Introduction and Bartonu2019s Background

All right, guys. About a week ago, I had the pleasure of walking into a room, and Barton was speaking, and I learned a little bit more about him, which I hope he's going to share today.

But we're talking to a guy that somehow is a biochemist, a nutritionist, a researcher at an entrepreneur, all wrapped up into one, and has built an amazing business that has been helping a lot of people, starting with himself.

And we're going to learn more about why most diets don't actually work. There's a lot more going on in the body complex, as you've been learning from various talks.

And there's another perspective we need to share. So first of all, Martin, thanks for joining us. Kash, great to be here. You know, looking forward to the conversation.

Yeah, I saw you the other day. We were in Austin at this conference, and there's this, like, roster of speakers and I walk to the room and you're on stage.

I said, I got to hear this guy's story. We'd obviously met before that. I've used your products. And then you started talking about your personal journey and, like, hit home, because this is where a lot of the great sort of product services research comes from is like, somebody was failed from sort of the allopathic medicine world.

They found root cause, integrative medicine, heal themselves. And they said, this is so impactful that I need to share with everyone. So tell us a little bit about what got you here.

Yeah, it was a two pronged thing. It was both my mother. It's funny, mother's day was just this past weekend as we're recording this, and, I wrote this, just this post on it.

You know, she would be 77 today, and I was born to older parents, right? And I, you know, I, I got to see firsthand what happens when you take pretty good care of yourself.

You know, she didn't drink, excessively or anything. She didn't smoke. She had a low stress lifestyle. She was, a teacher, professor and librarian. Towards the end of her career.

Just read a lot, like, gardened, like, you know, walked, didn't exercise, like, didn't, like, lift weights and stuff, but, you know, used to jog and stuff was active.

And, you know, throughout her whole life, we go on hikes and things, you know, and, and yet so she had this like retirement age that I think a lot of people would really like to like, you know, kind of that's kind of the American goal for most people is is that right?

They finally retire. They, they they're still in good health. And she was and then she had a couple things that were pretty minor. And then she went to a doctor, got on medication a couple years goes by and then surgery and then more medication.

And I got to see her go from this vivacious woman. I wanted to check out a recent post on on my Instagram page and ask Barton. And, because I, I feel like it connected not just for me again there, but and this but just for so many people.

It's like so many people story like objectively because now it's been ten years since she's passed. And I remember thinking like, wow, you know, so many like, I could be at peace with this.

And yeah, at the same time, I was struggling. I was going, you know, struggling with my own debilitating brain fog. Towards the end of chemical engineering and then going into, into the workforce and, and knowing that I wanted to

do something different.

I knew that in college even. But, you know, helping her with, with that path, you know, she was just vivacious. She had so much grace and charm and wit and this dazzling intellect.

Personal Health Crisis and Motheru2019s Decline

I think for a lot of people, she was honestly probably one of the more remarkable people they met in their entire lifetime, just objectively that that was commonly said.

You know, it's not just, oh, hey, you know, I get every everyone or a lot of people or lucky enough to like, really hold their, their mother in high regard.

But regardless of that, you know, I just think whether it's her or anyone else that's, you know, had a lot of wisdom to share. It's it's tremendously impactful when the the old calling, you know, call it that die young.

Right. You know, there's just a tremendous amount of wisdom that in our hubris, in our 30, 2030s and 40s, we we go, yeah. You know, I think I think I've got that figured out.

And then you, you know, you have kids or you go through a life change or you lose a parent or you and you, you just realize how much thinking and so how many solutions have already been figured out.

If you can just inculcate all the wisdom from later generations, instead of having them die in their 60s or living through their 90s or one hundreds on average. Right?

And I, I just saw this and, you know, this, this woman that I grew up with, just losing that sort of that life force. Right? And I remember thinking like, okay, this is just this is just this is not how it should be.

Like it. We have a fundamental error. It's it's not whether or not I can be at peace with this. I get there's so many things that are out of our control, but, you know, it was it was almost it really seemed like the this the traditional system not only didn't help her, but killed her.

And, it really seems that way, you know, and one thing that I found along that path was. And I was able to help her slim down, and just kind of find her ideal weight, things like that.

And, you know, and so we moved the needle some. But one of the tests, out of the many functional medicine tests that we did is one that we've taken and upgraded, so to speak.

Now and that's a, hair tissue mineral analysis. So using hair, whether that's underarm, scalp, pubic and and really understanding this whole picture of elements.

Right. Because what I found for myself, for her, for my girlfriend at the time and her dad is that we all had deficiencies in at least one thing that we were taking.

And for me, it was probably like five things and had been for anywhere from three months to a year and a half. So what? What am I really saying? I'm saying, you know, you're taking the supplement and then you're on your x, y graph on your bar chart.

You're low in that thing. In fact, chronically low. And you've been taking it for a year and a half. And, you know, it's regarded as one of the top shelf practitioner grade sort of brands from a quality perspective.

It's not quality. You know, most people don't have the vocabulary to say what it really is. But in short, what it really is is effectiveness. It's absorption, which is effectiveness.

Right? It's, is close to guaranteeing an end result or an outcome, as you can get. So I realized that that was just

failing. And I went to school for chemical engineering, which is really the science of that from a, you know, you get a minor in math, chemistry.

Well, I was just, physics as well. And then you go into your chemical engineering focus, which is really the people in the world that take an industrial process and improve it.

So that could be a higher output of things like gasoline or, you know, anything in that region making plastics, whatever it is, making a lot of the industrial components, really, all of them, in the world, you know, better or easier to make or more proficient in some way.

And I thought, that seems incredibly boring to, you know, but it it was a challenge. So I wanted to do it in my school, we had a focus on nanotechnology.

And I remember thinking like, this is a future certainly of, of medication and it should be of nutrition. And, you know, maybe there's a way to do this affordably and make process changes. And, and really have a totally different end product that doesn't need to be absorbed through the gut the way it normally would.

So a lot easier, which for minerals, which I identified was quite literally the most important area of focus from a supplement standpoint, because it's the elements that were missing.

And to the extent we're missing them, we don't feel good. Her mood is off. I put this slide up during the talk, and it was just like 20, just 20 or so deficiency symptoms.

That and I asked everyone, you know, in the last month, have you experienced at least three of these, or at least one of these, at least two of these, at least three of these and hands just stayed up, you know.

And so it was interesting to see and also just not surprising at this point after doing this for, about eight years and, you know, seeing that. So I'm just kind of giving everyone this picture of why this is important and how we got here.

So, so there were several years there where I spent researching, and what I realized as I, was make was thinking, okay, you need to find a manufacturing operation.

And be able to make some changes to it and ultimately have an end product that is, unique to us and one that, importantly absorbs without digestion because so many people have gut issues.

And that's not going to change anytime soon. Frankly, it just isn't. I wanted to and I want I want people to be working on that and be mindful of that.

But gut issues are complex. They're multifaceted, and they're just most people are going to have issues. And I realized that was the case because when I was having all the issues I was having with brain fog, and hormones, I had low sex drive ins.

And so I had this beautiful girlfriend I was in love with, and I thought, wow, I'm in the mid 20s now. This can't afford to get where worse. Like, it's just it just can't, you know, and luckily now that's, that's completely changed my testosterone naturally, which I've never supplemented is, has gone from about 400 then to, 960 the last time I measured it.

So right up and then have made some tweaks and, since then, so probably up around 1000 now. I mean, and I've, I feel awesome, recovery from workouts and energy and everything like that.

Discovering Mineral Testing and Supplement Absorption

But anyway, as, as battling those issues and, and thinking if I can find a solution to this as a system, like a real process, and get these, have these products really work and have the testing really do two things.

One, show people what they need to work on and then also prove that the products work, like we're we're really on something. And so that's, that's what we do today.

And unsurprisingly, we solve a lot of root cause issues for people. That's so because essentially we're living in this world where, you know, we can't get we can't eat ourselves to health.

The food doesn't have the nutrition. And now we're learning that even supplementing may not be the best answer because you've empirically measured that, hey, I took the stuff, but the numbers didn't change because there's no delivery, there's no mechanism.

So you literally became the Iron Man of supplements and opened up your tech shop and figured out its delivery. Like, you probably don't even need the dosage.

We're going for regular. It's just more about how do I efficiently get it into the cell, right? So what does that look like? Are there like nanobots surrounding the like, what?

What did you actually build? Yeah. So what what I was able to do with our, our assembly line is create supplements that the particle size is small enough to get into the red blood cell, which is the delivery mechanism throughout the body and then stable.

So stable in terms of shelf life and also dosage. So all of that together collectively took a while. But yeah, honestly, the the problems that you have to solve as a chemical engineer are often harder.

Yeah. And and they pay you a normal salary. Yeah. Yeah. And this is, I mean, everyone kind of hears the stories and sees this as the future that's coming, right?

But I don't think many people realize that the future is here now and that this is available up. You know, you watched a movie like I remember. What was it, GI Joe, where the person, like, literally morphine change because the nanobots that are going through their body.

But there's sort of a lo fi version of that that you're using to deliver properly, which is incredible. And I've tried it. And this flip that I had, you know, from the magnesium product, it was incredible.

So why do you say then, if we're able to understand our mineral deficiency through our hair and we're able to deliver and replace and supplement better, why then do you say that diets don't work well because of what you said when you said, really?

Well, you know, we can't eat our way to health, right? So that's that's really what I mean when I say all diets fail, they eventually fail, right? They, you know, any diet that you're that's currently working for you is working, possibly because it's just been a change and it's been some sort of diet elimination where now you're not eating almonds and you had some allergy you didn't know about to almonds, right.

And then, you know, but as we as you know, as we fix our guts for everyone, that's hearing this. We we our allergies actually, you know or not, life sentences.

I think very few people really understand that. I'm sure you guys do, because I've worked with your team and they're incredibly proficient. And, you know, we'll have some joint partnership there.

Soon. But, yeah. So I, I really admire what you guys are doing there as well. And, and so it's, it's both of these things. Right? It's, it's, it's knowing, your genetic makeup, it's also knowing that you can move some of these levers by having, specifically these minerals absorb better.

Yeah. You know, imagine that someone's eating this diet, right? And they're they're trying. They think they're doing this right. They think they're eating the same foods, maybe even, let's say they're perfectly somehow controlling the amounts of everything they eat.

So they're eating the same amount of the same grass fed steak from the same company and etc., etc., same vegetables, each week. Well, there's a little problem in that.

If you ate super repetitively and without much diet variation, then you can actually develop some allergies and you know, issues with those, those foods.

Right. So that's one issue that's that were diets are failing, but the other is from the micronutrients standpoint. If you're just doing this, you think you're doing this, but you're really doing this because the food is always changing.

And that could be based on the soil. I mean, or it is in part, but it's also based on your stomach acid, on your ability to absorb all those things. Right?

So, so many of the people, not only that we work with, but I believe just out in the world today have low stomach acid. So we're we're also struggling there.

In this, this world that is, that we're living in, that we're kind of straying from our, our, our, our makeup really. Right. Our design. So yeah, with that, you start to see, well, all right, if I'm eating all these vegetables or, and all this, this meat or whatever my diet is, I'm still going to have this is base level of things that are missing.

So I need to be testing for that in a way that shows me the whole picture, from a nutrient standpoint, really telling the story of what is and then coupling that with the, with the story of genetics, too, and going like, oh, here's my dispositions, here's the, the machinery.

I'm working with too. Right. So yeah, I really believe that the these two lenses together are incredibly important and really not not overlook. I think it's, that that word that you just made up, which is amazing.

What we're looking for is exactly what's happening, because their belief when it when it comes to genetic testing, people get it. It's like it's new. I got to go buy it from some company online.

When it comes to health testing, like whether it's a hormone marker, vitamins, whatever, people think that this is something that my doctor should be letting me know based on some symptom that I gotta go get.

And they're often thinking it's blood. So like the question becomes, why do you prefer hair? What's the difference? Is there any benefit over blood testing?

Yeah. So if I want everyone to picture the the blood in their left forearm, if they could look down and somehow look into their veins, what you would see is really healthy blood.

No, almost no matter what state your body's in. And that's because blood is is us on our best behavior. It's you on your best behavior. What I mean by that is the blood is so mission critical to keeping us alive.

We call it life force that it will our body will actually pull from the tissues, organs and bone marrow to make the blood as close to ideal as possible.

It can't, as you know, probably the pH from blood. If it strays much past a really narrow margin, we die and we die quick. And probably painfully so. The body and its innate intelligence goes, you know, that's an immediate risk.

I have to I have to make this long term trade off. And because of that, we end up with osteoporosis and osteopenia and different bone issues because we're pulling from bone marrow to fix our pH after stress.

And caffeine and alcohol and, you know, all this and environmental toxins and triggers. So the other aspect of this is the world is roughly a thousand times more toxic than it has been in any other period in recorded history.

So that is this other thing that we're having to defend against in our both our air and our water. So it's it's a lot to think about. But I feel like this is a really straightforward approach that makes it as simple as possible.

And the results go far beyond, you know, we've been talking about let's look for markers for minerals and etc. and, and know what to take. But, I mean, I heard in your work you're addressing things like adrenal glands and thyroid function and, you know, actual condition based stuff.

So how do those insights translate into that? Yeah, that's a great question. So there's there's certain ratios that have been understood for several decades now.

Building a Better Delivery System for Nutrients

In the same way that we we've understood that, oh T3 is a marker in blood for thyroid function. So D4 and DSH and E3 and so on. Well, we've realized that certain ratios that we look at in the body, for example calcium to potassium is a hugely correlated indicator with thyroid function.

And that sodium, potassium and sodium to magnesium or different functions, that or different ratios that show us the function of the adrenal glands. And when you see that, you can go off and do another test that is specific for either one of those, but you'll see that it, it falls in line.

So it's really cool to be able to do that, get this whole picture, see your individual deficiencies, but more importantly see the ratios. Yeah. Yeah, I think they cover these things.

So you think that the literally what you're suggesting is there's an alternative path to dealing with thyroid and adrenal function as opposed to masking.

The symptomology we have here is one of the root causes you can actually eliminate to reverse it. Right? Right. So one of the questions you might have heard me, ask this to the crowd was all right.

Anyone raise their hand if they know the building blocks of hormones, if they can name all the building blocks of them? Hormones, especially that just the most key aspects.

Most key aspects would be minerals and fat. Just if you if you don't have enough good fat and if you don't have minerals in the right ratios, then you're going to have issues making adequate hormones that really provide the mood and quality of life that we're looking for.

The happy sort of, hey, I just achieve something. I feel happy versus I just achieve something and I feel nothing, or I don't feel like achieving anything or know whatever, or I don't feel like going to bed because I'm not producing enough melatonin.

I don't feel good because I'm not producing enough serotonin. Both of those are governed in part by magnesium, largely, in the case of melatonin. Right.

So it's sleeping super well at night with, our upgraded magnesium. So, yeah, the I really see it as this approach that is incredibly fundamental and accurate, reliable and and affordable to, you know, it's it's sort of Occam's razor, really, when it comes to health testing because, you know, to really answer your question, we're speaking the reason all of that is, is because we're we're providing the glands, like, throughout the endocrine system.

So let's say primarily we're focusing on thyroid and adrenal, right. And also signaling from pituitary to thyroid with magnesium, but you know, we're or and we're providing all that signaling or we're providing the, the building blocks for the hormones for those glands.

So when you have the building blocks of the hormones, I mean, the body's able to make thyroid hormone. And when you don't have iodine, zinc, selenium, copper, magnesium, to a certain extent manganese, then you're not going to you're just not going to be able to from a elemental basis.

And just kind of a, you know, really a math equation or chemistry equation. You just will not at some point be able to make thyroid hormone. There's just, you know, that's that's just how it is.

Right? So we need to be testing for those elements and replenishing the body because we're constantly burning that. That's the thing. The body doesn't store minerals very well either.

So we need to be taking it in. You know, they're largely, you know, just water soluble. So yeah. So is just also the answer to how your testosterone levels went to Superman level with low, hormone therapy.

Yeah, yeah, yeah, it really is. I mean, that and just a lot of other just personal work I've done throughout the years. But, you know, in terms of actual replacements, the only thing I've done was get testing and testing every 60 to 90 days.

I recommend people do it quarterly throughout the year. So you're only talking about doing a test four times a year, and it's here. You don't even have to ship to your house.

So it I think it's about as easy as it's going to get until we get to this new phase, maybe in our lifetimes, hopefully, where we can do some of the things, like you were mentioning earlier, that are just just quantum, that are just not available.

To, at least most of us. Yeah, include new find. And because, you know, it's really interesting how you said that the building blocks of hormones that we need to consider.

And that's so cool because you're getting truly to the root cause, right? Like, here's the stuff you need.

Why Diets Fail and the Role of Minerals

Doesn't matter even genetically. If we tell you that you do a really good job of converting progesterone into testosterone, if you don't have the building blocks, yes, you have the instruction, but you don't have the Silly Putty to put together and build it out of in the first place. Right?

So, do you find that as people are aging, that gap is bigger because the nutrition hit them for longer? What is that window like? How long does it take?

Right. When you say the window, how long does it take? We knew that, that that, gap from, like, where they started to, you know, you got your testosterone levels, right.

Is there is there other stuff to consideration as like, cool factor, like, not know the inability to produce them or like the age of factor. You sure.

Age is a factor in terms of, heavy metal excretion, which does affect this. And we also test for that. So we also look at and tests for all in that one test, heavy metals as well.

So as we age thanks to some analytics cells and senescent cells and things like that, that, you guys know plenty about, then, you know, just the efficiency of the body over time, if we're particularly if we're not doing some of these interventions, decreases.

So we need to be reversing that through, you know, better, more adequate hormones. So yeah, I do see, you know, the gap I think is the turnaround is, is is looser, but people are still getting noticeable results within or by the 21 day mark.

If they were to retest, the, you know, like, like, for example, if you were to test blood, it would, it would show some improvements by that point. And sometimes.

Yes, about co-factors that is important. So you can be out of say be six and that can have your magnesium showing high on your test. So there's an art and a science to, or an art for science in understanding the analysis and that you don't just read it straight away like a computer.

Would just or like a robot would. Yeah. There's, you know, there's reasons why, for example, your sodium is or your potassium or your magnesium is elevated, even though your intake of those things is low.

And it could be kidney distress in the case of potassium, it could be that your your body is dangerously low in sodium. So it's preserving it and recycling it, which is incredibly intelligent of the body.

And he's able to do that with both sodium and potassium. In the case of magnesium, that's it's letting you know, hey, there's a, there's an issue, because, yeah, we know just from asking you questions, for example, if you're supplementing or not supplementing and you're off the charts in magnesium, it's not because it's over absorbed that you have a super abundance, it's because you have a co-factor missing.

And then sure enough, when you restore that cofactor by the next test, it's improved and you've done almost nothing different. So there, there is that.

And yeah, over time, I would say the message really is that we can help everyone and that it's great to start sooner rather than later, because heavy metals accumulate more nutrient deficiencies you have the more easily those heavy metals accumulate as well, which is that relatively not understood very well, by most people.

But it's important to understand certainly for sure. You know, as I'm listening to you, I'm starting to think like you and I'm playing the game like, let's get in Barton's head. Right.

And I'm starting to think, like, how the. And I'm thinking, like, Americans in general have some of the worst food in the world. There's a high, probably higher volume.

There's a lot more available. But the average American, you know, is eating some of the worse stuff. It's almost better to be in poverty in a country where you're pulling things underground and eating real food than what you can buy from, you know, certain stores.

And we also found that Americans had sort of the worst outcome when it came to a recent viral infection wave. Right. So is there something to be said about lack of minerals and our ability to deal with viruses and bacteria?

Yeah, certainly. So one of the ratios we look at is zinc to copper. And that's a really interesting ratio because the zinc yeah you know is viral susceptibility.

But the thing that I didn't hear one single person talk about during the epidemic that we had, the yeah, well, I'll just leave it at that. Was copper and and how and why to balance it.

And what happens if you don't. So I'll, I'll tell a brief story real quick. So I had a friend, come over. He and his fiance say we're going to cook at my place.

He got their came over a little before her and we were talking. He had just done a hair analysis, and, he I never see him upset, but he went got really this, these guys asked him, you know, I was, I was last week, you know, what you been up to?

And in short, what he said was I, you know, from really upset place. He said, I spent three days last week finding a biological dentist to figure out what sort of infection I had in my mouth, i.e.

a bacterial infection. And I told him right before he said that, I said, we were talking about supplements, and I guess he was kind of leading up to that.

And I said something to the effect of kind of over my shoulder as I'm like preparing in the kitchen. And I said, well, be careful with that, that zinc supplementation, because that is that's way too much to be doing without testing, you know.

And I said, you know, you can get a bacterial infection. And that's when he was like, I can't believe it. You know,

this is, I don't quote him exactly.

But he said, I essentially I can't believe it. I got a bacterial infection last night or last week, and I spent three days, the last three days of the work week because of it.

Hair Testing vs Blood Testing

Now, the good news for me is that we live in the same city, and I now have a great biological dentist that he's vetted for me, by going through that process, which is awesome because I needed to find one, biological dentist for people that don't know is the only type of dentist you should go to if you have any sort of mercury fillings that need to be drilled out, which can cause, huge weight gain, crash your metabolism, crash your thyroid hormone, this happened to another friend, here in Austin recently.

I just did an interview last night with who has a massive community online, and she struggled with that for ten years just because her mercury fillings were, drilled improperly.

So total side note but also, if someone you know hears that that's that's a life saving sort of little aside. So I want to throw that in. But that's zinc and copper and that's viral susceptibility and bacterial susceptibility through this lens of minerals.

And when we understand that, we we start to know that, that oh, okay. Well, if that's true for zinc and conquer, it's probably true for calcium and magnesium.

It's probably true for calcium. Phosphorus for all these elements throughout our body. So really testing becomes a no brainer. And then how can you test everything on the same page.

Well you need to be taking it all from one sample. And that's where hair becomes the clear winner again. Because to do all of that with blood, you have to take a bunch of different samples and the cost of that blood work for, you know, the same amount of data would be several thousand dollars instead of a couple hundred, with the consultation.

So you know, it's and it's just easier, and it's more accurate. So, yeah, to me, it it checks a lot of boxes, even if it's the most expensive solution, I would still do it that way.

So choose this. No question. And there would just be a lot less people that could afford it. Luckily. Luckily, that's not the case. So. Yeah. Okay. Shifting gears a little bit, I'm just thinking about this in the context of, like performance in athletics and people that are kind of already optimal in doing, you know, want to go to another level.

And there's a word that we use that people don't often associate to minerals, but that's electrolytes. And we think about how, you know, we associate it with hydration.

Right. And like you said, your body's bleeding minerals all the time. It's hard for you to hold on to what you have. So how important is it to understand what electrolytes are, where they come from, how you get them when you're taking your sports drink with electrolytes, is that actually doing anything for you?

What do people need to know? Yeah, yeah, yeah. From a performance standpoint, those are all interesting questions. And, to mention one other thing around, both performance and that touches on hormones in that category that we're just talking about zinc and copper real quick.

I just want to throw this in because it's important. And zinc also is a great adjunct to, electrolyte products. So we have electrolyte. The product has zinc in it as well.

That also enhances hydration. People should look at that to so it's called charge for anyone that's interested in. And it zinc. Zinc is governs testosterone and progesterone.

So you know very important for progesterone is really a master hormone for women. In particular in testosterone obviously for men. But you know, women have ten times more testosterone in the US in their body.

I think a lot of people don't know that. So it's incredibly important for both men and women. And if we're talking performance and we don't talk about that, then we, you know, be missing the boat.

So yeah, I just want to mention that real quick too. But we can we look at that ratio too, you know, that also is a phrase that coined which is nutrition becoming personality.

Because if you give a guy a ton of copper, he will become more feminine. And over time you will become more creative, will become more ungrounded in creativity.

So i.e starting projects and not finishing them, and zinc. So zinc is more of a masculine element. So is iron. Copper is feminine. Copper is creativity, copper is estrogen governs estrogen.

So those are some thoughts around performance real quick. And then to dive into electrolytes. We can do that too. Sure. Sodium potassium magnesium chloride.

You know, these are these are all very important zinc as well, to balance with that. And for some of the reasons we just talked about. So yeah, sodium and potassium is, is a ratio that we look at.

And I feel like it's one of the most important that you can look at in the body, because our why why is that. Well, our heart, you know, sits in a bath of sodium and potassium and that that electrical impulse is, is really what keeps us alive.

And magnesium helps the relaxation of that contraction. So to the extent that someone has heart issues like a, you know, different, like a, you know, arrhythmia, different things like that, then that can usually be solved with magnesium.

In fact, to relax the heart, when people have a heart attack, they're rushed into an emergency room and, you know, I could ask, you know, if we had a live audience here, but most, you know, I'd ask, like, does anyone know the first step that nearly every E. R.

in the world does? They actually put I. V. magnesium in just straight away. So one time, one of the few times when they use something besides a drug to actually help people, because it's not effective.

And, you know, it just comes, comes the body, and the heart is able to really relax. And that's that's really what you're seeing with a heart attack. Because the heart is, is this muscle.

And it's like getting a calf cramp. Except it's just a lot more important. And, you know, that lockup, that siege.

Hormones, Thyroid, and Adrenal Function

Siege, is is really what we're undoing with magnesium. So when you have a cramp, you can reach for magnesium instead of, potassium in that. That'll help in nearly every case.

Case in point. People talk about hours stopping cramps. In a matter of minutes. So that's that's really good for, for anyone that has, like, painful periods or just a lot of leg cramps and things.

But yeah, so that's electrolytes, sodium and potassium specifically is really interesting because when it's below a certain level, that ratio, when it's below about 1.4, you all but guarantee emotional distress, which can manifest in something like bipolar disorder, you know, again, nutrition becoming personality.

I personally believe that from everything I've seen in all the what some people call miraculous turnarounds, and I would just call just balancing, what is your neurochemistry through the elements of the whole solar system that we

have and what we have here on Earth, in a way that's test.

You know, where we're testing and we're actually absorbing those nutrients, you know, kind of straight forward. Now that we have products that really work.

So, yeah, it's it's super impactful. There's a lot that we could cover and talk about just in this one area. But, you know, keeping the muscles hydrated, keeping the whole body hydrated is so key for performance, especially in heat.

And we're shedding a lot of that. And if we get to the point where we don't feel, I'll just ask it this way. Like, can you imagine a top tier athlete playing, his or her best, whether it's high stakes, you know, Olympics or anything else, even practice a hard practice if he or she doesn't feel emotionally safe and secure in their body.

So that is now you're really starting to understand the value of electrolytes when you, when you think of it that way. Because when you're sodium potassium just that one ratio is low, then that's what you're guaranteeing.

And if you're not testing minerals via hair then I don't know how you get that ratio. In a way that's really meaningful because blood, again, is not going to be meaningful.

There's going to be deficiencies that we're going to spot the better part of a decade before they ever show up in blood, if not longer, you know? So, because again, a blood is it's going to be as, as homeostatic as possible.

Right? It's so important. Yeah. So yeah, that's that's how I think of that. Yeah. I don't think I mean, after listening to you, it's hard to deny. And I think people innately know this, that there's a need to be supplemented with minerals.

Right. I think what's new and what you're opening our eyes to is that there's some personalization required, but it's not one size fits all, which we most people think it is.

Let's take my magnesium. Let's go take my whatever. And then it's the combinations, the, the the, you know, the proportions, the dosages. That can all be highly personal, but unless you test to know where you're at, how do you know what the right protocol is?

Right. So that's really mind opening for me, because I've been taking a, mineral that I add to water. It's, I forgot the name of it, but it comes from some, some dirt somewhere.

They extract the mineral from it, you know, and it's it's a one size fits all type product. But knowing that you can personalize wherever you can personalize, that's like the ultimate luxury to be able to get exactly what you need for yourself, for whatever purpose.

So what is your daily regimen look like? What are you taking every day? Yeah. That so yeah. Thanks for staying all that. I mean, that's how I feel about it.

And the only thing I would add to that is that, yes, it certainly is personalized.

Electrolytes, Performance, and Daily Regimen

And it does change over time. All right. So you today versus you 90 days from now is going to be certainly different than you know. You six you know, three months ago so so that's an ongoing sort of you know, I picture a spiral upward like a spiral staircase, and you're just getting tighter and tighter and tighter as you go up top.

As long as you continue testing, continuing taking action with tools that work and, really absorb well. So so yeah, me personally, some of the things that I guess I'll just say what I almost always take, and I think virtually everyone would benefit from is, our upgrade magnesium upgraded zinc, upgraded memory and upgraded potassium, and then salt.

And then now we have upgraded charge, which is our electrolyte product. And it's a no brainer. It's one of our that's our only flavored product so far.

I kept flavoring out of all of our products for a long time because with this unique absorption method, I didn't want to disrupt the absorption in any way, shape or form.

And then now realizing this, this new way to get flavoring in there, have the flavoring be stable, have the product be stable and have it tastes really good.

I mean, oh, it's great. So I really like that one. Really proud of how that came out. I take some pea thyroid sometimes, not all the time. And then I take either trace minerals or I take our upgraded metabolism that has trace minerals in it as well.

And when I do that, then I'll skip the zinc for that day because it has quite a bit of zinc. And I'll skip the memory that day because it has been upgraded.

So yeah, manganese in that, that form. So or in that blend rather the I think the key thing to mention with all of our, our process, all of our formulas is that everything we've been taught for about a decade now, about forms taught and retold and regurgitated, take this form of this magnesium or this, lithium or this, chromium, for example, all of that for us, based on the process that we have.

Really isn't that it's not true. It doesn't matter. The because we're just looking at it totally differently. We're changing the structure of the mineral such that it's able the whole the body's able to utilize it throughout the body, like all the cells are able to utilize it in the same way that for for the people that are like, wait, I have questions about that.

So imagine you get magnesium from the steak or salad that you're eating. Your body doesn't ask you, oh, or it doesn't say to you, essentially, sorry. Cash, I got magnesium, but I can't use it for the brain.

You know, sorry. You know, it doesn't. That's not how it works. So why we've ever built supplements or thought it was good enough to have a process where the output is the supplement?

That's only going to help you really restore your muscles or your brain. As a primary focus. At least that's just the didn't seem to be the way. So that that was the North Star just from day one.

On. Well, how do we. This clearly doesn't have to be this way. So how do we make it different? So that's really awesome. I think, mine's been blown right.

But she achieved the objective. And I personally learned something because, I never thought of personalizing my minerals. I literally have been taking a off the shelf.

It's good quality stuff. But, like you said, what we think quality means, we're looking at the quality of the ingredient. That's right. And if it's a good manufacturer that uses good ingredients that organic, if possible, the right GMP standards.

But quality extends far beyond the ingredient itself. It's the actual delivery. It's the, you know, the the matching of proportions and knowing how to do it.

It goes far beyond just like who's supplying me the product. Right. And that's all I was looking for. I didn't know I needed to look further. So, I'm going to have to grow something up here to do the hair test.

Maybe I'll get out of here. Yeah. Yeah, but this was awesome. Really enlightening. I'm really happy that everybody got to hear this, because it's a whole other layer to personalization and wellness that most people are completely unaware of.

So thank you for joining us. Yeah. Thank you so much, man. This is the one last thing since you mentioned that.

What I'll say the easiest way for people to get a hair sample is, most likely, unless they're going to ask someone they live with is, and of course, it can come from underarm or pubic as well.

Is is going through your barber or your salon and, you know, just telling them the instructions, giving them the card, the kit and saying, hey, would you take the sample for me?

I'll give you a tip. You know, something like that. Just make it easy and do it every time you go in. If you go in once every three months. Yeah, that's really what I it's literally what I do.

So, Yeah, I hope that's helpful. I hope this has been helpful for people and, certainly always a lot of fun to talk with you. So this was amazing. Thanks for.

Yeah. Thank you.