Introduction to Dr. Antoun and Longevity Nutrition

In this session, we are talking with Doctor Antoun, who is an MD, PhD, and in PD in and has degrees from Harvard, Hopkins and King's College. So just a few places.

And he has a passion to improve human longevity. He's the CEO and chairman of the board of Al Neutra, which is a unique nutrition company leading in longevity and food as medicine.

And today we are going to talk about just that, how food can be medicine. The benefits of fast mimicking diets. Thank you so much for joining us today.

Doctor Antoun. Thank you, Doctor Crolynn. And, I hope we're going to change somebody's life today. Probably many people's lives. Because what you guys have, what you developed is really unique option for people, that has pretty amazing data to support it.

So let's talk about, about what fast mimicking is and how the fast mimicking diet is different than fasting. Maybe some of the pros and cons of fasting versus the fast mimicking diet.

Yeah. So a lot of people probably watching here are looking for, you know, strong and effective solutions for weight loss and or weight care. Right.

Fasting Basics and Circadian Eating

We've talked a lot about weekend, because you don't want to lose weight and lose muscle is happening to a lot of people today on GLP one and other drugs.

You want to talk about weight care. How can we help you lose weight in a healthy way? And and we're going to talk a lot about this today. So the biggest question is within fasting we we launched fasting to the world some 13 years ago.

A lot of people ask me about what are the types of fasting and and what are the benefits of this fast, how to fast and the right way for weight loss. And then the extension of that, we'll talk about how to mimic fast with food called the fasting mimicking diet.

So a lot of people, you know, have learned about intermittent fasting. There's two types of fasting, what we call intermittent fasting and what we call proloned resting.

The intermittent fasting is anywhere from zero hours to two days. It's it's a lot of people do 16 hours. We call it the 16 A. They skip breakfast to do 16 hours, but it's all the way from zero hours to two days.

And after two days we call it the proloned fasting. And why these two? Why the separation? Why the two days? I'm going to compare how the body behaves when it's fasting to accompany with no funds, right?

The body with no food, like a company with no revenues. So what happens? Right. So say you're you're, you're the head of a company and you need $1 million a month to upgrade the company and suddenly have $0 the same way that by having with fasting zero calories, what are you going to do you to say?

Well, I do, I do have some money in the bank. I'm going to go and tap into my checking accounts. And so the body has the same thing. It's called glycogen reserves everywhere in the body, especially in the liver and the muscle where the body says, I'm going to go and use those as the first, you know, checking account to quickly tap into the reserves.

And then the next step is say as a quick, hey, I do have some savings account. I'm depleting my checking. I'm going to go and tap into my savings account.

The money goes to the fat this is fat system and starts breaking down that into ketone bodies and chain fatty acids. This is how we start losing weight and losing fat.

And then when you tap into your savings accounts, you're going longer in fasting. So first ours is glycogen, then it's fat breakdown. They say, I'm going to ask for a loan from my bank.

I got to get some credit and right. And then the body goes to the liver and says, hey, can you do some? They'll go to Genesis because we need can you bring some extra calories into the system because we need you.

And this is what happens within the first two days. The body has three levels of of tapping into its reserves. And this is how people lose weight. This is how intermittent fasting became a very popular way of losing weight amongst people.

The easiest way to do it? People are skipping breakfast and when they skip breakfast, they keep the body. They prolon the overnight, break down the fat and therefore they try to get the 16 hours.

That is a lot of controversies around how to do it in the right or a wrong way, because you can do it in the right way and lose weight, and you can do it the wrong way.

It actually increases cardiovascular risk. So let me explain that some people by this fall, a lot of us in America, we eat late at night. We're stressed because we're preparing something for tomorrow.

We have a long to do list and we end up snacking. Or we're sitting in the bed watching Netflix, watching whatever is happening and our Facebook and Instagram, and we start snacking.

So we're eating late at night, and then we would have to do the 16 eight. We're saying the next day we keep our body fasting for a long period. The next day up until we eat at 4 or 5 p.m..

This is the intermittent fasting that potentially is not good for longevity. And this is where a lot of the trials that watch people that observational trials, they watch people do this, they end up concluding that it's not a great way to lose weight, and it's not a great longevity in practice.

The flip side is on the front end intermittent fasting. If you stop eating at six and 7 p.m. and then you sleep on a, you know, that full stomach, your body at night is not over absorbing and over restoring.

Is that what we call the anabolic and storing the extra calories? So your body at night is just, you know, using those calories to rejuvenate and then the next day.

Now if you stay a little bit longer without the food, you're truthfully tapping into a little bit of your reserves. This front ended intermittent fasting is the one that when we see when we test in randomized clinical trials because we tell them to eat and stop eating at seven is when we see positive outcome of that same 12.

So it's very important for those who want to lose weight with fasting. And we don't advise to go all the way to 16 hours because you should eat in the morning, you should feed your brain, you should feed your essential organs.

We say eat early at night and then stay 12 to 14 hours and then eat the next day at, say, 9 or 10 a.m.. You. I couldn't agree more with that. When I do have people who decide fasting is the right option for them, I really emphasize that I prefer their eating window and with an early dinner because this is just like the real world of what I see with my patients.

Most people are able to make pretty reasonable, healthy breakfast choices and portion choices at breakfast. And like you said, evening is when the vast majority of us make less healthy choices.

Eat to heavy foods, snack foods while we're, you know, watching TV. I loved you talking about, you know, being on Instagram, doing all these things. And that's exactly what I see clinically.

And then they're not really getting the benefit. Right.

Why Prolonged Fasting Triggers Autophagy

But if they have an intentional nutrition plan that complements the fasting, and they're not, you know, loading up on calories before bed, there certainly can be a really good clinical role for it for some people.

And based on my experience, and I want to make it super simple to people, if you want to lose weight, there's 600 diets and ways and philosophies and doctors and dietitians, and nobody has solved that right.

You know, lose weight, go to bed a little bit hungry. That by itself, I guarantee you, do nothing else. Eat in the morning, fill your stomach in the morning, eat a big do whatever you want to doing today.

If you go a little bit hungry. I'm not saying do whatever you want into pieces and but, but the most important factor that will determine whether you're going to lose weight and or and is a pro longevity, habit is try to sleep a little bit on an empty stomach.

And that's the most difficult thing to do for most people who gain weight, because it's that before bed food. And we can talk a lot about this. I don't want to consume the entire time on it, but this calories eat at night are not the same calories eat in the day.

The calories eat at night when your body is anabolic, your body's secreting growth hormone a little bit more insulin towards the morning is absorbing that the calories are during the day.

The body's catabolic is is here to burn them is here to use them as currency and burn them. The body at night is here to absorb that. So make sure you separate your dinner from your sleeping hour.

If you sleep on a little bit hungry stomach, I'm telling you, you're going to lose that weight. So and this is what I call intermittent fasting for us is you don't need to go 16 and 18 hours and and starve yourself for long periods.

Just have the discipline to follow the sun and the nights. And we call it circadian fasting the 12 hours. So at seven you finish your dinner, you stay all the way to next day, seven, eight, nine eating breakfast.

You feed your body when it's working. You don't feed it when it's not working. And this is how you're going to reduce it in your body and lose the weight.

So we are all for that circadian intermittent fasting. Now going back to the cross day two. Right. And we're going to talk about proloned fasting. This is a little bit interesting.

And so why we said when you cross day two because not the body depleted the glycogen the checking account fat to the savings account and then is tapping into the liver for the glucagon SSD loan and the credit that it took.

And that was going bankrupt after two two and a half days is, you know, the body tells the cells, hey, I'm burning my reserves very fast. I'm going to ask every cell.

We have 37 trillion cells in the body. I'm going to tell the cells, you're going to go and find intracellular sources of calories. Go fight in-house. What can you burn?

What can you consume? The brain's organelles rejuvenate. Six. You're going to be at your best performance. In order for us to survive as a whole, 37 trillion cells.

So it's that bankruptcy that happens between the two and the three of fasting that pushes the body to tells the cells

six rejuvenate, be at your best.

And this is what actually made fasting very famous. People. People follow the 16 hours. But actually what's the golden goose of fasting? Is the cellular rejuvenation that starts happening at the 2 to 3 days, when the body is always calling for bankruptcy, and this phenomenon is called autophagy or self rejuvenate.

And it won the Nobel Prize in Medicine in 2016. So it's pretty well scientifically valid today. Phenomenon. So you go further than that on day four. Day five.

So cells are rejuvenating and then cells are fixing themselves. And then still if there's no more calories coming in the body's going to tell some cells, sorry your body's going to start doing triage.

If you're an old cell you're not producing any good job. And you're just consuming the calories. We call those senescent cells all cells. They're senescent. They're zombie cells, we call them.

They also in use a lot of information that accelerates aging. The body gets rid of those cells and send them to other doses and keep the younger the active cells.

It says simple three years. In the same way. Going back to the example in the company, once you depleted the bank accounts, you go back, you start cutting budgets.

That's autophagy. Cut this budget. We cannot spend here. We can spend there. And if you go longer, unfortunately, you're going to have to cut a little bit of the workforce a little bit as the big, you know, projects to take a deeper dive into salvaging the body.

And this happens that on day five and six. So they went into we use the reserves, we lose weight the three and therefore we rejuvenate the cells. But we're losing a lot of weight at the same time.

And the five other words, we're we're selecting the cells that are great and we're getting rid of the old cells. And this is what made fasting very famous.

Because now if you do the proloned fasting this last five days, you're burning a lot of fat at the same time, you're rejuvenating your cells and you're getting rid of the old cells that are actually pushing the aging process.

This is what made fasting so famous in the last few years. Unfortunately, some marketers push that 16 hours will get you autophagy, but it doesn't. You still have a lot of reserve.

There's no urgency. There's no need to rejuvenate the cells. If you skip breakfast, you get to go for five days.

How the Fasting Mimicking Diet Works

And so we as a company earlier, we are a spin off from the University of Southern California. And a lot of the fasting research was done at University of Southern California under the leadership of Professor Valter Longo.

Everyone listening to us today, if you buy the Longevity Diet book by Professor Walter Longo, you're going to hear a lot better about how to lose weight in a healthy way, but also how to use nutrition, you know, to support patients with cancer or with diabetes or prediabetes or Alzheimer's, etc..

The Longevity Book sold millions of copies and is something I recommend big time here. So the author of that book, Walter Vogel, is the head of the department at USC that studied fasting and brought all the science that I'm describing in here.

And when they discovered that five Days of Fast was like a major weight loss and said the rejuvenation is an anti-aging intervention, but it goes even younger biologically because it's fixing the cells.

They went to test this in humans and people clean water fast for five days. And it's actually risky, right? It's crazy idea. And so they go and say it's like going to a company and telling the CEO, hey, I'm going to leave you a month without money just to help you rejuvenate your companies.

Like that's very painful. Don't do it frequently to me. So, seeing that is very difficult in humans. The National Institute of Health stepped in and gave you a millions of dollars to develop what we call today the fasting mimicking diet.

Meaning, can we see the body? Can we figure out the very precise food formulation that people can consume over five days while keeping the cells, thinking that they're fasting?

So it's an oxymoron. It's called the fasting mimicking diet. And this was a big project, some actually sponsored by the US government, seeing how important the benefits of proloned fasting were.

And then 18 universities came together Stanford, USC, UCLA, Mayo clinic, University of Indiana, University of Genoa, Milan. 18 of research across the world said we will test the fasting mimicking blood on different conditions, on weight loss, on prediabetes and diabetes, on Alzheimer's, on cancer.

Because the theory is if every cell is rejuvenating, this nutrition program should have positive effect on multiple health conditions. And this is what has been under, you know, going for the last 23 years, 32 clinical trials, testing, the fasting, the making, diet, prevention, reversing bio age and, people with prediabetes, diabetes.

But a lot of the trials have studied obesity, prediabetes, metabolic syndrome. And the benefits are weight loss, etc.. So happy to describe how we can mimic fasting with food and how is that possible?

Or to tell you the benefits or to do both. Let's talk about how you do this. I think let's start there because it's really a brilliant idea. Right? We know that fasting has these benefits, but like you said, you eat a five day water fast where all you drink is water is something that most of us, for many reasons, don't have.

The tolerance or the ability to do may not even be like safe for some people. And so to be able to precisely use food and be able to chew things and swallow things, and not feel like you're starving for five days, but actually get the cellular benefit of starving the cells is pretty cool.

How how does it actually look? What does it look like for people? Yeah, we we spend over $36 million, 36 million in development and testing the fasting mimicking line at the universities.

Basically, we started by looking at how the body is in its totality. How does it recognize that there's food. And typically it's when you eat carbs, insulin increase and it's a signal of pick up a food.

And if you eat proteins, IGF increases insulin like growth factors and other growth factor. So when you eat insulin crazy, eat protein, digest, increase.

They both tell the body through the blood systemically that we should go and anabolic state you should pick up calories. This calories come in. So the first hurdle was to develop a diet and sleep program for five days.

And by the way this is all plant based. No chemicals, no artificial high premium ingredient, clean formulation, gluten free, soy free, non-GMO, no low carb, everything you want in a healthy diet to start with.

So we didn't want to go with any. There's nothing here artificial. It's actually it's real food, right? I think when you think of this, you're like, is this like some sort of goo or something?

You know, like ultra processed. But it's it's a real food. Yeah. It's it's very high end premium healthy food. So we started we developed this formulation and there's 77 ingredients that doesn't spike insulin.

It doesn't spike IGF. So when you're eating the we call the it on the product. We're talking about 4 or 5 days is called prolon for promoting health and longevity.

So prolon first objective the food approval was not to spike insulin or spike digest. Now the second objective is by the time the nutrients get into the cells, how does the cell recognize this food.

So there are three radars on the cell for food that we call the nutrient sensing pathways. They sense the food and nutrient sensing band SP, the NPS, different speeds of the cell, the nutrient sensing pathways like the PCA, the rats and the tau pathway.

And we develop the nutrients in a way that they go around the pathways, or when they go through the pathways, they go and they they do not convince the cell they're below the threshold of where the cell is convinced that there's enough food to to.

So the body systemically is not spiking the anabolic factors. The cells are sensing some nutrients, but they're saying, I don't think I don't think I have enough.

I still I will defend myself, I will do autophagy, and I will stay in the fasting mode to give to simplify this, in the example of the company that we talked about, imagine you're the CEO.

You need $1 million. Somebody comes in and says, look, I'll give you 400 or $500,000. Actually 5 or 600,000 because the diet is 1100 calories. They want an 800 calories day to day life.

So you're getting half of the car. I say, I'll give you a half $1 million, and I'll earmark some of it to your heart, because you want to pay your employees and you want to keep the best you want to supply, and you want marketing to be able to sell.

So we'll send those, and then we're not going to fund the other parts of the companies and go and fix them. And that's the concept is how do we give you but not enough so that you can thrive.

You're not hungry. You don't feel as a CEO, you don't see the pain of what's going on, but you still go and take this. The action. And and initially we were hoping to mimic like a percentage of the fasting benefits.

What we're seeing is that we're doing much better than water fasting on many levels. Because imagine that with water fasting this year with no money, you know, people will quit.

He cannot buy stuff for next month. They cannot pay for electricity. There's no Wi-Fi in the system like so. There's a lot of negatives that comes with this pain of fixing.

So when you give him some money and he puts it in the right investments to keep what necessary and to fund, you need others to, to, to fix the company and the consultants and fix things.

So he funds the same way with the fasting mimicking diet with proloned what we're seeing is there's minerals, there's vitamins, there's, coming into the body, there's a plant based proteins, there's carbs, there's healthy fats.

Gut Health and Muscle Preservation Benefits

So the body uses those to fix itself. We see it a lot in mice, actually, in a lot of people come to us for gut health. We see a better fixing of the gut health lining.

When you're sending right, you keep the right microbiota. When you do water science, the entire microbiota is starving. When you do the proloned fasting mimicking by giving plant based ingredients.

So you're helping, then the good microbiome thrive in helping delineate the lining of the cells. When they want to fix themselves, you're sending that.

You're giving them nutrients to send that. You know, that's fascinating because I haven't actually heard people talk about that before. I want to make sure that people heard that.

So it appears that one of the benefits of this over strict fasting is that you're continuing to feed your gut microbiome, which we know is like this really essential part of health in general, but has a really big impact on weight and metabolic health specifically.

So that is actually something I was not aware of myself. So I suspect that is something that, you know, anyone listening is going to find new information.

So I think it's worth highlighting that. Yeah. Big time in a we we've seen those benefits in some trials. The other the gut benefits and the microbiota preservation.

And we collected microbiota before and after proloned to demonstrate that. But the one other major benefits that we've seen is muscle protection. Right.

When you water fast, the muscle is trying to rejuvenate. But there's no nutrition when you do water fasting. Right. So people people when they do water fast, they, they, they're concerned about losing muscle when you do fasting with the fasting mimicking diet, you're actually nourishing the muscle.

So the muscles rejuvenating and see is proteins coming from plant based sources from the diet. And therefore we see a preservation of lean body mass and muscle function.

And this is very, very, very big in weight loss. Because weight loss is not about just overeating. Weight loss is about how well your muscle is maintained to burn this fat.

Right? A lot of us, we're probably eating the same or more at age 20, but we're not gaining the weight and now that we're 30 and 40 and 50 and 60 and 70, we notice that like, I'm eating less, but I'm not able to get rid of it.

Right. It's so weight loss is not just about food and fluid timing suit food timing, but it's also about muscle that age. If the muscle is protective, you're going to keep burning what you're eating.

And it's very important to keep your metabolic rate and to get rid of what you overeat. The second most important thing is aging. And I always tell people, hey, I mean, you're diabetic at age 55, you are probably eating worse when you were 30, but you were able to burn it and you were exercising and you were more active.

So aging, less muscle, plus eating healthy, that tree you unlocks and the timing of when to eat, as we talked about, unlocks, losing weight. And this is what we love about proloned is the only intervention that can rejuvenate the cells.

So biological aging, getting younger, they can preserve lean body mass tech that is helping you eating healthy plant based clean nutrients and helping you burn the fat very fast while preserving your muscle.

This is the only time that we've seen because people are. I've been asked to eat every day healthy, right? And most people I always use the, the example of students in college, right?

Their parents are like, study every day, 10%, a little study every day. These are the healthy people among us. They go to the gym every day and they're very committed.

And 90% of the students, they study here and there, but they party in there as well. And guess what happened five days before the exam? They're all sitting and spending 16 hours and 12 hours a day studying to get by.

This is a little bit the prolog, right? It's going to be concentrated five days this year, but it's going to go through the stressful fasting. But you're going to actually go and get get through the exam or the health the health test and hopefully conduct a healthy and healthy and long life.

Yeah. So you like like one end we have like five day water fast, which is really challenging. And maybe has some drawbacks to do. On the other hand, maybe we have eating a diet, right.

A strict way of eating whatever that may be. Plant based, low carb, keto calorie counting, all the different 600, you know, different diets, right, that you referenced earlier?

We have lots of them. But most people really don't stick to a really strict diet every day for the rest of their life, let alone for a full month. And so when you have a proloned program like proloned, where it's five days of commitment once a month, then that becomes doable for for almost everyone.

Yes. And I'm happy to show you, happy to show you some data if you want. I mean, we talked a lot about muscle protection. Yeah, we've talked about muscle protection and longevity, but let's talk a little bit more about weight loss.

Like what could people expect in terms of weight loss on this. So, it depends on how many times you do the fancy we make in the I think you would call it roll on if you do just one cycle.

Just one cycle, on average, a woman would lose around 5 to 5.2 pounds on average and then loses anywhere between 6 to 8 pounds. This is what to expect within one cycle.

Now, a lot of people ask me how long the benefits stay and what we see is 40 to 60% of the benefits stay up to 3 to 4 months after, right? Because people have different ways to prolon.

That's a problem. The number one benefit we see, people say, I change my relationship with food. I never they always tell me it's long enough. Five days to get the benefits to change my relationship with food.

You know, I never knew that. I can, you know, have a soup and a couple of snacks just for dinner.

Weight Loss Results and Long-Term Adherence

I never knew that. I didn't need to depend on big plates. I never knew I can eat plan based for five days. It's long enough to inspire a change in lifestyle and assured us that most people complete that.

We have, anywhere between 89 to 93%, depending on the surveys. 8019, 93% say I completed it is only five days is day one. There's a day five. So the beauty of approval one is long enough to get you the benefits and change relationship with food.

And sure enough, so it inspires you to come back to the healthier life after that. And I think this is so important because when we go, when we have a when we have when we want to lose weight, right, we also have this Monday I'm going to start, etc., this sort of I'm going to have to change my lifestyle every day, Monday and Tuesday and Wednesday and months one and two and day 200.

Something that's hard is so stressful that a lot of people actually end up saving, and we call it learned helplessness. You get to a point where I'm helpless.

I started, I had only to fail on it and then actually gain more. And this is very important. We gain more when we stop because when we do a long term diet, especially just calorie restricted, we're losing muscle at the same time.

And when you go back to eating the, the, the volumes or the quality of food you were eating before that, did you have a smaller muscle mass? You're not burning fast.

What you're eating now and you gain weight super fast and super. And this is where the beauty of proloned why people where it takes 4 to 6 months. 3 to 4 months to gain back the weight or to just just abolish 50% of the benefits because it kept the muscle.

It turns you into a high performing machine. The muscle is there. It's only this fat. They've got tight and the cells are rejuvenated. So it's a younger you, faster, high performance mental clarity.

We have all these benefits documented and the muscle is protected. So when you go back to eating normal food, you're not just going back on a little muscle, low metabolic rate.

And you keep that's that weight loss for a longer period of time. On top of that, you're inspired to now eat healthier. And that's why we tell people, you know, who want to do problem to lose weight, do it once every 3 to 4 months.

Right. So because then you're keeping 60% of the benefits all the time and you're accumulating those, and then you're going to successfully reach your your weight loss objectives.

Great. Well is there anything you feel like you didn't share with us? I think we could probably talk about proline all day because that has so many different benefits.

Anything that we missed. Yeah, I when I say that the, the we talked about the weight loss, we talked about muscle preservation, we talked about aging.

I want to focus on the age and the rejuvenation because these are important metrics today. Right. Today, if you go on a healthy diet and again you're losing the muscle is difficult to to to conduct what a lot of people are injecting the JLP ones the same like the tides, you know, Zenpix and the others and they lose weight fast, but they should not stay longer than the problem.

They're losing muscle. A lot of the trials are showing that, the upfront weight loss is 20 to 25% muscle. And if you go longer. And all this, I'll just say one thing here.

As an obesity specialist, that has been considered a standard acceptable measure, right. Like like that, that is true. And that is also what we have in the medical community considered like acceptable. Yes.

And we got to use, you know, you know, a muscle like you are. And we got used to certain notions, right. Obesity. Oh, it's okay to lose muscle and the weight is, is what the best thing we can do.

It's okay to give a diabetic five pills for the rest of their life. Even though those pills are increasing insulin resistance because they take glucose from the blood to the cells, gets more turned into fat and increase in resistance.

It's a progressive disease, right? It's okay for it to go. And what we're saying here and prolon it later is saying no no no no. We get it protects your muscle.

It will help you lose the weight. And we're seeing tons of benefits, prediabetes and diabetes. We actually just published two trials on diabetes. We published one in Diabetologia, which is one of the top medical journal in diabetes, and the other one, and Jason, Journal of Clinical Oncology and Medicine, two top diabetes journals.

And we're showing that the fasting mimicking diet. Now, you do it once a month for six months in a row. So once a month, five days month one five days month to five days monthly all the way to six month.

And then it's helping you use 22 pounds when you do it six times in a row. It's helping you decrease insulin resistance by 59%. It's due to loss of central fat.

It's helping you decrease one you by 1.4 points. I mean imagine six months and it's helping. This is the most important metric is helping 67% of people.

So two thirds of people who would do this lifesaving million died over six months will actually decrease the need for medication. Because essentially what you described is, is it is as effective as most of our diabetes medications, right.

Like with that amount of weight loss, that change, it's more powerful than many of the medicines we have. The medicines that we have do not the rate. This is what the new trial showed, the diabetes awareness that we have today.

They don't take you off medicine. That's a problem, right? Right. It's actually it's much more effective in that sense because most diabetes medication and for everyone hearing us here today, that takes a pill for blood sugar and blood pressure and they know what we're talking about is they they have a prescription for life.

There's no expiry of it. And by the way, just taking that personally, you know, this is way less this way. When I, I used to tease my attendings like where we're writing, you know, we're writing scripts for, for for medicine.

If they work, why they have to renew them every month. And we get that. We get all brainwashed, like every patient, every doctor knows that this is my medication for diabetes.

Diabetes Trials and Clinical Outcomes

I refer that every month. To what? What what is this medication doing for you if you have to do it for the rest of their life? So most medications, they don't take you out of medications.

Drawer. Takes you out of medication. Would actually super proud of that. We have patents on it. We have multiple clinical trials. And then we have exceeded now 15,300 doctors in the US that are registered with us to to recommend approval on, and we're expanding globally and that's the right way to do you over it.

You become pre-diabetic, obese, pre-diabetic, diabetic. Well guess guess what's going to be the fastest way to get you from the overeating is this fasting mimicking which is.

So let's that it's it's it makes super sense. But it takes two hours to explain because we're all the brain was, oh, you're diabetic. It's okay. We'll give you a biologic injection or we give you a chemical and a pill.

It will help you a little bit. Maintain healthy level of blood sugar for the rest of your life. And people get used to it, and then they end up developing cancer.

They ended up losing their kidneys. They ended up dying sooner. And that's okay because diabetes is a progressive disease. Well, it's not okay. And it's not okay to be overweight for the rest of your life.

It was okay. And science is now on your side. And more importantly, is is science behind the plan based natural intervention, right. Fasting is a very natural intervention people think is that is that the new craze is fasting than you would know because the new the the, the artificial pattern of food is what we're eating today.

We're eating all the time. We're eating weight. We we press a bottom on Uber, eat and this. And the door rings after 30 minutes and you get your food.

This is artificial. Fair enough. Right? Hundreds of thousands of years, our ancestors never had that. They stored food into fat. When there was a lot of food in the summer, in the spring.

And then the winter comes down and there's no food. And they had to go through intermittent fasting, and sometimes it proloned fast. If it snows longer or if they have to migrate.

So the body was used to a store a little bit spring and summer. And then I fast during the winter. And it is when I rejuvenate to get back healthy and strong.

And in spring we lost the last 50 years, we lost all this balance of fasting and eating. We started eating all the time, and despite the fact that we spent $3.2 trillion and healthier diabetes is on the rise, cancer is on the rise, Alzheimer's is on the rise, obesity is on the rise, and nobody's curbing them because nobody is being truthful about the scientific approach.

Yeah, food companies just want to sell. Your diet is just going to sell you, on one hand the candy bar and the other hand the medical food. And it's not ethical and it has a pharmaceutical company.

They're trying their best, but at best, helping live is always have side effects, because that's the notion of when you have a drug, the drug works and it works on one receptor and has side effects on other receptors.

We have, for the first time built what we call a nutri tech and attrition technology company. We said, well, the solution to lifestyle is nutrition, and nutrition has to be ethical, scientific, plant based, a lot of trials and evidence behind it, and why we are the one of the few companies to do that, because the other companies, they know, they put ethical science behind their food and the not uncovering benefits that uncovering other results. So, I strongly recommend for people to go and read more about the size of product and consider it and do it. Yes.

So if someone is, you know, wanting to try this fast, mimicking program, the prolon program, how can they find it? Most of the information is on prolon life.com prolon this pro and life.com.

And there's a lot of other products there that you know, all our philosophy is clean nutrition for healthy aging and longevity. So there's other products around that.

And and you can you know, we're very active on social and on social media, etc. if you want to see the latest coming from us, they can follow me, mostly on LinkedIn and, Doctor Joseph and, and you'll always see the latest breakthroughs.

We, we do per year, around 6 to 8 clinical trials where we're like a pharmaceutical machine behind nutrition of it. Great. We need that. We because we don't have that level of data oftentimes for food.

Right. It's a lot harder to do so that that's hard to do. Is harder. For. Exposes that it's not harder to kind of it's not harder, actually. It's easier to do clinical trials and food, but it exposes the food.

Those who believed that, you know, I mean, I don't want to name companies, but, you know, I just want to ask a question like if there's is there one company that people trust they will always eat from because this has clean nutrition.

This organization is scientific. It helps me live a healthy life. This is this is the tree or that you want you want clean. You want formulation for longevity.

Is there any company you can name that does that?

Where to Learn More About ProLon

I always feel like I'd have to grow it myself. Right? Because you're always exploited. They they say, oh, this is a gluten free, non-GMO, you should eat it.

But behind the scene there's like additives, there's preservative, there's a fermentation that tastes good. So then you get addicted to it. So we decided to be at a leader, the first company that says, you know what?

I'm going to test because I'm proud of what I'm developed, what what what I have developed. And I'm going to show you the benefits, and I'm going to have the doctors prescribe it.

And by the way, the top uses are Prolon, the two top uses globally are both doctors. We have more doctors using frequently Roman than any other. Patient, I think.

I think the science and the data makes sense for it. Right. And you know, one of our jobs okay. Because we do have to wrap this up eventually, you and I, I could talk all day.

One of our biggest jobs as physicians is the first to do no harm. Right. And so when we're evaluating any option for our patients, you know, balancing that risk and benefit, I think the chance of a harm from eating plant based, healthy food for five days in a structured environment is really low, right?

Like like the harm from this. And then the possible upside is really high. So I suspect that's why you do have so many physicians and other doctors who who are using this. Yes.

And then did the science. The doctors love to read the science and the the first to understand it and support it. And I think that's, that's what got us a big waves us, and we're a grassroots phenomenon.

We're not here to, we're not we're not a big pharma or a big nutrition company with a true, you know, university board, company is trying to put ethical science behind it.

Well, I love it. Thank you so much for joining me and sharing and sharing about proton today. Thank you.