Introduction to the Summit and Dr. Antoine

This is Dr. Talks, real talk from real doctors on the issues that matter to you most. Welcome to the Fasting and Longevity Summit. I'm your host, Dr. David Jockers, and I'm excited to interview my co-host for this summit, Dr.

Joseph Antoine. And we are going to talk about why fasting is the best longevity lifestyle intervention. And of course, it doesn't cost you anything. But we're also going to talk about some powerful food based resources that you can use to mimic the effects of fasting and why that may be more advantageous in certain circumstances.

And so a little bit about Dr. Joseph Antoine, his passion is to enhance human longevity. He is the CEO and chairman of the board at El Nutra Inc, a unique nutrition technology company, leading the longevity and food as medicine markets.

You can find his website prolonlife.com and Dr. Joseph Antoine has dedicated his professional experience to launching two novel markets. The first is the longevity market whereby he launched the first tested and patented healthy aging product called Prolon.

The second is the food as medicine market where he launched nutrition for longevity, which is now among the first foods ever to be reimbursed by CMS and insurances.

So truly food being used as medicine and recognized as medicine. And he's also Prolon and his companies have also help to fund a lot of great research into fasting and fasting mimicking diets.

And so real powerful information here. Be sure to share this with anybody that you know and that you care about. Get them involved in this summit so they can learn how to use fasting as medicine to reverse aging, slow down aging, I should say, and reduce their risk of developing chronic disease.

This is powerful information. Again, please share this with somebody that you know and they care about, and let's go into the interview. Well, Dr. Joseph, great to be with you today.

Excited about this conversation. I know you've been working in this fasting and longevity space for a long time. You've got some incredible knowledge.

and really love what you and your company on Nutra are bringing to the space and really helping people access this natural form of medicine in the form of fasting and food technologies that really help us to get the benefits of fasting, particularly with certain population groups that may really struggle with fasting.

And so let's start with this question.

Why Fasting Drives Longevity

Why is fasting a core longevity intervention? Well, thank you, Dr. Chokers. And hopefully we're going to change somebody's life today. I'm going to go straight to it.

Fasting probably is one of the only two, three interventions that we know today that can really reverse biological age and help people live a healthier, longer life.

And what's the correlation is when you fast, you're doing two major benefits to the body. I mean, we can talk in detail about the types of fasting and the impacts of each longevity, but in general, you're doing a big intervention on your metabolism and you're doing a metabolic reset.

73% of Americans today are overweight, 90% of Americans suffer from one or two kinds of metabolic disorders and or, you know, meaning something going wrong with the metabolism, whether it's cholesterol, triglyceride, weight, et cetera.

So when you breathe fast, just to start with that, you're helping 90% of the population try to reset one of the metabolic markers. But what brought fasting, this is the, if you want, the low calorie setting of fasting and helping the body lose the weight and improve blood pressure and blood cholesterol and blood triglycerides and all the other inflammation and inflammation, et cetera.

Now, what took fasting to the prime scene of longevity was around that 2013 to 2016, when the science coming from USC and Professor Walter Longo were saying that if you do fasting in mice, you're rejuvenating their cells.

and you're bringing new stem cells up to the surface to replace old senescent cells, the zombie cells. So USC has established a Longevity Institute and they were looking at fasting and under the leadership of Dr.

Walter Longo, a lot of folks probably listening to us know that name and have read the Longevity Diet book and if you haven't read it, please go and buy the Longevity Diet book by Walter Longo.

He explains how first in mice, they were looking at if you do two or three days of fast, which is equivalent to four to five days in humans, the mice metabolism is a little bit faster.

He was showing that the body is going into a type of crisis. Fasting in mice or fasting the body, the body first couple of days has enough calories from the liver, from glycogen, from fat, the reserves of the body, they help you the first couple of days.

And then on day three, you go into a crisis where the body is telling the cells, hey, I cannot feed you any longer. You're going to go and eat the debris in the organ and you got to rejuvenate and you got to perform at your best so that we together, all the cells can survive the fast.

So the crisis on the cells after day three of human fasting or after the second day in mice is what pushes the body to rejuvenate the cells. That discovery won the Nobel Prize in Medicine in 2016 under the name of autophagy.

And then for the first time, we're seeing a fast at pushing the cells to fix, and therefore they're going biologically younger. You know, when you fix a cell, you're going a little bit back in time.

And the younger you is a you further away from the onset of the four big killers, diabetes, cancer, Alzheimer's and autoimmune disease, mainly the age-related health conditions that are killing 90% of us.

Now, what Walter Longo and USC developed actually, they went even further We all talk about autophagy and fasting. The next step, so imagine, so the first two days, the body relies on the reserves, fat, glycogen, and liver.

Then day three, day four, the body tells the cell, hey, no more food, I'm depleting the bank account, you gotta eat the inside, that's autophagy, we established that.

Now if you move forward, now the cells are saying, I depleted, I rejuvenated, what's next? And this is where the elimination process happened, what we call the regeneration.

And the buddy is saying, okay, I have cells that I don't need. They're all, they're zombie cells, they're senescent cells. And the buddy kills them, a process called apoptosis for those and pushes the younger cells to replace them.

So basically get an effective cell and push the younger cells. And we see this very much so in mice and we see it in humans in our Prolon trials. We're going to talk a bit more of Prolon.

We saw a spike in stem cell in precursor of white blood cells that is in kind of proliferative stem cells. and which which means the body is getting that older cells out and these older cells are key in the process of aging because

once you start having many of them they're very pro-inflammatory they start creating that environment of accelerated aging you know folks who are 50 60 70 they start having a lot of these old cells and they accelerate aging actually even faster we call the exponential aging at the end of life so it's very important to look at not just the intermittent fasting but look at the prolonged one whereby improving metabolism, benefit number one, we talked about due to the weight, benefit number two, rejuvenating the cells, that's the autophagy, benefit number three, replacing old cells with new cells, the regenerative part of fasting.

All those things are reversing bio-age and helping you stay healthier longer. Yeah, what a great explanation. I mean, fasting is this, like you mentioned, this hormetic stressor.

It's a stressor on the body, but the body actually becomes stronger, more resilient through it by getting rid of these old damaged senescent or zombie cells that are just kind of going along, but they're not functioning properly and they're causing poor function inside the body.

By getting rid of those and then replacing them with new young stem cells or repairing cells that we're still able to repair through that autophagy process.

So yeah, really incredible stuff. Now, when I was growing up, I was told you got to eat three meals a day. It's got to be breakfast, lunch and dinner.

You got to get all your calories. And so I never really heard the term fasting. Now, my family would do fasting one day a year for spiritual religious purposes.

And I thought that was like the worst thing ever. And so now, of course, you and I are big advocates of fasting. You hear a lot of people online talking about fasting.

A lot of people are starting to practice this. Is fasting new or has it been around for a long time? No, and everything you said is right. Both eating three times a day and we're actually a proponent of that.

And the prolonged fasting has to be added to this. So I'll put it all together. Well, first of all, fasting has been part of the human diet since the beginning.

Fasting Through Human History

Imagine the first few thousands of years where humanity didn't even have any fire or any refrigerator or anything. And humans lived, I hear all these theories about the cavemen and we lived around rivers.

We didn't live, I mean, you can, in the cave, you can hide at night, but there's no food or water. And by the oceans, the water and ocean wasn't drinkable and there was no trees.

And it was, you know, you know, so we lived around rivers and humanity lived because with the river, you have water, you can drink and you have a lot of grass and a lot of trees and a lot of fruits.

And so we were plant-based and a little bit pescetarian. The fish is the only animal that cannot fly or run or see clear. It was easier to fish. And this is why for the longest period, our diet was a plant-based pescetarian.

Then we started learning how to hunt a little bit. We became flexitarian. We added a little bit of meat to it. And there were periods where there was rain and snow.

So in the summer with abundance, we would store. Our body used to store in fat. We go through the winter and the winter, there was a lot of fasting periods.

There was a lot of times where, because we couldn't store food the way we can store it today. So the notion of not having food all day or going several days without food coexisted with us for the longest time.

Imagine in the middle of the snow or you migrating, you're packing your tents and going and all that. There was a lot of periods of prolonged fasts. So the buddy learned how to cope with all of it, learned how to store when there was abundance and learned how to deplete and learn how also to react when the depletion goes longer by fixing the cells, fixing the spoilage and being very ready to walk and find the next fruits or, and this is why we, what happened with fasting, we transformed fat into ketones.

The ketones are just food for the brain to stay up and be able to walk and not faint because then we will be exterminated as a race. And the second thing that the body does is to protect lean body mass.

This is very critical. critical and the body invests into the brain and the muscle to keep walking and collecting fruits and vegetables. And why is critical today?

Because today for all the folks who are diabetic or overweight or have some, we put them either on a chronic diet and they lose muscle and they lose the fat, but because they lost muscle, they're not able to go back and resist restoring the fat and they always Everyone tells me I've learned helplessness.

I go out on a diet and then I go off and I regain everything because they lost the muscle. Now we have the new semiglutide injections that a lot of people are doing.

Up to 20-30 percent of the weight loss is muscle loss, which means the day you stop those, you're going to pick up the fat again. It's very difficult to rebuild the muscles.

It's very easy to store the fat. It's critical to understand that fasting is one of the very few, if not the only intervention that helps you lose a lot of fat.

while maintaining lean body mass. And it's part of the success today of athletes who still do it. And what do we do with the fasting and making diet? Probably we'll talk about it.

We even accelerate that because we're giving the muscle even the nutrients that it needs to develop. So we have even a better way to preserve lean body mass.

And in some trials now we're seeing an increase in lean body mass when you do a fasting and making nutrition. But to go back and close on the answer, fasting lived with us for a long period of time as humans.

Even then when we, when we start sorting food, religion was the predominant, you know, adoption with humanity and, and all the line religious actually have one common word, which is fasting.

So we kept it as a tradition, as a cultural tradition up until the last 40, 50 years, we became less religious. We store now food better than ever. And we accelerated the delivery of food, late night deliveries with the Uber eats are and we started working late at night and overeating.

So. We went from fasting and feeding to multiple times eating per day and eating late at night, which is the worst thing you can do to your body. But your parents were right.

We should eat three times a day. And this is a big discussion between intermittent fasters and longevity proponents, whether you should do the 16 hours or the 12 and the 14. And I'm happy to go into all of it.

But one recommendation here is eat early, do a front-loaded intermittent fasting. If you want to do your 12, 14, or 16, just have your dinner at 5, 6, and then still eat something the next day in the morning, which will give you the 14 hour that you need or the 16 versus eat late at night and starve your body all the way to the evening time, because that creates a delta between your circadian rhythm and your biological clock versus the, and you'll be starving your organs when they need the food in the morning.

And you'll be feeding them at night when they're just relaxing and and it pushes insulin IGF and accelerates aging. So that's a separate discussion on how to do intermittent fasting, right?

But definitely we should do intermittent fasting and not eat during the night phase. And two to three times per year, which is what our ancestors did and prolonged fast when there was no food.

Today, the science is showing that actually the five days of fasting done two or three times per year helps us refix our metabolism, fix ourselves and be a pro longevity intervention.

The simple example to give here is a Formula One or a NASCAR car race. If you watch those, if you're driving, you're going pretty fast. That's life today.

We're getting toxins. The wheels are being over abused. The engine is heating. What you can do is you can slow down intermittently. That's intermittent fasting.

It can help you a little bit decrease all this you know, heat on the engine, but what you can do optimally, you can go to the pit stop, the mechanics come in, they fix, they change, and that's the five days fast, that's the problem, fasting and making diet.

You take the five days, the zombie cells or the senescent cells, you're fixing the existing cells, you're resetting your metabolism, and your car goes back on track, can stay longer, healthier, and faster.

Yeah, really fascinating. And you made a really good point as far as the sarcopenia or muscle loss. We know when we talk about longevity, one of the biggest risk factors for all-cause mortality is muscle loss.

It's called sarcopenia. And fasting helps preserve that because you get an elevation in human growth hormone, and HGH helps your body preserve your lean body mass.

We think about it from an ancestral perspective. When our ancestors didn't have food for a few days, if they got weaker, it would be hard to hunt or harvest.

So they actually got, in a sense, they preserved that lean body mass and their senses because of the ketones in their brain, their senses got heightened.

And therefore they were more mentally clear. They had less brain inflammation. So they were more creative and, you know, all their senses were heightened.

So it was easier for them to get food. And you mentioned the key word, it's a stress. So fasting is not a low calorie setting. We see that in other restrictive diet.

It doesn't work. You lose the muscle. Fasting works because it's an injection of stress. It's like intermittent intense exercising, right? You get the same benefits.

Fasting is actually like the intermittent, you know, transient and high intensity, the high intensity exercise. It develops a superior level of intervention, a superior level of stress that then the cells say, okay, I need to flex, I need to adjust.

I need to be metabolically flexible, but I need to rejuvenate and fix and be at my optimum to survive. And you don't need to do it all the time, the prolonged one, you got to do it, you know, when you, when the body is, is needing it.

And we think it's every four to six months is when you would go and do it, which again, whether it's a car race, you do two or three bits stuff during that race, whether it's humans, we used to migrate two or three times during the year with the snows and the Springs and the Ottoman.

How Fasting Mimicking Diets Work

It's part of the cycle of life. Yeah, yeah, for sure. And you know, some people that are listening here have done a three or five day fast water fasting.

And so for a lot of people, water fasting, they see amazing results with it. They feel good with it. But a lot of people are very intimidated by it and really have trouble as they get started with it.

And that's what's interesting about El Nutri. You guys have made these great food technologies where you're getting the benefits of fasting, but you're still actually eating and you don't actually have to make food, prepare food or really think about food.

You just, in a sense, all your food in a box and it's all set out for you. So you're still feeding, you're still eating. A lot of people are taking medications that they need to eat with and things like that.

They don't have to disrupt their day-to-day life with that. Yeah. And, and, you know, we, we used to be a water fasting, uh, a clinical trial, right? We, our story at Nutra is enough.

There's an offspring of University of Southern California. We were founded, we were founded by Dr. Long, the head of the longevity and USC. And we were the results of their water fasting actually initial trial.

So this is 20 plus years ago, they were looking at the benefits of intermittent fasting and then fasting for a day or two or three. And there was a lot of actually benefits on cancer patients.

And the first time USC went on a human trial, it partnered with Mayo Clinic to go on a pure water fasting intervention for patients, for a patient with cancer.

And it took a year and a half to just recruit two or three patients because nobody could or wanted to do a four or five day fast. But in mice, we were showing major benefits.

Diabetes on cancer and on autoimmune. So we took all these results in mice to the NIH. and we asked for grants to go and develop the fasting mimicking diet, meaning can we, because we were also, our founders are experts into what we call the nutrient sensing pathways of the cell.

How a cell recognizes food? What are the sensors of the cell? And they thought they would devise a very specific precision nutrition formulation that would feed the body and the cells, but keep the signals of fasting at the cellular level.

So this is why it's called the fasting mimicking diet, you're feeding the body over five days, and I'll tell you how the cell misses that, but at the cellular level and metabolic level, the body doesn't recognize the food, and therefore you're getting the benefits of a five-day fast.

Actually, you're getting even more benefits because you're funding the transformation of the body. When we say autophagy, you get to mobilize lysosomes and others too.

If you don't have minerals, if you don't have the vitamins, if you don't have the macros that you need, you're not going to do that. If you want to push new cells, you get to also feed them.

we were seeing in a lot of cases, the fasting and vegan diet to be not just safer and more compliant and easier to do, but actually a much better results than fasting on certain determinants.

And the big question I always get is how can you trick the body into fasting and what is this formulation about? So it all goes to how the body understands that you eat.

When you eat, there's two macros that stimulates, if you want the recognition of food, you have the carbs, which stimulates that insulin, it's a growth factor at the systemic level saying, okay, we have carbs, we're growing, we're fasting.

And the proteins trigger exactly similar IGF, insulin-like growth factor. So whenever you have a protein intake, you're also telling the body that I have one of the micronutrients and therefore we're not fasting.

So the first step at the systemic level is to not spike insulin and to not spike IGF. And so one of the core formulation of the fasting and baking diet, we call it Prolon in the, for promoting longevity Prolon in the market is to not spike insulin and not spike IGF.

And there's two secrets there because people wearing CGM now they say, Oh, I did get a spike after little spike after lunch and a little bit bigger spike after dinner.

And we engineered actually two of our soups to do that because You want to feed, you want to create a mini spike of carbs and insulin at night where the body naturally is pushing the growth hormone as well when you sleep so that the muscle is getting the calories and the boost to be preserved.

This is why we do better on protecting the body mass than water fast. We're nourishing the muscle and we're giving a signal of double signal of insulin and IGF and growth hormone naturally for the muscle to be preserved and to rebuild.

But it's a small spike. So in general, no big spike of insulin as a response to carb, no big spike of IGF. Now, when you get in the cellular level, the cell perceives nutrition through the PKA pathway, the TOR pathway, and the RAS pathways.

And they interject. There are other mini pathways. And so the formulation does not over-trigger these three pathways. We had to study on every ingredient.

There's 77 ingredients. Because provolone is a fasting by nourishment, not by starvation. You're getting a lot of nutrients. And we studied every combination of nutrients so that the cell does not get satisfied.

It's saying, well, I'm getting some nutrients, but I think I got to be cautious that I get to still be protective and stay in the fasting levels. And these are the two layers that we need to cover to put the body into.

And we do gift kickers. with the omega supplements, et cetera, to end the healthy fats. It's rich in macademia and pecans, and it's all plant-based, it's all vegan.

There's nothing engineered in it, so it's clean, vegan. one of the healthiest thing you can eat outside of fasting from an ingredient perspective. And we also play on the healthy fast to boost that environment of ketosis and environment of fasting.

Yeah. And, and so it's a calorie restricted diet and short-term, we know long-term calorie restriction. You have a lot of the problems like you talked about where you start to lose the muscle, but the short-term bouts of calorie restriction where you're also keeping your insulin and your mTOR pathways down or your growth pathways down.

You're getting all those benefits that you talked about the stimulation of the autophagy the stem cells, right and different things like that getting rid of the apoptosis getting rid of these zombies senescent cells.

And so can you talk about like, because it's it's you guys have it all down to a science and so it's like day one. you're consuming a certain percentage of your normal caloric load, right?

And then day two, three, four, five, it's a five day approach, right? Can you break that down how, what it looks like day one through five? And I want to clarify, it's not the calorie restriction so much as much as the formulation.

Because for Alzheimer's, for example, we have a fasting mimicking diet that's up to 1400 and 1200 calories. So it's calorie restriction is part of it, but the precision formulation that does not spike incident IGF and does not trigger the nutrient sensing pathways, the redness on the cell is the big key secret.

Yeah, because you can eat a thousand calories of fruit and it's all sugar. You can eat 200 calories. Yeah, right. And this is why the ketogenic diet, by the way, which could be also restrictive, is not getting you into deep ketosis because the protein, the cell senses the protein.

So you're very low on carb, but you're sensing the proteins and therefore you don't go into full deep fast. And sometimes you can just, and people say, I'm doing juice fasting or others.

I mean, if you, Even with a 300 calorie or 400 calorie intake per day, you can excite one of the receptors on the cell and therefore the cells would be an in-between fast or a partial or a non-fast state.

So it's very important to, this is what took us $36 million in the research and 12 years literally to get to that formulation. Now we have 18 universities that have tested ProLon, Stanford, University of Miami, USC, UCLA, all the big ones in the US and in Europe.

And it took a long, long time. It's, it's very balancing calorie intake with ingredients and effectiveness on longevity and on chronic conditions.

ProLon Protocol and Clinical Applications

But day one is a thousand, 100 calories. And in day two, three, and four and five are 800 calories each of the days. And again, We have a formulation that goes for cancer patients, a little bit more restrictive.

We have one for Alzheimer's patients that's even higher in calories. We adjust it to different health conditions. But if you're doing the Prolon longevity package, it's a 1,100 calorie day one and then 800 calories every day.

It comes in boxes. You get a big box. There's one box here behind me. You get a box and it has day one, day two, day three, day four, day five. You open the box up.

Day one, you have your breakfast bar, you have your soups, you have your lunch and your dinner, you have the snack and the drinks and the supplements.

So you don't need to do anything else. You have your drinks, you have your hydration, you have your pills, your supplements of the day and the food, and you just enjoy five days of a structured, delivered meal.

and you get the rejuvenation and the metabolic benefits of it. Yeah. And I'm most familiar with your basic ProLon package. I'm interested to know the science there with you were talking about with Alzheimer's patients, you bumped the calories up a little bit.

What is the reason for that? You know, most Alzheimer patients are actually an older population. and they're a little bit more frail, they have less reserve, or they can adjust less even if they have their reserves.

They're a little bit metabolically inflexible, their metabolism is different. So we allow ourselves to go a little bit high up, giving them a bigger nutritious, if you want, intervention to adjust.

And we also play a little bit on the Alzheimer's as a condition of the brain. And you can allow a little bit more ketosis and funding that ketosis with healthy fat as well to prime the benefits.

Yeah. Yeah. Really interesting. Now you said, but cancer, sometimes you're more restrictive. Can you go into that? So we have a fasting mimicking diet that we've studied.

Probably now we have eight papers on it. And the goal is to couple the fasting nutrition with chemotherapy or with immune therapy. So whatever standard of care you're doing, we do the fasting nutrition we tested right before the four days before and the day off the intervention.

and why we want to fast the cancer. And this is how the entire company, by the way, started. We started as bringing nutrition to cancer patients for testing them on fasting nutrition with cancer.

As I indicated, the goal is, you know, cancer is what, what is cancer? Cancer is a cell that lost inhibition. It replicates, typically a cell when it replicates, when it touches other cells, it stops replicating.

Cancer is a cell that just lost that inhibition, keeps going, going. And when it's too big, locally just goes in the blood and goes everywhere, just loves the proliferation.

And so cancer doesn't know how to stop replication. And we use this to the disadvantage of cancer. So when you fast the body before chemo, the normal cells, the normal cells of the body, there's no food, there's no growth factors, they hibernate, they don't replicate, they hibernate.

And the cancer doesn't know how to do that. So the cancer is being starved and doesn't know how to respond, doesn't know how to stop. So it gets into a very oxidative, very stressful, very weak state.

And then you hit it with chemo on day four and you're hitting a cancer that is malnourished, that's starving, and it doesn't know how to escape. So the first theory is how can we create how can we weaken cancer versus chemotherapy or immune therapy?

The theory number two is, as you know, chemotherapy has a lot of side effects because it kills any cell replication. Any cell doing mitosis replication gets impacted by chemo.

Cancer first because it replicates the most, but you lose hair because hair replicates fast. You lose white blood cells because they replicate fast. By fasting the body before the chemo, the normal cells are hibernating.

So you're sparing them the side effects of the chemotherapy. So benefit number one, sensitizing cancer to chemo. Benefit number two is pairing the normal cells.

We call this phenomenon differential stress resistance. creating a delta, you're separating the normal cells, you're sensitizing cancer, which unlocks the biggest dilemma in chemotherapy and cancer treatment because you cannot give high doses.

You can induce cancer cure today if you can give very high doses of chemo, but you cannot because of the side effects. So what we do, we enable, we unlock this delta called differential stress resistance so that the doctor keeps giving the high dose of chemo to the patients and spare the normal cells and hyperkill cancer, increase chances, hopefully, of remission.

We're studying all this. There's two, three papers already published on it. There's a third benefit, which is, as we know, the fasting-mimicking diet rejuvenates white blood cells.

So white blood cells are supposed to attack cancer. This is why we have immune therapy now to help unlock that. But they coexist, and they get lazy, and they adjust to the cancer.

By doing fasting for the four or five days, you're swapping new blood, white blood cells, you're activating them and they infiltrate the attack cancer in a better way.

And these are the three major benefits. Now, if you want to over-starve cancer, we do the version of Prolum, but it's a version for cancer specifically.

We haven't launched it yet. We're launching it next year, but it's more restrictive because you want to over-starve the cancer before the chemo and over-sensitize it.

Yeah, really interesting. Now, some people with cancer are dealing with cachexia where they're rapidly losing weight, losing muscle. Is there any sort of modifications they need to make as they're doing this?

Yeah. If they already have lost a lot of weight. And by the way, that's the dilemma. The problem is doctors do chemo without the fasting or without spitting.

And therefore you have a lot of GI side effects. You have nausea, vomiting, then you lose weight and it's a vicious circle. So if you want to do the fasting, you have to start it early on so that you don't get to that state.

But if you already are frail, if you're really frail below BMI of 18 or 19, then you should not fast. You should actually replenish. And it's important here to replenish with.

healthy fats, not to feed the cancer with high protein, with the other big mistake that a lot of oncologists and a lot of people do today, they replenish them with high doses of big concentration of carbs and proteins.

And why it's a mistake, because you're feeding cancer first and foremost, right? The cancer is is the hungriest organ once you have it and wants to take it.

So it's very important there to give them complex carbs, to give them plant-based proteins that doesn't over-spike IGF and grows cancer, and to fill them with healthy fats, give the calories mostly there as well so that they actually are not boosting the cancer growth while they're picking up on the weight.

And then you can go back to do the fast. So for some, it's too late. For some, you can refeed them and help them and do it. Yeah, really powerful stuff.

So this fasting-mimicking diet, again, helps to protect the normal healthy cells, but helps to sensitize the cancer cells, basically starving them down and making them uptake more of the chemotherapy or whatever sort of oxidative therapy that you are utilizing, radiation, whatever it is that you're using to try to kill the cancer cells.

So they get more of that, less side effects. It's just a great combination. And how about diabetes, right? What kind of results are you guys seeing with diabetes?

And, you know, a common question people give is when, you know, if they are diabetic, how do I go about fasting?

Diabetes Regression and Remission

What do I do with that? And this is why the fasting nutrition is important. You know, they're not on water fast and they don't risk hypoglycemia, right?

This is where fasting is our main core, main main today. And we actually just launched a month ago or two months ago, our fasting, what we call the diabetes regression and remission program.

And you know, the, the, the word remission is now there's the, the, the American College of lifestyle medicine, the underground society and the, and the American dietetic associations, they came together and they kind of did a national position paper saying, if treatment is reserved as a claim for drugs, we want to create the word remission reserved as non-drug intervention to reverse diabetes.

So the word remission, meaning a patient does not need medication any longer. And the word regression, they define two words. The word regression, it means the patient needs less mitigation.

So diabetic patients typically today when, you know, in traditional medicine, the story is they start on one pill, they go to two, they go to three, they inject and then they go on insulin.

That's the normal course, right? You don't hear stories about I was diabetic for 10 years and then I reversed it. And we accepted that, that's the problem.

It's a lifestyle disease and we accepted to just code it as a progressive disease. But now seeing that eating healthy And actually, in the national position paper, they mentioned the fasting-mimicking diet because the results of the fasting-mimicking diet were so effective on diabetes that it was one of the reasons for them to create this regression and remission position because we're seeing a lot of patients needing less medication or no more medication with the fasting-mimicking diet.

So, what is, why to do the fasting-mimicking diet on diabetes? And we have a separate program, again, on the neutral health. for diabetes that people can go and subscribe and have their product, the fasting nutrition for it, and

they'll be supervised with the dietitian also on our behalf.

But the premise is, diabetes is a disease of three pillars. Number one, and this is the most surprising, is aging. You know, most people who get diabetes at age 50 or 55 or 60, they were still overweight, most of them, even at 40 and 35, but their body had enough muscular metabolic rate and muscle mass, and the cells were young enough to correct and escape it, right?

So it's a disease of aging, first and foremost. And even if you get it at a younger age, you're accelerating your aging with overnutrition and you're biologically older.

This way you get it, you know, at the younger age. Number two, it's a disease of also muscle, retaining muscle, because muscle is the engine of burning carbs.

And when you start losing muscle mass correlated sometimes with aging, you start seeing your blood sugar going up. And then you have the lifestyle. It's a disease of over storing calories, which create insulin resistance and then get you into full diabetes.

And obviously, there's genetic predisposition as well. And the problem today, when you look at aging, We're talking about root causes aging, having enough muscle in the body and not overeating and having the right lifestyle.

We never had an intervention that deals with all three. The chronic calorie diets help you with the insulin resistance but then you lose a lot of muscle, they don't work much on aging and therefore You know, once you stop them, you go back to diabetes.

On the other side, the drugs, the diabetes drugs, they play mainly on the uptake of HbA1, of blood sugar. They accelerate insulin sensitivity or insulin production.

They're both leading to more carb storage into fat and accelerate the disease. And now we have the semiglutides, the ozempics and the wadovis and the others, and they're just helping you lose weight fast, but you're losing 20 to 30% muscle.

So whenever you stop those, you pick up back the fat and you don't pick up fast the muscle, unfortunately, and then you go in a vicious circle. So there's never been a solution for 3-Up until the fasting-limiting diet, because with autophagy reversing biological age, You're protecting lean body mass.

As you mentioned, it's a stress. The growth hormone is high. We're nourishing the muscle and we're maintaining body mass. And obviously we're working on insulin resistance.

You lose a lot of fat, you decrease insulin resistance and you escape the pathways. And what we're seeing now, we've done two clinical trials on fasting, one in Leiden in Holland.

It's showing in six months, six months only, five days a month, you do the fasting when we combine. So an aggregate of 30 days, six times five. you have two thirds of the patient needing less medication, two thirds already, some of them off medication, they lose 22 pounds, they decrease their consumption of blood pressure as well, pills, and their Hb1c is decreasing by 1.4 points, triple the FDA recommendation.

If you have 0.5 decrease in Hb1c, you are already clinically significant and you can become a drug. In six months, the drop is 1.4 Hb1c. And then we did another trial in Holland at Leyden University, one of the biggest health systems over there, for 12 months, showing that if you do the fasting-mimicking diet versus the metformins or a healthy lifestyle, you have 53% chance of better regulating the disease versus just 8% when you do the traditional recommendation on how to eat or when you do metformin alone.

over 800% superior in better regulating the disease versus today the most used drugs metformin and or lifestyle recommendations that typically the doctor gives to the patient.

So 800% results clinically studied. Really awesome stuff. And that's one of the great things that I love about your company is that you guys use proceeds to actually further research on this, which is really important because there's really not much money to be made in fasting, right?

As opposed to a pharmaceutical drug or something along those lines. So there's not a whole lot of government grants and things like that. So it's like, you know, we need to be funding this because we want to actually show more and more research on these benefits.

And you guys are the leaders in the industry when it comes to funding research on fasting and, and, you know, basically using. using these kinds of products, right?

Like Prolon to support the benefits and to reverse metabolic diseases and overall chronic disease burden in our society. So really great stuff. And people can find it at prolonlife.com.

Is that correct? And you can find practitioners that help support this and you guys have a support team as well? Yes. And as you mentioned, we're the first NutriTech of the world.

Like we We apply randomized clinical trials to, you know, and people trust us for that. It's like, okay, this is almost like, it's like how every drug gets tested.

We do heavy science in mice and then in humans. And then we bring the products and the claim forward to market. We're showing to lead nutrition for longevity and nutrition as medicine.

And we want to keep using our revenues to fund more and more trials. We've now, we are now in our 34th clinical trial on one foot formulation. Yeah, if you go to ProlonLife.com, you can buy the Prolon five days there.

We have products for intermittent fasting. We also have longevity proteins and longevity spreads, and you can benefit from any of those for healthy aging.

And if you subscribe, you can also reach out. We have a team, our customer service team is all nutritionists and dietitians. And if you go on a program, if you want to do the diabetes program, you can go to AlneutraHealth.com.

Alneutra is the name of the company. AlneutraHealth.com gets you to the diabetes program where you have a personal dietitian with us.

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and we have also doctors and, or we send you to your doctors to help you, you know, every three months reduce your medication or be checked with it in a fully integrated program.

Well, you know, I have to commend you and just acknowledge the great work that you're doing, really leaders in this industry and pioneering this approach to reversing chronic metabolic disease.

So thank you so much, Dr. Antoine. Any last words of inspiration here for our audience? What I want to say is, you know, a lot of 90% of us, Here you, me, and everyone listening are going to die from four conditions, diabetes, cancer, Alzheimer's, and cardiovascular diseases.

60 to 80% of why we get any of those is due to aging and lifestyle. And so let's make these disease optionals in our life, or at least let's push them by 10, 20, 30 years.

The way we're living today with eating all the time and stressing all the time and not sleeping well all the time and not exercising is not the right approach.

You know, Warren Buffett always says, because they asked him about changing assets and he said, the only asset I cannot replace is the body. And this is why it's like, can it go wrong about it?

And one of the best thing that tradition and religion and science all agree and all identify that can change your life is fasting. Do intermittent fasting, do the right one overnight, circadian, 12 hours.

This is the balance of life. If you need to lose weight faster, you can extend it a little bit and or do three times a year, the prolonged fasting and making nutrition.

It takes your body this cycle that our ancestors used to go through when they're going summer to winter and when emerging into the spring. This is what's gonna fix your cells, reset your metabolism and always give you that temporary reverse of bio age and keep you further away from whatever incident or accidents that is correlated with aging and you're not having the right lifestyle.

I love that vision, Dr. Antoine, and thanks so much for your time. It's been an honor and a privilege. Everybody be blessed. Thank you for tuning into Dr.

Talks. We hope today's episode has enlightened and inspired you on your path to optimal health. Each day is a new opportunity to make choices that empower your well-being.

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