Introduction to Magnesium and Hypertension

Welcome back to the Reverse Hypertension Naturally Summit. And today I'm going to welcome Dr. Decker Weiss from Jigsaw Health. How are you today? Good. Thanks for having me.

Well, thank you for having me. And today we're going to jump into kind of this murky water of supplements and before people, you know, disengaging supplements.

I really want to kind of get into one. You have research and speaking to like people get lost in the sea of supplements like we had described before. But you said there was an interesting story behind maybe Jigsaw Health.

And also, you know, the particular thing we're going to speak about today. But can you kind of tell us a little bit about the history? Yeah, I was. So I've used magnesium is part of a hypertension protocol in a way that was more realistic.

Magnesium can affect blood pressure, health. It takes time. It doesn't work in a day. It's not a drug. It's not even a normal like growth year, for example, that will work, you know, faster. It takes time.

But I have no doubt in the clinicals in the end, when we look at demographic data that low tissue, magnesium states are a big contributor to hypertension in the country.

In one thing that is really hot in research now is sort of the calcium, magnesium in battle in our brain and our muscles. You know, we're turning into rocks as we age and we need to get more magnesium.

But sometimes supplements doesn't fix it. Sometimes it's dark, leafy greens and things like that. And so, you know, all of that stuff sort of battles in my mind.

And I was approached. I always used a support called Magnesium Object. Frankly, it was out of Germany. It was the Dnieper family. They did a lot of research on absorption and for me it was the best absorbed because magnesium is a difficult time absorbing.

Sometimes we like that milk of magnesia doesn't absorb. It's great for constipation and mag citrate doesn't absorb. It's great for clearing out your colon before a colonoscopy.

But that's not the one we want for blood pressure. We want it to get into our cells and tissues and things like that. I was approached by this company and I'm looking at it and it's a small company out of Scottsdale and their main products, Magnesium.

They want to run a study and kind of see if their their magnesium is better than others. And I frankly, I sat down with them. I go, look, if it doesn't work, this is a big mistake and sort of a larger fish in a small pond career wise.

If people ask me about you did this Jigsaw magSRT study yet you're not using it, what happened? I'm going to tell them the date. It didn't work out. And so I said, look, you know, do you really want to do this?

And they said, absolutely. We believe in the product. We believe in years of testimonials, their die mag mate independently did have some data out there floating around.

But we want to know our version is better. We think it is. We want to prove it. So I said, okay. And and I was like, wow, you know, they're sort of putting the business on the line here.

Yeah. And then the other thing about it is we all want more research in natural products. Real research, not eight people. We gave it to eight people and they felt better.

We're talking about at least one blind, right? A placebo arm. We know we natural medicine products because you can't patent doesn't have the drive financial incentive to do these big trials we'd love to find out if fish oil would help protect from stroke and Afib, but we don't we big study hard to run study dangerous study.

So I ran a study in one of the difficult things about magnesium is how do you know if it's working? Because in our bodies, 1% of our magnesium floats around in our serum, the other magnesium is doing its job.

It's in our bones, it's in our vascular system, it's in our tissues working. So how do we prove it's there? And nobody agrees. So I'm sitting with this company whose main product is magnesium, saying, I just want you to know that we're going to have to extensively do a lot too in we probably don't have a true claim out there like ibuprofen helps with headache like that's not going to be the end point here they're like do your best years our budget and it was significant budget and I was like, okay so what we came down to is really three things.

Does it absorb? Okay, great.

Designing the Jigsaw Magnesium Study

So it doesn't cause as much diarrhea, does it absorb, you know, does it assimilate? Does it get into cells? Okay. But even that it's called RBC magnesium levels, a lot of people, they hang their hat on RBC levels, but yet science says that's not the be all and end all.

Science says the only definitive way of knowing of magnesium works is clinical endpoints. We have well-established magnesium deficiency surveys that are accepted by the government, by names in all the studies and things like that.

Right. The RDA says you need to get X amount of magnesium in your diet, but it doesn't say how much has to absorb right. And no, that's interesting. Right.

So when I generated the study, we did multicenter two centers, single blind. I would love double blind, but that's where it gets more expensive. But the single blind so the people don't who are getting the supplement, the people who are handing it to them don't know what it is right?

Well, no, the people who had any tubes sometimes did something. The people receiving it didn't go for is placebo or not. So we're still blinded. We did serum values.

So when they took the pill, we checked them at four and 8 to 12 hours. Blood draws. Does it get into the bloodstream? Those are those are busy folks. And we weren't paying them to do that.

So there were a lot of patients and there were a lot of volunteers and they got free possible magnesium. That's that that's what they were promised. Right.

I know you bought the nice people. Right? Right. And then the second thing was right in 30 days and at different points, we checked the RBC magnesium.

That's the simulation. Okay. So RBC Magnesium, so serum values went up nicely. RBC values went up predictably a little bit better than we actually thought.

What we saw is the more deficient, the faster the RBC came up. Kind of makes sense clinically it is. And so that was nice. One of the other things we saw about RBC is it seems like the body had a regulatory mechanism.

So when we do magnesium and IVs, if we do it too fast, you can stop a heart. Technically in cardioplegic solution When we slow down heart rates. When we work on the heart, we operate on hearts.

There's magnesium in that solution to really, really give that heart a nap. But aurally, we've always been worried. What if it absorbed too well? Hmm.

And we got these people dizzy and doing these things. What we saw is it kind of topped out. Never went too high. It was like the body still. And we liked that the body still had its regulatory mechanism in there to protect it.

And then the third thing was the surveys, and that's where the product shined. We consistently got some nice reduction in systolic blood pressure over about 90 to 120 days and even a little bump in diastolic, which is harder for natural products because it's usually fluid volume and, you know, all that kind of stuff.

So this product, whether it's leg cramps, sleep, you know, magnesium is like thyroid, it's involved in everything, right? So when you improve it, you would expect a lot of effects.

So when we looked at those clinical endpoints, it absorbed, it assimilated and we had clinical benefit, including some hypertension stuff. And you know, when we got those, I was texting them as I'm watching the results because we didn't really, truly unblind until the end.

I was texting the companies, I said, I think you got a good magnesium. I said, I might even use it to my benefit because I didn't use it. When I went in.

I was sticking with the one that had the best data that I did and when it was unblinded in the data, you know, was crunched through. We had professional data, statistics, P values, all the stuff that us nerds know that show, you know, is the data real?

You see, you looked away and I said, nerd, but but you got to be if you're interviewing me, you got to have some nerd in your hair. So but we did all that.

The data was was great and it exceeded anything. The the Journal of the American College of Nutrition. This is the JAMA or the Jack of Nutrition agreed to publish.

And that's a there's a little company in Scottsdale. Right. So getting into this journal, big deal stuff for them and I was very happy for them. And it's it's also a lesson.

This is a $3 billion company. I don't even think, frankly, it's a multimillion dollar company. I don't know how big it is, but they chose to do what they believed.

And it's a great story because in natural medicine, there are people that are taking, frankly, too many things based on hopes and possibilities. My patients I don't know if you're seeing this, Dr. Marbas, my patients are coming in on too many supplements.

Oh, yes. Oh, yes. Way too many things. You know, should magnesium be taken every day? Maybe it depends on the individual patients. From my folks that are we're trying to push down, you know, index calcium, magnesium more in the body because they're sort of this yin and yang to each other.

Sure. There's definitely a place for some people to take it every day. But it was really fun to be part of this. And when you see the success that that that's cool and they're very nice people.

You know, when we looked at it, they're like, you know what? We're going to continue the investment to submit to these journals. That's expensive to expensive.

You submit to these journals, and a lot of these journals say you submit to us, you can't submit to anybody else for three months, six months, a year.

So again, they put it on the line here, you know, so we're going to and there's always journals you can get anything published, right? You know, in my toe I got it published, you know, so it fun to be with and really the best you know

if you if somebody says I want the research to prove it, I want something that that meets the standards of the labels, standards of all that.

And it is very reasonably priced. They they do a bigger bottle, which I like because my patients keep throwing out 60 count bottles. It's just filling landfill here, you know, then if you're really looking at it, I think jigsaws, you know, their magazine is a premium one of the market because they proved it perfect.

Well, I love to you that you you came in with the bias of like, well, if it doesn't work, I'm not going to use it. This is very blunt. So that's nice that you can come away with, you know, feeling confident, at least in this study, that there are the bias of the actual and, you know, principal investigator was was transparent, that you were like, hey, this is if it doesn't work, this is nine work you're going to publish.

Clinical Results and Blood Pressure Benefits

Right? So there were primary outcomes, the secondary outcomes. What other things did you see that were people were reporting back that they were benefiting, you know, three and four months out.

Of sleep, leg cramps. Okay. You go into some of the personality things because we know magnesium co factors into some of that stuff, decrease in panic feeling stuff.

We panic attacks even. And some folks came down. Let me think. I'm just trying to think of all the things that that were really good end points, improved workout performance, you know, recovery times, things like that.

But the main thing was hypertension, panic, emotions feeling generally calmer and sleep were the biggest things that we saw. So we understand that there's a mind body connection.

There really isn't a separation, right? So when we think about you mentioned the emotion piece of this in which alone can, you know, get the sympathetic nervous system on guard and you see an elevation in hypertension from that standpoint, which do you think came first, the chicken or the egg?

Can you describe kind of the magnesium and the, you know, the cellular level, what's occurring with hypertension or do you think it's maybe it's multifactorial or what is your your thoughts?

You know, and again, magnesium does a lot of life necessary element, so it's doing a lot. My feeling is it's a great question. My feeling is that the physical vaso dilation was first, you know, magnesium, vasodilator, calcium vasoconstrictor.

So what nerds like me, I'm not going to throw you at that deep into the category. I'm all I've been known to be called in order to know that. So, you know, we're shifting the balance more even.

We need calcium too. But we get from all our dairy products and everything we consume, we're generally over calcified, but that, you know, people always want to always promote some osteoporosis because there's a lot of reasons we get osteoporosis.

But right. You're putting that back and I'm a cardiologist, so vasodilation, that's our thing. But I think secondly, a very close second would be smooth muscle relaxation.

And so for everybody out there, you know, leg muscles, all that, but in arteries, the middle layers of muscle. And so that's one of the ways that we vasodilator magnesium work on several ways to do that. But I think that the factor in though is when people sleep through the night and I'm talking good sleep, I always say more patients.

It's, you know, sleep is like booze. There's fine wine and malt liquor, okay? When you're pharmaceutically inducing sleep, you generally get the malt liquor of sleep and your body doesn't repair when you're fixing sleep with either a magnesium or it's been nice.

Jigsaw came out with the melatonin product and they're SRT. This whole race, when you're naturally inducing sleep, now you're getting the fine wine stuff and then really good things happen with good sleep.

So I think that those are the things that contribute all the blood pressure. But I think in the absence, even if it doesn't help you sleep better, you're going to get some underlying blood pressure reduction and we don't have to.

I was very pleased that it didn't work too well. If it works, if it's because these companies claim Dr. Mervis 100% absorbed its nanoparticle size, if 100% of the magnesium absorbed, you'd pass out, right?

Okay. It wouldn't be there. We wanted to absorb it in natural ways and we wanted to bring back homeostasis. We're not looking to drive you hypertensive like, you know, when I prescribe pharmaceuticals to patients for hypertension, I always say I can't overdo it.

No, no, no. My pressures to I said, yeah, but when you get into cardiology, we're going to ease it down. We can't go too low. You pass out your crash, your car.

So I really like the fact that whatever they're doing with this die magnolia or die, you know, they're their version of magnesium, whatever they're doing, it is not over absorbing and causing hypertension.

That makes it extremely when when people say, what's the safest magnesium it's going to be mag srt because I've clinically seen the RBC values not go overboard into levels where we might go, Hey, what's the criticism from a lot of these medical doctors and the supplementation?

Well, you don't know. You haven't proven. It doesn't do bad things. They're right to a degree with historical use and things. We have edges on it. But we can say that in this trial it was very, you know, almost the level of like causal for prevention that it won't go too far either, that it'll maintain a balance.

It really does it. And when you look at supplements in the core of what we're trying to do, especially with minerals, we don't want to overdo it. When people take iron, they can absolutely get too much higher.

That's a really bad thing, especially for heart. You know, Farrakhan's going up and inflammatory cascades. We don't want hyper magnesium. This restores that balance that we really want.

That was, I think, particularly neat from a cardiovascular point of view. Hmm. Interesting. So what are the the amounts, the milligrams that people are taking or they took in the study and they did see some improvement.

So we generally did 1 to 2 twice a day as we ramped up. And we wanted to see the difference in their in their and I've got my little supplements facts box that I'm sure I didn't memorize you know or four tablets is 500 milligrams of di magnesium eight.

Okay. Okay. And then you have the breakout, the magnesium from there and then their model uses some active or what we call cofactor b vitamins in there.

And that's part of their SRT model that they, you know, this was done on their SRT model. Nobody, no other magnesium can make any claims based on this study.

I have seen other companies with magnesium use the Scottsdale Magnesium Study as a reference for what magnesium can do. I have sent them a nice, polite email saying, excuse me, your magnesium is not mag srt, please remove those from your site.

I just did it. I was lecturing Vermont and they had this magnesium thing in there, according to Scottsdale Magnesium Study. And while that doesn't have cofactor bs in it, which I love to love in my heart, patients and all that stuff, by the way, these cofactor these they're using quatre folate, which is a company that's very expensive.

So they're not just using cofactor BS, they're using the right ones, then they're the reliable ones in order to get it

done.

Sleep, Cramps, and Other Reported Improvements

So those levels are what's kind of creating, you know, helping to create this SRT effect that they have. Okay. Can you speak a little bit about the different types?

I know you mentioned the absorption issue, but magnesium glisten, aid, the sleep, whatever the different types because people are like, so I see you're talking about the magnesium, the slow release therapy, SRT, but what is the different?

Sure. And why is this one, the particular one we should be choosing in this case? Yeah, in this case. And right in magnesium gets very complex because no other mineral has such a, you know, this wide swath of effect.

You know, low cost magnesium can be of great benefit in medicine for constipation. Uh. It does not absorb, you don't want it to absorb. And so when I think of those, the first one is the famous milk of magnesia, magnesium hydroxide, real cheap in every store and very gently helps with constipation.

Meg SRT is not your constipation magnesium. It is structured to be your complete opposite. So Meg oxide, which is frequently taken for heart and it's not a good form of magnesium mag oxide mag aspartate I don't put in a really absorbable category.

Some people disagree, you know, there's a few opinions. I would say Meg citrate is not very absorbable and you'll see that quite often if you want to know which ones don't absorb well frankly go to a pharmacy.

Pharmacy, they will have the lower cost, magnesium citrate, sand oxides and they will help you with constipation if that's what you want. But they don't label it for constipation.

A label it just magnesium glycine. Eight to me is the divider where it starts to get more absorbable. Okay. And that's why you see older companies that came out with magnesium, they'll have mag lysine at around.

It was really one of the first ones out there that sort of absorbed better. And when it came out, it was king. It was by far better. Then we got the European influence through the authorities.

It was Hans Dnieper in the Dnieper family love orchards. They actually broke in with lithium or était, where you could take a sub pharmaceutical level lithium so you don't get those side effects and all the drug interactions because it absorbed way better.

So they broke in with antipsychotics. Right. You know, crazy world. Right. And then they had calcium irritates and then their big one after lithium was magnesium or était and you'll still see lithium irritates and these are outer and they had really nice data there.

You get the luxury that the governments quite often study it for you. Right. So they had that and that, you know, I broke into practice really about 2001 when I was done with training and I used that until I started with the study I did and worked okay, frankly.

Okay. So, you know, a lot of people still got loose stool and were unable to do it and I had to go to creams and things like that to try and get some again.

And when this came along, I was like, well, you know, I'm waiting for the new king here. So that's what is. So on one end of the scale, the least absorbable will read your milk of magnesia.

And then on the other end would be mag srt glycine. It's kind of, you know, a little bit over to the absorbable was a nice magnesium and it helped people for a lot of years, but it's simply out of date today.

So I think a really interesting question because I'll be starting to use this with patients and we're going to be really curious is what's the difference between taking a supplement versus just eating more magnesium rich foods?

So that will be the question is like, can this be done in that in that setting?

How Magnesium Supports Vascular and Muscle Function

Boy, that sure comes up with calcium, too. Yeah, absolutely. Yeah, it does have. And we need to be really clear on this. I'm very you know, when I look at calcium supplementation, you know, calorie, I don't like it.

Yeah. Cardiologist learn over years to not like calcium supplementation because we're seeing it end up in arteries and all that magnesium we have not seen that with partially because it doesn't absorb so well.

You can't control much of it and probably right. So with calcium, I'm a green leafy vegetable guy, dark leafy greens, green powders, patches. I get into that deep right, I'll go into that, you know, urine and slivers and all that stuff.

But trying to build foam under smelled sources that are interesting though without magnesium there simply when we're looking to fix a deficit, a tissue level deficit, it is my belief from the journals as well as what I've seen over 22 years of practice, that you can't fix that with diet.

Mm God, I just don't see it. And I've never seen anybody who claimed it. You'll see a lot of people with calcium say dark leafy greens is the best way to get it in.

Here's the negative calcium supplements study. Here is the negative for this. And here's the positive dark leafy greens amid Vietnam, strongest bones in the world, least the least amount of calcium consumption.

But the morning I got the soup and they take a bag of greens, cilantro, some measles, and they throw it on the soup. So it's like, oh, okay. Strongest bones in the world, right? Dark, leafy greens.

So it is my belief you cannot replenish from diet and really, you know, it is reasonable to be skeptical. Skeptical on that. Look at the data. Mm. Right.

Are there other things that you would prescribe magnesium for, especially in this particular city, like palpitations or some other things? We, you know, we spoke about the leg cramping and a few other things.

I've seen cardiologists recommend particular types of magnesium for palpitations, PVCs, that type of things that were uncomfortable physically, not necessarily harmful.

Any thoughts on that? Do I my palpitation protocol is on. That would be fantastic. Okay, Magnus, 31 to 2 twice a day. Okay. Okay. And I like to do that at bedtime.

Okay. Even with the act of in there, if they're homocysteine are eight or above, I see no problem with them taking it at bedtime. So if everybody's like, we don't want to over meth, wait.

Good, good thinking. No problem support you but anything eight or over, you're going to be fine. I will also use tori between 2000 milligrams and 4000 milligrams twice a day waking and bedtime.

And then I like the herbals. There's a combination herbal product called cardiac calm by restorative, but there's a lot of combo oral formulas. They'll tend to have things in there, like they'll have a glycosides source, usually Cavalieri, Erst or FanFest.

It'll have Passionflower and I have Leonardo's Cardiac. So I do use an herbal combo cardiac com I think is the leader in the pack right now and I'll do like two cups twice a day of that.

And with Cavalieri having glycosides in it, you're going to these companies have to know their stuff. If it doesn't

have any glycosides in it, then you don't have to worry about it hurting anybody, but it won't help them.

So it's got to have some. So they they've got to have that in there. So that's my my protocol for palpitations. So it is now I will get a better immediate effect from the taurine in the cardiac calm, I will get a sustained effect or to me we can get correction of the underlying problem over time with the magnesium on board.

Okay. Because the taurine in the magnesium to me are fixing the deficiencies. Okay. The magnesium will take a little longer than the taurine to really do that.

Dosage, Forms, and Food vs Supplement Debate

But if we're talking about cure to the point where maybe they don't even need the supplement anymore, you'll have to have the magnesium on board. Okay.

That would be my feeling on that. Did you have a question on the doctor? Yeah, I can describe tell people just kind of what the taureans doing. Tawni does a lot of things.

The main thing is we do creepy things as doctors. We take organs and we dehydrate them to see what they're made of. So if you've ever been in Path labs, you'll see this.

This is a research labs. Yeah. We took this heart and we dissolved it. We found out this was less than this. When we look at amino acids, make peptides, peptides make proteins, proteins make organs.

When we reverse that in heart, it is quite abundant in taurine and taurine is really needed for two specific things in the heart. One is for even contraction and rhythm to function healthy, right?

It's like pulling a four legged chair. You're pulling one leg out. No, magnesium is like pulling the other two legs out, you know, then you really don't have anything towards needed for that.

Taurine also is very involved in a Gabba Gabba receptor. So you see that. And one last thing about taurine is the digestive system, especially detox pathways will steal taurine.

You need taurine for phase two liver detoxification. It is my feeling only clinical don't have any data of this, but it is my feeling that the body will pull the taurine from the heart, from the system away from it.

For detox pathways, as we all know, detox pathways are prioritized quite often in the body. Our phase two livers are so inundated with everything these days that I think that's why we become deficient in it.

But magnesium gets you in. Mega search gets you in the game for true recovery. Okay, very cool. So wow, I think people got way more than just, hey, take me hypertension.

They got education on physiology and anatomy and everything else. So never give a cardiologist a microphone. It's terrible. Yeah. Well, we appreciate you spending time with us for this summit.

And again, tell us a little bit more where we can find this particular supplement. Mega 30. So go to their website, go to full script, go to any of these, you know, doctors supplements and what's the one on the East Coast I keep forgetting?

Well, you know, the one on the East Coast. Yeah. Well, all right. Well, it will. Be yes, you will have it. So all of those standard things will do it.

And and I think clinically see, the one of the last real practical things is with this study, I'm very appreciative they didn't crank up the price. You know, that one of the things I advise them on is, look, if you're in the pharmaceutical world, you're Eliquis, you're the one with the Leadless, right?

So you're going to triple your price. I said to me, You've invested in this. And it was a very interesting thing. They're very active on social media, Facebook.

They have magnesium, social, everything, very, very good and quite entertaining and funny. It's it's a great group. But they said, no, no, no. We have our community.

We're good. You know, we're all going to raise prices if we kind of have to with the economy. Right. And so you get the bigger bottles, bigger bottles in the magnesium world.

And for us, cardiologists are more compliant. So when you're just looking at simple compliance, the fact they have the bigger bottles is good. And the last thing is, if you are concerned about methylation, some docs are very concerned about over methylated patients.

They have a mag B-Free where they do take the active bees out. It was not the one at the trial, but it is a di magnesium malate. I have faith and there is studies on magnesium but I think it works the same.

But they do have an element. They do have a version that does not have the active bees in it just called mag B-Free. It's a mag B-Free But again for me anything homocysteine and up I have no concern really.

At six I don't have much concern. I very rarely see over methylation, but just in case they'll have the mag B-Free.

Palpitations, Taurine, and Methylation Support

But honestly, at the end it's the best absorber and it's got a big bottle, so your compliance will be better. Hmm. Okay, so I'm just curious about. I mean, we understand that homocysteine too high can put you at risk for certain things like stroke, especially if you're B12 deficient and things like that.

So nobody's ever I've never heard necessarily over methylation. So what would be the consequence. Of crop jitters, anxiety, sleeplessness? I have only seen two cases.

One was in a teenage gentleman with autism who had a very, very odd methylation genetic issue. And so before B's, his homocysteine was two. So even inactive B's would set off, you know, the kind of hitting the real rough behavior.

And then the last one was somebody was referred to me, but they were doing I've Active B's all the time, and they really had some symptoms that could be explained by a few things.

But I do know there's a culture, especially in psychiatry, psychology, that gets more concerned about over methylation that's reasonable. So if you have that concern, they created the mag B-Free.

I think it's it's I in cardiology world we just need active bees. I mean, you know, it is it is a risk factor that I think my conventional colleagues have ignored too long.

You know, and even when, you know, I have surgeons and interventionalists were good friends of mine. One of the things that I will say, they'll go, give me one thing I got 2 minutes of like for homocysteine eight or under grape some if you bottles wine with 16 guys you know it is wow yeah.

Now that is that is really interesting. So let me add one quick thing. When you're looking at methylation problems about getting homocysteine down, remember, magnesium is in the methylation pathway as well.

Right? So on those folks where they're stuck to get homocysteine down. Right, or. Looking at the lesser things, the zinc for magnesium. And around there, I think there's some manganese thrown in there too.

So, you know, when we're looking at do we add TMG, do we add stuff like that, we just go higher on a methylated B formula. Rather than looking at that, you may keep them on a good homocysteine formula, but look to add the

Magnus mag t because you might be, you know, fill in that deficit as well and helping them with methylation.

That is interesting because I do have I've had a few patients who when we measure homocysteine because I was eating a plant based diet, we do worry about B12 deficiency.

And so, you know, one of my I said the one supplement that's a non-negotiable if you're on a plant based diet is B12 and we measure homocysteine, metabolic acid and checking a few of those things.

But some of them, you know, their B12 is fabulous. They're not asymptomatic. They're both like acids or that homocysteine is like stuck in this elevated place.

And so that's interesting. So look at the iron and magnesium, the mag bases. Yeah. Okay, that's very helpful. It's my second thing, which is that they'll be homocysteine first.

I'll crank up, you know, methylated B's, all right. And you know, those that are stuck. It used to be TMG Powder and I never got a lot of success out of that.

I would just even though there's TMG in those formulas, I would just try and really overwhelm that pathway. So I swap that over the mag SRT and I get better portion reduction, no question about it.

All right. Well, if I find a can now add to your case studies. In real effect. Love it for sure. Yeah. Yeah, absolutely. Well, anecdotal evidence sometimes is a glimpse into why it could be very helpful.

I'd better be worth something after 22 years. I better have something to give back to to our professions here. Appreciate that. Okay, great. Thank you, everyone, for watching.

And yeah, definitely check out Jigsaw Health the magnesium SRT and you have hypertension that is very valuable. So thank you again.