The Benefits Of Keto Beyond Weight Loss: How Ketosis Impacts Your Brain, Your Cells, and Even Your Lifespan Transcript

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Introduction to Dr. Ryan Lowry and Ketosis

Welcome to the bio optimized summit where we are exploring the next level of physical and mental health you can achieve through targeted and intentional optimization.

I am your host Dr Amy and today I'm very excited to have with us Dr Ryan Lowry. He is the ceo of ketogenic dot com and president of the Applied Science and Performance Institute which is just amazing in itself.

He has published over 150 papers at abstracts and book chapters on human performance and sports nutrition and is heavily focused on the impact of ketogenic diets, which is what our topic will be on today of course on the benefits of ketosis, especially for the brain, the nervous system, performance, energy, All of that. Ryan has received the exercise science Scholar of the Year award, the N. S. C. A. Award for Outstanding presentation of the year award and the national exercise Science Major of the Year award.

He recently co authored the book the ketogenic bible alongside his partner, Dr Jacob Wilson which focuses on the science and practical application behind the ketogenic diet, exogenous ketones and all of their potential applications and why I love that book is it's really talking about how to optimize the ketogenic diet because it can go wrong, it can be done wrong, I've done it wrong. And so it's really about optimizing that and knowing how to do that. And so that's why he and his partner wrote that book which I highly recommend. So Dr Lowery, thank you so much for joining me today. I'm very excited for our conversation today.

Thank you so much for having me. I'm honored to be here awesome. So let's jump in and let's review like what are the benefits of ketosis? I know that there is a lot of science behind it. Many people are scared to do it because it seems so extreme sometimes. So let's talk about like what really are the benefits of doing a ketogenic diet and being in ketosis for sure.

And I think you mentioned something earlier that you said that there's a difference between a well formulated ketogenic diet and just like being in ketosis, there's a million ways to get in ketosis, but that doesn't mean that it's going to be beneficial for you. And I'm sure we'll talk about that and a little bit. But in reality most people, I think in general come and and dabble in a ketogenic diet for what they consider is weight loss right?

Most people want weight loss. I tell people in the fast weight loss, right? Like they use it for the fast weight loss of this promise of so many pounds in two weeks. It's crazy.

And I say cool, like like there's a million ways to lose weight. There's a million different ways you can starve for a week and like the people want if you want to optimize body composition, meaning you want to lose fat and you want to maintain or gain now can ketosis do that. Yeah, absolutely.

If it's a well formulated ketogenic diet.

Benefits of Ketosis and the Sugar Roller Coaster

So I think a lot of people come, they see very early on success and results. They start seeing like, oh wow I actually am losing a bit of fat here. But most of what people stay for I think are like the mental aspects. That's the reason why I I've been on a diet for over 10 years. Like I'm not trying to lose fat.

I'm looking to like optimize my brain and stay focused and not live on this carb roller coaster that I've lived for for 20 to 25 years of my life, right? You don't even have any fat to lose anymore.

So that that is clear. That is obvious. You're not doing it for the fat loss. But it's all these other benefits and the mental clarity just feeling so well right? And what we do on a daily basis is like I never before in my life thought that I could go periods without eating right. This concept, The F word fasting was was like taboo to me. I was like there's no way I need to eat every three hours or else I'm gonna whittle away, it's gonna be terrible.

But since going keto it's been night and day, like I I typically I do a 24 hour fast every monday and then I typically do like 16 hours of fasting during the week and just calorie cycle on the weekend and it's just been something that I never before thought I could do until I was like in ketosis. So you're giving me flashbacks of a very traumatic period of my life and I'm realizing, oh my goodness, maybe I've got some pTSd from these times in my life, which was most of my life on that sugar roller coaster ride and I felt awful, but I didn't know that there was any other way to, to feel, to live and so I would be starting my day, starting my, you know, breakfast with this carbohydrate heavy meal and then for the, the rest of the day, Ryan, I would be chasing that what I know now is like my blood sugar levels and you know that spike that I would have and then the fast drop, I don't know how low they were dropping at that point because I wasn't, you know, bio hacking enough to be measuring my sugar at that time I do now, but I felt awful, right? And just that was how I was feeling all day long. And so yeah, this, I was right there with you eating three hours every three hours just to try to maintain a level of feeling okay, being able to focus on what I was doing and so this concept and the fasting at that time was absolutely horrible because no, I can't even go more than three hours or I'm starting to sweat. I'm starting to feel really anxious, really weak and so yeah, that sugar roller coaster ride was very traumatic for me and what a difference it has been, what a difference it has been.

It's just freed up so much more energy without having to chase that. Exactly. And I think most people, unfortunately in today's society are stuck on that roller coaster.

Like they want to get off. It's like, imagine being on a roller coaster at an amusement park, like you're going on it all day long with these ups and downs and like they want to, they want to get off, but they don't know how and they don't know that like the amount of carbohydrates, that type of carbohydrates that they're eating consistently on a daily basis are are what keeping them on the roller coaster as that.

Mhm. So besides getting off the roller coaster ride of the sugar levels. What are some of the other direct benefits that ketosis ketones have on our health, on our biology, our nervous system, all of that. Yeah. And there's there's a lot, so a lot of aspects, right? I think most people over the age of 30 we talked a lot about Type two diabetes and and people know what type two diabetes is, insulin resistance of skeletal muscle and and when you really, really aren't responding to carbohydrates were starting to refer to Type three diabetes as insulin resistance in the brain. We start to see this and this problem is getting worse and worse. You're starting to see instances of Alzheimer's pre Alzheimer's dementia steadily increase. Uh And a lot of that is due to a fuel we're providing a fuel source that we readily can't utilize.

Uh And so the brain even though there's plenty of sugar and carbohydrates floating around the body, it's not like people are starving themselves, they're eating carbohydrates but that those that glucose and carbohydrates just can't get to the brain effectively.

And so the brain is starving and we stop to see this build up and that's that's one aspect. I think there's a bunch of of studies now looking at the anti inflammatory aspects.

Yes. Which I love going on that. Yeah for sure. So um we know that being in a state of ketosis and they've actually done some recent work looking at ketones themselves basically.

It's like a light switch. There's something called the N. L. R. P. Three inflammatory um which is basically the master regulator of inflammation in our bodies.

Um And ketones kind of act like a bodyguard. Imagine a bodyguard standing by the light switch saying no you're not you're not going to turn this on and it's kind of helping lower that inflammation. That's that's constantly build up in people.

So we're seeing benefits, we talked about, we did it. We actually published a case study in someone with Crohn's

um Their studies on m s. Their studies on idea. I guess a bunch of different highly highly highly inflammatory conditions. Where you're seeing where people would think there's no way like eating a higher fat, lower carbohydrate diet wouldn't that just make it worse. In actuality we're seeing things like c reactive protein and some of these markers steadily decline which I love.

Anti-Inflammatory Effects and Chronic Disease

And it's really a paradigm shift because in my in my experience it's still very much the mainstream view that fats are bad, right? Just fats in general.

Everything fat eat less fat is what you should do. And so this this idea that the fat is bad in our day diet and yet especially for the autoimmune conditions or any of the inflammatory conditions, we have such solid scientific evidence that no it's healthy fats right?

Not all fats it's healthy fats that really bring down that inflammation and this is really key. And even for the diabetes right? Like all of these chronic diseases have an inflammatory component and this idea even in diabetes that you know oh the fat is bad. You know, even I've heard you know the fat is what makes you get diabetes and it's like, well I mean if if done incorrectly, yeah there are some really bad fats out there on the market. But when we look at the science of how the body operates how it can use energy from fat from carbohydrates and when we are primarily carbohydrate driven how much that can drive inflammation.

We've got to be looking at these diseases a different way and the ketones just by themselves whether or not you're in ketosis, the ketones can be so helpful for anti inflammatory, such a, such a powerful tool. And I think you brought up so many good points there, like, it's again kind of going back to what we've been reiterating.

It's it's a well formulated ketogenic diet, eating a ton of vegetable oils and eating big macs without the bun for every single one year meal. Like, will you be in ketosis? Absolutely. Um, you likely will be.

But is that is that going, will you likely see lowered markers of inflammation? If that's all you're eating? Probably not, you actually might get worse.

So, you that's why it's it's very, very important to keep things in context. But most people sadly uh it's it's they're eating high amounts of these inflammatory oils with high amounts of processed carbohydrates and that's just an ultimate metabolic disaster.

Right? That that combination is should be labeled the metabolic disaster combination. You're special today. Like the combo special metabolic disaster.

It's on sale though. Don't miss out. Right? And this was totally my experience because I uh was at a point in my life where I realized, well, I came to the conclusion that my weight was my biggest problem in life.

Obviously not true, but I was significantly heavier at a certain point in my life. I think I was even above 1 90 and I was like, okay, I have to I have to I have to and of course what did I go for but you know what will give me the fastest results.

Well that was obviously, you know one of the, the uh lines where they, you know, provide you their meals and, and it's very regimented and it's very much a ketogenic diet And I started this Ryan and I crashed, I had a complete metabolic crash and now that I've, you know, been in functional medicine for several years, I understand more of what was happening. But I think that there was a lot of toxins being released as well because with that really rapid weight loss and the toxins were then coming out of the fat cells and being released in the bloodstream and I think that contributed to it. But just the metabolic crash that I experienced and felt absolutely awful. So since the then yeah, I've learned, you know, hey, okay, that was the wrong way to do to do a ketogenic diet.

But yeah, this concept of, there are bad fats and I was doing all of that right. Like I was using all of the bad fats to try to accomplish something healthy in my life.

And I actually went through a very similar experience about 10 years ago and there weren't as nearly as many resources before keto was the cool kid on the block.

It was like that we were using like epilepsy and some like military personnel were using it for these long duration missions. And I was fascinated by it.

And, and I was like, I have no idea how to do this. I just think it's like eating a lot of fat and like I come from someone who love sweets. I grew up eating all the junk food. Um, so I was like, oh well I'm just, I'm just gonna take what I, I love sweets, but I'm just gonna find something that's keto and just eat that all day long.

And the first time I did keto, I ate three meals that I eat three meals a day. They were all the same meal and they were what I call my keto chocolate mousse, which was in essence, it was heavy whipping cream.

It was coconut oil, uh, protein powder and unsweetened dark chocolate and you take, it's delicious. You mix it up, you put it in the fridge. Each one of those is probably 1000 to 1500 calories.

I was eating three of them a day. No electrolytes, tons of just like, just nonsense in there. And I was like, I was super in keto. I was measuring my blood.

It was like one million moms. Like, yeah. And I felt awful terrible. And people just, there's, that's why there's a difference between like, oh, you're in ketosis and a well formulated like that.

All right. So let's talk about a well formulated ketogenic diet. What are the components that a person needs to bring in to have it be something that's really going to bring them the benefits without any of this negative side effect of doing it wrong. And this is this is the million dollar question that people still argue over. I actually have friends that are huge advocates of keto and vegan. I have huge carnivore people and it's like, alright, well where do we find? I kind of like I sit in the middle, I like plants, I like, I like me. Um so how do we, how do we balance that? And I think for most people, the majority of the population to basically put together a well formulated, it consists of getting your carbohydrates from ideally green leafy vegetables, making sure you're still getting in adequate amount of fiber.

I think that's that's super important too to remember, especially early on because we know fiber helps keep us full. Um and a lot of people early on were like me and you could easily get 2, 7000 calories if you're eating all these cheeses and dairy and creams and things like that. So for me that's a very, very big component is one of the reasons why I love like big cobb salads or like like nice steak and vegetables. Um then you you need to hit a protein goal.

I think that's can we just stop right there. Like Ryan, like what you just said was so important, so important and I really want to emphasize this because that is where I went wrong as well, right?

Like I I was like okay I'm gonna do all fat only fat all fat, if this is what I'm supposed to do, you know like I'm the type of person that's gonna go even the extra mile, even less carbohydrates, but the vegetables still have so much value in them and you've got the phyto nutrients, you've got, you know, electrolytes that come with the vegetables, you've got all these important components that come with those vegetables and so it's so important to remember you're not neglecting those at all. In fact you're optimizing which vegetables are going to give me the most phytonutrients, the most value for what I'm eating and you're gonna be needing to get in different colors because you know, you you need all of those nutrients, you can't just feed yourself fat and expect it to have all of you know these these other essential ingredients in order to run your body and make proteins and and get stuff done.

So the vital nutrients from vegetables are so essential for a feeling well in doing ketogenic diet. Absolutely, absolutely.

What Makes a Well-Formulated Ketogenic Diet

And that's why I kind of shift the paradigm for people because everyone always thinks, oh fat first, I actually think of fat last, I always let's focus on getting in because the biggest thing people have is like well what am I gonna eat

well, let's start with your your vegetables first, like let's start there and understand all of the different things that you can eat from that standpoint. Then we go to protein and I I think there should be a protein goal. I think a lot of times people, because they get, I think a lot of times people get worried about eating too much protein.

I think they're worried about eating 200, g of protein. And from what I've seen and people that I've dealt with, I'm more worried about the opposite. I'm worried about people not eating enough protein. I think there's always gonna be the people who are super fitness into fitness and bodybuilding types that are taking it to the extreme and eating 250 g of protein a day. And like, like yeah, there will probably be some glue kenia genesis at that point, but like the majority of people don't come anywhere near that.

I think often times people will go to like do o mod or one meal a day or they're only eating two meals a day. And I see this a lot, particularly in females, they'll do this and then they're only getting in like 15 g of protein per each meal. And all of a sudden at the end of the day, they're only eating 50 60 g of protein and they start to see hair loss and they're not feeling good and it's not the result of a ketogenic diet or ketosis, that is the result of a protein deficiency.

That's that's the main main main thing that that I I harp on as well. So do you have a range in which you think is ideal for people to get enough protein?

Is it different from men and women? I definitely think it does. I think it differs by individual. I definitely think it differs by men and women. I like to say at minimum what I what the target should be. I say a minimum is one g per kilogram.

Um, it's a body weight is what I say, like. So if I'm 80 kg, I want to get in at least 80 g of protein per day. Um, ideally that would be spaced out between two meals.

So I'm I'm optimizing protein on a per meal basis. Not just, Oh, I ate one meal with 10 g and I'm going to eat the other meal with 70 g. Like you want to optimize it and spread it out Good.

And even with the protein, are there, is there a different range based on activity level? Or not necessarily on activity level? Yeah, for sure. The more active you are. I tend to go on the higher end 1.2, g per kilogram is more ideal. And I think at that range.

One, not only you get are you getting the benefits of protein itself, especially if you're eating high quality sources of protein because protein source is different. Um but to protein, it has a very high thermic effect. Um it's very, it's a lot less likely to be stored as adipose or things like that and it's filling.

There's also a satiety component that comes with protein. So that's why I say I started carbohydrates. We have to hit a certain amount of protein and then you utilize fat as kind of the lever. You use that to fill things in.

You don't, you Use it as oh, just because my calculator that I use said I need to eat 250 g of fat per day means I need to stick 200 g of fat inside of my coffee in the morning just because like that. No, that that's not the reason for that.

Like, like you don't need to force it in if there are some days where you're like not hungry, cool. You tailor that lever down, you don't need to force in all of that fat.

So for a ketogenic diet that is truly like optimized the ideal one that would give you all of the health benefits, how many times a day would a person be eating?

Um I personally like to do, like I said, calorie cycling and I do that by uh changing up my meal frequency. So for me personally I do one meal on Mondays, typically two meals throughout the rest of the week and then on weekends too and then maybe three meals, but I don't like staying stagnant at just one meal or two meals.

I think most people would be completely fine around two meals, whereas before, When I was having a ton of

carbohydrates in college and like that I was probably eating 5-6 meals per day, which is, it's a big shift for a lot of people.

It is a huge shift and that was actually one of the first things that I noticed when I started doing it right, that not only did I feel more full and so I had need to eat less and less often and that really took a burden off of my digestive system and I hadn't realized how much work my stomach, my digestive system was having to do when I was eating every three hours in order to try to keep up with, with feeling well and my sugar levels and so just that change in itself really shifted things for my digestive system. Of course my whole health, I felt the inflammation levels go down in my gut and so that was when I really need like, okay, this is, this is doing it right, this is you know on the right track now for sure and I think most people deal with that same struggle of, they don't realize how how much an overdrive your digestive system is and it's kind of like we were never really intended to be that way. If you think about the whole feast famine concept, like we never were meant to have a covered full of snacks and cookies and brownies and everything else where you're just kind of like I'm bored or I'm stressed out, let me go over there and have a brownie. We never really were intended to that.

So you're kind of bringing it back to as primal, so to speak as as you can be awesome. And then let's talk about longevity and so we've talked about that the, you know, short term health benefits really. But are there long term health benefits to ketosis? Yeah, I definitely think so.

Um as long as again it's it's well formulated. So we actually did, we did some studies on this that were kind of fascinating. I wish you could do longevity studies on humans but you and you and I and everyone watching this, we wouldn't be around to see it. Uh but there we did basically take animals and what we did was we took them from the human equivalent of when they were about 20 years old and we took one group, we put them on what would be like the american Heart Association healthy standard diet. Um Then we took the other group, we put them on a well formulated ketogenic diet and we actually just let them live out the rest of their lives, fed them let them exercise as much as they wanted to and what we saw was the animals that were on a ketogenic diet lived significantly longer.

Um And when you we kinda obviously opened them up and looked at a bunch of different markers afterwards? Way less visceral adipose tissue, way less overall adipose tissue, better markers of liver, kidney, heart function. Like when some of the pictures from these animals, when you open it up, it looked like an anatomy chart when they were on a ketogenic diet, whereas when they're on the american Heart association standard diet, still tons of visceral fat, tons of capacity and you're like these are our recommendations.

Now will that would it transfer over identically to humans? You can't say that, but it's the first step and there's a lot of mechanisms that point to why that would be the case for the anti aging benefits of Quetta.

So it sounds like not only living longer but having a better quality of life, having a better state of health while you are alive. Absolutely. And I think that's super important. You could live 250 but if the last 50 years are terrible then then what good is that? But like ideally where we want obviously the longevity and an improved quality of life while you're going through that awesome.

And let's talk about those people who do want to be gaining muscle while they're on the ketogenic diet. Is there a right way to be doing that. Is there a wrong way to be doing that. What's been your experience with that?

Yeah, for sure. It was actually the first study we actually did. I was I was very curious in this Jacob. My business partner was also very curious and like can you gain muscle on a ketogenic diet? And we were the first ones really to look at this. And what we found we, a lot of the studies there were some studies that showed you could but a lot of them often a more protein than the other group.

Protein, Meal Frequency, and Muscle Gain

So people would just so oh well the only reason you can gain muscle on keto because they eat more protein. So we said we're going to take that out of the equation.

So we took highly resistant trained individuals. We put them, we did a 10 week study, we adapted them for two

weeks because there is this process of going through keto adaptation. So we got them adapted over the first two weeks.

And then we compared just their standard a standard diet group versus a ketogenic dieting group while the resistance trained over eight weeks. And what we found is at the end of that full 10 week period.

Uh the key drink diet group actually lost significantly more fat mass but they gained just just as much muscle. Um And protein was basically matched. So yes it is certainly possible. But again it comes down to making sure you're optimizing the ketogenic diet. You can't really you probably if your goal is to build muscle, go eating one meal a day seven days a week probably isn't ideal.

You're not gonna get in enough protein in that one meal every single day to do that. So you really just have to tailor your meal frequency and you to meet your goals.

Mhm. And by developing the meals this way are you trying to optimize the different types of ketones like the exogenous versus the endogenous and go into that a little bit in terms of the different types of ketones and how to optimize those.

Yeah definitely. So endogenous I think endo means inside endogenous is what your body makes when you're on a ketogenic diet when you're fasting when you drink M. C. T. Oil and it gets converted over inside of your body. Exogenous ketones means exo from outside and there's a lot of a lot of talk about exogenous ketones right now we're trying to do our part to help clarify the message because I think there's been a lot of a lot of confusion about like hey I'm just gonna drink these exogenous ketones and going big Macs and lose £50 in two days. That's not gonna happen.

That's just that just won't. Exogenous ketones can be a great tool. Uh And we're actually exploring them Uh in a wide variety of applications. I've been utilizing exogenous ketones as a tool for the last five years.

Actually I was one of the first ones to try the terrible tasting esters that were, that were like $1,000 a serving back five years ago now. They're obviously a lot better tasting. You have ketone salts.

You still have some ketone esters but they are a tool and one of the areas that we are exploring them for mainly is for cognitive function. There are a lot of people and dr mary Newport, One of our friends, her husband had alzheimer's and she was spoon feeding him coconut oil and then finally got her hands on a ketone ester. But some people like my mom and dad for example, I try and be like, hey, you should be eating a ketogenic diet.

You know, I feel like it would be better for optimizing your brain. They're just, they're just reluctant to it. And my mom's italian, my dad's irish and they liked some french fries or some pasta and it's like, all right, cool. So what can we do?

Um, so I try and get them to utilize exogenous ketones every day and it's been a game changer and what we're seeing with, we're actively studying with Alzheimer's Parkinson's and traumatic brain injury or the three areas we're studying. Awesome.

Thank you. Yes, so needed. It's fascinating. It is absolutely fascinating. Some of the preliminary research we've seen and the results, it's just, it's mind blowing because I haven't seen something work like that.

So I know this is preliminary, but can you share a little bit of what you're seeing? Yeah, for sure. So, um all three of those conditions really? Alzheimer's Parkinson's traumatic brain injury, uh, particularly Alzheimer's and traumatic brain injury. A lot of it stems from what I was talking about early on with a lack of fuel to the brain, Right?

So when you have this lack of fuel to the brain, meaning you have this, this insulin resistance of the brain, your brain start what we call starvation in the face of plenty, there's still plenty of fuel but your brain is still starving Now that happens over time, which builds up to which leads to the build up of these tau proteins and all these things going on in the brain.

And the same thing happens with traumatic brain injury. If you look, if you're, if you watch football or rugby or UFC, any of these contact sports, in fact soccer is actually one of the highest instances of tv.

I but you see these, these athletes and oftentimes you think that there's only trauma when there's a big hit and all of a sudden the person's laying on the ground, they have to bring out medical personnel and yeah, undoubtedly there's there's a lot of trauma that just happened during that hit, but that's not really where the majority of the trauma happens. Think about the linemen who are head to head, every single play or the running back who is carrying the ball 15 times and doing this for military right? Military personnel when there's there's bombs and these things blowing up and the shocks they're getting these T.

B. I. S. What what happens during a Tv. I. Is very similar to what you experienced during Alzheimer's and in fact there's people when you look at someone's brain who has severe TBI and someone has Alzheimer's it's almost impossible to tell them apart because of the disruption that's going on with the traumatic brain injury.

Again, imagine tunnels like imagine tunnels going out of your new york city. Well some of those tunnels now become closed even though you have cars that are willing to go through those tunnels and those cars are glucose there they want to go there you're feeding them sugar and Gatorade and all these different things on the sideline.

But the cars can't get through because the tunnels Claim. But there are alternative tunnels right? There are these tunnels that transport ketones that are different than the tunnels that transport glucose and those are still open.

So we're just giving that fuel source and now you're starting to see like we're seeing reaction time, improve cognitive focus, improved memory improved just within 30 minutes of giving a dose of exogenous ketones because now there's a fuel source for the brain that otherwise they have. Exactly. And even long term like because surrounding all the nerve cells and their communication pathways is this Myelin sheath that's completely made up of fat and so that is what is essential for this transit time and how long it takes, you know, for us to react to something and how long does it take for that communication to go from our brain to somewhere else in our body.

And so the ketones especially help with that with that myelin sheath. And one thing that you're, as you're talking I'm thinking of is a lot of the immunity, like the auto immunity that can develop in the brain with the micro glia and those immune cells in the brain that get activated when we've had these types of injuries to our head, whether it's a big one, right? Or even if it's like you were saying, uh smaller but more consistent ones, the micro traumas and how they build up and how that can lead to this immune activity happening in the brain.

And how powerful is for those ketones to be able to get into the brain and bring down that level of inflammation and be that fuel source for the brain cells and help in that way as well. It's huge.

And the other, the other aspect along with that is like ketones themselves have been shown to increase mitochondrial function. We know how important mitochondria is that?

We've done plenty of studies looking at how mitochondrial function tends to decline as we get older, right? For a variety of reasons we become more sedentary, we're not eating the right foods, environmental aspects affecting our mitochondria tons of stuff, lack of sleep stress.

Exogenous Ketones and Brain Health

All these things are affect our mitochondria and being in a state of ketosis has been shown to not only improve existing mitochondrial function, but also kind of initiate this process, known as mitochondrial biogenesis or the formation of new mitochondria, which we really get from like exercising and prolonged fasting and things like that, ketosis can help with that as well.

Yes, I love those studies on how the prolonged fasting is part of what uh, kind of signals to our body. Hey, let's make more mitochondria. Let's make this engine more efficient and everything that I've had to focus on to get my health back after my health crash uh, involved all of that, right? Like it involved the head concussions and head injuries that I had and the autoimmune process that I had going on and my mitochondria.

And so, like my body feels so much better, not only when it's getting ketones, whether or not I'm in ketosis, but especially on a ketogenic diet because it just addresses all of these different aspects about our health and about about the metabolism, about running efficiently about the brain, the neurons.

And so yeah, it's no wonder that people when they're doing it right. I feel so much better. I feel like superhuman right on a ketogenic diet because it's just yeah, it's it's unbounded energy that you can tap into because of the benefits and the effects of the ketones.

So Ryan for someone who's doing it or has been trying maybe to do a ketogenic diet and they're listening to this and they're like, huh? Like maybe maybe I'm not doing it right.

Maybe I don't have it optimized. What would you tell them in terms of, hey, this is what you can look at in order to know what changes you could make to optimize their ketogenic diet and their benefits.

Yeah, I would say the first step is really getting granular of what you're eating right. You can't really like, I think the goal for everyone, I like to call it food freedom.

I want everyone to achieve this sense of food freedom where you're not constantly tracking or weighing out food. Like that is the ultimate goal for, I think most people. Um, but in the beginning it can be helpful to do that because you might be, you might not realize you're eating a pound of cheese every single day or like you're like, oh wow, I didn't realize I was having that much.

And so in the beginning, I think tracking, seeing where you're at weighing things out because you don't know what you're, you're not measuring. And so in the beginning, try and measure some of those things out and you might realize or find some surprises of like maybe I'm not eating enough or maybe I'm eating too too much of this and I didn't realize that this was having an effect on me.

So I think getting really, really granular on that is probably the first step and then working with someone and saying, cool, how do I like, how do I look at this from a carbohydrate net carbohydrate standpoint? Like how does that play into effect optimizing and hitting my protein and then filling in the rest with good quality sources of fat, not just tons of vegetable oils and things.

And I'm sure that by now, after you doing this for 10 years, you are so dialed in on your levels, your body that you have a sense of what your levels are. In terms of your sugar levels, your ketone levels. You don't need to track that.

You don't need to measure that. You know, that just based on how you feel. And when I was starting out, I was tracking my ketones with the urine strips.

Is that something that that is helpful? Is that really accurate? Is that what you would recommend people do in order to again, just, you don't know what you're not measuring. Right?

And so would that be a healthy accurate way to be measuring ketones and and starting that process out? Yeah, ideally, you would want to work with blood.

Um, there's a lot of blood mark. There's a lot of blood meters that are pretty cheap comparatively now that are out on the market, that's the gold standard.

One of the things that we don't like you're in for it after a while like for example when I if I were to take a urine strip right now and go pee on it, I would probably show zero. I'd show nothing because a lot of it's not getting converted over to a C. Two acetate.

Which is what that urine strip is measuring the main ketone body we are striving for is something known as beta hydroxybutyrate or GHB. And that is detected inside of blood.

So for most people, if you are measuring you, you are like saying, hey, I want to see if I'm in the best way to do it is

testing your blood awesome. And then in terms of sugar levels, is that something that you would recommend them monitoring tracking or? No, it's it's as long as they're tracking the ketone levels, that would be good enough. I think I think occasionally tracking sugar levels if you're someone who's really, really concerned about it and a lot of it again, depends on where you're starting from. If you're starting as someone who's prediabetic then yeah, you probably should be a little bit more careful of saying cool, well my fasting Blood glucose is 140 typically. But like now all of a sudden you're seeing it come down to 110 and then eventually 100 like that's a great sign.

And I think also that gives someone good feedback of like Wow I'm actually doing this, I'm going in the right direction. But I will say this because I know a lot of people get hung up on numbers is in the beginning, it's important to make sure like, like, cool, it's, it's okay to check. You're in ketosis.

That's great. But I got dangerously into this game 10 years ago. It's like, I always used to have colleagues or friends and I used to be like, what's your ketone number?

And like we were Like fight each over over like, Oh my God, I'm at 1.7, I need to start for another 14 hours because he's at 2.3 and I'm like, we used to play this game of like higher ketones are always better and that's not the case. Um, it's, it's not a game, a battle of the highest ketones because in actuality what we've found lately is like maybe higher actually isn't better. Maybe it's an indicator that you're not utilizing them as well. And so like for example, now I've been, like I said, I've been doing this for 10 years.

I probably been fasted now for roughly around 14, 16 hours and like right now I'm probably only at 160.6 or 0.8. Um, and until even when I go to have dinner tonight, I might be at work 1 1.2 mm, but like that's after a 24 hour fast.

So don't chase ketones don't, but just make sure you're exactly. I think the end goal is to feel well do well, right? Regardless of what that number is for you.

And yeah, so much of it is about whether your body is utilizing it or not. And so a higher number is not necessarily better for you. And just in terms of chasing numbers, I remember, you know, being fixated and chasing the number on the scale in terms of, you know, weighing myself and just how much, um, like peace and sanity it's been able to give me too. I don't ever step on a scale anymore.

Like it's not even something that crosses my mind because now I'm just more focused on how do I feel, you know, like where are my energy levels at how can I optimize my diet, What do I need to be doing today in order to feel well?

And I get to forget all about the numbers in terms of the weight and at this point, yeah, I I'm I feel pretty confident about my ability to know where I'm at with the ketones and the sugars to know whether I'm in a good place or not and need to work on that.

But yeah, just just being able to not have to chase those numbers anymore. It's been awesome. Right, Right. And I think, I think so many people could use that, that, that confidence and that, that understanding that it's not just the number on the scale because that number can easily easily be manipulated, I'll give you a perfect example is I still have a scale at my parents house and um I don't have one at my house because I think I just, I just don't use it. I don't really care about my weight.

I judge my body composition how I'm working out and how I feel. That's more important to me. But I think it's fascinating because like sometimes I, if I wake up in the morning, um I might be 100 and £80 but like if I go to bed that night and I just had a big meal, I could be 100 and £88.

Like literally an £8 swing in less than 24 hours. And then guess what? When I wake up again, I might be at £181.

How to Start Keto and Optimize for Success

Does that mean overnight? I just lost £7 of pure fat now. No, it's weight fluctuations and like for some people that

can drive them crazy and go insane.

And so it's like just get that out and focus on the other aspects like awesome. Okay, one last thing that I'd love for you to cover, if someone has not been uh willing to experiment with ketogenic diet yet has been afraid to do that.

Where would you encourage them to start? How would they start this process so that it's not overwhelming and they can start to experience the benefits.

Yeah. Honestly, I think you need to, you need to have a strong foundation. I think a lot of times people jump into it like I did and like you did and it was just like you jump into and you're like I'm keto and then you're like butter bacon, what's going on? So for one of the things we do at dot com is like we have a calculator um that's a completely free calculator. It's just dot com slash calculator which you put in all of your information and it kind of spits you out a general recommendation and I tell people this all the time like this isn't the be all end all of like you need to eat these macros, but a lot of people have no idea where to start.

So we created this as a foundation to go cool. Use these and now be your own scientists and taylor, maybe you need a little bit more protein, maybe cut back on the fat a little bit and so I think get getting to that place is super important of like I understand roughly where I should be at then use one of the trackers, like like whatever you used to track your food in the beginning. Um and like we said, the ultimate goal is to not ever have to do that kind of eating intuitively is the ultimate goal, but in the beginning like understand like, wow, I didn't realize that this had that much fat or whole avocado is is actually a lot, maybe I should only have a half or how you kind of tailor some of these things is going to be super important and then also just stay up today, I like to say always find anchors that's kind of like there are a lot of people in this space who are full of bs just in any space nutrition in general, but there's a lot of people who can be anchors, people that you anchor onto and you learn from and they're filled with knowledge and they're passionate about it.

Find those people find those people that are and support you, find those people that will lead you find those people that will, that will help educate you and stick with them and and learn and be willing to open up, we'd be willing to understand like, hey, wow, they said they talked about the importance of electrolytes, maybe that was something I was doing wrong, cool. Uh that anchor is going to be there versus just trying to sell you a million different things uh to try and get you to buy into their program with no care in the world about you as a, as a human being.

I love it. So, start with big picture, start with a calculator, get a rough idea of what you're doing, start tracking the food that was definitely important for me when I started doing it the right way was, was tracking the food and then and then start dialing in on different aspects, Find your resources and figure out what you're doing that or what you can do to feel even better to optimize it. Don't give up right?

Like don't, don't just wave it away because it's not working right now and you know, you're only two weeks into it and you still feel awful, Get to that place where you can troubleshoot because yeah, like for you, you've, you know been doing this for 10 years now, like it didn't happen overnight, you didn't figure out how to how to do it right overnight.

It takes time. The accountability and support is a big factor if you can find someone to do this journey with or find even a coach or a mentor to keep you accountable. Like your chances of success are gonna exponentially grow because when you always have, like if you're like the sole person, everyone around you making fun of you, like oh you're the person that's eating all that fat, like oh you're on that keto thing that's only gonna work like that negative, that's gonna lead to negative momentum. So finding people, like when things get tough and you're at a family outing or you're coming up on on the holidays and you're, you're like, wow, okay, this is gonna be tough, How do I, how do I make an alternative to this because I still want to stay low carb, I might not be super keto, but I still want to stay low carb and not have a ton of sugar.

That accountability and support can make the difference all the difference. Thank you so much Ryan. Where can people find you uh, on social it's just at Ryan P Lowry or dr Ryan Lowry on facebook and Youtube.

We also all things keto. We have a website called ketogenic dot com tons of free recipes articles. Um just

troubleshooting things to help you kind of find your and and optimize your journey. So the best awesome thank you so much for this Ryan, I really appreciate you taking the time and explaining all of this.

I know that again like this is just so much rich information, still a little bit of it against the grain even though it's becoming more popular but even though it's increasing in popularity, people aren't necessarily still knowing how to do it.

Right. So thank you so much for sharing your experience and knowledge with us today. Thank you I appreciate it. And thank you for joining us today. I am your host for this bio optimized summit Dr Amy and make sure and get the discount price for all the recordings and content and gifts so that you can get that wallet is still available once that discount price is gone, it is gone forever and I would just love to see you inside be able to connect with you more and together. Let's find that next level of health and aliveness.