Master Your Biochemistry for Optimal Health with The Survival Paradox & Galectin-3 Transcript

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Introduction to the Summit and Dr. Elias

Welcome to the Restore Your Mitochondrial Matrix summit. I'm your host, Laura, from Ontario, and bringing you experts to help you boost your energy and fix your health so you can build the life you love.

And today, my special guest is the esteemed doctor Isaac Elias. Hi, doctor. Elias, welcome to the summit. Hi. Thank you so much for having me. It's wonderful to have you here.

You, your work in your life has taken you in so many directions, and you have done such important work in the world. And we're going to touch into that today.

And you're an expert in the field of integrative medicine. You focus on cancer detoxification and complex conditions. You wear a lot of hats. You're a physician, a researcher, a bestselling author, an educator, a mind body practitioner.

That's a lot you. You partner with organizations such as Harvard and the National Institutes of Health and Columbia University. You've coauthored studies and integrative therapies for cancer, heavy metal toxicity, and more.

And I know that you just got grant funding from the NIH just recently to do another study, which is really exciting and you're the founder and medical director of, I'm going to say it right.

It's all me. Amitabha. Amitabha. You're the medical director of Amitabha. Tell us what that means in a moment. Medical clinic in Santa Rosa, California.

So welcome to the summit. And tell us what Amitabha means. Actually, Amitabha means limitless light. It's the name in Sanskrit. And it's reflect the the healing aspects in a.

You know, in Buddhism. And, Yeah. And I'm so glad. I'm so glad to be on the summit because really, all our health boils down to mitochondrial health. If we can heal the mitochondria, we can heal anything.

And if we don't heal the mitochondria, we can't heal anything. It's really the essence. So today I really want I want to acknowledge your work. And I want to a little bit. Yeah.

Why why it is what it is. What is really is the underlying a current and the and the and the deeper cause that causes us to go out of balance when it comes to mitochondrial health and be practical about what can we do about it.

I'm so I'm so excited to jump into this talk. And I just want to really thank you for that opening statement of, if you can heal your mitochondria, you can heal anything.

And this is why when people ask me, why did you do a mitochondria summit? You're a gut health expert. You help people detoxify their bodies from environmental toxins and mold and all of these things that we're exposed to, because when it comes down to it, if you don't address and support mitochondria, then you're going to have a really hard time getting better.

So thank you so much for just bringing this all together. Even in that one sentence. So we're going to talk about your concept of the survival paradox.

This is fascinating. You have a book on this, and how this mechanism of survival actually impacts health and disease.

The Survival Paradox and Galectin-3

So while our body is trying to survive and save itself, it can actually be harmful to us as well. So we'll get into that. We're going to talk about this survival protein galectin three and talk about the role that toxins and have in the body and the importance of safe detoxification, which is critical because you have to remove toxins to restore mitochondrial health and function.

And we'll just get into these strategies. So I'm going to let you take it from here. And where does it make sense for you to start with all this? Where would you like to go first?

I think I will start with the big picture with the survival paradox. Okay. Perfect. And the survival paradox is really a simplification of a of a multi-decade journey that they had.

As you said, you know, I'm a I'm a clinician, I'm a medical doctor physician, I'm a licensed acupuncturist. And I'm trained vertically in integrative medicine.

Now, years of classical homeopathy, use of nutrition or use of botanical medicine. At the same time, I'm a healer and I spent a decade meditating starting at age 15 and for 20 years since 830, spending two months a year in the mountains on my own in ten years, meditating for half a day and being able to treat the greatest, most famous and meditation masters in the Himalaya.

And in the same time, I'm a researcher in the life I research. I published papers, and when I try to really reflect, it is simply a understanding, a practical understanding that really affects our life, who we are, how we live our life.

And then our health will transform us, you know, is part of this is is an expression of this. I came with this concept, the survival paradox. And the reason is that we are built to survive.

It's innate in us. We have it. Every cell in our body, every tissue, every organ. Us is the person our communities. And now even the whole world, right with, with, with, with global warming.

So it's very basic. It's built in us. And because it's built in us and it's innate, it has to be automated, has to be we can't control it. And this is done through the autonomic nervous system, through the sympathetic system.

And what does the sympathetic system do in a fraction of a second. It either fights with which results in inflammation, or it runs away and hides, which results in fibrosis, or in creating hidden areas of micro environment.

Biofilm, atherosclerotic plaque, cancer environment areas that are isolated. Great. We become isolated, which is a big issue now in general. So this is our response.

And then within minutes we have a biochemical response led by by a protein called galectin three, which I will talk more about later, which I've been researching since 1995 and made the key discoveries in inflammation and fibrosis.

So I want a real quick, real quick doctor, like you said, within minutes our body responds, right, two minutes. This is a very your body is so smart and so reactive that within minutes you're already responding biochemically already.

Yes. Yeah. And so this was my whole approach. This is you know what I've been. Yeah definitely within minutes. So what I did actually interesting that you bring in this question.

This was my approach. I've been researching sepsis and the idea of what happened. When I look at this protein galectin to me and the we induce sepsis in animals.

And when we blocked galectin three and then we induced sepsis in the most acceptable model, what we found is one, we reduced the death in the animals from over 60% to 20%.

We reduced dramatically the amount of acute kidney injury in the animal that is caused. But more interesting, we attenuated dramatically the rise of interleukin six because galectin three the survival response is up at the top.

It's upstream and then open, and then everything washes out. That's why when we chase the cytokines, it's too late. It's too late. It's like we have to shut it. It's a damn leveler.

So for example, in our studies, we showed that galectin three, after the induction of sepsis, will will rise. Maybe we will double, maybe triple interleukin six, which will rise 1 or 2 hours later to a significant amount.

We will rise 1000 fold, 10,000 fold. Because it's such a downstream. And so this was my concept. That's where I got my first NIH grant. And now I got my my second engagement.

And in this, this instance, we're trying to remove galectin three through a process similar to dialysis averages. But that's the idea. Our body is very smart.

So the autonomic nervous system turns on. We take a few deep breaths. We relax. It turns down. Now we know if it turns on all the time. Bad news. The biochemical system is more tricky once it turns on.

And as we age and as we start developing habits and the genetic and epigenetic and pastoral mas and dramas, toxins, abnormal microbiome, heavy metals, mycotoxins, emotional traumas, we don't let go.

I like the image of, you know, a child three years old, fights with his friend and two minutes later they forget. But the parent can remember for days and weeks, right?

Yeah. So biochemically, what you're saying is biochemically, we remember long term. Oh, it turns on and it does not turn off. And this is what sets up practically every disease.

If you look at every chronic disease, acute disease I mean, initially the interest was in cancer and then in, in the in the heart failure, kidney failure.

But now with my work we are realizing it's actually drive sepsis. In fact, Covid patients, when they come to the emergency room, regardless of the involvement of the lungs, the level of galectin three at the admission in that emergency department will determine who will end up in the ICU.

Oh that's fascinating. So you're have you actually already studied this? Yes, I yeah, yeah, this is a paper that one of my colleagues published, but I published a very important paper with really the leading critical care doctors in the world, John Keller.

And we showed that when a patient comes to the ICU with sepsis, regular sepsis, no preexisting conditions, the level of galectin three at time of admission will determine who will get acute kidney injury and who will die in the ICU.

And we showed the same thing with the patient after a bypass surgery of the heart, they come into the ICU, no preexisting condition. Often it's an elective surgery and the level of galectin three at the time of admission to the ICU, you know, after the surgery, will determine who will get the complication of Aki.

And some of these are going to die. Why? Because galectin three is at the beginning of the process. So this is why understanding of the survival paradox.

You can see it's really the beginning of the process once it hits the mitochondria. We got a lot of work to do. But the good news we can do it. And the more we understand the multifaceted, multi-system approach, we can do it more efficiently and more easily.

And that's when medicine becomes an art. You know, that's where medicine become functional medicine instead of pathology driven medicine. You know, pathology to be when medicine is dead, when you look at the slide of the

patient and you look at it under the microscope, this tissue is already different in the patient.

If he has more of it, the patient change time, change metabolism change, everything changes. So we are interested in the movement in the change. And that's really that's really the the wave of the future.

So this is fascinating I want to talk about the survival protein. So the survival protein this is the survival paradox. Because this survival protein galectin three is released in the body.

But then it has this kind of problem of contributing to inflammation mitochondrial damage being a precursor to cancer. Sounds like heart disease, inflammatory diseases. So, you know, we have health practitioners watching this summit.

We have consumers of health care watching this summit. Can you help people wrap their mind around why do why does our body have this survival protein that causes so much damage?

What's the what's the what went wrong. Exactly. So the survival protein embryonic when we are just being formed, survival is making sure the organs come out healthy.

So galectin three intracellular early helps embryogenesis when we are out in the world, survival is meaning that we have to repair any injury that happens to us emotional injury, psychological injury, toxins to prevent injury, accidents of all kinds.

And that's what the latency drives. It drives the repair system. How does it do it through inflammation and through fibrosis. So it drives TGF beta one.

It drives either the inflammatory pathway. Just what what I showed about interleukin six. And it drives the TGF beta if fibromyalgia site and the fibrotic pathway.

And this is why there's so much interest in it in diseases like Nash or like, you know, IPF, you know, idiopathic pulmonary fibrosis and kidney and chronic kidney disease, where I'm doing a lot of work because it drives the process.

But how does it do it? It's really the bus. So our galectin three has this it attaches to carbohydrate to to acid.

How Survival Signaling Drives Disease

So different glycoprotein glycol lipids attach to the galectin to me. Then they collect electrons recreate the plant and in the pinto attached to each other.

And they create a micro environment. They actually create a lattice formation a coating. And under the counting you got your micro environment. And what happen when you have coating like biofilm?

The biofilm is the gut. The basic structure is galectin three. All the other phospholipids, everything heavy metals are sitting on it now and again. It's because there's a limited time.

I can't describe how many studies, but galectin three you can have a signal in one specific organ. Kidney is especially important in the negative. Will drive all the way and cause damage in the heart.

So you got this shuttle that goes to the area with the injury and it brings in inflammation. It brings fibrosis. And then you get organ degeneration. And into this we have to remember we are not the only ones who want to survive.

And this really resonates with your gut health which is part of what you do. The microbiome also wants to survive. So our relationship with the microbiome, it's really a community relationship.

It's mutual support. And when we imbalance it the microbiome gets upset. Suddenly they use biofilm and then

bacteria shifts. Right. See it's practically an epidemic right now.

And you get the gut being attacked, you get leaky gut, and then you get autoimmunity. ET cetera. So if we look at this concept and we look at Covid and we look at the spike protein, and we knew it because the papers were published in June 2020, we just couldn't get hospitals to do clinical trials and picked up on my my galectin three block, a natural product.

The spike protein is practically identical to galectin three. It is a survival protein of the Covid. And what does it cause? It causes a cytokine storm.

Which is really is the basis of my work for a very long time. So the idea that when we regulate this response, when we need to repair it will always happen when it's needed because the collections will be expressed.

Is galectin three creating this ongoing and an ongoing damage. It eventually doesn't. So cytokine storm is the first step. Later on there will be immune suppression.

We know, for example, people here, interested in cancer, where mitochondrial health is in the basis of one maybe to interject and say cancer is a metabolic disease, it's really a metabolic disease.

So if we look at immunotherapy, if the patient has high levels of galectin three, they will not respond to Pd-l1 inhibitors because the galectin three will suppress our innate immune response.

So that's why it's such a fundamental a fundamental issue. And that's why after being in this field for decades, you know, I started my journey, you know, as a teenager.

But definitely I was already involved in the mid 80s, you know, is it that's why I strongly feel that modesty respecting is the most important supplement.

One thing and yeah, because the basic role and how you build on it in different angles. Right. So we're going to talk and get it gets us talking about the solution.

And I and I want to I'm trying to wrap my mind around. So we have this survival protein galectin three. It's we have it it's it's embryonic. It is helping.

It's helping the body, perhaps have healthy organs in development. And I'm thinking that. And I asked you, what's the floor? What's the problem? And I'm thinking it's not.

The floor isn't in the human. The floor is in the environment. And all of the toxins and everything. We're being exposed to that, stimulating this survival protein, galectin three.

And now there's too much of it and it's causing that inflammation. Mitochondrial damage is that. Am I going down the right path here? We're going down the right. Page one.

One of the patterns we naturally, as we age, we have inflammation, you know, is the age. We have our traumas, our difficulties and our responses to them.

So what happens when you have too much galectin three for different reasons? It will, for example, block insulin receptors on the membrane, and then a Ampk gets shut down and then you get and then you get into one rising up.

Now remember we have a microenvironment outside. There's no oxygen coming to the tissue. That's what happens in cancer. You get a hypoxia inducing factor rising and act, you know different pathways.

And then it stimulates PDK firing. The protein is kinase PD gets blocked no mitochondrial function. So what drives this. It's survival right. Because glycolysis produces energy hundred times faster.

That's what we need when we can take a deep breath. Right. We have it's an emergency but at a very heavy cost. Extreme inefficiency. No 118 of the efficiency and lactic acid and byproduct and worse hypoxia.

And this is really the Warburg effect, really. That's how the cancer survives. But it's also how autoimmunity happen. That's how different metabolic diseases happen.

And that's why if we can open the mitochondria to function normally, of course you need the cofactors, you know, the lipoic acid and the B1. But if we can get to a place where we can take a deep breath, I often ask my cancer patients to attend when I do healing just to connect.

And they connect to the place where why they couldn't take a deep breath. Why is the cancer cell felt like it's under danger if we look what is a cancer cell?

Cancer cell is a cell that lost its understanding that it's a part of a bigger community, that there is mutual support and decided it doesn't want to go into apoptosis like every other cell you decide is to survive.

And then it identified with its survival. And then what happened when we identified the strong, we become aggressive. And there's a metastatic process.

And what it's driven the more imbalanced metabolic process the more aggressive the cancer. Right. So you can see how metabolic function is the basis of this.

And the solution has to involve understanding the mitochondria, but also understanding the cell, understanding the membrane, understanding the extracellular space and understanding the relationship between the 50 trillion cells in our body.

Okay, one more question. And then I promise I'm I know I love I love questions like this. So the discussion okay, so you mentioned when people walk into the emergency room with Covid or people are admitted to the ICU, you can predict what the outcome is going to be based on this galectin three levels.

So here's the question why some people have higher levels than others. What is going on there? So it's not necessarily that even low levels of galectin three can be damaging.

So people will have different levels of galectin three based on the metallo protein exists in their body, MMP, and it's different genetically. So galectin three can appear as a monomial.

So then it will look like you have more in these monomers. This single protein, which is about 30 kilo delta, can penetrate into small places. And then it will create the pentameter and will get things worse.

For example, bone metastasis. In some people will have lower levels. But the importance of, of of checking galectin three levels will be jumping. But it's pretty especially for the doctors in the audience, is that you don't decide if to use modify.

It was picked in based on collecting three because it's the survival response is universal to us. That's why you look at studies. You can see that MSC in logistic with chemotherapy.

So with so many things you do it because if you are supposedly healthy and you have a high level of galectin three, you know something is going on. That's one.

And the second thing, if you have more galectin three, you need more modified C to speaking. So like cancer patient, if they have over 1718 nanograms ml of galectin three, 15g is not going to be enough for them.

They need 20g. And for people who are relying on galectin three, you cannot rely on the standard in the in the lab because the standards in the lab were done based on congestive heart failure, and these patients have kidney failure.

So the liver, the higher in the blood, anything about 1213 is already a problem. Okay. So now that we've established that it's the problem and thank you for entertaining my questions because I'm so curious about this.

I mean, this is this is really interesting because I tell you, we didn't learn about this in the Western world when I was working. And I certainly didn't learn about this in the functional world either.

This is a whole new concept. I think it's probably new to a lot of people watching as well. And I'm sure they're having their their they're thinking, oh my gosh, they're having questions right now.

So at the end, we'll make sure people know how to learn more about this too. So now let's talk about what to do about it. So if you establish that this survival protein, this galectin three is damaging and it's predictable that it's going to be damaging as well, and it's hurting the mitochondria, it's driving chronic disease.

It's driving faster aging.

Detoxification, Toxins, and Modified Citrus Pectin

So what do we do about it. Like that's of course that's why the beauty of this talk that there are practical solutions. There's no no need to just create fear about it.

Yeah. So on the simplest level, I mean pick this or modify it was pectin is a bonafide galectin three inhibitor with close to 80 published papers, practically all of them showing results from, from, from, from from cancer to in multiple issues, multiple conditions.

So that's why it should be a part of our, our regimen. For example, if you look at centenarians and you compare them to people who are 70 or 80 years old, centenarians have a lower level of galectin three compared to 70 and 80.

Remember that 7080 is a few people are going to make it to be over 100 years old. So that's it's a basis. But then on the bigger on a more holistic approach.

And for me, I truly feel fortunate because I happened to start researching galectin three, I understood it is really not only the survival protein. When something create a coating, it creates separation.

It creates isolation between us. And that's why it's really damaging for fibrotic type heart failure. So it's about melting this separation. How can we connect, how we can snip away from this environment.

So the first thing is behavior is behavior is like where can we catch ourself and not response not respond in a survival mode. And in my book, in my book, A Survival Paradox, I tell the I know I described the connectedness, I described a survival concept.

And it is a paradigm shift because, as we all know, we always blame inflammation for everything for a good reason. But inflammation is not the cause of any disease.

It's a result. What drives information is this survival drive. So it's like a new paradigm shift. And then you know today we are looking how it affects the mitochondria specifically.

So now when we when we really have this understanding we can see what can get us out of a survival response. So in the book, like I mentioned, I go through all the different conditions to explain the physiology.

And then in the solutions there's one chapter about detoxification and then about healing the scars of survival. And I tell my story coming from a family of Holocaust survivors named after my grandfather, whose name was Isaac, and how he got stomach cancer at age 50, and how I was carrying some of his pain in my chest in a way that healed it.

It affected my mother without her knowing. So this is a multi-generational healing that we have power to do. And when you do this, your galectin three will go down, but also your quality of life will go down.

Because as we all know, and we showed that the lesson the last 2 or 3 years, right. We have no control about what's happening outside. The only thing we can control is our reaction.

So the journey is a journey of shifting from reactive T, that is, expression of the survival to responsiveness, which is what happen when we connect with our heart.

And that's why the heart is the medicine of everything. That's what I call open heart medicines. It's supposed to. It was supposed to be my first book is going to be my second book.

Already wrote it, but in Hebrew. And the process in the process. Galectin three is our biochemical messenger. So anything we can do behaviorally or food supplements, you know, we were discussing the importance of binders because we are constantly bombarded by toxins.

By, I mean, you can't just get pesticide. I mean, even if you buy organic, I mean, in, in, in flat land, glyphosate travels miles and miles and miles, you know?

Yeah. So let's give, let's give the audience context. So before Doctor Liz and I jumped on the on this, interview, I mentioned to him that I take binders daily because I am a meat eater and there are toxins in the fat tissue of meat, even in, even in organic meat.

And I cannot avoid glyphosate. It's in the air. It's. I drink purified water, but I'm still not bathing in every time in purified water. So, I'm getting exposed, so take it from there.

I mean, we cannot avoid toxins, right? And so it's important for us to understand also we can't isolated. So we all are exposed to heavy metals, you know, of course now there's no leaded gasoline, but like small planes do you have leaded gasoline, you know, and so you get heavy metals from so many places you get mycotoxins.

It's that expression of dampness, you know, and biofilm and, and and then you get pesticide. And I think people don't recognize that like 330 million, million pounds of glyphosate a year being sprayed in United States a year.

Okay. So, you know, we live in California. It's a little bit cleaner, but even in the Midwest, like next to a conflict field or soil field and what happens?

So if you look at glyphosate and then the like glyphosate formulation, the formulation can be more toxic than the glyphosate. So what it does is it robs the plants of minerals of nourishment.

But well, once it's in formulation and once it affects our microbiome, it starts affecting our own ability to absorb. And it it affects the the lining of our gut.

And then because it's so similar to glycine, it can exchange and mimic glycine in the brain, in connective tissue, in detoxification pathways. And it really increases the likelihood of chronic kidney disease.

So that's only one pesticide. And then of course we have all the industrial toxins. You can live in the most pristine expensive area that often I work with people from the South, from the South Bay, from Silicon Valley, very affluent area to say the least.

But the planes are flying above it to SFO, so they get MTBE byproducts. You see all of them in the urine test. So you get all these mixtures. So we really have to so we have to take care of them.

So picked us or modified it was picked in was multiple paper published to be a very excellent binder for heavy metals systemically because it gets absorbed.

So we enter systemic binding some in the gut. Also it bind to some mycotoxins. But we have to prevent reabsorption. And that's why it's important to have binders in your arsenal.

But the basic difference between MCP and the regular binder is it because it blocks galectin three and breaks it biofilm. And it's a published, proven prebiotic.

You know, it enhances, for example, the effects of antibiotics and different infections and and supports the normal flora. We published a number of papers with with the USDA while it's binds.

So so real quick, Isaac, you're talking about modified citrus pectin, right? When you say MCP, I just want make sure everybody understands what you're talking about.

Yeah, yeah. Right. And the research was specifically done on Victor. So let's talk about MCP. So MCP in the same time. Well it removes heavy metals and toxins.

It reduces inflammation. It allows the gut to heal. So that's one approach. But the issue is that we need a wider array of binders. In addition. And I admit you know, I overlooked pesticides.

And the reason why I overlooked them for many years is, you know, we all get trained to accept them. It's okay to have a normal level, like it's okay to eat a little bit of poison every day.

Right? This is pretty much what we are being told. Brainwashed. We're being brainwashed to believe that. Exactly. And then I realize, wow, I could see how patients are not responding to treatment.

That's the issue. So I really embarked on it in the last few years. I'm now in the middle of clinical trial, proving it because I like I know I'm a researcher also, but I believe in the wisdom of nature.

So if we look at glyphosate and we look at pesticides, they affect our our plant that affects our meat, just like you said, they affect our water and the effect our soil.

So when all weather is a problem, nature is offering us a solution. That's how things work. So when I formulated a product like for detox, I took regular high molecular pectin, which is more fat soluble and doesn't get absorbed.

So it binds to mycotoxins to lipid soluble toxins. I took alginate, which I do a lot of research for decades, which has a different profile than pectin.

It's similar group called poly unites. And then I took also kelp. Why? Because kelp is alive. Kelp is mineral. Is this protein. We need to support the detox process.

And also it will help to exchange and remove negatively charged ions like bromide fluoride. And then I took folic acid from Sheila G from clay because this this material growth was the rocks 30 to 15 million years million.

And it binds to glyphosate. It stabilizes the the gut lining. And and by it also support the nervous system. It supports mitochondrial support. It's good for inflammation.

So I was able this way I'm covering the whole ground. And then I used glycine of course to exchange with glyphosate to stabilize the gut lining and to help, glutathione pathways.

So from, from my approach is really for people wanting to really detox. It's about using the MCP with the glide for detox. It's a very simple I call it the micro Toxin Rescue team, the pesticide rescue kit.

And interesting that was I introduced it to the world. We are getting phenomenal feedback with it. Like it makes your day when you get the stories. No 20 years, nothing helped me. It's a drug.

In the same time, we got to take care of the guilt with the right, with logic, probiotic and everything you know that

you're talking about, what are people noticing?

So when they use this, modified citrus pectin and this kit that you put together with, with all the, the binders, what you said nothing's helped them.

What are they noticing? What so interesting. So one of the first things that many people notice is that the digestion starts to improve, but mainly, but also that the head is clearer, that the joints are better, the energy is better.

So initially the whole work on galectin three was around cancer from the early early 90s, published my first a paper on prostate cancer and modified it, respecting it in 97.

But then I noticed that people's joints are getting better, people's memories are getting better, and blood pressure is regulating for some people. And that's very early on, late 99.

That's why I kind of made my initial discoveries, you know, and I, I, I never discovered the, the patterns and I started the research on it. And then by 211 it became the focus of the whole world collecting seven inflammation.

So it took about 11, 12, 13 years. But that's fine. It's so much bigger than me now. All the papers are published by independent. Now, most of them I do my research.

It's much bigger than me and like, you know, we've seen our field. First they ridicule you, then they fight you. And then they say it's self-evident. So now I'm at the self-evident phase.

And but for me, this symbolizes our need to move from struggle, from fighting, from survival into harmony and mutual respect. And this is really why I am now making it a mission.

The people who know me say, Isaac, my God, it was the best kept secret in town. I was too busy meditating or tweeting people or doing research. And I'm not shy about talking.

As you can see now, it's about me in my 60s. It's about sharing my heart and sharing these decades of knowledge because we are using medicine to change the way we live our lives.

And from your perspective, mitochondrial function is essence because if we look at us, we are one organism. We have a, let's say, round up 50 trillion cells.

Not so many doctors know this, I checked it, I didn't know, you know how many reactions every cell has. Every second? No. Take a guess.

Mitochondrial Health, Open-Heart Medicine, and Closing Remarks

I think it's in the hundreds of thousands. You, smoked up to a million every second. You got 50 trillion cells, million reaction a second. And we are still functioning.

Truly a miracle. And then 50 to 100 trillion organisms in our gut. Also helping us in all of sixth is working together. Now. Each cell has a boundary, right?

Each cell decides what comes in and what goes out. And we'll talk in a moment about it. Because in a moment, because it really relates to understanding of detox and transformation.

But within the cell, the smallest independent organism is a mitochondria, which is also the oldest part of the cell. The mitochondria decides where it's going to take stuff for energy.

Is it going to be through sugars, through the PDA? It's going to be through lipids. So the mitochondria itself and its relationship, which is affected by our genetic by our epigenetics.

So when we are balancing away my mitochondria and also in my book, you know, I relate to the two organs, of course, but two cells is is like living creature.

They have feelings. They have emotions. When the mitochondria is happy, it will take its time. But when we go into crisis, it will go into glycolysis.

And if the crisis is long term, it will go into ketosis. And that's why you and I discussed before this. And we agree ketogenic diet is not a long term solution, because if it's in that alternative long term survival solution, if it was the best thing to do, the body would have done it all the time, you know?

So the mitochondria contains this ability to change everything for us. But in order to change it, we got to think so much bigger than the mitochondria.

And we have to understand the mitochondria. Is the energy production a reflection of who we are, how we live our life, how toxic is our environment, toxins of all kind, you know, and you know, and the only thing we cannot control what happens the outside, the only thing we can control is our reaction.

If we are in a reactivity right in the survival mode, there is no way the mitochondria is not going to function well. So yeah, MCP would have been on one level.

They've shown, for example, the patient after myocardial infarction who immediately listen to music or meditate. The galectin three goes down and they have less damage in the heart.

And even six weeks later when they meditate, the same meditation collected. So it goes down. So this shows us, right, the biochemical relationship. So yeah, we of course we want to block it. That's easy.

But we also want to see how in our life we can shift from survival to harmony. And when you're ready, I will I will share the secret for this. Well, definitely tell us the secret.

What is it? So if we look at our body, every organ in the body, every cell is has its own boundaries. It takes in nourishment and it releases toxins. There's only one organ in the body that functions differently, that organ that is part of its survival.

Take the toxicity from everybody, all the difficulties from all the organs. It doesn't say only from the liver, only from the kidney. It's our heart. It takes all the dirty blood.

It connects with the universe with a breath. Because our drama is is it is is insignificant for the infinite space. And, you know, it's interesting, the molecules of air in our mouth or our nose when we just as we breathe it here, it's connected with the whole universe practically.

No. Think about it. Amazing. We let go of what we want to let go. We take. We take oxygen. There is an exchange in the lung serving the heart and then the heart gives without discrimination.

You know, the O2 is the stiff artery. As we know it doesn't decide. Blood will go on the up or down. It goes everywhere. And who does the heart now? First is part of of nourishing the whole body.

It nourishes itself through the coronary arteries. So this is self-management. Self-love is part of loving others, not narcissistic. Because interesting enough, one more thing, and I always like to.

It's like this when I when this physiology occurred to me a few years ago, it was like, oh my gosh, the heart is the only organ that nourishes itself after it finishes its work.

You know, think about it. We could have had the coronary artery in the right atrium, right? When the blood comes, you know, in the left atrium, for example.

No, we get this supply only when we are done. So the heart is a selfless organ, and the selflessness of the heart is its survival reward. That's why the transformative organ in so many traditions, religion, belief system, etc.

and it's happening anyway, physiologically, even if we are not following it and we are reactive, but because it's physiological, it's easier to connect with it through meditation, through different methods.

And this is open heart medicine is connecting with who we really are. And we when we connect, things change. You know, I just said in experience I you know, I'm right now in Hawaii because I got Covid in Israel 45 minutes before starting to teach a retreat to 250 people for seven days.

So I recovered quickly. I even was able to join the retreat, but it affected my blood pressure. I know up and down and really crazy numbers, double medication.

So, you know, I came to I came here and I still working, but for three days I just connected with this. Let it go, right? That person now is normal and it's better than it was before this whole thing started.

Why did it happen so quickly? Because I'm just more trained in connecting with this infinite healing potential. The infinite healing potential in our body is sitting in our mitochondria.

That's where we can decide if we're going to open up. Tell the PDK the agents them to one. Just relax. It's okay. Mitochondria opens up it effectively.

So that's why I started with this statement. Because it's not just a it's a very important statement for people to understand. It's all mitochondrial health.

It's the root of everything. And it stems from understanding that we have to shift from our survival. Right. So talking to you is like speaking to an expert in biochemistry and mind body.

At the same time, biochemistry means mind body medicine which is rare. You don't see, you don't meet many people who can speak so expertly and eloquently on both sides.

So thank you for marrying all that and bringing it back to the fact that we have the ability to heal. We have the ability to heal ourselves. And, and the mitochondria is the root of that.

Now, I know that people want more of you through this interview. I know, like, we could talk for a whole nother hour and just keep going longer and longer, but maybe we'll have to do a second interview.

Tick, tick. Keep this conversation going. But for now, can you share with us, our audience how people can find you, how people can find your, your support in all ways because you have a full supplement line as well.

Of course, so they can go to that to survival. Part of that comment about the book, they can go to Doctor elias.com. Ltc.com. They can go to econ eugenics.com or to pick the soil.

But if they go to to my to my site doctor realize that com it will guide them. And we are going to offer all the participants is yeah. An excerpt certain excerpt from the book, which I think are important for understanding mitochondrial function and the.

Yeah. And the and for eco eugenics. That's your website where people can get elements right and the public can purchase supplements there as well. Yeah. Okay.

So so I know people are watching right now and they're wondering what should I you know, people like to DIY, right? They like to do it themselves and figure this out.

So so I guess a question is, is is this supplement okay for everyone to take? Is there anybody who should not use packages. Oh yeah. Again, you pick this one specifically.

There's a lot of borrowed science from my work. And because most effective was picking the generic term. So anybody can put depicting and put on it, it's really picked the soul. Yes.

It's the only people who cannot use pick the soul. People with they can use it in smaller amounts. Still is people with severe kidney failure severe meaning EGFR under 15 literally advanced is stage four.

We call it end stage renal disease. Exactly as with it they because it's it's buffered with potassium and sodium. So they are limited in how much they can process.

Of course it's ironic because they picked up soy because modified it was picked in by blocking. Galectin three helps kidney disease. So if you are 20 GFR you can already take the full dose.

But if you are around 20, you take only ten grams. And if you had 15, you take only five grams. Yeah yeah yeah yeah. But otherwise no it's a it's really a sophisticated fiber.

Okay. So pretty much we've established most of our audience is going to be okay unless you are on dialysis or knocking the door of needing dialysis. Talk to your nephrologist. Right.

Oh, of course, we always say a disclaimer. Any supplements you're going to take, talk to your health practitioner first. But we've established that this is a very safe product to sell products.

So wonderful. Well, thank you so much for being here for, for the work that you do. And congratulations on your upcoming, study with the NIH. You want to share real quick what that's going to be about?

Yeah. When it's really in a large animal safety study to show that the galectin three of this is safe. So we have to develop the regulatory column and show.

And then we are then we are on to human clinical trials. Excellent. Congratulations on that. I can't wait to to hear more. I hope you stay connected with me. And we will.

We will because we really resonate, you know, and, you know, understanding and and you know, the, the, the dynamism of, of transforming our health, you know.

Yes. Well, thank you so much. Thank you. Yeah, it was great. Thank you for time. You take good care. Bye now. Hi.