Introduction and Guest Background

Hi everyone and welcome to another episode of the Fasting and Longevity Summit. This is your co-host, Dr. Joseph Antoun, and in this session, I have a big, big pleasure to talk to Dr.

James LaValle, who's a personal friend and a person that I've shared that portion of my career with. And he walk the walk with us from the early days of fasting and longevity and then is now getting his own movement with his metabolic code and other approaches, scientific and medical approach to longevity and staying healthy, staying healthy longer.

This is going to be one of the most interesting sessions. I really invite everyone to tune into it. Dr. LaValle, thank you very much for for your time today.

Oh, it's I'm excited about being on this interview. I've been thinking about it all week because I know when you and I start talking, you know, the arc start to fly.

So I'm I'm excited and revved up, ready to go. Yeah. And, and to just frame the discussion, would you, would you say a few words about your background yourself, your expertize and your passion and then and then I'll start asking you questions and we'll take it from there.

Sure. Absolutely. Well, I mean, my passion is, since the first time that I started working with individuals 40 years ago, I believe that, you know, people deserve vitality at every stage in life.

So it doesn't matter whether they're six years old or 80 years old or beyond. Let's hope. Right. With longevity in it. I like this. The Millennial. How old are you, Dr. LaValle?

I'm going to be 64. To me, you look 40 or 45. And this is just to frame this discussion. Dr. LaValle has unlocked a lot of pillars of aging and make sure you listen to him today and listen to the recommendation.

Well, I appreciate that Joseph and I and I don't have any filters on. So this is the real me. So so, you know, my background is, of course, being a clinical pharmacist.

And I taught 18 years at the College of Medicine and Pharmacy at the University of Cincinnati and really brought in a lot of the pioneering work, you know, writing databases on natural compounds, doing personalized work on people, you know, starting in the mid eighties.

And so I always had this passion for that and then, you know, that evolved from working with very big organizations CVS, Rite Aid, long stride chain, McKesson to having the probably the largest clinic in the country doing this kind of work in Cincinnati, where we're seeing 3 to 400 people a week, where we're working on personalization and programs that help people drive the best potential for them now.

But over the last 20 years, actually acting as the academic co-chair for the American Academy of Anti-Aging Medicine, which obviously is dedicated to longevity and anti-aging, chairing the International Peptide Society, working with athletes in all five major league sports, working with military special forces, just got back from doing an education program with them.

And all of this I think, you know, it all works out whether you're a high performer or, you know, meaning that you have a lot of demands on you or you're just trying to perform through your life so you get to enjoy the benefits of a long, healthy life.

That's been my focus. So, you know, working with the metabolic platform and kind of looking at algorithms that can

help people determine, well, where do I need to begin with my chemistry?

There's some basic things I know we're going to get to, but you know what areas of my metabolism are the most disturbed and how do I start to correct them?

For most of us in the U. S., it all starts about eating too much, too often, too late, picking the wrong foods and, you know, developing insulin resistance, you know, and then, you know, doing programs, you know, we did a program with, for example, Lifetime Fitness, which, you know, you know, affected 200 and almost 250,000 lives.

So I've always been about how do we create the ability to scale wellness? And when I first started with you, Joseph, what I saw clearly was, you know, the projects that you were working with on you know, with L-Nutra and ProLon this was something that would scale wellness and longevity for individuals, something that could be implemented across a large population with very good science behind it.

And so that's kind of the, you know, the the the net net still have to practices have one in California, have one in Texas.

Why Fasting Matters for Longevity

So I'm active with always seeing people. I think that's how you learn how to do things. Then of course, as you know, we met a few weeks ago at a Fountain Life project.

So doing things, you know, with groups like Fountain Life as well, so very excited about the future of longevity and wellness. And appreciate you for that.

And let's have the core topic here, fasting and longevity. And you've been at the forefront of both. Can you explain a little bit to folks listening to us in this episode?

You know, what are the types of fasting and what is the right way to fast and why we talk fasting with longevity. What's that interconnectivity? And I know you track a lot of those practices and you implement them in their clinics.

Absolutely. So now why is fasting important? Well, from the most basic standpoint, when you fast and it doesn't I'm not talking about a five day water fast, which, you know, needs to be supervised, carries some risks with it.

But even the thought of fasting for a period of time, why it's important is it cleans up your body. If you think about the topic called autophagy, where basically what you're doing is your cells are cleaning out the debris of the byproducts of your metabolism.

And why that's important is that debris, if you build up enough garbage, your immune system starts to look at it and goes, Hey, that's bad stuff. We need to respond to that.

So why fasting is important first is that it allows for that signal of autophagy or the clean up. So that's what the next thing that's really important to understand is that it helps to regulate a compound in your body called Enter and if you continually signal this compound called mTOR, which is anabolic, it tells tissues to grow.

But if you're always in the process of triggering IGF one, which is kind of a growth hormone analog along with mTOR, it actually is going to accelerate driving, you know, uncontrolled growth in tissues.

So we know that I wrote a book, a chapter in a book called Diabetes and Cancer Epidemiologic Links and Molecular Evidence. Right. And in that, we we discussed the fact that is, IGF one gets out of control.

That's kind of a big feature of what happens with people that are pre-diabetic or insulin resistant or diabetic, which is a problem with 50% of our population, which then leads from that insulin resistance to cancer to diabetes to cancer.

So we want to regulate them to mTOR isn't bad. You need to have the signal to make muscle and keep your muscle as muscle is the currency of aging, but you don't want it uncontrolled.

So for example, after a fast, you'll see a rebound of your of your growth hormone, which supports rebuilding your tissue. But for that time, while you're fasting, you're shutting it down to kind of create regulation in your body.

So when I think of fasting, I think of it as, you know, first of all, Joseph, I'm an Italian in a traditional Italian family. You ate breakfast at 7 a.m., you ate lunch at noon, and you had dinner at five or 6 p.m.

by a 1212 window, which is what I think is a very healthy way to fast, you know, eat 12 hours, don't eat 12 hours. And then if you could have a food that doesn't spike your nutrient sensing in the morning where you could extend the fast but get nutrition, then that that adds a little extra benefit to it.

But what I have found is when I watch people that come into our clinic that are an 18 six faster than me here, 18, six, 18 hours of fast, 6 hours of feeding window, their labs don't look that great.

They tend to actually show you more stress hormones, more, you know, triglycerides, higher cholesterols. And I think we have to bust that myth up. I mean, if we're talking about a once one day a week fast, I can understand doing something like that or two days a week.

But what we've got in the market right now is everybody going, oh, well, it's 18 six every day. And then the other piece to it is you. Then the extreme is the moment, right?

The one meal a day that that a lot of people are practicing in. And I want to you've you've mentioned two things that are which are probably going to shock a little bit the listeners way.

You talked about proteins and entering and aging and cancer. I want to talk about that because people you know, people think carbs are bad and proteins are great.

Right. And everything is good at moderation and everything is bad at that at a high dose. So we're going to talk about that. Right. And then you talked about fasting being good, but is the right way to fast, which is 12 hours or 14 hours and not leaving the body starving in the morning and essential organs for 18 hours and 20 hours and 22 hours and then binge to binge eat at night because that's that's doing more harm than the benefits of fasting.

We're going to talk about both which one you want to start with, because I think the concept of growth of of eating and balancing that with fasting and making sure that the total the mTOR and the IGF are regulated.

And, you know, based on Voltaire's longer studies, we have a big meta analysis is like that 130 to 150 IGF is where you balance having, you know, maintaining muscle, which is a great organ of longevity.

And that pushing the biological age. All right. We're going to talk about this because a lot of us are over protein, is eating our self. And then let's talk about the right way to fast after that, if you don't mind.

Well, I think the first thing and I'm a convert, I'm like when everybody goes really low carb or they go ketogenic and they go, I feel so much better.

First of all, it's typically short lived. I've talked to enough people who have stayed on ketogenic diets and after they're on it for four months, they don't feel great anymore.

But I always call that, you know, putting a Band-Aid on a bullet hole, because what it's telling you is that your glucose and insulin receptors are now dysfunctional because you cannot tolerate carbohydrates.

Protein, IGF-1, and Metabolic Balance

And in it, when you keep that metabolic inflammation or meta formation signaling low in your body, glucose, insulin

and glycogen. Live in a beautiful relationship where you're storing glycogen on muscle.

You're utilizing glucose, and insulin is properly signaling in your body, which is reflected in a healthy hemoglobin A1 C long term glucose control number and a better fasting glucose.

And remember, the higher your glucose goes, the more your lipids will get dyslipidemia because of the inflammation process that occurs from that. So the first piece is we know once you're over 60, it's probably better to take in more protein.

How we do we agree on that. But I think where people are missing the boat is that, you know, carbs, fats and proteins are healthy and good to do. It's necessary for proper metabolism and energy production in your brain needs glucose.

It's it's it's just a fact. And your heart and your kidneys. And your body, every organ in your body. Right, right. Everything's running on that. And this this kind of bro science of oh, it's only about ketones is just that it's not really rooted in, you know, your body would not utilize would not have a need for insulin if you didn't need glucose.

Right. I mean, you know, when we look at ourselves as as we've, you know, kind of altered ourselves over generations, the need for glucose has a changed people, a carbohydrates in a healthy way.

Just look at them in the blue zones. Right. If you look in the blue zones and it's the one thing that I'll say about when we talk about the blue zones is you have to remember that if you're going to eat more carbohydrate, you have to move more.

And it's you know, when you're in Sardinia, you're walking up and down hillsides, you know, and so a little bit of this is, hey, if I'm going to sit on my tail all day and I'm not going to move at all and I'm not going to incorporate exercise as a global part of my house band strategy.

Well, yes. If you said you never move. Yeah. If you're you're eating carbohydrates, you may end up gaining weight from that. But you know what? We all should be moving.

And in the second phase to it is, is that, of course, you know, there's a social context to why the blue zones work and that we create, you know, relevance for people with their aging because they are maintaining their vitality.

And we can gain wisdom from those folks. So those are important concepts, too. But I do think that in general, you know, I know for myself I've cut my protein portions down from what I used to do is what I call a recovering body builder.

Right. I'm happy. I'm happy about that. Yeah. I've cut my protein down. I've tried to incorporate more of. Can you explain to people why you're saying that, why you cut your proteins?

Yeah. First of all, I think, for one, if you're eating a lot of protein, you're signaling much more IGF one, you're going to say much more nutrient one.

Is it insulin like growth factors. It pushes the body to age and to grow? Exactly. And remember when I love what you just said. So Dr. Long is not saying low IGF one is good.

And we already know. I mean, I did I wrote in the textbook, we know high IGF one isn't good. So it's being in the bell curve of moderation. So if you're always stimulating nutrient sensing by a high protein meal, you're always stimulating more IGF one.

And so it's important to balance that out, right, to not overdo it. And so that's really the reason for doing that. And then the other piece to this puzzle, of course, is the timing of food and making sure that, you know, you're not eating all the time for one.

So people do one of two things right now. Today they read all the time, which is continually stimulating cortisol, insulin and glucose, which you don't want you don't want to eat all day long and even nibbling all day long is going to have that effect.

So you want to have established meal times, maybe an established snack if you're working out or you know, you've got a long day and at the same time you don't want to starve your organs.

Because I know we've discussed this before. We know based on studies, on animal studies, that when you go too long without eating, you starve the organs of the nutrients it needs and you don't get the nutrients through through the blood that's being delivered to the organs to be able to clean up that, you know, whether it's the liver, the kidneys or the pancreas or wherever it is, you're not getting that type of response.

And so it's important to understand that there's a balance to these things. So if we put both concepts that you talked about that we don't need to eat all the time, but in fact, it is good but long fasting is bad.

Probably the recommendations that you're hinting at is you'd rather people fast for 12 hours overnight, which is a natural circadian fasting. But we have breakfast, right?

We there's a lot of studies years for everyone listening to us that skipping breakfast again we'll talk about skipping breakfast could be good could be bad depending if you binge eat or not and how long.

But in general, skipping breakfast is not a pro longevity intervention. And the more you frontload your food intake during the day, the better you are.

Because like Dr. LaValle said, you're going to walk during the day, you're going to exercise, you're going to burn it versus when you fast the opposite of the circuit in fasting you're you're starving your organs during the day and then you just binge eating at night.

A lot of the 18 six to oh my this is what's happening to their body in the morning the brain is active but no calories for the brain. The heart always needs to pump the kidneys.

All the essential organs are looking for calories and they find no calories. And by the way, this is when you get a headache is where you get fatigue and then you're starving the organs when they need the calories and then you load the body in the afternoon or before sleeping when the body almost doesn't need that.

All this calories in at night, naturally, growth hormone is high. It's an aging factor. Anabolic. Then you add to that IGF add insulin because you ate late during the day.

So your body is just getting all the signals of aging and food storage at night. This is how you develop in a pre metabolic disease and how you push the body to age.

So to put it all together in a simplified way that to a level is saying fast, but do the natural 12 to 14 hour fast. Right now, many people could benefit from fasting longer to lose the weight but that's will compromise that longevity and this is where he and us have been working for a while.

And this all comes from not too long ago on it. Fasting, mimicking, intervention, meaning can we feed since we're saying it's important to eat something in the morning or it's important to do fasting with food?

Can we eat? Can we give the body a special formulation to mimic fasting while giving the nutrients that the organs needs in the morning? And this is a separate discussion about prolonging the fasting mimicking diet that we're covering during the summit.

And Dr. LaValle, we'll touch on that. But this is the essence I'm trying to simplify so that people don't get loss of oxygen, that they should fast. But then fasting is not good.

No, it's it's fast at the right time. 12 to 14 hours. If you want a fast long to get out of phase rejuvenation, do it with food because then you're merging fasting and longevity together.

I think that's a great summary, Joseph.

The Right Way to Fast

And look, I think if you had to ask people the question of would you give 15 days a year up in order to improve the likelihood of a healthier health span, 15 days out of 365 days, that's now.

I think it's a pretty good equation. Right. And the 15 days are prolonged if you're hinting at that. And I'm not heading I'm getting to know right now for you because I'm an advocate.

I mean, I've been an advocate. You know, I've been an advocate. I've lectured, you know, just full disclosure. I've lectured for al-Nusra, and I do it because I believe in it and I recommend it.

So the point being is that using the fasting mimic diet, what you're effectively doing is resetting your metabolism. You know, if I had to say it in the simplest form, by in that five days when you are turning down your nutrients and seeing and stimulating autophagy, when you look at the data that comes out of it, if better glucose control, better lipids, people were more satisfied it resets their satiety, at least in your subjective survey data.

It was amazing that people thought about eating smaller plates of food and they got for quicker and changing. The relationship with food. Yeah, a much better relationship with food.

I, you know, I think that that's really important because one of the biggest things that I see overall is that because of chronic stress, people end up overeating.

They get they get triggered by the elevations in cortisol, by the reward cascade, where before you know it, the plate of food becomes a bigger plate of food, the small glass of wine becomes a goblet of wine.

And then comes the snacks in between. And then when we try to counter measure for that, we swing all the way to the one day a meal or the 1806 fast instead of really trying to narrow into a therapeutic window of, well, what is it healthy for me to eat?

I mean, obviously I was very intrigued by when when I developed the morning shape that extends your fast but yeah, it gives you nutrients. I think that's really an important concept because you know, here is what I see when people are fasted and they're doing it in their morning cortisol, their higher their morning glucose is higher and what's happening is, is you're breaking down muscle in order to keep that that glucose level up.

You're actually becoming catabolic by doing that. And so it makes more sense to really think about, you know, what am I trying to accomplish as food, as a lifestyle, meaning that I want to eat the healthiest foods possible, I want them to be clean, I should structure my meals want it's going to be more cost effective for you and everybody's worried about the cost of food today.

So, you know effective cost effective food that also ends up creating, you know, a benefit for you metabolically. And I think people aren't thinking that way with with food yet and they need to I mean, obviously, we see the blue zones and we understand how people are eating there.

And that's great. We need to apply that here in the U. S., which is an environment that's much more stressful. And so that is what we need to really focus on, is how do we apply, you know, fasting to me, diet, like I said, would you give up 15 days a year?

Five, you know, and it could be more. Right. We've talked about how some people may want to do that more, maybe even if they did it last. But applying that five day sequence of giving yourself digestive rest, reducing nutrient sensing, stimulating the clean up procedure for your body, it's incredibly important for people to understand that

concept and that, you know, basically, you don't need a lot of calories to keep your muscle tissue on.

I've learned that, you know, I'm a £205 guy. I operate at around 1800 calories and I haven't lost any muscle at my age. And I certainly don't have a bunch of saggy skin and I think the secret has been the fact that for for myself and also thousands of patients over the years, that it's understanding your relationship to food and just how important it is.

Have I mean, this is this is this is key. And 73% of Americans have a certain level of overweight. But now the new statistics are showing that 90% of Americans have certain type of metabolic issue.

You talk about inflammation and you talked about we also call it inflammation. We get a high cholesterol level of hypertriglyceridemia. It's all driven by lifestyles.

And we know that. And the stress is creating multiple eating per day. And I think this is such a core concept here today to balance fasting and nutrition.

And if you want to fast longer, do it with nutrition form relations with the fasting. Nutrition is what we're trying to say so that the life balance is set back and so that your body's aging gracefully is no over push into growth factors like insulin and IGF.

There's no over acceleration of the brain deposits in the cell, which creates more inflammation and accelerates aging. And there's a body recognition of we didn't talk about the hallmarks of aging, the senescent cells, what we call them, the zombie cells and everything else.

This, the longer sessions of fasting, pushes the body to clean those or send them to apoptosis and get rid of them as we know, once we have a lot of the reason to sell a lot of senescent cells, aging becomes exponential.

After that age 60, it accelerates itself. The ambiance, the environment is the body saying, Oh, this is the new setting, let's go in accelerated. So, you know, fasting is critical at balancing balancing those.

I know you're an expert also in performance health. I don't want to miss today not talking about it. That's probably what a lot of your career has been about and culminating now with the metabolic code.

Can you talk a little bit about what is performance health, why it's core to longevity and and and the foundation of what is then the metabolic code and how could people benefit from all this?

You're are so I mean, you know, for me I've currently my my center in Cedar Park is Laval Performance Health Center.

Performance Health and the Metabolic Code

And it you know, it doesn't matter whether you're struggling with an autoimmune condition, you're obese, your body really needs to be able to, you know, operate at its best performance.

And operating at its best performance means that the markers of aging, whether you're an athlete or you're just an exact give or someone for whatever reason, you're already retired.

The markers of aging stand. If your insulin is high, it's a problem. If you're making bad actor lipids, it's a problem if your glucose is high, it's a problem if your homocysteine is high, it's a problem.

And so the metabolic code was about identifying these key markers of aging in the traditional evidence based literature. I'm not talking about invalidated labs or things that are kind of cool and hip in their longevity space.

And I've got nothing against that. That's how you push innovation. But there are plenty of markers that are in the traditional medical realm of evidence that we can track and we can we can really add our our our expertize to.

So the way that I look at performance health is, for example, if you have a 85 blood sugar, you're in pretty good shape. But if you have a 95 blood sugar, your doctor tells you it's normal, but you have a 60% risk of being a person with diabetes.

And then if you have a 95 blood sugar and your kidney function is starting to kind of lower and your blood pressure is borderline high and you have a lipid particle sized, it's like you're making BP LDL cholesterol that allows you to attach to the inner lining of your arteries and your mean platelet volume is elevated, which is a marker for matter formation.

Now, all of a sudden, I just lined up five things that relate to my insulin resistance that is affecting and accelerating my inflammatory aging. And that was the concept behind the metabolic code is identifying these acceleration points in people's metabolism and starting to factor them together.

Now in terms of performance health, there's no doubt a person who's training 4 hours a day because they're a professional athlete has a different goal.

They're being paid for a living to perform at their best. And so it becomes incredibly important that they recover more than even how hard they train.

And how you recover is by managing your chemistry. And we've had many discussions about this. Joseph I can't think of how many times we've talked about athletes and how if they took a break from their training, maybe it's in the off season or it's at the mid-season break, and they did a five day fasting limit diet to reset that inflammatory signaling and matter formation.

Right. That it could help in terms of their tissue enamel ism coming out of the fast and their repair and their ability to kind of take control of those parameters or levers that you're pulling on metabolic performance.

So for me, performance, health, simply means how and this is what people are listening need to think about how far are you away from your best health?

See right now in Joseph, you know, being trained as a medical doctor, you know, what we get trained in the traditional medical system is we have a line of demarcation that says you have a disease or you don't.

And the reality is there is so much trend analysis and I know we geek out on this all the time. I mean, I you know, I can't think of how many conversations we've had about this, that what we're not doing is looking at the trend of where you are moving.

And to your point, you have I a 50% of the US population by 2030 is predicted to be obese, you know, 73% overweight, 90% with some type of meta formation or metabolic imbalance.

And, you know, all you got to do is look at the look think of the wave that happened with Mozambique in Mangano. People flocked to it. And, you know, which is a good thing and a bad thing.

Right. People weren't getting answers for their insulin resistance. So they thought if they just took that, that would be the answer. Low and behold, they're losing too much lean mass because they didn't change their lifestyle.

So if you start to combine 12, 12, 14, ten, extending your fast in the morning, utilizing something like a pro line and also using other aspects of what our neutrophils develop, I think now you get all the benefit and I've done this, I mean, I work with this a lot.

You can't expect anything like, you know, Ozempic Mangano, great medications that have been developed, fantastic. But to just use them for weight loss and not change your lifestyle and get committed to longevity and performance health, it limits that success and people get disappointed because they see their appetite come back and then they eat a lot after they get off of it.

And then they gain their weight. The big thing. And they roll. On. A lot of them coming back to prolonged to protect the muscle and the rejuvenation I mean this is muscle is critical for metabolic rate and burning the calves like you said.

Yeah. Yep well sparing muscles since you since you mentioned it. What is fascinating is that people go on a and they actually can they don't lose muscle and in fact may even gain muscle back in the process.

And people have to realize when you use those medications, the GLP one agonist or mixed agonist, you're going to lose the same amount of muscle as if you get a low calorie diet.

So it is estimated and this is in the studies that were developed by the drug companies themselves. So I'm not saying anything negative. I'm just reporting the data 20 to 30% of your weight loss when you use those medications and you're not doing anything else like, you know, utilizing proton to counterbalance that 20 to 30% is lean mass loss and it's the equivalent as if you did low calorie dieting.

So you don't want to lose 20, 30% of your lean mass on a diet. You want to not lose lean mass and only lose fat mass as much as possible. That's that's a critical point that we're trying also to disseminate is the importance of muscle and performance health for longevity.

Right. And and I know you have your protocols with some things for those who want to do the injections is how to do roll on or how to do proteins with them and train their muscle to preserve their muscle.

And this is how going back to the IGF, balancing, how not also to increase the protein in a way that is also accelerating aging and the fasting alternation with these with such nutrition could could create that balance.

Hopefully one day measuring IGF will become part of the same way we measure, you know, HB one C and glucose and insulin can become part of a metric of longevity, I think.

GLP-1 Medications, Muscle Preservation, and Misinformation

I think this would reveal a lot to and expose a lot in this marketing and forced hyper protein ization. I call it, or the diabetes, a protein that's happening out there.

And people are lost because there's very few ethical science based innovations and interventions. You know, anyone in nutrition can write a book or start a podcast and and people are lost, you know, I do a lot of podcasts and we're trying to do a lot of medications.

And the first feedback is like, people are completely lost. Oh yeah. Fasting is good. Fasting is bad, proteins are good, proteins are bad. And and we're trying through this summit that we're trying through this continuous education to bring the true ethical science behind what to do and how to do it and when to do in order to to clarify these concepts for people.

Well, you know, I think you bring up such an important part point, Joseph, because I've, you know, battled that a lot. I get on guest as a podcast every once in a while and you know, there's so much confusion on what to do.

For example, even with the use of those medications and eating a high protein diet, you limit the success of it because you really need starch. You need carbohydrate in order for those medications to work effectively.

And, you know, so I see so much misinformation out there. And mainly, you know, like I said, a lot of times I ask people in the big name podcasters, I ask, well, how many people do they see?

Now I know for me, even now, in my slow periods of time, I probably see 30 people a week working with their chemistries. And at my peak I was seeing 300 people a week.

And I think when you see people and you see what really works, that's the folks that I say, you know, start to listen

to them because, you know, they're in the front line.

We can all read a study and extrapolate on a study on how it might be, you know, but if you haven't seen it work and I and I think that's why my hat's off and why I've always supported our nutrition pro on and in Volta's work and your work is because of the dedicated and the commitment to getting the science right, doing studies, publishing those studies, showing the evidence.

It's very few and far between, unfortunately, that that happens. And I think it's key to kind of get rid of the misconceptions, get rid of the what I call bro science or the myths that are out there so that people can actually start to live their lives in that with that sort of performance of Healthspan longevity, you know, but you know what the last data showed we're living four years less than we used to.

The bottom line. So we got to get some science and get some sort of some guardrails on what we're doing so that people can start to kind of not make it such what I call a hyper sensitized event as to what should I eat and how should I write.

It shouldn't be that confusing for folks. So appreciate it very much. And right on point. Just to conclude, I want to ask you two questions. Number one is, what do you think are the three in a if you want to summarize the discussion today, what would be two or three highlights of it that you can mentions that people kind of go and digest and adopt in their lifestyle?

Sure. I mean, the first one is learn about fasting and the science of fasting. And don't assume that the extremes are the way to go, that in fact, extremes tend to disrupt your metabolism.

So learn about what the importance of fasting is for your metabolism. Time to clean up your chemistry so that your cells can remain vital, healthy, and send appropriate cell signals that's going to limit senescence.

Key Takeaways on Fasting and Lifestyle

Or those rogue cells that is your aging. Want to pop up and throw out a bunch of inflammatory compounds. So learn about that science. And the second one is, is, you know, whether you whether you choose to fast, which I think is smart utilizing fasting, memory, diet, all the tools that you have.

I mean, look, with L-Nutra, you have developed some amazing products. I mean, they really are. You got to think of it as a lifestyle of being well, think about incorporating exercise and stress management, your lifestyle.

And if you're noticing abnormal eating patterns because of stress response, do a metabolic reset. Think about doing a five day commitment to yourself so that you can kind of, you know, reset the circuit breaker box in your brain for that reward.

CASCADE Because to me, managing appetite, managing your metabolism, reaching for performance, health all starts with understanding your relationship with food.

That 12, 12 cycle or even 1410 cycle that that people should be doing and not eating late at night. Don't go to bed on a full stomach. Right. Those are probably the key things I would say that are important.

That's probably, you know, the biggest advice I give people when they say just one thing, one thing, just don't go to sleep on a full stomach is going to accelerate your anabolic state's fat storage and aging.

And it's it's so damaging that's actually even counterbalancing the benefits of potentially skipping, you know, prolonging fasting the next day. It's unbelievable how damaging that late night eating is.

Dr. LaValle, appreciate you very, very much. Thank you for your time today. A lot of great lessons for people to adopt in their life and hopefully we contributed to increasing that health span today.

Appreciate it very much. Thanks for having me, Joseph. It was a pleasure.