The Muscle-Boosting Molecule Changing How We Age—with Jim LaValle Transcript

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Introduction to Doctor Talks and the Guest

This isn't acting as a stimulant. It's only acting to help repair the mechanisms that as we age and we go through this in slam aging process. Right? Metabolic inflammation or meta formation that gets turned on through lifestyle, through what we get exposed to environmental exposures, vectors, you name it.

Maybe we're not sleeping enough. Maybe we're not exercising enough. All that kind of cascades into this process where our body starts to turn on the wrong signaling, and we're wanting to just to right that ship.

And that's where I think going. So one is so powerful as a compound. Welcome to Doctor Talks, the podcast where every episode leads to a healthier you.

Join us as we navigate the world of optimal health, uncovering groundbreaking strategies to conquer chronic disease. In each episode, we'll bring you the latest insights from leading health experts, medical innovators, and wellness warriors.

If you're seeking to transform your health journey, or if you're looking for answers to burning questions, you've come to the right place. Get ready to unlock the secrets of lifelong health and vitality.

This is Doctor Talks. Real talk from real doctors only issues that matter to you most. Hi, this is Ray Solano with your Healthy Choices podcast. Doctor talks, is our series here.

We're going to have our most celebrated guest. Doctor Jim Lovell is one of our most celebrated practitioners. He's, He's one of our pharmacists that teaches, so many practitioners across the country and the world.

His k his reputation and all of his accolades are go on and on and on. He's also we talk about he's in charge of education for a for him.

What Small Molecules Are and Why They Matter

He's, in charge of, science for a lifetime and on and on and on. So, Jim, I don't want to take away, you know, we can spend 25 minutes for all of your accomplishments.

But I don't want to take up all your time today. But I we really wanted to, you know, you always coming up with new and innovative, formulas, innovative, molecules that really change the course of health care.

And I've always said that, you're always years ahead of everybody else. And I want to talk a little bit, today, if you can go over this new small molecule therapeutics we call an OS o one, and maybe you can tell us about this.

Any and this applications. Oh, sure. I mean, you know, the first thing is when people hear small molecules, what does that mean? Right. You know, because you hear peptides, they're kind of small.

And Bluetooth ions kind of small. Right? Right. But a small molecules typically it's an organic compound and it has a very low molecular weight under not usually less than 900 Daltons.

So that's a really small compound. And they're obtained from natural sources. And they're becoming a really dominant class of compounds, you know, in the pharmaceutical arena actually.

So once again, over half of the compounds that are end up as drugs originate from natural sources. Right? So this is no different than that same proposition that you and I, you know, we always talk about.

And I got a laugh right. When we went through pharmacy school, we weren't even allowed to use a calculator. We had to use a slide rule. Right? I remember that, right.

You used a slide rule. But so, you know, we've been at it for a while, but, you know, the real valuable courses that we learned, of course, for things like organic medicinal biochemistry.

And that's where small molecules fit their working on at the cellular level, helping to signal your body to do the things that you should be doing, right.

And so on. So one, why it's important is small molecules get across the blood brain barrier. They get across the cell membrane and they create a physiologic process that we're looking for.

And then the biggest thing is you can take them orally. You don't have to inject it in things right. You can take them orally and get a metabolic effect.

Great examples a lot of people are familiar with the drug. The statin drives. Statin drugs are small molecules. You know, calcium channel blockers are small molecules.

But in the natural arena, things like RG three pretty small compound. You know, cylinder size, pretty small compound. But oh, so one has got its advantages because it has I think one of the most desirable profiles for what people need today.

OSO-1 Benefits for Metabolism and Muscle

So the first thing is people are losing muscle from right. All day long sarcopenia man. Everybody's everybody's into not eating now. And when you don't get enough protein you're going to you're going to go to that muscle and break it down to get the fuel that you need.

So it's really important that we preserve lean muscle. So one thing that it does is it activates something called Ampk. So Ampk helps with mitochondrial metabolism, keeping a lot of mitochondria within your cells and generating a little bit of that anabolic drive.

Now, if you look at all of the actions of also one, it acts similarly to a GLP one, but not as intense as a GLP one. So there is some, you know, some supportive literature to say.

It does work in that way, helps with glucose homeostasis, helps with something called autophagy. Everybody's in the autophagy now right. You know it's oh you know or you know autophagy is the process.

If you're listening it's cleaning up the byproducts of your metabolism. So you're getting rid of the waste more effectively. There's some interesting, evidence for that that it helps with cardiovascular support.

It can help with perfusion of skeletal muscle. I probably say you combine this with something like RA Waskow, which is a great nutrient that I know, you know, you know, a lot about, helps with that improving micro capillary blood flow.

Why is that important? All your organs and tissues need blood flow in order to sustain a healthy environment for all the cells of that particular organ or tissue.

Yeah. In addition to that, it has some renal protective properties. It also acts as a redox agent. So it helps to reduce oxidative stress. And then a really interesting area is that there's some evidence that it supports reducing the signals of pain and inflammation signaling.

So I don't want to make this out to be a panacea. Like oh, this is a miracle compound that works on everything. But I do think that this is a breakthrough compound as a small molecule and of natural origin that has what I like to call a play, a trophic effect.

Right? It's working against across a lot of different systems of the body, in order to create better homeostasis. You know, everybody talks about optimization.

I'm big into homeostasis. Well, let's keep the body working the way it's supposed to be working right. So that that's kind of in a nutshell what what osso one does, we can get more specific as it relates to protein synthesis in muscle.

You know, one of the big areas is, you know, we hear about this term entrained. You don't want unregulated M to, because that means abnormal growth. Well, it's interesting because this works on both sides of that mTOR signaling.

So it helps to regulate that so that you maintain lean mass. But you're not shooting off an uncontrolled growth. Right. So that's a big plus. And so it's safe.

It's safe. It's an oral medication. You know the people the they asked me you know, these are what you just mentioned. There's a lot of positives are the fact for some of the questions patients ask us.

Simple. Can you take it forward with food or without food? And then the question is, is it interacting with any of my other medications or any of my other supplements?

Is it going to affect their sleep? So those are some of the basic things that people are asked for. And it seems to be, maybe you can just recap those to make sure we're we're on the same page.

Yeah. I mean, you can take it with or without food. I generally tell people, take it with our food, at least wait 30 minutes after you take. It's probably ideal.

You know, so that's best. The dose is 100mg. You know, they found that you can take it anywhere from 4 to 8 weeks on, and they suggest taking four weeks off.

That makes sense to me, because you're wanting your body to get into a cycle. Right. And so you're getting into this cycle of autophagy and cleaning things up.

You're improving protein synthesis, you're helping your mitochondria. And then you want your body to kind of reposition all that for a period of time.

And then, you know, you can restart. Right.

How to Take OSO-1 and What to Expect

So this is one of those great, I think cyclic compounds, because of its effect on motor and because of its effect on autophagy and because of its effect on, you know, fatty acid synthesis, it's got a lot of different benefits.

Now, of course, it doesn't replace exercise, although when you hear its mechanism, you think, hey, I probably don't need to exercise anymore, right? But you still need to get out there and move and get that blood flow and, and have all the other benefits, you know, getting better, serotonin production getting better, heart rate variability getting improved, heart heart rate and heart rate recovery.

So you know, you you still want to do that and still want to have a responsible approach to your eating patterns. Right? Right. So so all those are important.

Is it going to affect other things that you take. You know, you would see probably some synergistic effect if people are on mitochondrial support like PCA or CoQ10.

Right. You're going to help fuel and support the mitochondria. Getting adequate magnesium status. Really important. Do you have to worry about feeling amped up?

Not really. This isn't acting as a stimulant. It's only acting to help repair the mechanisms that as we age and when we go through this inflammation aging process right, metabolic inflammation or meta formation that gets turned on through lifestyle, through what we get exposed to environmental exposures, vectors, you name it, maybe we're not sleeping enough, maybe we're not exercising enough.

All that kind of cascades into this process where our body starts to turn on the wrong signaling, and we're wanting to just to right that ship. And that's where I think, oh, so one is so powerful as a compound.

So, you know, it really, you know, when you think about it, it's trying to neutralize metabolic dysregulation. You know, what's metabolic dysregulation lead to?

Well, things like diabetes and nonalcoholic fatty liver and bad actor lipids and, you know, dementia. Right. And once again, I'm not stating at all that this is the cure all for it because it's not.

But what it is, it's helping us to really reestablish what our body should be doing. You know, and when you combine that in a full thought of a comprehensive program of your health, I think this can be a really powerful tool that in combination, you can use this in combination with certain, like you said, certain therapies.

But the GLP ones that people are losing muscle, it'd be a good combination with it or be a great combination with that. Right. Because you've got people and once again, top ones don't make you lose muscle.

Right? But by default, most people that are doing GLP ones right now, their appetite goes way down. They don't take in enough protein. And maybe because they're not taking out a lot of calories because they've reduced their appetite so much, they don't have a lot of energy.

That's the wrong way to do a GLP one. And their high ever dose. Right? Right. Yeah. It's you know, you know, high dosing, you know, and don't do all those things because you will lose lean mass in general if people are doing GLP ones, they'll lose about 30 to 40% of their weight loss will be lean mass if they don't do anything to counter measure, meaning they don't exercise, they and really they should do some resistance training.

They don't eat enough protein. Right. And those are two big areas of, of issues. So this really would help to neutralize that when you're not able to do everything that you should be doing.

As it relates to the GLP one's for weight loss and you mentioned briefly kidney is supporting your kidneys. I mean, what a huge area of deficiency in our society, especially as we get a little bit older or anywhere, the loss of kidney function is, is is seems so universal and it's one of the worst ways to go, oh, what is kidney.

So what we're talking about is something that is really, you know, the muscle is great, but to repair the kidneys it's not many compounds out there that targeted.

Yeah. It's interesting because you know why we lose kidney function is because basically we lose redox poised. Right. We are there are inflammation and oxidative stress overwhelms the kidneys, starts to damage them.

You lose mitochondrial function in the kidneys. And so this you know, when you have that ability to induce autophagy and protect against the sadness sense or the, you know, the death of these cells, and then you create zombie cells that are creating oxidative stress when you can clean some of that up and preserve mitochondrial function.

Well, you're going to spare some to some some kidney cells, right? You're going to spare some of that ability to filter. And Ray, as you know, we're seeing an epidemic of that with individuals, right?

Kidney Support, Autophagy, and Metabolic Health

Yeah. A lot of people coming in with reduced what's called GFR or glomerular filtration rate. There, there are able to be able to, you know, get the kidneys functioning the way they should.

And this is happening at earlier and earlier ages. I mean, I've seen people in their 40s with kidney functions of people that are in their 80s. Right.

And in a lot of it's due to lots of oxidative stress, not enough hydration, you know, too much burden on your metabolism. And if you're diabetic or pre-diabetic, I mean, you're just right in the throes of kidney dysfunction, right?

And we've got half of the population that's either pre-diabetic or diabetic. You know, we look at this new generation of longevity medicine and looking at opening up a platform for people, for new therapies actually work.

This is right. It's perfect. You know, we've been people have been using drugs like rapamycin, to help reduce it chasing this. But, you know, it's a different classification of drug.

I think this is probably something that maybe replace that because a little bit safer. Would you agree? Yeah. I mean, when you look at its functions, I mean, it it kind of inhibits them to that's kind of what rapamycin does.

Right. But but not only inhibiting M tau but balancing and tau. That's what's I think really important. And then of course increasing autophagy sperm again real popular now right.

Everybody's talking about sperm. And that's because sperm it induces autophagy. It induces the cleanup of your cells. Right. So super important they're probably one of the most important things is it helps with glute for transport sort of glucose into your cell.

That's the appropriate way for you to get glucose in your cell. Then you generate ATP which is you cross your molecules of energy production. Right. And that's a key feature of how you're going to stay healthy longer and live.

Yeah. How about have that extended healthspan, you know, so that's a key thing. But I think we just all miss. Right. Why am I starting to feel so tired?

Well, you're not generating energy the way you should, right? Right. And you know, we're seeing adolescence and younger people go having these chronic conditions that adults used to have.

And it's they're having glucose irregularities, obesity. So many of these chronic conditions. Is this also for people that are in their teens or you know, that, you know, we're giving tremendously tremendous side effects of drugs to this population of youngsters.

I would think that this for those people who are having this, having some of these dysfunctions, it would be perfectly safe for that age group. Yeah. I mean, I think, you know, when you're young, typically you're generating a fair amount of tissue anabolism, but but what happens now is that people even in their 20s, they're they're already compromising that.

So I think that, you know, from that standpoint, as soon as you start to notice catabolic function, I'm not able to maintain lean mass. I'm lowering my energy production.

I'm seeing changes in my anabolic drive. That's where it can be of support. And seniors as well too, because sarcopenia. Right. Well, I think seniors, it's even more important.

I think this is where you see some incredible value. Right. So I think that, you know, when you when you look at this, there's a tremendous opportunity.

You know, for individuals, I mean, I, I mean, honestly, I think people starting in their 30s nowadays, I almost consider them seniors metabolically from what I've seen.

Right? Yeah. People are already kind of going down that too. That's that old story I used to hear. What? You're 40 now. You should expect to feel this way now.

It's more like you're 30 now. You should expect to feel this way. Right. So I think that's all, you know, really important aspect to it. You deal with a lot of athletes and people that are competing, that are always looking for an edge in something to an increase, muscle.

Do you see this is also something that, people are looking for. Their peak performance could be a candidate as well, right? Oh, I think it's, a huge plus, actually.

GLP-1 Support, Recovery, and Performance

Yeah. I mean, I would call this a significant edge, because, you know, it's not about how hard you work out. It's about how well you recover. And a lot of times, recovery, the harder you exercise and the longer your duration of exercise, the more it's difficult to have the recovery mechanisms in place.

You know, adequate sleep, adequate food, you know, adequate kind of balance of the, you know, you need inflammation, post-exercise, but you need to reset that inflammation.

You need to clean up the, you know, have that autophagy clean up the by products of hard exercise in your cells. And so I think it's got a real opportunity on the performance side.

And, you know, it's not just about it's not about the professional athlete. We got attorneys and, you know, plumbers and teachers that are competing in the Spartan Games.

And they're doing CrossFit and they're running. They're running, you know, they're doing a triathlon or they're running a marathon or a half marathon.

So they're training for that. And you really, you know, how you really help people. They're just getting them to perform at their best and getting them to recover at their best.

So it's post event where you want to make sure they're getting, you know, recovered. So that's I like the training a fair amount, but I but I also know that I'm only as good on my next workout based on how well I've recovered from my previous workout.

So you've used it. I've seen you that you're that your, I guess your your muscle mass and your fat distribution changed all of a sudden. And I said, you know, so you practice what you preach, and, you know, I do.

I'm always looking for another edge, right? I mean, look at me and whether it's a peptide or the use of bioidentical hormones or compounded medications or nutrients, I want to try and give my body its best opportunity to be as healthy as I can, as long as I can, you know?

And when this came up, you know, the osso one, you know, and I read up on it, it was, wow. Here is a, a newer compound that offers a tremendous opportunity.

For people that are out there looking for, you know, creating the best environment for them not just to age gracefully, but to thrive. Right? To to really be at their best.

And, that's why I think it's such an important comment. Well, for people that are listening to this, you know, we're talking with, Jim Lovell regarding the, the ozone molecule, and this is available by prescription.

It's 100mg per capsule, 30 days on, 30 days off is what our standard is right now. You can check out our website, PD labs.com for more information, or check with your practitioner and be able to call us.

And we'll be able to get this out to you. Make it very easily and we'll be able to ship it to everybody in pretty much 49 states. But also our contact information, PD labs.com.

And Jim, maybe you can give plug for your, your practice in what you do. So when people want it to get to your,

your website and your podcast.

Clinical Practice, Books, and Closing Remarks

Sure. So I mean obviously they can go to Instagram. The real Jim Lovell got a lot of information always being put out on that, Laval Performance Center in Cedar Park.

They can certainly look that up. I've got a tremendous group of practitioners there from a variety of disciplines. So everywhere from nurses, the NPS.

I got a medical director, you name it. We've we've got a lot of folks there that are ready to help individuals achieve their best. And certainly if they want to see what I'm doing with metabolic code, what's really happy that we're seeing this?

You know, I'm operating as obviously chief science officer at lifetime, being able to utilize the metabolic platform to help people achieve their best.

Well, you've been doing this for many years, and you have a new book coming out soon. I mean, I, I got the rewrite on, your blood never Lies coming out.

The second edition of the Peptide Handbook just came out, new metabolic code 2.00, which is more more about, you know, how to achieve that longevity process.

And I would say a common sense way, you know, I, you know, that's that's getting ready to, you know, I'm on the final edit of that and then, obviously got one more, we've got a performance health book coming out for athletes, and that will probably be out second quarter of this year.

So, you know, it's, we all have our, addictions, and mine apparently is getting books out. And you're up to how many now? 28. Yes. Books. Wow. Yeah. Yeah, 20.

About 22 e-books, 28 books, five databases and, you name it. I mean, just just got to keep going. And you still see patients and change people's lives, so that's that's important.

Well, that most gratifying part of doing this is seeing work in the real world. And that's what counts. Well, great. Well, Jim, thanks a lot for your time today.

And we're going to have more in more editions about OSL one, doctor talks and and check out our website PD labs.com. Jim, thanks again for your time today.

Great being here Ray. Always love talking with you. All right. Take care. Thank you for tuning in to Doctor Talks. We hope today's episode has enlightened and inspired you on your path to optimal health.

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