Massachusetts, where he served as chief resident and then after residency, he was a psych psychiatrist in charge and later served as an assistant medical director of a schizophrenia and bipolar inpatient unit.

So he's had lots of experience with lots of different psychiatric disorders. He developed his passion for community based care as the chief medical officer of El Horn, a sister program of accord where he pursued alternative ways such as focusing on metabolism, nutrition, cardiac rhythm, biology and exercise to help individuals achieve their best level of functioning without relying solely on traditional psychiatry approaches.

So this is why I'm so excited to have you. Thanks for coming on our podcast afterwards. It's my pleasure. Thanks for having me. So we were kind of just talking right before we started, and I think this is a good point.

I want you to tell the listeners, so tell me kind of like how you got here. So, you know, you were telling me you spent a lot of your career putting people on a lot of psychiatric medications, which we know have side effects.

Now, some of them are needed for sure, 100%. But then, you know, long term, sometimes there are other options. So I guess tell people kind of your journey and how you got here.

Absolutely. So yeah, as as you said, I worked on an inpatient unit and saw how these medications could be sometimes lifesaving for people when they're at their worst, people with vitality and psychosis.

But what I learned over time is that people often don't feel good on these medications in the long term at all. And yet, our field field of psychiatry that I'm in, maintains that we should be on the same dose of these medications indefinitely, especially for some of these severe illnesses that we've talked about like this to the brain, you know, bipolar disorder and regression.

And you see the toll over time metabolically, but also neurologically. And it's hard to watch. I always felt terrible about people gaining sometimes, you know, 40, 50, sometimes 100 pounds after being put on these medications.

And, you know, I had a real awareness and, eye opening experience with two kids who got sick with an illness that looked very psychiatric. It turned out to be autoimmune encephalitis.

It took years to figure that out, but it really opened my eyes that our path in medicine doesn't have all the answers. And so certainly traditional psychiatry didn't have all the answers.

So I had an open mind at that point. And then I learned about this use of ketogenic diets, for brain health, which was pioneered over 100 years ago for epilepsy at the Mayo Clinic.

And I heard a lecture from a colleague who was talking about using it in severe mental illness and having incredible results using a real, you know, real ketogenic diet, measuring know, doing a sort of medically supervised.

And that really opened my mind that the table ism is really the key here. And mitochondria. So that led to a whole journey of learning and discovery and trying to figure out how do you get people who are already been all this way, who are on psychiatric medications, who started off with an illness to make these pretty intensive lifestyle interventions, which is really kind of the the art and trick to it.

I think, it really works, but it's not necessarily easy to get people to change their behavior in such a severe way. Yeah. So you said a lot of things. I have a lot of questions.

So for listeners, when we're talking about psychiatric illnesses, give me a rundown of the list of illnesses you're talking about. You mentioned schizophrenia, severe illness.

You're talking about bipolar. Are you talking about anxiety and depression, too? Does this work for that? Does it work for ADHD?

How the Psychiatrist Shifted to Metabolic Care

It does. And I mean, the nice thing about it is you don't need to go necessarily the full intensive version for some of those conditions. It's an anxiety disorder that's troubling.

But is it the debilitating or a mild depression or ADHD? Even just cleaning up the diet sort of point of making a little bit of ketones can have a dramatic effect, you know, fixing the metabolism a little bit for some of these more major conditions that we talked about to the bipolar and major depression OCD, we might really need to go the full, route and really get into a pretty deep level of ketosis to start seeing the benefits.

So what are like, let's start with this. Why does ketosis make your brain better? Like explain that to people. Explain what is ketosis and then why would that actually help fix some of the things that people have going on in their brain?

Yeah, yeah. Thanks for that question. Good to start with. What are we talking about here? So first of all, a ketogenic diet is a high fat diet moderate protein and very low carbohydrate.

So the original ketogenic diet that they use at the Mayo Clinic was epilepsy was a 3 to 1 ratio. Sometimes they even did a 4 to 1 ratio of calories from that compared to the calories from protein and carbohydrates combined.

So that was really pretty much a almost all fat diet. And now we're learning that we can do it. We can have people make ketones with a lower ratio of 1.5 to 1 or 2 to 1.

We can usually get a pretty nice level of those. Just give it the clean version of the diet. And ketones have actually an array of, brain health benefits.

It's been studied for many decades now because of that incredible, benefit in epilepsy. Neuroscientists have been studying how ketones do this and how diet does this for many decades.

As we know a lot about the science. And I like to say, you know, way more about the science of how ketones improve brain health than any of the psychiatric medications that I prescribe.

So we can start with a couple of mechanisms. I don't want to go through all of them at once because it's a lot to absorb, but some of the most important ones are, you know, it's an alternative source of fuel for the brain.

So when we get into that fat based metabolism, our body can use it. Most of our body uses fatty acids for good set of always glucose to fuel. But the brain can't use fatty acids.

So the liver makes ketones which cross the blood brain barrier. And the, the the cells, the neurons and the astrocytes and the yourselves. And you know, I know you talk a lot about insulin resistance, and I'm sure your audience knows about insulin resistance.

So there's this idea of cerebral insulin resistance, bringing insulin resistance. So the idea is that, you know, you can have a very nice level of glucose in the brain, but if the if the brain is insulin resistant, you actually need insulin to bring glucose into those cells.

And so if you're insulin resistant, your brain, you can have all the glucose in the world, but your brain might be starving for energy. And so that's very important alternative source of fuel that we don't provide to the brain.

But then there's many more. I mean, maybe we want to stop there and then pause the you ask some questions about that one. Yeah. So what you're explaining is, you know, like I tell my patients in a fasted state, ideally our body's breaking down stored energy from our muscle where it's deposited first, assuming that we eat food that can be deposited in our muscle or a liver, meaning glucose side note a lot of ultra processed foods.

There's a lot of my listeners know that have fructose and High Court. I, Fritos corn sirup that can't be deposited in

your muscle or in your liver. Our liver and our muscles don't take fruit.

So the only place for Tesco's is your fat. That's a lot of problems. Why? A lot of people are chronically starving, right? Because they eat a lot of ultra processed foods.

You're not feeding your muscle or your liver. It's going straight to your fat cells making you hungry again. But when you are processing your food correctly, what you're saying is, when we are in that fasted state and we've used all of the glucose that we need from our muscle and our liver, our liver can make ketones.

But throughout this time, our liver is making ketones as well from stored food feed our brain. So our brain only runs on ketones. And our brain is a very big glucose hog in general.

Right? So an energy hog, I guess we should say our brain needs a lot of energy. So in all these people in this country who are walking around with high insulin levels, meaning that probably you're not very metabolically healthy, you don't have a lot of good stores of energy in your liver, in your muscle, because they're all stored in your fat, because of what you've eaten, whether you know what you're eating or whether you don't, then your liver doesn't have that reserve or those ketones to give you your brain.

And so you get tired, right? So you have this like metal bar in just your exhaust. And so that's the point that you're making why ketones are so important.

So let me ask you this. And when you eat fat high fat it's easier to make those ketones. Right. So where are you going. Explain that. That's right. It's also the benefit of this high fat medium protein.

What Ketosis Is and Why It Helps the Brain

Low carbohydrate is also that we're not stimulating much insulin release at all. And so we're keeping insulin levels really low all the time. And it really is a great way to reverse insulin resistance.

So over time also people's insulin resistance is improved significantly if they're doing this diet. But initially, even when they are insulin resistant, those ketones are providing this source of fuel that bypasses that, cerebral insulin resistance.

So what you're saying to is when you do have high insulin levels, the insulin levels that get into your brain are toxic to your brain. I'm not I wouldn't say that.

I think it's more that we need insulin to get the glucose into the neurons. It's it's required to have insulin. And so if your brain is insulin resistant, you can still have a lot of insulin around, but your brain cells are not responding to that insulin.

There's resistance to the signal essentially. And so we can't get the glucose into the cells for use as fuel. And so this is one of the main mechanisms for Alzheimer's disease.

But it's also we think a huge mechanism for all the mental health disorders, this sort of lack of brain energy due to, that cerebral glucose, hypo metabolism is the term, but it's really brain insulin resistant because not you like what you've heard so far.

It's so modern. Endocrine is now able to provide telehealth services in eight states, including Arizona, Nevada, Oklahoma, Texas, Ohio, Illinois, Michigan and Georgia.

If you would like to become a patient, visit our website at Dot modern endocrine.com backslash contact. You can also email us at hello@modern-endocrine.com, or call our office at 405 286 1571 to schedule an appointment.

Please note we no longer accept insurance for new patients. However, we do have customizable membership programs available. Your first visit will include a detailed intake, and lab orders will be provided to further assist us

in developing your ten Stages to Ultimate Health Plan.

We do offer discounted lab rates with a nationwide lab service. And now back to the show. So it's kind of like for the listeners, you have insulin that's there.

Like you have all these doors in your brain that are locked, and insulin is the key to open the door so you can get your energy source into the cell. You've got all these doors that are locked and you have keys, but you don't have the right or you don't have enough keys, right?

Or they're just not working like they're not fitting into the lock. Because when we develop insulin resistance, we know that those cells upregulate their insulin receptors.

They need more insulin, the different types of insulin. And so that's the problem. The other thing that we know, and you can correct me if I'm wrong, but like the lymphatic system of the brain and the way our brain cleans ourself, it doesn't like lots of insulin in our brain either.

Right? Like it's supposed to go there, it's supposed to do its job and it's supposed to get out like so. We don't need all these extra molecules of glucose and insulin floating around in our brain, because it actually causes enhancement inflammation, it causes water shifting, things like that.

And so our brain wants that energy source, but it wants to come and go pretty quickly. And so a lot of the reasons that people sleep throughout the night, and they either wake up in the middle of the night or they wake up and they're not rested, is because they have high glucose levels, insulin levels in their brain throughout the night.

And when we are sleeping, our lymphatic system is supposed to come and clean everything out of our brain, right? And allow our brains to make connections while we're sleeping so that we have memory so that we learn it can't do that when it has all this information from high glucose and insulin levels. Correct.

That's my understanding. Absolutely. Yeah. Yeah. And so then you wake up and you feel terrible. So like if you if you're listening to this and you wake up in the morning and you sleep six, seven, eight hours at night and you maybe wake up once at 3 or 4:00 in the morning, just like wake up and you don't know why.

A lot of times it's a glucose issue. Either that or it's an alcohol issue. So if you drink a lot of alcohol or even drink one glass, that it's going to affect your blood sugar around 2 or 3:00 in the morning, you're going to wake up.

And then if you wake up in the morning and you are not rested, you don't feel like, hey, I can get out of bed and go. You probably have a good position, right?

Right, absolutely. And so that mental health. Yeah, it's so important. You know, it's very important. So when we have that mostly fat in our diet and then some protein, it's easier for our body to make these ketones.

That's what you're saying. And and insulin levels need to be low for the liver to make, you know, you can have plenty of fat around, but if your insulin is high, you're not going to make it.

So we got we have to get that insulin level really low to get the body to start making. Yeah, I tell my patients. So insulin is kind of tricky. And here's why.

In our liver our liver is really smart. So our fat cells in our muscle with insulin and glucose, you can only have things go one way at a time. So either things are going in or they're coming out.

That's right. It's not like a two way street. We got one way roads people. So when we're storing glucose into our muscle or restoring it into our liver, it's going in right.

Our insulin time. We've eaten. We're getting the signal that, hey, we need to we need to take all this in and store it so it's going in. But when you're in that fasted state or your insulin levels are not high, they haven't spiked, then

things can be made and come out like ketones.

But it's not a two way street. And that's why weight loss is difficult and people don't understand that. When your insulin is high, it is almost impossible to lose weight.

I have thousands of people I can prove it to you as soon as I get their levels to go down, though, it's like, oh my gosh, it came up. I saw a girl today.

We've been struggling with her insulin levels for 3 or 4 months, and I told her we got to get it under five. We got it under five. Well guess what? Last month I saw our labs and it was under five and I started and she's like, I lost 12 pounds.

And I'm like, you don't say, oh, I've been telling you that for four months. Like it goes one way, goes in or comes out. And so that's the point with, with the ketones, right.

Is like in order to make ketones, your insulin cannot be high because then things are going to be going in. And so they can't we can't be breaking down that good source of fuel for our brain.

That's exactly right. And so that's that's one of the important mechanisms. The other really important mechanism is that ketones are a signaling molecule, especially to our mitochondria.

So they're telling the mitochondria to make more of themselves and to recycle the old ones that aren't working well and make better functioning mitochondria.

And that has far reaching effects. As you know, mitochondria are making energy which, you know, in of itself is enough of a reason to have healthy mitochondria.

But in the brain and in other cells, they're doing lots of other things. It's a size just making energy. They're involved in neurotransmitter release in the neurons.

They're involved in form. The first steps of hormone production. They're involved in gene expression in the nucleus. They're actually signaling the nucleus to turn on certain genes and turn certain ones off.

So when the mitochondria are doing well, the brain's going to be well, we talked about before that the brain's the energy hog. It's, you know, using about 20, 25% of the energy in the body, even though it's only weighs, you know, about 2% of our total weight.

So, you know, it's really outsized need for energy in the brain. And so the mitochondria, you know, function better, you know, has far reaching benefits for mental health.

Yeah. And, and my listeners know, you know, mitochondria. So we have like a ten step approach to health that modern endocrine step one is your mitochondria.

Because if your mitochondria don't work it doesn't matter. Doesn't matter what you give someone. It doesn't matter what hormone you give them. I don't care if your mitochondria don't work, then you don't make energy.

Your cells, like you said, can't fix themselves. They can't repair themselves. You're not going to get better. And so your mitochondria are very important.

You have to make ATP from, you know, the Krebs cycle. You have to be able to make energy. You have to be able to recycle yourself and make new. So ketones are a big part of this.

So that's important. Yeah. Okay. And I know you're you're know a lot about inflammation. But you do know that mitochondria are one of the most important ways, to resolve inflammation that's out of control.

There's a there's something called a cell danger response, which Robert Navios has written a lot about. He said at UC San Diego. And he's really shown that mitochondria are orchestrating the inflammation response, and they're orchestrating the the resolution of chronic inflammation as well.

And so having healthy mitochondria is part and parcel of reducing inflammation, which is one of the other ways eugenic that works great at reducing neuroinflammation.

Yeah. Repairing your mitochondria I knew a little bit about that because of SS 31. I don't know how much you know about SS. Nobody wanted to die. I use it on that one.

Yeah. So I use it to help restore mitochondrial damage in people with really significant autoimmune. So, you know, a little bit about okay. So that's so, so we know that ketones are important for our brain. You.

Brain Insulin Resistance and Energy Metabolism

So I've said this the you know, clinical psychiatrist has confirmed this. The metabolic clinical psychiatrist has confirmed this. And so you know, you mentioned, you know, dementia and so dementia ADHD anxiety, depression I mean, these are all things that are like astronomically going like this, right?

So like OCD, ADHD in kids, this is what kills me. Like if you're listening to this and you have a child that has ADHD and you have them on a stimulant medication, tell us your thoughts on that.

Like, I mean, in my mind, kids act like that because of what they eat, right? Like if you feed your kids Pop-Tarts, sugar, a bunch of crap, and then you send them to school and you ask them to sit there and learn, they're not going to be conducive in that diet.

They're going to be disruptive. You're going to want to get up and move around because their blood sugars are dropping and they feel like crap. And oh, by the way, they're probably not sleeping very well because of what you're feeding them.

And so they don't feel well. And so then they are going to get in trouble and they're not going to do their work, and then somebody's going to get annoyed because teachers can't deal with 20 of them, and then they're going to try to put your child on a medication that affects so many hormones in their body and how they grow.

And like, this just fires me up. And then you get people who have been on this medicine for five, ten, whatever years. And they come to my office as a 20, 30 year old.

They're like, I have ADHD. So I've been on the stimulant forever. And I'm like, do you really? I don't know, I guess I'm like, well, what do you eat for breakfast?

Pop-Tarts or I don't, or I go through Starbucks and I'm like, you don't have ADHD, you have a glucose problem, right? I mean, I don't know, am I wrong?

Like, are there really millions of kids and adults that have ADHD? Or do we have a metabolic issue? We have a metabolic issue, for sure. Absolutely. You're absolutely right.

Now, I mean, there are definitely some situations where it gets really bad. And I certainly sympathize with the parents and the doctors and the teachers and figure out what can we do.

And we're asking them to make this huge change in their behavior and eating totally different things. But if they could do it, it would work. Absolutely, absolutely.

So would you recommend a ketogenic diet for kids like that? Like, let's say we have a 13 year old that has severe ADHD or are we giving kids ketogenic diets? Like, what are we doing?

Well, they do an epilepsy. That's where this started. And it's been done for decades and decades in pediatric epilepsy that when some kids are on three four antiepileptic drugs and they're still having seizures, that's when the pediatric neurologists start talking about ketogenic diet.

And one would think that maybe they should start talking about it sooner, given that this is the big gun and it's natural and has no side effects. You know, however, it's usually reserved for sort of last resort, but it actually will stop the seizures most often, even in those kids where the medications couldn't stop them.

And when that happens, with kids now, we can't say this would happen with adults, but with kids with, epilepsy, often they can be on the ketogenic diet, come off their antiepileptic drugs, and then after a few years on the eugenic diet, they can often taper off the diet and still remain seizure free is absolutely incredible.

As the most brain disorders, we can't deal like that. But in this case, we've not seen quite a lot. Which is incredible. What is the thought process behind that?

Like, do you think these kids are having seizures from inflammation from, like from diet? That's a thought I don't I don't really I mean, I'm not an expert in epilepsy, but, I mean, I think what it says to us is that there is some kind of healing process going on for those years that they're on this diet.

Maybe it has to do with improving their insulin resistance, inflammation. We know that, you know, it's helping with oxidative stress as well. It really changes the gut microbiome as well too.

So you know, the gut you know, brain axis is huge. So that could be one of the other ways in which we get that permanent healing of that. I don't think we really know the answer.

But when you ask a question about, you know, kids with ADHD need a ketogenic diet, I don't think most of them will need a diet. But if you change it up enough so that you're getting adequate protein, healthy fats keep the sugar down to a minimum.

Get rid of the processed foods. That is probably going to be enough for most kids with ADHD to reverse the condition. They're not necessarily going to need to go to the full version of the diet.

So we know we know it's safe in kids, but I don't think it's probably necessary. How long do you have to put if you're on a diet like this or an adult on a diet like this before, you're going to see changes in symptoms for ADHD.

You know, I think again, it depends on how how well you do it, you know, how strict are you going to be if you really go to a purely whole foods diet, get rid of all the sugar, really nice proteins of that.

Could be very quick. I mean, within a few weeks, that we'd see changes like that. What about like, autism? So that's another one. So autism spectrum, you know, these, these kids that, and the only reason I know even a little bit about this is because I see a few of these kids now, although I don't see kids, but I do it for friends.

I do it for, you know, but I look at these kids that like, I've done gut studies on these kids and I'm like, what is going on with your stuff? You know?

And it's really hard because a lot of these kids, you know, they have food aversions or they'll only eat like 5 or 6 things or. But, I mean, what do you think about that?

Is there any tie to insulin, what they're eating with autism. What are your thoughts on that? Absolutely. Well, I mean, we know that autism is really one of these quintessential gut brain access disorders.

You know, microbiome, gut brain access disorders. There's always got issues almost always in autistic. Right. As you said. And there have been some studies of using ketogenic diet and as an autism.

And it looks pretty promising. Again, not necessarily easy for a family to institute, especially, with a kid who's

getting older and is expressing preferences.

But if you can start at younger in an autism situation, you probably wouldn't be that hard. And I would recommend for for autism, especially in, you know, more severe kind of autism, you're trying out a colleague, whole foods Degenek diet.

You would even maybe recommend ketogenic diet with with autism. I would okay. And I mean, are you alarmed? Do you see this like I do see do you see kids?

I don't work with kids. Yeah, I'm an adult psychiatrist. So, I mean, but of course, you know, I have some experience. Yeah, there's you see, people talk to you about their kids all the time.

Yeah. I mean, do you see this, like this trajectory of autism, ADHD in kids, just, like, just very different. Huge. You know, and I wonder how much of it to, you know, we can blame diet.

But then kids stare at screens all the time now. Right. And they watch TV and they don't go outside and play it just it's different. There's lots of things that are different, right?

Oh, yeah. It's all connected. I mean, I think, you know, in, in the program that we do, we we're trying to get people outside multiple times a day, going out in the morning and seeing the sun exercise.

All of that improves metabolism as well. Reducing blue light at night, using overall screen exposure. All of that makes a huge difference. And, you know, it's as you said, I mean, you know, things are different.

And there's a reason why our culture has changed the way we interact with our environment, really significant ways. The two years. Yeah, unfortunately for the worse.

Yeah. So I have to ask you this question to you because I know my listeners want to know this, but do you feel like there is any correlation with vaccines or certain vaccines and an increase in ADHD, autism?

Any of these? I think it can be the case with certain certain kids. I mean, I think, you know, certain, you know, we have different genetics, as you know, and sometimes some of our genetics are not very good at detoxifying.

And there's definitely agitation in vaccines that are hard to detoxify. And we give kids, you know, now, 4 or 5 vaccines at a time. And that may overload their system.

So I don't think it's the only reason or the main reason why we have more autism.

Ketones, Mitochondria, and Inflammation

But I certainly think that that, you know, that way we do the vaccine schedule could be looked at and, yes, it's not my area of expertise, but but that's that's what I've learned, you know, from my read.

So do you, do you think maybe we should just look at giving kids vaccines more? Spread out? Not for at a time. Not for before they leave the hospital.

Not. It's okay. Yeah. Things like vaccines are incredibly important, incredibly valuable. But I do think I saw one study where a pediatrician who had a different schedule and he just spread it out more, and he compared it to before he did that different schedule when he was doing it, the standard schedule, and saw significantly better outcomes, mental health outcomes, metabolic outcomes, all kinds of outcomes.

Yeah. When he spread it out more. And so I think that was a really cool study that was just a private pediatrician who really was interested in this. Yeah.

And it's really interesting. Yeah. I mean, it makes sense. Like you said, detoxification is so important and we

detoxify through our through our GI tract as well.

So if you have these kids who are not metabolically as healthy as they could be and they're eating garbage, and then you're also giving them, you know, things in a vaccine that they have to metabolize and get rid of.

It just kind of make sense that it sort of overloads the system. Right. So like the bathtub analogy got water flowing in the bathtub as long as the drains open were good.

But if the drain starts to kind of close and the water keeps spilling, eventually it's going to overspill. So if we can't detox by from our gut when we're giving kids forward by vaccines at a time, we at least honestly.

Yeah. Okay, so I just had to that. On the topic of kids, there's a really interesting study that really highlights this point between the connection of metabolism and mental health that that might be worth hearing about.

So this is published in 2021, in Jama psychiatry well respected journal. I can send you the link for it. For your listeners interested. And they looked at metabolic helping kids and then mental health outcomes.

And they got to lead adolescent and early 20s. And so the top, quartile of insulin resistance at age nine had a threefold increased risk of schizophrenia in their one, which is incredible.

So the metabolism problem comes first, a severe mental health problem later. Similarly, in puberty, the top, I think was also quartile or quintile of the kids who gained the most weight during puberty had a five fold increased risk of major depressive disorder in late teens, early one.

So that's just, you know, profound risk of really severe mental health problems in the kids who are had the worst metabolic health when they were younger.

Yeah, that's that is interesting. You know. And I would I would probably I would believe that, I was a very overweight child. My sweet father used to say, you're not fat.

You're just really pleasantly plump. I was a very fat kid. I weighed as much when I was nine as I weigh right now. And I will tell you that when I was in my early 20s, teens, and early 20s, I had some pretty debilitating anxiety.

And thankfully, you know, my diet wasn't much better. I mean, it was better to the fact that I wasn't morbidly obese, but I was still eating Taco Bell and processed foods and all the things that I thought were fine.

As long as, you know, as a 20 year old girl, you're like, well, I'm only eating 1500 calories a day. Although it's being burritos from Taco Bell and Oreos, it's just 1500 calories.

So I'm fine, right? I don't look morbidly obese anymore, but until I got like, a good therapist and got a good health regimen and started exercising and eating better, I had some pretty debilitating anxiety and I could never figure out why.

And you know, I had all these doctors that gave me medicine to make it better, and it didn't necessarily make it better. And I remember one day, like in my early 30s, when I finally was like eating like I was supposed to and exercising, and I just realized, like, you need this medicine anymore, you know, like, at all.

It was great. And but I will tell you, you know, and I eat pretty good in general. But if I have like a week or so where I go on vacation and I'm just like eating crap, like I feel like I get anxious, then it's really interesting, you know?

Yeah. If you pay attention, the connections are right and they're right there for us to see. Yeah, yeah. And so I'm not even kidding you. I had these conversations in my head sometimes, like when I'm, when I've had a bad day and I'm like, oh, I want to eat that, you know, fill in the blank.

My thing is, like, I love these cake balls. They're gluten and dairy free, but they're just sugar and chocolate. And I

like to put peanut butter on them because that makes me feel better about it.

But I'll literally find myself having this conversation with myself. Like, you know, if you eat that, then you're going to be anxious tomorrow. What do you have to do?

What are you going to do? You need, you know, like, have this whole conversation that reminded a lot of people, like, it's not worth it. But I would believe that I really would.

And I think that that's a lot of the reason that people have issues like this. And I see it in clinical practice all the time. You know, I see these people with insulin levels who are super high and we fix their insulin levels.

And when they come back, you know, I'm like, I'm very excited that they've lost weight. But I you know, my question is always like, well, how is your anxiety?

How is your sleep? You know, I didn't think about it. It's so much better, you know, and that's like that's the best thing. And that's what I wish. That's how I wish medicine would go.

Like, you know, traditional medicine has failed us, failed me. That's why I do what I do. And psychiatric traditional medicine has failed you. And and so we really, you know, need to be thinking about, like, what can we do to get what caused this, like, what is the root cause of this?

And what can we do to get people off of medications if it's possible? Like I said, I know there are people who really need these medications, right? Schizophrenia, if you are if you are listening to this and you're full blown schizophrenic bipolar, please do not stop your meds.

Right? Like that is not what we're saying about you can get with you can get with somebody who can work with you and help you have less, manic episodes or depressive episodes or, you know, but there are a lot of things in this country that I think that we could mitigate medication with if we just looked at metabolic and and lifestyle.

Yeah, absolutely. Yeah. I mean, I echo exactly what you said. People shouldn't just say, oh, well, you know, I heard a psychiatrist talk about this. I should get off my, my medication that, you know, might be lifesaving, but there are withdrawal syndromes coming off medication.

So whenever someone lowers these psychiatric medications, it needs to be done in a careful supervision with someone who really knows what they're doing very slowly, very gradually, especially if they've been on it a long time.

That being said, there are plenty of people now with very severe mental health conditions schizophrenia, bipolar, excuse of affective disorder who have been able to come off their medication through a metabolic approach.

ADHD, Autism, and Childhood Metabolic Health

And many of them are very public on the internet. There's that there's a channel called Metabolic Mind that talks all about this, and there's another one called called Living Well, let's do the training app, that talks about that.

And there are, there are people who have been able to literally come off of these medications that they needed for many years, through this approach. So it is very powerful.

But you can't just do it on your own and you can't just starvation without something to take your place. Yeah, I would completely agree with that. And finding somebody to help you do it that you know is on your side is really important as well.

And the amazing thing, like I tell people this all the time and this is why I love this. I love talking to people like you. Our body was made to heal.

It's very full stop, like it was made to heal itself. You have to be give it the conducive environment and the things that it needs. But that's what it was made to do.

And so that's why if you just figure out normal physiology and how to return back to that normal physiological state, you would be really surprised what you can do.

Now, the other thing I want to say to people listening, though, too, is if you are struggling with any sort of psychiatric illness and you're thinking, me and I want to try to start getting rid of this psychiatric illness, and you can speak to this as well.

One of the things that I had to do when I was struggling with anxiety is I had to figure out, you know, what is causing that anxiety? Is there something you know from the past that we need to work through?

But then also, I had to look at how am I treating that anxiety and is it making it better because you know, to be 100% honest with you, in my early 20s, you know how I treated my anxiety with alcohol.

So that's how a lot of people come and work, right? And that makes it a million times worse, right? Maybe not at that time, but the next day. Right? Absolutely. Yeah.

And so you have to do some work with that too. If you're struggling with any sort of psychiatric illness and you need a good provider to help you with that, right?

You know, they needed a therapist. I have a phenomenal therapist. But so there's just lots of things that go into. Right. And and we can't heal the metabolism.

We can't heal the brain. If someone's using substances, like alcohol regularly or cannabis, which is the other very common one that people are using to try to self-medicate their, you know, their problems, which are very real.

And it's not so easy to stop. But like you said, you need to work with somebody. You need to get help with that. Those things will absolutely prevent any healing and recovery.

So then can you tell me from a psychiatric standpoint, talk to me about alcohol, marijuana, mushrooms, all these things that people say, you know, alcohol, thankfully, I think is becoming kind of like cigarets were in the 80s, sort of like people are starting to realize, man, maybe alcohol is insane.

But what I don't like is the trajectory of people saying, well, but marijuana is fine, or microdosing mushrooms is fine or whatever else. So I mean, if if it is.

Anyways, so you tell me one of those things due to your brain, like are they good or they're bad? Or is there any amount of mushrooms or alcohol or marijuana that doesn't is not toxic to your brain?

Yeah, well, I think dose makes the poison in some respects on these days. So, you know, a couple of drinks a week, you know, people may still be able to be very healthy with that.

It's not going to enhance their health like people used to think. People, you know, people who say, you know, a glass or two of wine today is good for your health, good for your brain health.

Absolutely not. But I think you can get away with a little bit. And I think the same about cannabis. Some people can get away with a little bit. Some people can.

A lot of people with some of these severe mental health conditions, even one use of cannabis will make all the symptoms get much worse. And so again, it's, you know, depends on the person.

There's no universal to that, but certainly is going to get in the way of sleep quality, which we know is incredibly important for brain health, mental health, you know, brain detoxification system, all of that.

None of that's going to work. Well, if you're using these substances, it's not going to work as well as it should. It's going to get in the way of hormones.

You know, obviously, all of our, you know, our growth hormone, it's not going to be made in the same way if we're using substances. That being said, with something like psilocybin mushrooms, there is now a lot of research going on that there may be a role for those in brain healing.

However, you definitely need to be done under careful supervision. A clinician who really knows what they're doing right now. It's only in the research phase.

This is not, something that people should be doing on their own. And there's a few, you know, clinicians in certain states there that are using these things, and they know what they're doing.

But, you know, that's a sort of tricky one because, you know, it's not necessarily, toxic, but it's very dangerous in terms of, you know, what can happen during the episode, but during or during the ingestion.

And it needs to be done with the right setting, with the right detention, with someone there to help someone integrate that experience. There's some incredibly good research right now showing psilocybin can be helpful and major depressive disorder, when done.

But it's literally, you know, one psilocybin experience under careful supervision or maybe two, so not people just using this, recreationally on their own, you know, that certainly would.

Yeah. And that's what I was talking about. These are people who do you know, I microdose mushrooms every day or every weekend, like drinking alcohol or wine with my friends.

It's just microdosing. It's not a big deal. And like, okay. Yeah, sure. That's not what I'm talking about. I'm not talking about the supervised medical.

Right. So just I mean, yeah, we're just the, you know, don't shoot the messenger. We're just giving you our medical advice. But I think, you know, in my mind, anything that's toxic to your brain in any amount is definitely not going to make you back in your right.

Right. And so if you're healthy, if you're somebody who's listening to this and you're metabolically healthy, like, full disclosure, I like I have no anxiety.

No, I mean, do I get anxious every now and then when I have a to do list? Yes. But I am in human way better than I've ever been. I don't take medication for anxiety, you know, I'm not.

So, like, if I want to have a glass of wine, then I'll have a glass of wine, like, but I'm not going to have four glasses of wine and I'm not going to take a shot of vodka, and I'm not going to drink until I have to go to sleep, you know?

So I think that if yeah, if you are healthy and you want to have some of these things in small amounts, that's probably okay. But I guess my point was, I don't think that we should be trying to treat our psychiatric illnesses or our anxiety or anything like that with those.

That's absolutely. I mean, it's tricky. I mean, I think it can be, you know, subtle transition from, having one glass of wine or two to enjoy the end of the week to, you know, it's becoming something that's being used to treat the anxiety that someone doesn't want to acknowledge.

And so, you know, really honest introspection sometimes, you know, people can really feel like they can learn, okay, this is not a healthy habit anymore.

Or sometimes you know, once loved ones have to tell them that. And so it's tricky because, you know, our brains want more of these things. It gives us a dopamine hit.

And what anything that gives us dopamine hit, we're going to want to do more of. And that's true of not of substances, but our phones and as well the internet, you know, all that we're getting dopamine and our brain is going to keep going back to those things.

And sometimes, we need to really, honestly take a look at, you know, how that how those things are affecting. Well, yeah. With me, you know, I just I have a great therapist and it came to a point where I would say things to her like, you know, I had a really bad day, so I'm going to go home and have a glass of wine.

And she's like, that's how you're going to make your bad day go away. I'm like, well, that's just it makes me feel better. You know? She's like, we might want to evaluate that, you know, like a walk, a bath, a conversation with Rob wine, if that's the first thing you're thinking about, you know, just I mean, it's it is true.

It's very it's an introspective, like, you just have to you have to ask yourself like, you know. And so now whenever I have a bad day, to be honest with you, I'm like, I want to go home and, like, take my dog for a walk or I want to take a bath, or I want to get my sauna, or it's never like I want to have a glass of wine for me.

Absolutely. You know, after you. Okay. So then I have other questions. So we talked about glucose. We talked about diet. I'm assuming, you know, we talked about the ketogenic diet, but I'm assuming you're a very like whole foods not process.

So try to eat protein. Not a lot of carbs. Obviously your you know, is there any specific diet besides ketogenic that you recommend or do you tell people to take like Eat Mediterranean or are you just, you know, eat foods intelligent?

Like what do you tell your patients. Yeah. Great question. So yeah, I mean, I think, you know, the full version would be this ketogenic diet that's omnivore, meaning, you know, heavy on animal protein quality, animal proteins which are higher quality, and then really trying to get a lot of vegetables in for their fiber and phytonutrient content.

You know, polyphenols in plant foods do tremendously good things for our mitochondria as well. They almost do similar things to what ketones do. And it really good for our, our, our gut bacteria as well.

So we want to get those things in people healthy fat. So when we're talking about eating a high fat diet, the quality of the fat is super important. And so we want to get extra virgin olive oil, avocado oil, avocados, nuts and seeds, coconut oil.

We sometimes use something called MCT oil to boost ketone levels as well, which is a medium chain triglyceride that usually gets converted to ketones when the insulin low.

So that's, you know, sort of the general basis of the ketogenic diet. But if someone doesn't need to make ketones, we can do a version of that whole foods healthy diet that just adds a little bit more carbohydrate in there.

So they may have a little bit more fruit. Some of the, you know, starchy or vegetables could be added in. And so that's a version that I do with people quite a bit who maybe don't need the full version.

They'll do a whole foods low glycemic index diet. With as healthy as, you know, the healthiest ingredients that we can get for them and avoiding the things that are unhealthy. The process, for sure.

But some people are sensitive to gluten and the way that some people are sensitive to dairy and you do avoid that. So, you know, we need to find what's going to work for that individual first.

And then as far as you mentioned this, but being outside in the sun exercising, you're on board with that. Like we talked a lot about that. I think the circadian rhythm of people sleep absolutely full as well.

It's very powerful. Yeah. For brain health, you know, getting that circadian clock into and we know that that's what orchestrates the proper rise and cortisol in the morning and cortisol going down in the evening and melatonin going

up.

Natural melatonin, which is what allows us to sleep, but also orchestrates this beautiful detoxification process that happens overnight. And that all works well when our secreting rhythms are in alignment.

And yeah, so that's super important. And of course, exercise the data on exercise and brain health and mental health is enormous.

Lifestyle Factors: Sunlight, Sleep, and Stress

There is a, you know, recent meta analysis that, you know, I think there was 1100 papers and that meta analysis, I mean, so there's so much data on it.

You know, you usually do see meta analyzes with, you know, maybe 20 studies or 30 studies. We've had 1100 studies in it. And the effect sizes are really significant for exercise on these mental health disorders.

And so I understand if someone gained 50 pounds from their gastric medications it's not going to be easy to, you know, get in the gym right away. But if they can start small and build up, that's going to be a way out of this mess.

And it's something that they can do on their own. You don't need a doctor to do it for them, you know? You know, prescription, and it really works. Yeah.

Just walking. That's what I tell my patients. Just walk. Yeah. You know, walking is free to start there. Yeah. And then, you know, some sleep. We talked about sleep.

And, you know, I'm big proponent on being asleep in bed by nine, asleep by 930, making sure you're getting those hours between 11 to do the witching hours of sleep.

Those are actually the most important. You know, that's like from 11 to 2 is like six hours of sleep, like, that's when you release your growth hormone.

It's very important. Leading your brain. You want your, you know, your comfort system to be able to work. And so you're on board with sleep I'm assuming as well.

And stress reduction. Absolutely. Yeah. So you know, mind body practices is also very well researched in terms of its benefit on mental health and probably works through this, mitochondrial system, partly.

You know, they've done studies showing that when people are meditating or doing a mind body practice, it actually changes the formation of the mitochondria in the cell.

And so they're responding to the stress that we're under. And they're also responding when we're getting into that relaxation zone. And so very, very powerful.

And so, you know, for a lot of people, it's hard to meditate. They don't know how it's it's challenging sometimes when your brain's real busy, I usually start people with breathing exercises.

Just everyone can breathe and breathe according to a timer. That in and of itself and calm down the nervous system almost immediately. And so that's a really accessible mind body part that almost anyone.

Yeah. So the first time I ever so I, I'm a terrible meditator. I'm still working on it. But what I do do is breathing exercises. And what really made me start doing it was when I started cold plunging.

So I and, you know, I put my mind to something. I'm going to do it. I'm not going to quit. I'm not going to give up. So, full plunging is really hard, especially when you do it in Oklahoma, when it's 20 degrees outside or ten degrees outside in the water you're getting in is 42.

And so where I really learned to use breathing was last year when I started cold plunging, I would get into my pool and it would be 42 degrees and it's 20 degrees outside.

It's snowing it and I would get in and immediately, you know, here it is. The feeling is just it is awful. And I remember my husband would be like you said, you're sitting in there for three minutes and 20s and I'm like, I'm getting out.

You know, it's like, know every everything in your body hurts. But I, I read something about breathing and how it like, calms everything down. And so when I cold plunge, I use the for for I box breathe.

So I breathe in for four I hold it for four I breathe out for four I hold it. And so when I called, plunge it every time it's heart, it hurts. Every time I call almost every day.

But as soon as I get in and I feel that initial like, oh, and I start that breathing technique, it's it's I can't explain it, but it's like two cycles in.

So it takes about what? That's not even 30s. It's almost like the pain is gone and it's just like, I'm calm. It's the weirdest thing. And if something happens, like my husband talks to me or something triggers me and I get out of that, it hurts again, like it's, you know, it's just it's very it's a powerful thing for sure.

Breathing. Oh, pain is, you know, largely in the brain. Right. And even though we have, you know, nerves everywhere and the nerves are sending signals, but sending signals to the brain and the brain can, you know, control those signals that are coming in and credibly powerful what you're describing.

I mean, that's that's an incredible example of that. It is so wild. And I do it every day. And it is just I don't know how to describe it other than like I'd cold plunge by myself.

Now I joke that I'm somebody is going to find me dead in my cold plunge because, like, I don't want anyone in there bothering me because if they get me out of that, like breathing rhythm, then it hurts so bad and it's hard to go back in it.

And I go on for five minutes. Now, that's my thing. Every day is five minutes. And so, but it is just wild, like, so if you're listening to this and you ever have to do something really hard or you want to do something really hard, I tell people this all the time, try box breathing because you will be shocked, you know?

And just like when I get anxious or I, I don't get anxious very often anymore, but I do have my days. And if I can go in a room and just shut the door in box, breathe.

You just feel your heart. Just your heart rate just comes down, right? It's just it's the coolest thing. So I'm not a good meditator, but I am a good breathing.

So any any mind body practice that you do regularly is great. It doesn't mean meditation is not magical, it's just anything. So if I do it for five minutes every morning in my cold once, then I'm benefiting my mitochondria.

Absolutely. Well, you're better than your mitochondria for the whole hundred. That's the only reason I get in there. I promise. The whole time I'm, like, psyching myself up to go in there.

I'm like, okay, I'm going to change my weight. That's brown fat. So this is going to help my metabolism. And when I make my mitochondria better, you know, I like have this whole run down.

I go in my head, well, I'm like, get my timer if music on. And then I get in and then I do it for breathing. Then I get out. I'm very happy when I'm done, but here's, here's an idea.

Maybe try the box breathing for a minute before you get in as well. It's actually really save yourself that discomfort in the beginning. That's true. I'm going to try that.

I'm going to try that tomorrow. I'll I'll report back to you tomorrow. I'm going to do that. That's a good thought because I do have this whole routine to get me ready.

It's almost like, I have to blare my music. I listen to the same song. It's really loud. It's right at five minutes. So I know, like, I have this whole routine to get me going, but all blocks breathe for it.

That's a good look at that. So the other question I wanted to ask you when we were talking about all this side effects, you mentioned, you know, side effects of these antipsychotic medications.

And so just for people listening that don't know, you did mention weight gain. And that's one of the significant ones I see. Yeah. What are some other side effects.

Just let's say somebody is listening to this and they're on depression medicine or anxiety anything. What are the most common side effects of medication.

So I think sometimes as people we get put on medicines. We've been on them for years. We don't even think about it. And we may be having some of these side effects and don't even realize it's coming from our medication.

Yeah, well, different classes have different side effects. So we'll we can start with the psychotics. It's not just weight gain. It's really full blown metabolic syndrome.

So glucose dysregulation, anemia, elevated blood pressure all of that is associated with the and they are also associated with these neurological side effects.

There's a term called tardive dyskinesia which is really a dreaded side effect because it's neurological side effect where you have extra abnormal movements, usually of the face or the, hands.

And for a lot of people, it doesn't go away, you know, when you stop at age. So that's a really scary one. For the antidepressants, which are very commonly prescribed, we do see some weight gain.

Not as much as with the psychotics, but absolutely. If we can associate with antidepressants, there's sexual side effects. A lot of these are antidepressant, which is not talked about as much as it should be because it's very common and it doesn't go away, when you know, you have when you once it happens, if it's on with that medication, sometimes when you stop the medication, it'll go away.

But you know, you're going to have that for, for the duration of medication. And, you know, some amount of sexual side effects is probably more than 50% of people taking serotonin or antidepressants.

So that's pretty severe. And then emotional blunting of the other one that the find. So some people, you know, find that their aggression and their anxiety is much better on one of these antidepressant.

But then they say, but I just feel my emotions the way I see it. And that's very common. And so, you know, I think, again, these medications can be helpful, incredibly lifesaving.

And for some people, they want to stay on it forever. And that's fine. They want to. But for many people it's not really curing their problem. They're still depressed, they're still anxious, and yet they're dealing with anxiety.

That and then finally with the antidepressant, there's a really significant withdrawal syndrome research in our practice. And it's something that, you know, field of psychiatry has it recognized and not.

But there's now pretty good data about it, especially for people have been on the medication for a long period of time. And so to come off really require some effort.

Use them on these medications. Yeah, I'm glad that you mentioned those two things. So the thing I see the most that frustrates me besides filmmaking is people get on these medications and they come to me on the hormone

specialist. Right.

And one of their main complaints is low libido. Like, I don't, you know, I never want to have sex with my husband or I never everyone have sex with my wife.

And you look at their meds and I'm like, well, you, how long have you been on the citalopram? How long have you been on? Five years. And like, nobody's talked to you about this? No.

You know, and it's really frustrating, especially for women. You know, when women go through menopause, I would say that 85% of doctors, if you're a woman and you're going through menopause and you tell your doctor I'm having hot flashes or I have fatigue, or I have, what do they do?

They write you in SSRI, right? That's what they do because they don't know how to deal with it. They don't know what to tell you. They haven't been they haven't been taught school.

They don't teach you these things in school. They don't teach you anything about school. They don't even teach oncologists that it's very well in school.

And so there are millions of people out there who are on SSRI for depression or anxiety when it's a hormonal issue or it's a metabolic issue and then you're having other issues like low sex drive, which then make sure depression worse and it makes your weight worse and it's medication driven.

So I'm glad that you mention that because I try to get people off these medicines. And then to your point, when we do talk about getting them off of it, it is a process.

It is a very long, very tedious process. And you don't normally feel very well, but you have to do it with the help of a provider for sure. Yes. And the slower the better.

For many people, you know, something like 10% of the dose per month. So, you know, that can really be a, you know, a year long process. It's someone to sit on one of these medications a long time.

That's sometimes how slow we have to go to to get off the medication. Without some pretty significant withdrawal symptoms. Yeah. And and then too, like I see a lot of erectile dysfunction, you know, men or not.

And I see a lot of men are on venlafaxine. I don't know why you tell me this. This is a great question for you. Why do all men get put on venlafaxine and when they get put on Prozac?

Like what? Why? I don't understand why. I have no idea. There's no there's no male female difference between the response to an SSRI like Prozac or Celexa versus an NRI like X or venlafaxine.

I have no idea why more men would, but on that, there's there's nothing in the literature that would suggest why someone would be doing that. Okay. I just in my practice and maybe it's just me.

Like every 40 year old middle aged man is on venlafaxine, which, by the way, can cause Ed, you definitely can, cause Ed. And so that's normally why people are coming to see me in their 40s, unless they're having weight issues.

And I'm like, well, let's talk about the venlafaxine that you're taking. Well, I've been taking that for two years. And I'm like even worse, you know, and then anyways, so but I feel like every man is on venlafaxine and every woman is on, you know, Prozac, citalopram.

Medication Side Effects and Tapering Safely

It's just it's interesting instead of asking, you know why. So I'm glad you brought that up. So we've kind of talked about all of the, you know, things with mental health and metabolic issues.

And, you know, it's kind of been a somewhat of a damper, on, on all of this. But I want to end on a high note, which is I want you to tell people about this support.

So tell people about this program that you have I think this is phenomenal. And then I want to know, is there plans to have this in more than just you know, New York, but tell everyone about this.

Yeah, I mean, I, I'm glad you're asking because, you know, the message really is about hope and empowerment. Really? Yes. Because the idea here is that we actually have control over our mental health.

It's not, you know, mysterious. It's not some, you know, mysterious neurotransmitter imbalance that you're genetically programed to have. It's it's epigenetics, metabolism, all things that we can control with our lifestyle and, and some careful help from someone who really knows what they're doing about root causes, like yourself.

So the idea here was, you know, taking people who have had a really tough time with a mental health and immersing them in a whole metabolic program, and that's what accord is.

So we have a house that we renovated. We have this beautiful big teaching kitchen. I work there as a psychiatrist. We have a social worker who's the program director, is a full time dietitian and full time chef.

And a personal trainer who's getting full exercise. So people come and we put them on this individualized whole foods ketogenic diet, and we get them exercising at a level that they can get them walking after each meal.

We get them up in the morning seeing the sun and blocking the blue light at night. And I'm sleeping in a room to do mind body practices. And then we're obsessing what's going on the whole time.

So extensive lab work, continuous glucose monitor, ketone monitoring, daily, body composition measuring machine. That's telling us, you know, visceral fat and body fat percentage and mental health rating scales that people are filling out.

We're seeing the correlation between improving their metabolism and improving their mental health, and it's just incredibly fun. But that's, you know, people come in and they're, you know, really downtrodden, hopeless sometimes and they don't really quite believe in the power of what we're about to do.

And then, you know, a few weeks in and they're making some ketones and they're exercising and they say, wow, yeah, this is powerful. And then the goal is to teach people how to sustain it when they get home.

That's, you know, we can immerse people that we're we're doing a lot of the work, but we're trying to get people cooking the whole time that they're they're learning the diet, learning how to go to the grocery store, learning how to order at restaurants the right way because, you know, they just do it for a month or two.

They're with us, and then they stop. Yeah, it's not going to have that big of an impact. So the goal is to get people to be able to do it when they get home as well.

So the how long are they with you? Like a month or two months. Like how long is the program? So it's a minimum of a month. And some people can say two months or three months.

Usually, you know, it depends on how quickly someone can pick it up and learn and how severe the problem is. But we thought a month was sort of the minimum for people to be able to get enough that they could have a chance to be able to do this sustainably when they all.

How long have you been doing this? It's pretty new. Yeah. We just opened up, in the summer of 2024. Yeah. Okay. How many people can be there at a time?

So we have five beds and then we have a few spots for people as day clients. So people who live in the area or if some people, people come from all over the country to come to our program, some of the people Canada and

some of the interested from India right now.

So we're really the only place like if it's using metabolism specifically for psychiatric condition. Yeah. So, you know, more significant mental health conditions, are you looking at like hormones and cortisol and insulin and all that stuff that I love less strong lipoprotein and like inflammatory markers, CRP.

You're looking at all that all that stuff. Yeah, I do a very extensive lab looking at all of it. And then we check it when they come. We check it a month later and we check it another month later.

So every four weeks that they're with us. Yeah. What about gut studies? Do you do GI maps? I have not gotten in to do GI maps. You know, it's I mean, I've seen them done, my kids had them done, you know, you can see a lot.

In the end, the way I look at this is, you know, we can only do so much. We're already doing a lot of testing. We're already doing a lot of interventions.

But the the interventions that we're doing a really good for microbiome help. And if someone has specific gut issues, I will add in, supplements, probiotics, gut healing supplements for them.

And we've had good success with the combination of that really good diet. And, you know, a few supplements for people with, you know, not issues. So I haven't delved into the GI maps yet, but, you know, maybe, maybe some point we will.

Yeah. I just think it would be awesome to show patients to, you know, just show them how much of a difference I just in the nerd. And I want to know that what you're doing in a month like I because I do them.

So they all teach you. You need to learn. I'll teach you or. But no, I think that is amazing. I think that is so awesome. Thank you. Scott here. You told me about it.

Are you going to have one somewhere else? Is there like a plan to have one of these in every state? Or you're just going to kind of see how it goes or what?

What's the plan? We're going to see how it goes. I mean, I think this metabolic intervention, you know, for people with mental health issues is really important to spread.

A lot of people are hearing about it, learning about it, getting very excited about it. And then they go to their doctor or their therapist and say, oh, have you heard about this?

And the doctor says, oh, that's not going to help you. What are you talking about? Right. So first of all, we're doing a lot of education out there trying to spread the word about this.

But, you know, in addition, yeah, it would be great to have one of these in every in every city, you know, where people would come, you know, not too far away.

And you know, and potentially, you know, the day model, you know, doesn't necessarily have to be a place where people sleep. You know, people can come during the day.

We find and eat all their meals. You know, the education, do their exercise, you do their walk and all that stuff that they need, you know, can be done during the day.

So, it's definitely something I would love to bring, you know, to more people. And, you know, it's so new, but we're we're working on it. Yeah. So if you had one of those in Oklahoma City that I would that would be my jam.

I would be there every Saturday and Sunday. Like that sounds wonderful on spot. You definitely do. Let me go. Let me I think that's a really, really cool that's awesome.

So I was just thinking, like, my husband does real estate, we have rental houses. I'm like, how can we do one of those here? Oh, wait, I'm not a psychiatrist.

But, but I love that. Like, that model is amazing. Maybe we should make an accord slash modern endocrine house in Cabo. We can do, like, retreats. And that's how we have a wonderful house and how we can use.

No, I think that is that is really awesome. I think that is such a good because it is. It's overwhelming. Right? Like, I have people who come to me and I do such an extensive lab work.

But I do gut studies and I see it on their face when they leave. They're like, oh my God, right? And I'm like, we just have to start somewhere. Like we have to start doing something.

I've almost gotten to the point where, like, I want to do like when I do these blood tests, I'm only going to go over party or results before you come back, you know?

But but I want them to understand, like the extent of things that need to happen and change, but it is very overwhelming. So I think this is so neat. I love that you're doing this.

I think that's an amazing thought to keep people there for a month. I think it's amazing that to have it where people can come for the day, I'm just going to put this out into the universe because I truly believe in, manifestation.

But I want one of these in Oklahoma City. I don't care who does it. I'm happy to help. You gotta find a good psychiatrist here, though. But this. I mean, I have so many patients I can think of that this would benefit.

Do you care if I asked, like, cost, in case people want to know. Because we can put all your information and they can get a hold of you. Sure, sure. I'm happy to talk about the cost.

It is expensive, unfortunately. Yeah. I wish we could offer this at a reasonably low price for everyone. You know, benefit. And I wish insurance will cover it because in the end, it would save the insurance companies money.

They're not going to be paying for all these medications year after year. We're not going to be paying for all these metabolic, you know, chronic illnesses year after year after year.

I mean, think about, you know, the heart attacks waiting to happen that we for that, you know, by like ableism. So unfortunately that we're not there yet.

We're at the point where it's private pay. So for and residential first month is $36,000.

The Accord Program and Final Takeaways

It's a lot of money. And then it goes down in price in the second month. The third month someone wants to stay longer. If someone wants to as a day client, it's about $10,000 less for each month or so.

So if they don't stay the night, if they don't want to stay the night, I wonder, can they just come, like for a day or two or like a week? We, we don't think it's a great idea because, you know, right now we're trying to figure out how to get people to really institute this whole lifestyle changes themselves.

And yeah, they only needed a day or two. You know, they could probably get what they need from, you know, from a dietician and, you know, he's a genic dietitian and a lifestyle coach.

Or health coach. They probably wouldn't need to come. You know, it was just a day or two. And there are plenty of people who do this, you know, on their own at home with no immersion, does it?

You don't need to be in an immersive environment to be able to make these changes, but it's just we know that it's hard to make these changes on one's own, and that when you're in a place where it's all being done and you're

learning about it and other people are doing it, or everyone's doing the hard thing together, it's a lot easier to do it.

And then you have this captive audience where we do tons and tons of education as well. So why does this work? How does it work? I'm giving, you know, whole talks about, you know, how ketones help with the brain and how, you know, circadian rhythms and metabolism, you know, 100, 101 and, you know, insulin and mitochondria and, you know, glucose curves and all that stuff.

And people are, you know, really getting it. And that really helps to figure out why you want to keep doing it. But sounds to me like Doctor Bernstein, you need to write a book to put that out there.

But it sounds like you need to write a book. Okay. Well, so we're going to link all of your information to this in the show notes. In case people want to find you.

Where else can people like, do you have social media that people can follow? Do you have a website or are you on YouTube? Like give us all the deets. So I'm not a huge social media person.

I'm of that era of, psychiatrists who we were sort of taught to not do social media. I more recently gotten on to LinkedIn so people can find me on LinkedIn, and someone connects with me and they, you know, want to talk about metabolic psychiatry or have a question.

I'm happy to respond. I don't I don't do the other social media stuff much, but we do have also, you know, a website record which is Support Match.com so people can learn all about the program.

And we have lots of links on there and education on there as well. So, and like I said, there's a couple of really great YouTube channels about metabolic psychiatry.

One of them is called Metabolic Mind. And that has tons of educational content around all the stuff that we've been talking about today. And then there's also a wonderful channel called Living Well, now called Living Well After Schizophrenia.

That's, this, wonderful woman, Lauren Kennedy West, had so affective disorder has because of affective disorder, she had been posting and had a huge following on this channel.

She put herself out or had help getting on a ketogenic diet starting in the beginning of 2024. By, I think, October, she was off all of her medications.

And, symptom free, you know, living, a really high quality life. So she had to change her channel from living well with schizophrenia to living well after two.

That's awesome. Again, the body was made to heal. I really believe that right now, you just give it the right supports. So. Well, I'm going to end with three questions that I always ask every guest, so don't overthink them.

It's easy. One word answers. But everyone loves the question. So if I don't ask them, I get in trouble. Yeah. What is one food that's most beneficial and why.

So I'm going to go let's talk about for your brain one food that's most beneficial for your brain. And one I'm going to go with an egg. And if someone can afford it, a pasture raised egg is even better.

Protein. Tons of vitamins has choline, which is hard to get. It's the highest and the highest and colon. You know them all. It's really great for the eyes.

It has a special antioxidant for the eyes, and cholesterol, which we know is the basis for making all of our good hormones. And it's, you know, it's so it's got a lot of good things in there.

Great omega threes, especially in mastering eggs as well. So that's what I would say. We get a lot of eggs I love

eggs I eat two every. What is one thing that anyone can do for their health that's completely free.

That would benefit their health. And let's say maybe even their brain? So incredibly powerful thing is to get up and take a walk outside at sunrise to see the sunrise while you're walking is not not easy for a lot of people, but incredibly powerful and free.

So I highly recommend and I agree more. And the last question is what is one thing you wish you would have done differently for your health? Let's say you knew something differently 20 years ago about your brain.

What would you have done differently with your life? I would not have eaten so many carbohydrates. Okay, I became quite insulin resistant myself, even though no doctor ever tested it.

But in retrospect, I was very insulin. And even though I was exercising a ton, eating what I considered a very healthy diet whole grains. I put lots and lots of fruit, and I at one point, you know, you know, five, six years ago, before I changed my diet, I used to have to eat six times a day to be able to have a good, productive work day, because I would have breakfast and by, you know, two, three hours later, my energy was crashing.

And then I would, of course, reach for fruit, which would, you know, boost my energy for a little while. But then I'd be hungry again for lunch. I'd have to eat another snack.

Between lunch to dinner, I was very at all the signs of insulin actually in my brain. So I really wish I knew, you know, not to let myself get to that point.

So do you follow a ketogenic diet now? I do a, moderate version of one. I'm making a little bit of ketones. You know, I don't not shoot for the super high levels.

But yeah, I do a version of it. So. So do you eat any group, eat some berries, you know, some strawberries and some raspberries. But I don't eat other fruits too much at all.

Yeah. One other thing I was going to ask you. I forgot I have to throw this in here. The liquid ketone drinks that people drink. Do you. Is that good?

Is that not good? Does that work? And is really not because they taste terror, right. Yeah. There's there's a couple now that they're making the taste a little bit better.

They will boost your ketones, but only for a couple of hours. And so I think they're useful for people, especially when they're trying to get into ketosis.

Some people have a little trouble in that transition period. In the beginning, it can be helpful there. There's another area where they can be helpful if someone else wants to feel what ketones feel like.

And this is especially true for people who are really insulin resistant and that, you know, that mechanism. We talked about the first one of bypassing that cerebral glucose, hypo metabolism, the brain insulin.

It just so you can get that big boost of ketones just from taking one of those drinks and feel what it's like to get some ketones into your brain and see, does that make a difference?

And if it does, that's great. That's a sure sign that this would be a helpful intervention for you. But even if it doesn't give a huge benefit, we know this will be a helpful intervention for these other mechanisms to just take longer.

But I think there's a nice, yeah, there's a nice use case there, especially in people who are getting older where we're pretty sure they do have that brain insulin resistance.

And if people are starting to have memory issues and their 60s or 70s, that's a really good time for people before they get full blown Alzheimer's to think about a ketogenic diet.

And I think they can prove it to themselves just by trying one of those ketone drinks and seeing how much better their brain is. What which ones tastes good.

There's a the one that I've, recently tried that I really like. It's called ketone. So q I t o n e. And it's an interesting one where it's, it's a combine, a certified molecule that's partly, a ketone.

And then it's combined with a MCT molecule, which your liver will turn into ketones if your insulin is low. So if you have one of those in the morning when the insulin is hopefully low, you'll get the initial ketone and then you get the secondary ketone from the MCP.

And it tastes pretty good. It combines and drinks and has a pretty good flavor. So I think they've made a really good product. Well, Doctor Matt Bernstein, thank you so much for your time.

For coming on back to the basics. I think that this information is very beneficial for our listeners, and I applaud you for not practicing traditional psychiatry medicine anymore.

And I think what you're doing with this house is really, really, really cool. I love it. So thank you for everything that you do. Thank you so much. Yeah, it was wonderful talking with you.

Yeah. If you guys liked this information, make sure that you share it with people. So please share it. Make sure that you're following us, that you like our, stuff on Instagram and Facebook.

And then make sure that you leave us a review as well. Reviews. Let me know that it's worth all this time to do these and that you guys want to keep, you know, learning information.

And then on social media, let me know what else that you guys would like to learn about. Would you like for me to talk to you and we'll see you next week.

Thank you for tuning in to Doctor Talks. We hope today's episode has enlightened and inspired you on your path to optimal health. Each day is a new opportunity to make choices that empower your well-being.

For more insights and strategies, subscribe to our podcast and visit our website w ww di doctor Talksport.com. Stay connected, stay healthy and join us next time on Doctor Talks.

Real talks from real doctors on the issues that matter to you most.