



The Link Between Diet and Mental Disorders | Dr. Chris Palmer

[00:00:00] Guest Intro – Christopher Palmer

Darin: Hey everybody. Welcome to show, this is Darin Olien. This is The Darin Olien Show. I'm excited you're here. We're going to talk about brain energy and specific applications. My next guest, Dr. Chris Palmer, assistant professor of psychiatry at Harvard Medical School and the director and department of the post-graduate and continuing education at McLean Hospital. For the past 25 years, he has been an academic physician looking, researching, educating on how the brain works, how to help some of the mental disorders and the metabolic disorders of the brain. Now, keep in mind in this conversation, we talk about many things. We talk about how in front of him, he saw severe mental change because it changed their entire metabolic condition in their brain from heavy blood sugar, challenges of diabetes to ketogenic better insulin, unlocking situations from anxiety, depression, O CD, PTSD, and a lot more gnarly, even schizophrenia. So listen, I am not a ketogenic proponent. However, there is some incredible compelling research on what he's talking about, mental disorders. I don't believe in saturated fat and eating all of these things. I don't think the science holds up however it does as it relates to specific conditions for a specific period of time. That's what my belief is, I'm not saying that that is primarily Dr. Christopher's belief on it, but we had an incredible conversation on brain energy and the mental disorders that can be changed and reversed, and we agreed on more than I expected. So these help everyone. And certainly, the mental challenges right now are at an all-time high. The doctor really got into postpartum depression, anxiety, pain disorders, obesity, severe things, Alzheimer's disease and epilepsy and Parkinson's, all of that stuff. So there may be an application of ketogenic and also you can do a vegan keto as well. So sit back, relax, and enjoy this great conversation with this powerful renegade from within the system, seeing how we can change the patterns of the brain beyond medication and do things better to unlock the potential that the body and the brain has and having brain energy. So you can check out Christopher's book, brain Energy that is now out. So check it out. Enjoy this conversation with Dr. Christopher Palmer.

[00:03:19] Podcast Intro

Darin: You are listening to The Darin Olien Show. I am Darin, and it is my life's mission to find and share healthy and sustainable ways of living. In this podcast, I talk to inspiring people and professionals from around the world to uncover ways that we, as humans can improve our lifestyles, strengthen our mindsets and take better care of this beautiful planet we call home. If you are looking for motivation to take the next steps towards a happier, healthier life then you are in the right place. And I am stoked that you are here. So, let's do this. This is my show, The Darin Olien Show.

[00:04:02] Interview Commences

Darin: Well, thanks for jumping on here, and I look forward to discussing that interaction that you are dedicating what seems to be most of your life to the metabolic conditions as it relates to brain energy and brain metabolism and function. And congratulations on your new book, Brain Energy, A revolutionary breakthrough and understanding mental health and



improving treatment for Anxiety, depression, OCD, PTSD and the list continues, but it's super important. And looking at what you're doing, of course it's all connected. I'd love to hear a little bit about your past and then what kind of led you to this epiphany around these things. Mental health brain condition are essentially linked.

[00:04:52] Treatment - resistant mental illness

Dr. Christopher: I am a conservative, tried and true psychiatrist. I am at the bastion of conservative mental health. I'm at Harvard Medical School, I have been here for 27 years. I'm the director of continuing education here. I have done neuroscience research. By and large, I have worked with patients with treatment resistant mental illness, and that means severe, chronic debilitating mental disorders. I treat severely incapacitated people with things like severe depression, OCD, anxiety, substance use disorders, schizophrenia, bipolar disorder. And I will just say that I came into this field desperately wanting to Christopher help these people. And sometimes I do. Sometimes our treatments work, sometimes the pills I prescribe work and they work well. Sometimes the therapy psychotherapy I do works and works well. Sometimes even E C T works well shock therapy. But far too often our current treatments don't work. And I have been frustrated with the lack of improvement in the patients that I see. And early in my career, I kind of started wondering like, is it just me? Am I just a bad psychiatrist? Like why am I not getting everyone better? What's going on here? The more research I did, the more I learned, the more clinicians I talked to, the more researchers I talked to, I recognize this is the state of the mental health field. The overwhelming majority of people who seek treatment for a mental disorder do not get better, at least not fully. And over the long haul, they just don't. Even with a simple diagnosis like depression, the majority of people who get treatment for depression do not get all the way better. Whatever improvement they get does not last for years. And if you think I'm being too pessimistic, mental disorders are now the leading cause of disability on the planet. And the number one diagnosis that disables more people is plain old depression.

Dr. Christopher: Even though we got tons of antidepressants and psychotherapy and shock treatment and ketamine and psychedelics and all of it, they don't work for the majority of people who seek treatment. So we need new ways to think about and understand mental illness. And at the end of the day, I think the biggest conundrum is that we know all of these risk factors for mental illness, neurotransmitters, hormones, genetics, it runs in families. People are born this way, that must be it. But trauma and social factor, trauma, abuse, neglect, loneliness, all of these things come together to cause mental illness. But if you ask any researcher or clinician, well exactly how do those come together and how exactly do they cause mental illness in the brain? The answer is no one knows, it's too complicated. The brain is so complicated, nobody can figure it out. It's all a big unknown. And that's really where I was as an academic psychiatrist up until 2016 when everything that I knew was upended. And it was with this patient, a 33 year old man with schizoaffective disorder, which is a cross between schizophrenia and bipolar disorder. And this man had hallucinations and delusions every day of his life. He was chronically paranoid. He could barely leave the house. He had tried 17 different medications, but they didn't work for him. They did cause him to gain a tremendous amount of weight. So weighing 340 pounds, he asked for my help



to lose weight. And we decided to try the ketogenic diet within two weeks. Not only is he losing weight, but I start to notice this really profound antidepressant effect in him. And within two months he spontaneously tells me, you know, those voices that I'm hearing all the time, they're going away.

Dr. Christopher: And you know how I always thought that there was all Christopher these people out to get me? I don't think that's true anymore. And it probably never was. He started to realize that he really did have schizophrenia and that it was probably going away. That man went on to lose now 160 pounds and he's kept it off to this day. But he was able to do things that he had not been able to do since his diagnosis. He was able to go out in public and not be terrified. He was able to complete a certificate program, able to perform improv in front of a live audience, able to move out of his father's home at least for a period of time. And that completely dumbfounded and shocked me. And I went on a journey to understand what in the hell just happened.

Darin: Wow, there's so much there. I think your honesty is important around how severe this is. I'm a big fan of turning and facing both individually as well as societal issues because if we don't face it, then we're just like la, la, la, la. You know, we have our hands over our eyes, our fingers in our ears, and nothing gets better. Certainly nothing gets better if nothing changes. And I also like that you acknowledge being as high academically as you are and the position that you're in to also admit it's infinitely complex and we can't possibly understand all of it is also a very, very important piece to it all. I think the humility. So, I just want to applaud you for those two things because that's necessary and needed in this world more and more and more, especially as researchers and doctors and clinicians and the questioning, the discourse of, I don't know, but I'm willing to look and look and look and explore and ask questions and dialogue. But for you, after this next phase here and seeing this happen, then what were some of the steps that you started taking?

[00:11:02] Accidentally finding a link between a ketogenic diet and mental disorders

Dr. Christopher: The first thing that I was questioning was really just how the hell did it work? I knew that I couldn't ignore it. And fortunately this guy's father was involved in a psychologist. Another psychologist was involved in his care. I actually had to go to both of them a couple of times and say, are you seeing what I'm seeing? because I'm having trouble believing what I'm seeing. And they're all like, yeah, no, what the hell's happening? Like his schizophrenia is melting away and this is impossible. And I'm like, and I haven't changed his meds like this doesn't make sense. So I quickly started searching literature and at the time I knew that keto diet for weight loss and for diabetes control, but I did not know that it was an evidence based treatment for epilepsy. Turns out the ketogenic diet was developed a hundred years ago now for the treatment of epilepsy. And we have got actually a fair amount of research literature on it. And the reason that was particularly important to me is because we use epilepsy treatments in psychiatry all the time. We use medications. Some of your listeners might be familiar with - Neurontin or Gabapentin, Valium, Klonopin, Xanax - all of those are epilepsy treatments. We use them in tens of millions of people for psychiatric disorders. And so I quickly recognized, well wait, if this diet is an epilepsy treatment, maybe



that is what it's doing, maybe has nothing to do with weight loss per say. Maybe it's that whatever it does to stop seizures, maybe that's helping his brain too. And then I went on this deep dive into the neuroscience literature to understand exactly how does the ketogenic diet stop seizures? Like that's messed up like how does that work? And I found out that the ketogenic diet changes neurotransmitter systems, it changes calcium regulation, it decreases brain inflammation, it changes the gut microbiome it, it helps improve insulin signaling.

Dr. Christopher: It does all of these things. And that kind of started a whole new phase of my career because armed with that information, I started using this treatment in dozens of patients, but I also started collaborating with researchers around the world. I started hearing from clinicians and patients from around the world who had stumbled upon this diet more often than not just to lose weight, but they notice dramatic improvement in their psychiatric symptoms. And so I quickly started doing research on this, publishing articles, speaking around the world on it, and quickly became gotten an expert in the use of the ketogenic diet for psychiatric patients. I'm seeing patients with schizophrenia and bipolar disorder get full complete remission of their illness off psychiatric medications. And I'm thinking this is impossible. This goes against everything that the mental health field says right now about schizophrenia. Schizophrenia doesn't go away and it certainly doesn't go away off medications, and it certainly doesn't go away from a diet. And I'm like, what can this tell me as an academic psychiatrist about the cause of mental illness of these disorders?

[00:14:35] The Brain Energy Theory of Mental Illness

Dr. Christopher: Like I quickly recognize this is a really important clue to the complex puzzle of mental illness that nobody's been able to figure out yet. And because again, schizophrenia, bipolar, those don't go into remission. We have long known that diet and exercise, not necessarily the keto diet, just a healthier diet, whether it's plant based, whether it's just get rid of the junk food and processed food, whatever, healthier diets and exercise, we have long known those can help depression and anxiety. And most people know somebody who is kind of depressed or kind of anxious or even severely depressed and anxious, but they got cleaned up their diet, they started exercising and they got dramatically better. That's not hard for most people to believe, but a diet's not supposed to make schizophrenia, bipolar disorder go away. So that led me on this deep dive into the science and that science led me to develop essentially what I am calling the Brain Energy Theory of Mental Illness, which suggests that the nutshell of all of this science, and we can dive in as much or as little as you want, but the nutshell of this is that mental disorders, and actually all of them are metabolic disorders of the brain.

[00:15:57] Vivo Barefoot Ad

Darin: Your feet are an evolutionary masterpiece without a doubt and I really mean that. There are 26 bones in each of your feet, all made for natural stability. And over a hundred muscles, tendons and ligaments, and hundreds of thousands of nerve endings. All of these things are allowing you to stand tall. No matter what size you are, you got to admit the foot is pretty amazing. You just learned something here now. The truth is we have forgotten about



all the wisdom in our feet. We cover them up with thick padding thinking the softer is better. We're completely lost, the feet to brain connection come on. Our feet are meant to help us navigate our surroundings and feel stimulated. That's why I love the innovative footwear from Vivo barefoot. A study from Liverpool University showed that walking daily in vivo barefoot footwear strengthens the feet by 60% in six months. That's amazing. It also improves balance and physical function when compared to normal, narrow cushioned athletic training shoes. For these reasons and just because they feel fricking amazing on my feet when I have to wear shoes, I wear vivo barefoot. To try this amazing footwear for yourself, go to vivo-barefoot.com, and you get 15% off with promo code DARIN15 and your feet will be celebrating.

[00:18:08] Caldera Lab AD

Darin: If you are a regular listener to my podcast, then you already know how much I love Caldera + Lab. I never used to put much effort into my skincare at all. With so many terrible brands out there creating products that are packed with harmful chemicals, but then they market it as natural or organic. It was overwhelming to know who to really trust and believe me, I looked but Caldera changed that for me. They combined science and the power of plants to create skincare that has been clinically proven to improve the skin health. I have been implementing their three product regimen into my routine every day, and it's made my skin care so easy. I wash my face in the morning with The Clean Slate, then I apply The Base Layer moisturizer at night. I use Clean Slate again and then end it all with my all-time favorite, The Good. It's packed with 3.4 million antioxidant units. And it's the product that got me hooked on the brand. Honestly, a game changer, my skin has never felt better. One of my favorite things about Caldera + Lab is they go the extra mile and source it with all ingredients being either organically farmed or wild harvested with a team of botanists from Jackson Hole, Wyoming. Guys, go get this. This is a no brainer and women, it works for you too. To get 20% off your order, head to calderalab.com/darin or use the code DARIN at checkout. And to all my Australian and UK listeners, they can now ship directly to you. So do your skin a favor and head to the website today.

[00:20:30] Interview continued

Darin: I think just for everyone and the listeners, because on the one hand in physiology, when I first heard of ketosis was in my physiology class and they're like survival mechanism, the body this is what happens. If you're in ketosis, it's probably a really bad idea. You're in survival mode and I know people think they know what it is, but then their sensitivities around too much protein can kick you out and all of these other things. So describe what this guy and what ketosis is and then what that looks like in terms of someone moving forward. Put a caveat, even if they're listening, they know people who are suffering from, this is not a prescription, we're not telling people to go do this on people, but they can take maybe this information and give it to their medical advisors, et cetera. But let's unpack what ketosis is and then how someone would live into that ketosis living model of eating.

[00:21:45] What is Ketosis?



Dr. Christopher: So maybe the first thing to get out of the way is that there is a very dangerous state called ketoacidosis, and that most commonly occurs in people with diabetes when their diabetes is way out of control. And usually it's an association with very high blood sugars. The blood sugars are so high because the insulin resistance is so high or because the person didn't give themselves any insulin. And that means that the body is not able to use glucose as a fuel source. So it starts producing ketones instead. So ketoacidosis is really bad and life threatening and dangerous. Therapeutic ketosis is modeled after fasting. So fasting has been used for millennia in just about every culture in one way or another. Usually for healing practices, but also for religious practices in many cultures. So people fast, there's a difference between fasting and starvation. So fasting is going for a defined time without food, but you're not necessarily eating away at all your healthy tissue yet, you're going without food for a day or two or something like that or even just you're skipping a meal or two. And that can be intermittent fasting. But fasting, if it occurs for more than probably 24, 48 hours, most people will start to develop ketone bodies. So you burn through a certain amount of glycogen in your body and then your body starts burning fat. And these ketone bodies are needed to get up to the brain because fatty acids can't get to your brain and fuel your brain cells. So instead your liver takes fat, turns some of it into ketones, and those ketones can go up to your brain and fuel your brain. And then we have always got a baseline amount of glucose through; glucose neogenesis. Even if you're not eating anything, you'll still have some glucose because your body will make glucose. So the ketogenic diet was actually developed by a physician to mimic the fasting state. That was the whole point of the a ketogenic diet. He had noticed that fasting itself stops seizures. When the person with epilepsy starts eating again, the seizures come right back usually with a vengeance. And so he wanted to see could we trick the body into thinking that it's fasting when it's really not so that they don't starve to death, but they get the benefits, the antiepileptic effects of fasting. And so what does the diet look like? There are so many versions of a ketogenic diet. So, a lot of times people think of ketogenic diet as one thing, and more often than not, it gets into this diet wars of its bacon and eggs. That's all anybody's eating. They're just eating bacon, steak and eggs and that's all they're eating. And it's really unhealthy and it's socially irresponsible and we don't like it. And everybody's going to have a heart attack. Some people will do an all meat version of the ketogenic diet called the carnivore diet. Most do not, the majority of people eat both animal and plant sourced foods, but you can actually do a vegetarian or a vegan version of the ketogenic diet. I know a few people who are vegan ketogenic and vegan ketogenic could be various protein sources, but lots of nuts and avocados and olive oil with lower carb vegetables. So, you can have huge salads and other things but you are going to add extra fats to all of these plant sourced foods and they can be plant sourced fats. So, there are lots of versions of a ketogenic diet, but the goal of the ketogenic diet is simple. It's to mimic the fasting state. It's to get your body to start burning fat, it's an alternate fuel source. So again, glucose never goes away completely. So, our bodies will always have some glucose because some cells do need glucose. There's no other way around it. Red blood cells in particular and some brain cells appear to require glucose and they can't run on ketones or fats, but you're trying to get your body to go to a fat burning mode. So, the types of meals that people can eat, again, it's highly variable and I'm almost reluctant to give a prescription based on what I just said. I mean you could do a vegetarian version of a ketogenic diet; you could do an animal sourced food version like carnivore diet. You could do something in between. But the main goal is to reduce high



carbohydrate foods. So, you're not going to have starches, you're not going to have starchy anything, vegetables usually. So, no potatoes, you're not going to eat grains for the most part. So, no grains. You can have lots of vegetables, you can have some berries and you can have a lot of animal sourced foods, meats, fish, poultry, things like that. And the goal is again, to create ketosis and what that diet looks like in real life is highly variable. Oftentimes mostly dependent on how much fat the person has on their body. So, if somebody is really obese, it's actually really easy to get them into ketosis. If they're really obese, you could probably restrict their carbohydrates to less than 100 grams a day and they may very well be in a state of ketosis on that diet. The usual prescription is less than 20 grams of carbs a day. But again, it's highly variable and the goal of the ketogenic diet is ketosis.

Darin: Certainly, if you're carrying a ton of weight, I can see how this could be very beneficial. We all agree that getting them off of the high inflammatory foods, again keeping the severe mental illness side for a second, is it realistic? Because I have seen so many people say they're in ketosis and they're not even close, so they're not testing it, they have no idea. And when you shift that, and you also, we all agree, every diet that has some sort of common sense agrees again to get rid of the fake foods. So, you're going to have huge amounts of change, right? So, you're going to get this change. So, listening to this, where is it realistic for common people to keep this going? And do you recommend it for common people in a lifestyle perspective? And or when you get insulin sensitivity under control, then can you then start incorporating a brand-new way of eating that is holistic and increase the whole fruits and whole carbohydrates and have kind of a more of a common sense. I'm curious more than anything about what your point of view is on that.

Dr. Christopher: Yeah, so if it's okay, I just want to take a couple of seconds to take a big broad picture. So, what I'm arguing is that mental disorders are metabolic disorders of brain and there's actually a lot more to metabolism and brain metabolism than just diet. But there's no question diet is a major factor and is a powerful lever.

[00:29:00] Mental disorders are metabolic disorders of the brain

Dr. Christopher: But to give you some examples of other things that could interfere with brain metabolism, they're actually the common-sense things that everybody already knows. So, if you're overusing alcohol or marijuana or smoking a lot of cigarettes, those are really bad for your metabolism and those need to go if you're not sleeping, that needs to get better because sleep affects your metabolism and your mental health. If you have got hormonal or vitamin deficiencies, those can play a role. So, there are lots of things that can affect brain metabolism. Exercise is a huge one. Obviously not exercising is not good for your metabolism and really good vigorous exercise program can really benefit your metabolism. But in terms of a dietary intervention, the broad picture that I would paint is I'm going to put people into one of two categories. If you have a serious mental disorder, especially if you're on prescription medications for it, I want you to work with a mental health professional or a medical professional or someone. Why? Because you have got a serious mental disorder that's serious. It requires serious help, serious intervention, you deserve, competent care, what makes something serious? Any symptoms that are life threatening or dangerous,



suicidality, homicidally or agitation or aggression, hallucinations, delusions. Those are serious symptoms that threaten your safety or the safety of others. So please work with a professional. You can still do all these treatments, these metabolic treatments, but I just want you to get safe, competent help.

Dr. Christopher: And then there's another bucket of people and this can range from people with moderate mental disorders, even some who are on prescription medications who want to just improve their mental health. But it can go all the way down to just people who feel I have brain fog, I'm burned out, I'm not happy and peppy like all these other people like that Darin guy, he's so happy all that. I'm not like him, I want to be like him, I want his energy, I want some of that. For you, I'm going to want you to first think about all those other factors I talked about, substance use, sleep, stress, those kinds of things. Are you exercising? Get those things in order. If you're using things that are poisoning your metabolism, then get rid of them. Stop them because that could solve your problem right away. Maybe you don't need a change in diet. But I think the first step that I would is a broad measure for somebody with like burnout, fatigue, mild depression, anxiety. I would actually say see if you can clean up your diet. Lots of ways to do that and lots of options and choices. And I'm not here to tell you which option you have to choose. If you want plant-based omnivore, I go for it. But I think exactly what you said, get rid of the fake stuff. If it's coming in a plastic bag and it has an ingredient list more than four ingredients and you can't pronounce and define what all of those ingredients actually are, then it's probably not real food. It's got some real food in it and it's probably got some fake food or chemicals or whatever we want to call that. But start with maybe clean up your diet, focus on real foods. Whole foods doesn't mean you have to eat them as the whole thing. You can have apple sauce if all it has is apples in it, that's still a whole food, it's just mashed apples. But focus on real whole foods and for some people that can be enough. Some people don't even have to do that. They just have to get rid of the ultra-extreme junk. So, for some people clean up the diet and for others it might be something else. It may be carbohydrate restriction, slowly but surely. See if you can reduce your carbs because if you are insulin resistant, lowering your carbohydrates can be helpful to help you regain your insulin sensitivity. And as you said, once people do that, sometimes they usually, more often than not, they can start to reintroduce carbohydrates into their diet and they're perfectly fine and they can manage them.

Dr. Christopher: Once they are fully sensitized again and more metabolically healthy, they can handle more carbs. So, I think there are lots of variables. If people want to try a ketogenic diet to treat mild depression anxiety or moderate depression or O C D or something, I'm in full supportive and I have talked with actually dozens and dozens of people who have dramatically improved sometimes chronic disorders. Like a few people that I know, chronic O C D, they were trying medication after medication, it was not getting better and they did a So, ketogenic diet kind of on their own. They wanged it, they did ketogenic diets on their own and their OCD pretty much went into remission and they ended up being able to get off meds. Because again, the ketogenic diet, a lot of people in this field, there are these diet wars and there are people who hate the ketogenic diet and say it's not a healthy diet. I am a brain physician so to speak. I'm a psychiatrist, but I focus on brain disorders and I actually don't see the ketogenic diet as a diet. I see it as a brain therapy because it's



changing neurotransmitters, it's decreasing brain inflammation, it's doing all sorts of things to brain cells. Ketones have a special place and forcing your body to produce ketones creates metabolic changes in the body and brain that can be beneficial for some people at least.

[00:34:07] Nootopia AD

Darin: You know, if you were like me, you want to get the most out of your day. Oh my gosh, there's so much to do all the time. And when the brain is cloudy, it's hard to focus man. It's hard to perform. And that's where Nootopia comes in. The experts here have improved cognitive functioning with these supplements and designed for you in mind. There's a cool thing of customizing that you can take a survey and you get your Nootropics customized to your needs based on the questionnaire. So then as you take Nootopia, you will fill out more information of how you're feeling each day and you get to keep tweaking in your regimen to get maximum results. It's really, really cool. Unlike other neotropics on the market, Nootopia uses only organic based compounds and healthy ingredients. So, no synthetics, no fillers, no weird flavoring and no blunt force caffeine's completely science backed plant nutrition meant to boost your brain and make you feel amazing. And you don't have to take all the pills every day for it to work. The concentrated formula means one dose is effective as 5 - 10 capsules of some weird synthetic neutronic. I have been using their power solution and others that I really like. It works. I have noticed a huge difference in my focus. So, to experience this brain boost for yourself, head to www.nootopia.com, use the code DARIN at checkout to get 10% off.

[00:38:48] Children and mental illness

Darin: You know 2.7% of all Americans are deemed healthy and I'm like wow, the fact that we're running around with immune metabolism, disease fragility in such a degree gets already beyond a fire. It's like blazing and enter in any sort of stress, any sort of pandemic, whoever's not in that 2.7%, they're susceptible to all of that stuff. So that's where I kind of go. It's like man, what are we doing? And like I would love to get your take on, we have the rise of mental disorders and children and kids nowadays. Like I would love to get your take on what you think about that stuff and maybe how we can, and parents maybe listening like what can we do to kind of nurture and then you add on stress and all of that stuff and sugary drinks and caffeinated and who knows what they're fricking vaping. And then I'd love to also then talk to you about the growing chemical warfare of our endocrine disruptors and phthalates and all of that stuff that's playing a major role.

Dr. Christopher: Yeah, so the big picture is as you said, and I just want to start to connect the dots for people, even at the exact same time that rates of obesity and diabetes are skyrocketing in the population around the world, the rates of mental disorders are also skyrocketing in the population and it's across the board. It's not just depression and anxiety, everybody thinks it's burnout. No folks, those disorders, it's across the board. Rates of bipolar disorder are skyrocketing, especially in youth, rates of autism have tripled in the last 20 years. And at first glance most people are like, those have nothing to do with obesity and diabetes. Are you say, Dr. Paul, are you saying that obesity causes all mental illness? No, that is not at all what I'm saying and let me be abundantly clear about it. Obesity as far as I'm



concerned is a symptom. It is a symptom of metabolic dysfunction in a person's body or brain. Mental illness is a symptom, it is a symptom of the exact same thing. Metabolic dysfunction in the body and brain. So, to drill this home for people with two kind of very concrete studies that will drill this home that are largely unexpected, like most people are like, well yeah, if everybody's eating junk food, it's not surprising that they're more depressed and anxious. That's true, yes, those things are true. But here are two kind of probably shocking studies I mentioned autism rates have tripled in 20 years. Clearly, it's not the kids diet because the kids aren't even born yet or they're really young and like they were born that way. That's got nothing to do with diet. Well listen to this, if you are a woman who is obese and diabetic, three to four times increased risk for having an autistic child, if you are an obese man, your sperm is doubling the risk of having an autistic child.

Dr. Christopher: So, everybody's scratching their head, where the hell's this autism coming from? What's going on here? We can't figure this out. This is just so confusing. Well open your eyes to the science, open your eyes to research that is already published time and again, numerous studies in case you didn't know, pregnant women have increasing skyrocketing rates of obesity and diabetes. Men also are included in these skyrocketing rates of obesity. That's where autism is almost certainly coming from. Is it the children's fault? No, no, it's parents. And is it the parents' fault? No, the parents are suffering from a metabolic disorder. That is really the way I see it. I am not at all about fat shaming, wagging my finger, telling people, you're just a lazy slob. The reason you have an autistic child is all your fault, that is not my message. My message is exactly what you said. We have a crisis in the world today. People are being poisoned metabolically with something. Is it our food supply? A lot of people debate about that. We can even start to get into the diet wars. But I think as you said, most of the diet warriors agree, get rid of the crap and the chemicals. Let's at least start there. Could it be more than that? Could it be all of the environmental toxins and microplastics and all that stuff, pesticides and herbicides that we're all getting in our water? And could those, they are, as you said, endocrine disruptors. What does the endocrine system do? Well, the endocrine system actually affects our metabolism. It affects how much we weigh, but it also affects our brain function folks. So yeah, if you're swallowing lots of endocrine disruptors every day in your water, that is disrupting your endocrine system, which is disrupting your metabolism, which might make you gain a lot of weight even if you are eating the exact same amount of food, even if you're eating a healthy diet, you could be gaining weight because your metabolism is being poisoned.

Dr. Christopher: But it's also, guess what? All that stuff affects your brain too, that affects your brain function. And when your brain function is off, guess what that means? You might get diagnosed with a mental disorder because your brain's not working right and you're having symptoms that shouldn't be there. Depression, anxiety, psychosis, whatever. I will give you another study to just link this to make this clear to folks. One study followed 5,000 kids from the ages of one to 24. They found that the kids beginning age nine, the kids who had the highest levels of insulin resistance were five times more likely to have a psychosis at risk mental state by the time they turned 24. So that's 500% more likely to be at risk for psychosis. And they were three times, 300% more likely to already be diagnosed with bipolar disorder or schizophrenia. So, insulin resistance beginning at age nine, triples the probability



that you are going to develop schizophrenia or bipolar disorder. That is the kind of concrete clear data that we have already got to help us begin to understand the connections between what we call metabolic health and mental health. But what I have done with the brain energy theory is I take it down to the cellular level for better or worse, people who hate science or not. But if you really want to understand mental health, you got to read the book. The good news is that once you understand this science, it leads to more effective ways to help people and it leads to common sense interventions like considering a dietary intervention or a change in diet, but also exercise and sleep and stress reduction and get rid of the toxins, alcohol, the marijuana, all that. But also, psychological and social factors play a huge role in metabolic and mental health. And that means connection with other humans. That means feeling heard, feeling respected, feeling valued, having a purpose in your life.

Dr. Christopher: Those things affect not just mental health, but they actually affect. And we have got lots of studies, those things affect your metabolic health. People who are also, lonely are more likely to die early deaths from heart attacks, they're also more likely to develop Alzheimer's disease. The connections are there. Metabolic health and mental health are inseparable in my mind. And again, once we understand these connections, the solutions become obvious like you're going to be like, this is what I have been saying, this is what my podcast is all about. This is what I do and I'm going to be like, yeah, this is what you do and we need more of it and we need to start doing this.

Darin: I hope people hit pause and just kind of soak that in for a second. I hope they just take that in because that is so alarming, the fact that as unhealthy parents, it's having an effect on the children and the offspring and all these things. Unless we make these connections, we're just sprinting down. Some pharmacological intervention was showing up with a squirt gun to a forest fire. Nobody's changing because they're looking and doing the wrong things when the most common-sense things that we can do, we're not doing. I have now worked on a book called Fatal Conveniences for the last year, unpacking these chemicals that were swimming in and it's like you're making these links. I'm trying to make these links of these invisible things that are beating the shit out of us. And then we're, as a society, we're throwing up our hands going, oh, that sucks. It's like, no, there's reasons for all of it. And you're doing the work to make the connection. And again, going back to the miraculousness of that schizophrenic patient that blossomed right in front of you, for you to not just throw it in the category of like, well, that's a miracle, but you actually said, no, no, no, there's something here. And I think it's safe to say that I'm really, really happy to meet you and I'm really happy that you're making these connections and let's keep making them because it flies in the face of just the apathetic world that just is kind of moving along.

Dr. Christopher: I actually think that most people, at least most people that I meet, whether they're patients or just friends or family or just acquaintances, most people desperately want to be better. I'm hopeful that if we can get accurate and effective and implementable recommendations to people, more often than not, people do want to make the changes and they're willing to make the changes. And I'm going to just hold onto that hope because



otherwise the human species is going to disappear. Probably not in my lifetime, but it's going to going to disappear. And that is just too heartbreaking and tragic to contemplate.

Darin: Yeah, well it's hard not to see the bricks falling already. There's two people right here and maybe many other people listening are going, you know what, that's true. So, let's fight for a better life. Let's not just take everything that's told to us. Let's look into it. Let's question, let's look under the carpet and take responsibility. It's very easy for all of us to give our power away and think everything on the shelves and everything that's being told you is true. So, well Doc, this has been so amazing. Please stay connected. Where can people find you? And they certainly need to get your book. Where can they reach out? Where can they follow you?

Dr. Christopher: So, I will give you two websites and they're going to have different purposes soon. So brainenergy.com is probably the most important one. So, you can learn more about the book there if you want. But much more importantly, I want to start a grassroots movement. We need major changes in the mental health field. What we are doing is not working. Tens of millions of people are suffering and want better answers, and I believe they will do what they need to do if we give them accurate information, but we need a movement. The other place people can find me is chrispalmermd.com, and you can learn more about just me, my work, my research, other things. But brainenergy.com is really going to focus on hopefully soon, a grassroots movement for mental health.

Darin: Well, I'm in. I'm in. So, you got my support and I know everyone listening was enlightened here today with many bits of information and hopefully hope as well because facing and looking and learning and being curious is the hope for the future for us to change this stuff. So, thank you for the work you do. Thank you for the work that you will continue to do and let's let it rip, man.

Dr. Christopher: Thank you.

[00:50:56] Podcast Outro

Darin: Thanks for tuning in to this episode of The Darin Olien Show. I hope you took something valuable away from this conversation that will help improve your life in some way. If you would like to learn more about my incredible guest, you can find all of their information in the show notes on my website. If you enjoyed this episode or even you didn't like it, please rate this podcast, the team and I value your feedback so we can continue to give you the most value possible. We want you to get the most out of every podcast. So please rate, subscribe, share - anything you feel called to do. I truly appreciate it and I love and value your support. So, thank you and I will meet you in the next episode.