Stress, Survival and Mitochondrial Function: How Much is Too Much Transcript

(Transcripts are generated by AI and may contain errors)

Introduction and Survival Paradox Overview

Welcome back to the conversation. Today we have Dr. Isaac Eliaz. He's one of our fan favorites. Hi, Dr. Eliaz. Welcome back. Hi, thank you so much for having me because I'm very excited about our conversation today and about being part of this summit again.

And thank you for inviting me. So let me introduce you to our audience who may not have met you yet. You're an expert in the field of integrative medicine.

You specialize in cancer detoxification, immunity. Really You help people with complex conditions. You're a physician. You're a researcher. You're a bestselling author and educator.

You're also a mind body practitioner, which I've always found fascinating, because you don't see many physicians who are also mind body practitioners.

And I absolutely love this about your practice. So today we're going to talk about stress survival, mitochondria function. And we're going to get deep here into some of the groundbreaking concepts from your bestselling book, The Survival Paradox.

So can you start off by giving our listeners an overview of what do you mean by survival paradox? And what is the main culprit here? So the survival paradox is it sounds is a paradox in that what really drives us to survive is actually what also showtunes our life and drives many diseases.

So how how really does it happen? We are all aware, especially with the COVID behind us or with us still, that inflammation drives really every chronic disease and a few diseases.

And we know it in the integrative field for decades. Now Western medicine recognizes it with the cytokine storm, but inflammation is really not the cause.

It's a result. And we're driving. Inflammation is the survival response. So the survival paradox really offers a new paradigm of understanding of a deeper understanding about our life, our health, how we can improve our life and what drives our illnesses.

So because we are built lower, because we are built to survive, because it's innate in us, it's present in every cell in our body. And it's it's really automated.

There is the autonomic nervous system through the sympathetic system. And we respond, as we all know, in a fraction of a second when there is danger, when the body feel it in a survival mode, we respond either with fighting which equates biochemically with inflammation.

Always flight fear in flight with freezing or with running away, which equates to hiding, to isolation, to creating a shield which will then drives organ dysfunction and fibrosis.

So these two automated processes can be balanced relatively easily if we don't do it all the time. When we take a deep breath, when we relax, when we are more open, when we are in nature, we can balance the system.

The issue that within minutes the biochemical system gets triggered to a survival response through proteins called alarmins alarmins molecules that sound the alarm and once they turn on, they don't turn off so quickly.

And the cue I have been researching for almost 30 years and made the key discoveries about blocking it is the way to attenuate and reduce inflammation fibrosis and regulate immune system is called Galectin-3, and this is a protein that drives the survival response.

So when we look at the survival response, we want to look at what we can do in a simple way, in the simplest way of blocking this protein. And there is a natural blocking modified citrus pectin and what the survival response is when it's in balance means to us, to our life and what we can do about it.

I guess I'm I'm trying to I think this is a very complex concept for our viewers to understand, because it's almost like the thing that that protects you also can kill you. So.

So the way I'm thinking about this is it's almost like if you have an engine, a very high functioning, expensive engine, like, I don't know, it's a maserati or something.

And if it's revving constantly at a high, high level, eventually stuff's going to start to break. And our body I mean, if I'm trying to simplify this.

Galectin-3, Inflammation, and the Survival Response

Is that this is This is only one limited way of looking at it, because really you're describing wear and tear. And when there's higher wear and tear Galectin-3 it goes up why because the body needs to repair.

So whenever the body see that, there's something that needs repair, it's a survival issue for the body. So when we are very young, when we are babies in utero, or even more, if you get a scar in utero or when you are just a newborn, this if you get it cut, the cut heals without a scar.

Right? There are no consecration. Consequences to the healing process because we are fresh, because the response is more efficient and the response is fresh in a deeper sense.

What I mean when when I say fresh, the response is based on what's happening at the moment. When we get an issue and we have 40, 50, 60, 70, 80, 90 years old.

Now, the response is attached to a baggage of experiencing through our life interpretations. And last time I hear this, that's what happens. I need to respond in a different way.

And then suddenly the response is not it's fresh and it lives it lives in after an aftermath, you know, it leaves scar, it leaves a layer, and slowly the scars accumulate.

And this is really important in general, and this is specifically important when it comes to mitochondrial function. Okay. So let's talk about that. How does this survival response relate to mitochondria and energy production and healing and prevention of chronic pain?

So it's important for the viewer to really see the interdependence and interconnectedness of all of these elements. And I want to emphasize it now, because it's really what makes the difference between just struggling or really healing in between being an okay Doctor and amazing Doctor is this interconnectedness of everything.

So our metabolic system, our energy production system is functioning in order to serve us, right. We need energy to do what we want to do. And based on our state of mind, based on our state of physiology, based on how we feel about ourselves in the moment, and based about how we felt about ourselves in the past and how our ancestors felt about themselves, which affect us genetically and epigenetically.

We will have a response in the moment, and this response is regulated by the metabolic system. That's the definition of the metabolic system. So when you see this is it. Wow.

So if I'm very relaxed, if I feel very safe, if I'm in no rush, I can produce energy more leisurely. I can produce energy

without too many byproducts.

I can produce energy more efficiently. And then what happens, mitochondria is it's great mitochondria. Doesn't the cell feel like it has oxygen, it's relaxing, it's not in danger.

So the factors that signal danger within the cell or that I'll shut down and the cell gets glucose coming to the cell in an efficient way, something called AMPK gets activated into one, gets block.

Hypoxia inducing factor is a factor within the cell that tells the cell, Oh my God, there's no oxygen we've got to produce energy. It's emergency. You shut down and then the mitochondria opens up, glucose breaks to pyruvate.

We make 36 ATP from one glucose. That's a basic healthy metabolism where we are not producing too much oxidative stress and we don't need too many antioxidants because it's all balanced.

It balances itself and it is a state of balance. When the cell goes into a survival mode and it happens within a second, then the cell says, Oh my God, I need more energy.

A great example when we do it, when we sprint, but when we do a hundred, 100 meter sprint, right, we can run as fast as we can. And then suddenly afterwards, we get exhausted by this amazing professional run of how tired after the 100 meters, you know, it's all because they mobilize the energy systems and then the body repairs and cleans and clears lactic acid and clears the oxidative stress.

So at this stage, we can produce energy 100 times faster. It's amazing, but we produce it at 5% efficiency. Two molecules of ATP for one molecule of of glucose.

So if you think about the number of of of of glucose molecules that we need to consume. Okay. In order to produce the same amount, our efficiency is actually 2000 times lower because we are working at 5% and we are doing 100 times more.

Right, 20 times times a hundred them down with this has very deep, grave consequences. We can maintain it for a very short time and then you start damaging our metabolism and it basically when it's done on a long term basis, it's part of different factors that we can of course talk about and we'll talk about it such shifting the metabolism.

And as a result, if you and I talk before you drive practically every disease. Yes.

Mitochondria, Energy Production, and Chronic Stress

And I think what's important to think about right now is we're talking about the analogy of an athlete that is sprinting, but many of us are sprinting in our life with stress or we're sprinting in our life with being in relationship to that Texas or working in jobs that we don't like or, you know, stressing, watching the news and that same type of taxing on the body also is like the marathon sprinter.

So can you talk a little bit about that and how stress I mean, there's there's different types of stress, right? There's there's healthy stress. There's bad stress.

There's a concept of you stress. So I think this is a good time to talk about that because some people may be watching this right now thinking, well, I'm not a sprinter, I don't run marathons. That's not going to happen to me.

But you may just be sitting in your office all day long stressing out and this is happening. Yeah, yeah. The marathon is just an example of people who are really well fit.

And yeah, that's a very important and really important concept. And it's a concept right now. There's more interest in the concept of home basis, you know, is stress to induce a balance.

But I can tell you and I'm going to air, it's great that there's a lot of research on it, but there's a big catch 22 with it's

just like there was a catch 22 with everybody using ketogenic diet in 21.

So what happens? It's very easy to feel good about and feel, you know, justify being stressed because it's good for you. So in principle, stress is not good for you is a big category.

It's good for you when it's driving you. I mean, it's useful can be useful when you when you use it in a controlled way, in a controlled way, either as part of your lifestyle and in a controlled way when it happens for very short period, like a run, they're running 100 meters.

So many of us, when us are in stress all the time, so we are sprinting. We may not be sprinting with our muscles. We are sprinting with our brain. And our brain needs to get glucose just like the muscles.

The brain is glucose dependent in the beginning. Then it can it can switch to ketone bodies. It's why the ketogenic diet to to kind of to help in alternative metabolism.

So when the brain is under stress and on an ongoing basis, we have different transmitters that are coming into into play. And this neurotransmitter will affect growth factors, IGF one and an insulin and will create obesity and will affect metabolic processes.

We are focusing on metabolism, but it will also create a wear and tear. So we're entering the brain now. Inflammation is very devastating is not the topic of today.

So what happens we can and it's interesting it's this is fascinating for me because I don't think I ever shared it. But when I was in the medical school, I was a yoga teacher.

And I was noticing that when you exercise, when you dance, when you move, your blood pressure gets better. That means activity. Putting the body into activity helps, which is really the concept of home is of work because the body and I'll explain why it's important.

It's really the caveat today that I want to go a little bit deeper into this, but at the same time, I noticed in red and experienced that when people just relax, we also get the same effect and it was really challenging for people and they kind of remember I came with the whole theory how it works together.

I can get to the same place, you know, once you get to the same point from two sides by letting go and going into the parasympathetic mode or by working out.

Because when we work out, there's always a state of relaxation afterwards. And it's really fascinating for me that it's coming back and becoming a big topic now.

And it's it's all about 40 years later. And and so so really what happened when you when we challenge our body, it's people who do cold showers. I don't like cold shower me either.

I hate it. And I don't care how good it is for my health. I love what was was like. I like to swim in the ocean when it's not too cold. But fortunately, there's a lot of ways to stimulate or misses.

Exactly. Cold shower is not very good. So some people like it, but the basics that we know when we haven't exercised for a long time, when we start exercising, our muscles ache and as we exercise every day, we can do more.

We can do more because our mitochondrial function is improving. Right. And if we do it at an early stage in our life, we actually create more mitochondria and we and we and we don't have the same muscle aches because we're able to clear lactic acid because our antitoxin system is working better.

So this is a very useful system, but that when we are under stress because of the survival mode on a repeated basis, it really affects our whole being and it will affect Sinaloa metabolism.

And let me give you a little bit of an image right now. When we are talking right now, when people are listening, they are reacting to us, right? Everybody listening goes, oh, my God, I love what I that's just oh my God, this guy's nonsense.

Or we just become more neutral. We really don't care. We are multitasking anyway right now. Okay, so that's a reaction. So whatever we feel outside is going to affect us inside.

This cell function metabolically is affected by the interaction of the cell with its environment. And that's really an important concept to understand that the interdependence between cells and it's also affected by how this cell interacted with its environment in its history during our life, genetically and epigenetically.

We're all aware of it, right? Yes. So the cell has a certain state of mind. And I really look at cell to the living being, and I'm really glad that now more people are looking at it.

I really because it's just a boundary, it is a metabolic system, it reacts to the environment and how it's going to function. So the cell puts different receptors on its surface, right?

That will decide how it's going to react, what is going to take in, what is going to note taking. And based on this, it will affect all these pathways that we talked about that will affect the mitochondria.

So we are under constant stress in the cell is in a constant survival mode. It will change its receptors in an adversarial way and we will affect our metabolism in a certain way, very different than when we put the body under a very short defined stress at times of stress.

And one more thing, stress can come from different places, says stress can can come from a place of crisis where we are emotionally, mentally, psychologically, psycho, spiritually in crisis, in trauma.

That's very damaging. Stress and stress can come when we love what we do and we just keep doing it. And, you know, there's not enough time and we just committed to helping another ten people are doing.

But we love what we are doing and then the whole effect on the body is different.

Healthy Stress, Recovery, and Cellular Adaptation

This is healthy stress because we are mobilizing ourselves to something which comes from our heart and we know the heart is happy. Every cell in our body is happy.

I mean, the electromagnetic field of the heart, which is everything in our body. When the heart functions better, we get blood supply better. And when the heart is open and spacious and compassionate, our being happy and compassionate.

These are the three levels of body, speech and mind in Buddhism translated into physiology. So all of this system is affecting us on a cellular level.

So now when we look at stress, we got to look at it in this way. It's great to to rely on research, but for me, research is just a confession, a confirmatory act.

What I talk, my insights do not. I mean, research supports them. Obviously, I'm a bona fide researcher with religion, age grande to study is this protein Galectin-3 and the removal in in blood filtration in a few ways is so and I published all the time so obviously I'm a researcher but what drives the way I try to understand life, the way I treat people is insight from it.

From my meditation practice, from connecting inwardly and outwardly. And and so in this sense, I wanted to a little bit present, a little bit expand this idea of stress.

And really, for each of us, we can look inside and see what it does to us. And it takes time. You know, although I sometimes when I sit and meditate, even for a few minutes and I really feel, wow, you know, and I tell myself, well, why did it take I started meditating at 815.

So almost 50 years got and let's say and why do I realize things now? Why did it take 50 or so? A certain process of maturity, of understanding. So when we connect with our body, if people are meditating, especially, then connect with your cells and open up.

So usually I know I talk a lot about open heart medicine, right. And we talked before about it is a transformative and it's really the essence of the solution, the transformative quality of a survival product.

I know I'm actually not able to talk about it as much. I want to talk about the recipients of our open heart, which ourselves. So when we come from a place where we are connected to a sense of compassion, of community, of we are all in all of this together our cells get opened up and when our cells get opened up, we can handle stress much better because the receptors on the cell feel safer.

So insulin will work better in the mitochondria will function better, there will be less byproducts and there will be less oxidative stress. And the balance between antioxidant processes and oxidative stress becomes better, you know, and so this is part of the process.

I want to take a different angle today. Yes. I'm so glad that you just explained it in this way, because we all know in, you know, the functional and integrative medicine space that we can run labs on people and we can write supplement protocols and lifestyle protocols and we can detoxify people and we can remove toxic elements from the environment.

But if people don't handle the end, if they don't do the internal work, if they don't do the emotional, internal work, then oftentimes they will get stuck.

And so in my history of working with people, the ones who just get stuck and can't resolve their symptoms, oftentimes it's an internal job. There isn't a supplement I can give someone.

There isn't a you know, you can't exercise your way out of this. You can't eat your way out of this. You must do the internal emotional work. And this is what I'm hearing is inside of us.

It it it imprints in ourselves. It imprints in our inside our bodies. And this can literally stop us from healing. EcoNugenics, makers of PectaSol modified citrus pectin is one of our summit sponsors.

PectaSol is a unique super nutrient that provides powerful natural support for your health. It's actually backed by over 80 studies, six patents and 30 years of clinical success.

And it's a Doctor formulated supplement that delivers support for your optimal health through its unique mechanisms of action. Now, research shows that PectaSol all blocks the destructive actions of rogue protein Galectin-3 like you heard about in this interview with Dr.

Isaac Eliaz. It's also a natural binder. It's clinically shown to remove toxins from the body and supports carriers of your health, which is why we're talking about it.

On this summit, I invite you to continue your health journey today with EcoNugenics PectaSol And they're offering 15% off at econugenics.link/silent15 with code SILENT15.

You can just click the EcoNugenics link on this page where you're watching the video and use code SILENT15. Yeah. You're so right. And so what? They gain a little bit of a fear of a jump, which is one of my weaknesses.

They jump from topic to topic sometimes is that when we are aware of it and we are working on it, I want to just bring up the idea of so metastasizing it.

There's a way of so metastasizing it, bring it into our body and then when we bring it into our body, how we respond to it, we relate to the survival response.

So, you know, so we talk, for example, about Galectin-3, that is the repair protein and about about modify it, respecting the block city, you know, and there's so many I like to unpick this all the motivated to speak and I developed over 80 published papers on Galectin-3 over 10,000 papers in the papers and modified, so to speak, you know, in multiple health issues.

So that's one part. And we got to address it because that's why I feel motivated to speak and is the most important supplement because it it helps to regulate such a key process that really damages our health.

But now taking the other and the mind and is it when we can have this sense of openness, of compassion, of understanding that we are all capable of doing and we all are capable of losing?

Right. I know from my experience, I lose it one moment and I get it one moment and they lose it one moment, they get it one moment. The more we are trained in it, the more it embodies who we are, the more it becomes part of our essence, the more our sales get this quality, and then they start treating their communities around them in such a way in their microbiome, just the way we treat other people.

We have this idea that our body is different than the environment. It's a microcosm of a microcosm. And within this microcosm it does have almost 50 trillion cells that a lot of cells, you know, each of them close to 1 million reactions a second.

It's insane. So looking at this, each cell is in this amazing relationship. I mean, think about it. It's infinite, which is like beyond genius. It is whole that we are alive.

And really, the reason why mitochondrial function is, is the essence of we know last left you I emphasize it is because it's really the great regulator.

So we have the great regulators in our body. We have more than immediate metabolic rate in function. We have the thyroid and we have the adrenals. We do know which cortisol in different adrenal hormones and sex hormones that gives us the drive and the move.

These are different qualities of movement, but within the cell, all of them, the bottom line, they're driven by metabolic function. So metabolic function is so important.

But what you said and what what I want to emphasize is that it's really a reflection of how we think, how we feel, how we live our life. And in this sense, we actually have a choice.

And it amazes me, I will say it in the list of symptoms of the COVID, long COVID and I think fully recovered that I would feel that I will feel a certain symptoms.

It's amazing.

Oxidative Stress, Antioxidants, and Balance

You just relax the mind and suddenly they're not there. It's not that I pushed them away. I just relaxed and it went all the way to the cellular level and the cell relaxed.

And that's a place where this integration between oxidative stress and antioxidants, between proper function all comes together. Well, let's talk about that oxidative stress piece, because we know that mitochondria produce free radicals.

That's part of normally normal energy production. Right. But we also know on the other side that antioxidant supplements can actually damage mitochondria.

So there's a paradox. So how do we avoid the buildup of oxidative stress in the body and get around that? You know, that's a great topic. And I know I know, by the way, there are no easy solutions because it depends on our balance at the moment.

And the so this really relates to our, you know, wisdom is people know what, you know, wisdom on a cellular level. So the systems it needs to be functioning and producing energy.

When they are producing energy in a more efficient way, they mitochondria is normal. We need less, less, less of the support, less of the clean up antioxidant is still very, very, very, very important.

But the image to think about it, if the if you are trying to heat a place or you're making a fire and the fire is very tiny, you put a little bit of what are you going to distinguish, extinguish the fire, right?

The fire is huge and it's about to burn the whole field. You got to put water on the sides. So it's a balance between mitochondrial function and antioxidant capacity, and that's why it's regulated.

Like after you have a after you really have a big burst of energy, of energy challenge in production. Let's itself after an extensive exercise or other activities or challenging activities, you need more antioxidants to clean the field.

So it's really a balance and and the balance is not only in the biochemistry, the balance is also in the personality part of people who have very great adapted, adaptive vitamin A, very adaptable people who can really have a big burst and do a lot, but also the ability to recover well.

So some of us can do it on an ongoing basis in some of us need to have defined time to do it. They've been my in my lifestyle and I'm not as extreme as I used to be, but I need time for repair for the antioxidant work.

So in my life is history story. I would do a lot and it would go every way. Every year I would go away for, you know, 6 to 12 weeks on my own to meditate for 20 years.

And during this time there would be an enormous repair where I would look different when I come back, I would people literally I would look 10 to 15 years younger.

My, my whole being would change y because this was the repair time I really went into the repair mode. The more more balanced way is to do it all the time.

Right. And that's a part of being building a lifestyle where during the day we take time to play hard emotionally, psychologically, mentally, physically, and we take time to rest.

This is really important because I know people listening right now are thinking, well, that's great for Dr. Eliaz, that he could leave his life for six weeks and, you know, go meditate and repair.

And, you know, people are thinking, I can't do that. My job only gives me, you know, three weeks a year off my family members. So this is a listen between the lines, right?

He's not suggesting everybody has to care for six months. Yeah, yeah, yeah. Of course, this was my my personal choice and journey and I probably would have done it again and did not like.

I mean, yeah, every time I went, it would risk my clinic collapsing and my, you know, I took a risk. I decided I want to meditate and it's not like I was all off and I would just leave.

But it was a choice. But then within it, for ten years, I meditated for every day, which again, not everybody. This time it's not suitable for us now, but we can, when we wake up in the morning, sit in bed for 5 to 7 minutes and just let the whole space in front of us open up.

We can do it before we go to bed. We can remind ourselves to just take a few deep breath and relax, and we can

add this as an exercise regimen, even if we have 5 to 7 minutes, you know, or 10 minutes.

So these days, everything is intense. The body adopts. One of the reasons why the the the stressful time we are living in right now is also an opportunity to heal much faster because everything is happening faster.

I see now in a being trained in very traditional methods of meditation that I trained in again, when I teach you, they do it in the context of of diet and exercise and other methods.

It's amazing what happens. People in a few days while in the past people would go away for months or years. Everything is fast. I often say that if you take a yogi from the mountain, from the Himalayas, from 500 years ago and you drop them inside Wall Street in the stock market, they would be dead in 22nd.

Nobody would not be able to handle the stress. We are our adaptability is a result of where we live. We have our the amount of radiation of all kinds, which puts pressure on the body that we have now compared to 100 years ago, estimated or even founded.

Clear source is ten to the 15th power. Okay, so not million, not billion, not trillion, 1000 trillion times. And this is radiation to the. Body of all kinds. Exposure.

Yet we only live, of course, the cost, the adaptability. It's a whole mess. So it's happening. So we meet within it. We also adopted the ten or 15 minutes of exercise done in a very wise way, may, may serve us for certain people.

Like somebody would take a slow walk for three, 4 hours and you know, it's not the same. I want to say we are able to adapt differently. And this is the same dialog like between oxidative stress and antioxidant in how we run our life.

If you live our life in a more balanced way, we need less of support on the edges. If we really work very hard, we need time to recover. But what we care is what happens in the middle, the in the middle way, in the middle.

And the more, the less we go up and down, the more our life is balanced, the more we can wear the same hat because we are not as reactive to the situation.

I feel a lot better about myself right now because I'm super fast paced. Person as I know. Yes. And I'm that person who does. Okay. I've got 10 minutes before I start my day to sit in front of my red light, read some scripture, you know, get clear my head, meditate, whatever it is.

And then when I'm working and I got 20 minutes to lift some heavy weights, it's like I'm I don't I don't have the luxury of two hour meditation and three hour walk.

I wouldn't even get anything done in my day if I did that. But so I feeling better about myself. But it's more than feeling better. You started the day by relaxing exactly what we talk today about relaxing power sympathetically and you edit on the other side exercising in intensity.

It's exactly what we talked about today. Yeah. So actually it's both sides are balancing themselves.

Detoxification, Honokiol, and Closing Resources

This is a great way to wrap up this conversation because what we just established is everybody listening right now can do this. You don't have to go off for six weeks and meditate to restore your body.

You don't have to. So listen very carefully to what Dr. Eliaz is suggesting, that there's little moments, those in-between moments in your busy day. Can a huge difference in your cellular adaptability?

Definitely. Mm hmm. It's important to remember, I don't go for six weeks anymore for. Many years, you know. I don't I. Yeah, definitely. Yes. So as we as we wrap up here, always when I speak with you, it's profound.

And it's I'm I'm hanging on your every word, every time. Any other recommendations you have for our audience right now to help balance their biochemistry and support, you know, their mitochondrial energy production?

We covered a lot of ground, but any final words on. Yes, yes. Okay. Of course, I think it's important to use to do to put lifestyle into it as much as we can.

And because it's free, it's available. And it's the same principle of relaxation, of exercise, of good hydration and of sleep. And this can be on on on on on the on the on the grand way of really taking time or in small ways.

In 30 seconds, in 60 seconds, we have to address Galectin-3 and Galectin-3 drives practically every disease. That's why I feel motivated respecting a picture is so essential and it's remarkable the feedback we get from all over the world in situations we were not aware of.

And in the beginning, when the initial work on what effects it was packed in Galectin-3 was on cancer, it's my specialty. And then I started watching the people's blood pressure gets better and the joint pains get better and the memory improves.

And then later on, Galectin-3 was recognized as a driver of inflammation and fibrosis. The basic processes of aging. We have to support our cell, our mitochondria, by removing things that put pressure on it diet, emotional and psychological.

But also we didn't touch on it. Today, environmental toxins. We are bombarded, heavy metals, environmental toxins of all kind and pesticides. So pesticides, huge pesticides, especially glyphosate.

And there are many others that really are so prevalent in the United States affect affect our lives, affect the gut lining. But also affects the cell membrane, also affect the blood brain barrier producing no inflammation damaging damaging organs like the kidneys, etc..

So I've made it a goal of mine to find a solution and know our product to go for detox just went through the second phase of of clinical data. We will be publishing it shortly.

Great results in reducing life with it. I'm really excited to hear this. So I test glyphosate levels on most of my clients find high high levels of it in me are probably like 80% of people that I test.

And we're also bringing some glyphosate specialists on this summit. So Stephanie, Dr. Stephanie Seneff will be here. Yes. So definitely catch that talk.

I'm so excited to hear that you are creating a product for this. Yes. And then we it kind of how I do my work. We actually we did we know we are in the midst of trials and now we have we have more, more subjects.

And really it's consistent what we are seeing. So that's that's another but the other part we talked about the balance between activity and rest, between oxidative burst and antioxidant.

So the compound that helps the cell regulate it like berberine, like curcumin, like quercetin. But nature has sometimes creates the same quality of compounds that can decide what we need to win.

And one of this compound, which is under use, despite the fact that I've been talking about it for a long time, it would not kill for me. Magnolia Bark.

It is an unparallel effect in that it becomes an antioxidant and a protective and will reduce possible post-exercise inflammation and damage in a normal cell.

And it will put pressure on the cell. When the cell, the cancer cell infection, it recognizes the different molecules within the cell, the p53 expression there, the oncogene that protects us against cancer.

When it's an imbalance, there's a greater chance for the cell to develop cancer or it's a cancerous cell. It will attack the cell so that a substance or not really is a substance that can biochemically do what we talked about, that when we look at the honokiol a lot of research on cancer and you will see that it's synergistic with with different chemotherapies with immunotherapy with the with biological agents.

I published a number of papers on it. Only the only clinical data, at least in the paper that I published and in the papers in the same time it also relaxes our brain.

It moves us from glutamate to GABA, from an excitatory phase to a relaxed, more efficient phase. So it in effect, it reduces neuroinflammation, it is neuroprotective.

So it's I mentioning honokiol a little bit in more extensively because it really mirrors our discussion today, Laura. And it's it's a natural compound present in Magnolia bark But, you know, one or 2%.

You all you always are so full of so much information. Every time I interview you, which is multiple times now, we could keep going for hours So you have so much knowledge and information to share with our audience.

And you are you do have a bestselling book. You you're an author you have a clinic up in Northern California. You have a website where people can get information.

You have a product line of supplements. Can you share with our audience where they can more of you? Yeah, of course. So people are welcome to go to dreliaz.org That that's one place where you can find everything dreliaz.org And we have a high quality newsletter.

We have a staff of people who research and put out the informative and really high quality information, including supportive research. And you can find more information about, about, of course, my, my interviews, my lectures, and I hope to start teaching more meditation and healing in the United States.

I've taught a lot outside of the United States, and you can find about PectaSol and other products that they developed and researched and. Yeah, that's and the and my book, The Survival Paradox.

I really think for many people it really makes a difference. It gives you a different point of view of an understanding about life and about him. So good.

Thank you so much for yet again dropping your wisdom on us. And I also want to thank you for the huge contribution to the medical space that you are. You have really influenced the way that many of us practice and many of us think about healing from deep inside cellular healing.

And when I move my, my practice towards the concept of cellular healing, this is when people started to get better results. So I just want to thank you for being such a stand for this and educating and just thank you.

Thank you. Thank you for having me. Well, until next time, Dr. Eliaz let us take good care. Bye now.