Introduction and Guest Background

Well, welcome. Welcome, everyone, to another edition of Mycotoxins and Chronic Illnesses 2.0 and, I'm excited today to, have kind of be in conversation with Doctor Isaac.

Elias. Doctor Elias is someone I've known for a long time, and I've really had the privilege of sharing patients and much learning over the years. That Elias is, physician who is, medical director of the Amitabha clinic in, now in Santa Rosa.

And he has a long history and tradition of Tibetan medicine. And also, most importantly, I'm not most importantly, but I think most beautifully is bringing into, helping people in oncology, in cancer, and in really, helping people find themselves, find their lives again, and live a long time.

And, Doctor Elias has also done a lot of work in, in the field of medicine that I think is going to, really help us move forward on a lot of levels. We're going to talk about how, some of the some of the compounds that he's been interested in have, and give us an opportunity to really help our healing. So, doctor Elias Isaac, it's just so wonderful to have you today.

And, you know, week before we go into, you know, the topic of mycotoxins, I just really want to get a background because I realized before, when we started to talk that I never got the full story of what got you interested in galectin and galectin three.

And I know that probably no one out there knows what collecting three is. So, tell us a little bit about it and, how you got started with it. Now, of course, Eric, it's I'm so happy to spend this time with you.

We know each other for decades. I actually believe it for almost 25 years. And every every time we chat, it's like we get so excited, like, like kids, you know?

Which is good. It's a sign of health. So in my big one, I'm a physician, I am a licensed acupuncturist. And, so I studied a lot of, of Chinese medicine and I'm a healer the most.

So an active researcher, we actively research published papers and with this is my interest in cancer is my focus and other how to treat illnesses like toxins and Lyme.

I was a I was always interested in innovation and and formulation. I am a native of Israel, and in my neighborhood, in my small street, there was a Ruth and Leo coin.

There were both PhDs in organic chemistry. They're not alive anymore. And they were the pioneers in the citrus industry in Israel. Israel was very famous for citrus industry, especially in the 50s, 60s and 70s.

Most of the country was citrus, and they were the main researchers of the main, industrial complex around citrus. And one day we took our evening walk to the house.

I remember, I was 12 years old, and Ruth turned out of the blue. She turned to me. And it's me, Isaac. One day they will find a cure for cancer from the peel of the citrus fruit.

And somehow I remember it. And 24 years later, when the first research on galectin three came out by Doctor Avram was which I formerly collaborate with now I publish with, I called her up.

It was in San Francisco and it was 1995, and I was telling here and Ruth, it's Isaac. I don't expect you to remember, but I remember what you told me.

I need your help. And she put me together with some legendary pitching experts. One of them was already retired.

Professor. And somehow I got to plug into the the most sophisticated pectin researchers.

How Modified Citrus Pectin and Galectin-3 Began

And it helped me in the journey of developing a commercially viable, reproducible galectin three blocker from the peak of the citrus fruit. And what's amazing.

And I reflect on it, Eric, when I talk to Doctor Avram, was none of us ever dreamt and expected that we are touching a field which is so big. It started with cancer and then as I was moving on after a few years, I started seeing the connection with inflammation and fibrosis and removal of heavy metals and immune enhancement, which were my I discovered it.

I have I have the development and the patents and now now it's so big. They are close to 10,000 published papers on galectin this every day. Published papers. I'm getting.

And even on our compound there is a picture. So there is more than 75 papers. But it all started with this intriguing comment that somehow got into into my, you know, stuck in my mind.

And it's really, I see this nature's gift. No, it's really nature's gift. And what if I take this, Yes, I love that. I just I mean, that the magic of life, you know, that that always warms my heart with these things that some people would just let pass by.

But the right person held on to, and, you know, and the modified citrus pectin is, is, that's what we're going to weave through our conversation because, I mean, like, as we were talking before, how chronic inflammation in all of its ways is what really to me is chronic illness and how you have found such an interesting, you know, organic, safe tool for us to use as, in the healing path.

So, you know, how do you, you know, like I said, how do you connect this with, with the micro toxin world? I guess let's let's let's start there. I mean, like, where, you know, we'll go back to survival and all the important things, but just one jump in.

Where do you connect? The, the mycotoxins and the galectin three mycotoxins, enhanced in the presence of the main protein, galectin three. And I think in order to really understand it, because, Eric, one of the issues is that when you look at like, let's say on the papers and the soil, you will see we just publish a multicenter trial on on our monocytes.

It was picked in in a recurrent biochemical recurrence of prostate cancer. It's a biochemical recurrence. The prostate was removed. And now the cancer starts coming back.

When it's coming back in a unique environment, you know, and we see like a almost 80% response in when we follow. For a long time, 80% of the people who responded are responding for years.

Then you see publication that I published in one of the important papers on sepsis and acute kidney injury. On perfusion injury, you see on, on on mesh, you see how is it possible?

We really have to understand the role of galectin three is our fundamental, what they call survivor protein. It's our basic survival protein. And we are built to survive.

You know we talked about it a lot right? We are built to survive. It's innate in us and it's automated in us. And this survival response, if it is innate and automated, we can control it.

So the first reaction is our autonomic nervous system, right. We immediately respond with a sympathetic response that we can also come down with the parasympathetic console.

But we have found that a lot of my personal, research is at the biochemical survival response starts possibly within

seconds, but definitely within minutes.

So galectin three will rise within minutes, within minutes. And then it will start a chain of events, chain of events that will lead to the cytokine storm into the inflammatory abnormal inflammatory response.

For example, I've shown in the most acceptable animal sepsis model called Clbp that if I gave out modifies, it was baked in before the procedure is done, I attenuate dramatically the rise in interleukin six.

So galectin three rises first for showtime. It's enough. It's a message. And but it starts this crazy vicious cycle. And then il6 goes up and up and up and up.

Kidneys get damaged, the animals die. If you block galectin three or you remove it, you attenuate the process. So why? This is a survival response. It causes inflammation.

So now if we want to look a little bit deeper and we see how can it respond to survival when it's a frequent flight response, fear flight or fight. We either fight, we create inflammation or we run away or we hide.

So the hiding is well when create a shield around us and the shield in the case of mycotoxins, is our biofilm. So biofilm is a very big term. Biofilm is a material sclerotic.

But a biofilm really. If you want to look at biofilm in a deeper way, Eric, biofilm is really creating a micro environment, an environment that is manipulated and becomes different than the environment outside of this very small area where the players and the influencers can take control.

So biofilms serve like a fungus where they can excrete micro toxins. Of course they have them in the gut, but them in the sinuses where they can keep on excrete eating, and a micro toxin that will go into the brain in the classical micro environment is the environment of the cancer cell or metabolic abnormalities.

So it's really fascinating. Now why is galectin three the key compound. Because it get it, get it, get it gets awakened almost immediately. It travels to the place of the inflammation.

And it has a spatial structure, which what we call a carbohydrate recognition domain. And it binds a different inflammatory compound, different growth factors, different, immune molecule that can suppress the immune response.

And it creates a penta male five structures like this. And then what happened? The pentameter through a ligand through a carbohydrate like a glycol.

Galectin-3, Survival Response, and Inflammation

Lipids you know, and glycoprotein will bind to another penta man. And it creates scaffolding to create a lattice formation, a coating literally, structurally.

And this is really the backbone of the biofilm over eat. You got heavy metals and oxidized phospholipids and a lot of other growth factors. And the microenvironment is that survival response.

So when the sun was filled in the under stress either the person is under stress. There is dysbiosis. We took antibiotics. The environment is changing. It's fights.

And you know it's so well versed. You are such an expert in life but really are under stress will wake up. It's a survival response. So in this sense galectin three will enhance mycotoxins and will also allow it mycotoxins, dysbiosis, aggressive bacteria LPs.

You know it carries LPs. It will allow it to attach to the gut, which will create inflammation in the gut, and it will create systemic inflammation. And this is why you see such a basic and powerful effect of galectin three on practically all

natural inflammatory illnesses.

It's this connection of the gut and the brain. So this is a little bit about the idea of what a survivor response does. And we can we can revisit it and talk how you change it.

You know, because we are talking about it because there are solutions. There are solutions. Yeah. And I just just want to emphasize, I mean, what you're saying is just I mean, it's beautiful.

And so important is that this research finds the galectin galectin three is a molecule that if you release it for a short period of time, is signaling and doing its job.

It's but for some reason, the persistence when it stays as a persistent signal is when we get into trouble. Is that right? It's more than this. The mechanism of repair by galectin three is inflammation and fibrosis.

That's a problem. So you're taking is the wrong pathway. So if you look at galectin three, if I was showing the diagram I would show that it affects it affects macrophages in one and two.

Macrophages create inflammation. They they secrete the different cytokines. You know I L1 BI6 etc. TNF alpha. And you will go down the inflammatory path create extra you know you know extracellular matrix inflammation and fibrosis.

Or it will enhance TGF beta. And you'll go through myo fibroblast and you'll create fibrosis in the heart in delivering the lung in the kidney everywhere.

So even for the same person, galectin three will control the two most fundamental processes. The fighting process inflammation the hiding process fibrosis.

But they all end up with dysfunction. So if you look, for example it it it centurions okay. Right. Well I think three goes up with age because there's more repair more drama.

Right. If you look at centurions, the average level of galectin three in Centurions every age was one of four is dramatically and significantly lower than if you look at the sample of the people in the 70s and 80s. Why?

Because this. Except if you see in the 70s and 80s, it's really neat to look at this study. A group of that are really low. These are the group are going to be the Centurions.

But there is something about our ability to repair without leaving a scar. You know, this is a Buddhist term like a bird flying in the sky when like if you don't attach to your sword, nothing is left.

So a baby gets injured. It repairs without a skull. It has the ability to repair without the scar. You know, in utero, we lose this ability over time for different reasons mycotoxins, heavy metals, emotional stress, epigenetics, whatever the reason is and we we get and it triggers this abnormal survival response in mycotoxins.

It's key. It's key because this is what is abnormal inflammatory response. The the muscle activation happens the hyper inflammation the relationship between the organism.

And that's why addressing galectin three is it's the root of practically every treatment that you will give because it's driving. If you look at the research, it's driving every single chronic disease.

That I think it's one of these days I, I'm always like to go to the beginning is if you so when you have a little bit of it, you know it it just so it's your ability to turn it off quickly.

But if you don't turn it off quickly, then it keeps driving the response. Right. And more like it's a little bit more than this. You can block galectin three, you can remove galectin three.

Like what? What my, my my research work with the Pharisees. Right. But yet in the local tissue, when you need galectin three, it can still be expressed because it's needed.

Right. Just prevents the overexpression. So, it's literally about just allowing to get the message. And then comes the whole the whole system. So if we are very resilient, if we're very flexible, we let it go.

So, you know, we've talked about it in some of our last, you know, talks that we spent together. It's really it's really about letting go when something happen and we address and we let go, everything is different.

We let go of emotions, we let go of trauma. We let go of thoughts. We there is better circulation. Everything is flowing. And we look at our how to go out, how it stops contracting and we stop flowing.

We are dead. So when we hold to something, when we create a rigid environment, it's really the difference between life and death. And that's really what happened in the micro environment.

We created a toxic environment even in the presence of oxygen in other tissues. And right, you get a toxic environment, then the whole chain of events and the pathways to change isn't the same.

So in oncology to be p53 and Act and the M to one and HGF and the mitochondria get blocked and you get the the Warburg effect in diabetes you get a Ampk and the metabolism changes.

Right now these are very similar metabolism that you see in mycotoxins. The mitochondria stops functioning. Why the cell lost its ability to take a deep breath, yet lost its ability to just relax, to feel safe.

So it's about to reintroduce the sense of safety. And anything goes. Any method for blocking or lifting three which is fundamental to training your mind to working on your emotions, to opening your heart to others, to sharing, and to feeling safe on a cellular level and as a being, as a community, as a country, as a planet.

I mean, we see it right now, right? Yeah, yeah. No, absolutely. It's funny because that's in a way, the world perk effect is, is the inability for the cell to exhale because the oxygen goes in.

But it doesn't be it's not used. Right. Exactly. Yes I like that. Yes. We forget to exhale. Oh God. That is. So in order to inhale we have to exhale. So what you are you're I mean I we we're going to go to different places because our collective exhalation is at the root of detoxification.

We come to this world. What's the first thing we do. We exit, we create. What is the last thing we do in life? We exhale before we leave our body. One final exhalation.

So when you exhale, you create space. And when you create space, change can happen. You can't in hey inhale. If you didn't exit you need to have room.

And there's, you know, the lungs natural movement is a movement of exhalation of letting go. You know in Chinese medicine in the fall season when the days get shorter, in Judaism, it is Russia, China, you know, it's the foreign.

We look what we did right, what we didn't do, and we ask for forgiveness. And we exhale. We let go. You know, in Buddhism, it's every night before our sleep, in every tradition is the same way.

When we let go, there is a place of nourishment. And this is why I really call the healing process detoxification. Transformation and healing. And it's done very different on a silver like you mentioned, cell, you know, cell danger response.

But our body is built to do it differently. And we're kind of jumping almost to, to keep, keep going. You tell jumping beautifully. Don't worry. Almost.

We're almost jumping to the end. But we're not jumping. If you look and this goes back into mycotoxins okay. It's

about respecting the outer environment and the inner environment.

So I know one thing that we overlook is that we are made. I'm going to round the numbers up a little bit. Tiny bit I don't know why they say 37 trillion, but we are made out of, let's say 50 trillion cells.

And we do know how many reaction each cell has every second, how many what, how many reactions every cell has in every second. Oh, God, I have, I no idea a lot up to 1 million reactions a second.

Okay. Yeah. So you got 50 trillion cells with million reactions in one body working together. Now, if that's not a miracle, I don't know what's a miracle.

So as to be able to talk and comprehend it is truly a miracle, you know, just for the system to work.

Biofilms, Mycotoxins, and the Gut Microbiome

But then we got people can argue, 50 trillion, 100 trillion of microorganism in our microbiome in 90% of our genetic material. And there's an amazing dialog between us and the microbiome with similar to the dialog between ourselves.

So when we respect the microbiome and we treat the microbiome well in many levels, and we each come to these words with a little bit of a different baseline, then the microbiome becomes our biggest help.

Yeah, I mean, it's amazing how you need a healthy microbiome for immune immunotherapy to be able to kill cancer. Or you give a drug like Adri amazing.

And you give antibiotic the same day as we are. Medicine is not going to work. The microbiome is the wisdom to activate nutrients and to even activate drugs that we need to our body.

When we insult the microbiome through dysbiosis, it goes into a fighting mode. You get abnormal bacteria, you get less variability in fungus, loves to grow.

Then you give it a little bit of you sprinkle some some mercury inside, you know, and completely it goes. And then it gets methylated. And then all this abnormal environment is affected with the vagus nerve and affects your brain.

And you really get to mess. But a part of it is really looking at our relationship with the microbiome in an honest way. And maybe to close the circle we are built to do this.

Why we are able to do this? Because every cell in our body wants nourishment. And let's go for toxin. It's part of the cellular survival. But there is a concept, you know in Hebrew you call it the mutual support.

There is a relationship between the different self-aware cell knows I'm going to leave and then I'm going to end my life throughout the process. And another cell will come.

If a cell gets stuck in a survival mode and doesn't want to really let go, that's per definition, what cancer is. And then you get in micro environment, but the fungus does the same if it's attacked.

Yeah. The only organ in the body that thrives on taking others suffering what every cell didn't want let its survival that it can't survive without it.

It's it's building is the heart. The heart has to take dirty blood. If it doesn't with that, it connect with the universe where our drama is not very meaningful to the endless universe.

We connect with oxygen, with healing. And then when you come back to the land, there's an exchange. The transformation in the capillary. We let go of CO2 of toxins and you get nourished.

And then the heart just gives, gives without discrimination. So the altar is stiff. How do we think about it? It gives everywhere. And who does the heart nourish first it nourishes itself.

It nourishes itself. So the coronary arteries in order to be able to nourish others. But it's part of nourishing others. No. It's interesting, I haven't found it's kind of lost my insight.

One day when I was meditating said, oh my God, nobody's really talking about this. Our heart is built to heal, to transform difficulties into love, compassion and healing.

And it was the it's through our electromagnetic field, the heart. The field of the heart is so big it's 100 times bigger than the brain. It gets to every cell in our body all the time.

So when we bring this into our body. And that's why stress is an issue. It affects every cell in our body. And the other thing which is so amazing about the heart, which is really my my big passion, I call the work I do open Heart medicine.

It's another book that kind of written. I just have to put it out in open heart medicine. One one of the interesting one. Look at the heart. It's the only organ that doesn't nourish itself until it has finished its work.

Think about it. It's done. It's giving the blood. And only then it takes blood back. This is very unusual, right? You know, it's very unusual because it's okay.

I've done my work. And that's the selflessness of the heart is part of its role in this body. So if we can get a sense of harmony and sharing an open heart, for example, into the gut, then of course the environment changes.

A a fungus doesn't feel threatened, it won't excrete mycotoxins in your guts, and mycotoxins being excreted. You got the biofilm that allows the micro environment, which is a toxic.

We'll call it dampness in Chinese medicine, ideal for growth of fungus. Then you got a little bit of glyphosate or a lot of glyphosate sprinkling in and messing out your tight junction in the gut.

Right. And then, you know, then you get out to England. This is no never inflammation, chronic kidney disease. Cancer. Well yeah. No glyphosate is is is definitely a how do you say I you know, it's a great example.

It's in a way, it's the flagship of, of the last, 70 years of, of chemical toxins. But somehow we've managed to, create one that we've used everywhere, all of our food, you know, and just get it totally into the environment.

And that's something that you have been intrigued with for for a while now. Yes, I've been intrigued with it, about it in one. One of the reasons that I've been intrigued about it is that I really feel like I knew it.

You know, we only know about it, right? But we kind of almost accept it's part of reality, and we don't realize how bad it is until, you know, a few years ago, it kind of clicked on me.

Oh my gosh. I mean, this is this is like an obstacle for healing, especially in the United States. I mean, an interesting area. It's very hard to get the data how much glyphosate is being used.

Yeah. After 214 it's very how even to 12 you can't get the data even if you look for it. So some people say it's three 4 pounds per person per year in the United States.

But it's an insane amount. And what happened? It is water soluble, but it does bio accumulate. It's clear now that it by accumulates. You can find it in organs of animals.

You can find it in bones. And it's really so similar to glycine, which is the smallest amino that it can easily exchange with it. And the glycine motif is so common in so many and in so many protein in collagen, you know, in their in different tissues. And, I mean, I think finally the world is waking up, you know, in the, in so many parts in the world

that life is not allowed, like in Europe.

And I think in the United States, supposedly in 2023, it's not going to be used anymore in the household. Right? We really bring down the awareness why the 95% is still being used in the fields. Yes.

And so it's something we have to be aware of. And the nice thing, you know, I am I'm solution oriented. So I, I've, I've found I mean I was talking about the effect it picked us on that motivated prospecting is if you.

So I started publishing on the heavy metal removal properties of motivated prospecting. Like I started researching it in 1998, and we published a few papers on the ability of MCP to remove lead, to remove mercury, to to remove uranium, cesium without depleting minerals.

So we we understood this disability. But when you look at glyphosate and in pesticides, you really have to address the gut. So what modified seed prospecting does it chelating heavy metals while harmonizing the immune response.

And it has a systemic effect. But our exposure to pesticide. So as a gut is ongoing and for this reason I really worked on developing something specifically to change the environment and also address negatively charged ions and look at glyphosate, look at which of the our kingdom it affect.

It affects plants, it affects the soil and it affects the water. So we're looking for solutions for this from the three kingdoms. Because always know nature is smart.

When it has a challenge it puts out the solution. So if you find the solutions that my starting holistic point of view and then the research comes into focus.

But that's always the part of your brain that I've loved is that you start from the beginning. Yeah. You know. Yeah, yeah. That's what you keep going for.

No no no no no no. It was just because that the, the the glyphosate, you know, I say that you say it's just one piece, but what concerns me so much about it is that we measured in people who are really, really careful about their organic diets and they're clean.

I mean, really clean living people is good. I mean, you know, as good as you can get. And many times it's very elevated. So that means that this is coming into so many different ways, into the into the environment and into the individual.

Of course, you know, if you look at pesticides in a in a flat area with a lot of this soil field, the country, you know, pesticides can drive out 10 or 15 miles and, you know, all horizontally.

So, yeah, you can have a really nice organic field in 3 or 4 miles down, especially if there are hills, you know, like, you know, in Sonoma County is, oh, I'm eating organic.

Can you look from the window and you see all these great vineyards for like 500 acres, all elevated? Yeah, of course, the whole water table is coming straight into your well or into your water.

Yeah. And I think it's the one place where it was very evident for all of us is that our gluten sensitive patients, when they go to Europe, they go to Italy, which doesn't use glyphosate.

Suddenly they can eat pasta, they can eat bread, absorb it. Right? Yes, yes, yes.

Glyphosate, Pesticides, and Detoxification Strategies

They come back gluten sensitivity. So we kind of tied it to the GMO. But it's really the glyphosate because glyphosate increases the growth of fungus on wheat, it increases the excretion of mycotoxins.

Now galectin three activates the excretion of, for example, anti-glare, glial mycotoxins. So going into it will increase the excretion of mycotoxins because of the reaction, but also glyphosate will allow mycotoxins to thrive.

And and glyphosate is very tricky. And you know, it's not the glyphosate. There are thousands of life of that formulations that are not regulated. Okay.

You know when we get an herb we use it has one side effect. It's in every major newspaper in the country. Right. Exactly. But nobody is regulating this additional compound in the formulation, which is even more toxic than the glyphosate itself.

So you get glyphosate is really it's really one of its mechanism. It collates nutrient, it collates every metals. So for example, it will it will create late tryptophan and will not allow lactobacillus to grow normally in the gut and will enhance mycotoxins.

It will create inflammation in the lining of the gut that will lead to gluten sensitivity. This is well published and documented acceptable, but it also will increase.

For example, chronic kidney disease very significantly. And chronic kidney disease is one of the most under spoken oh in percent of the population. 17 it's just it's considered normal.

Except yeah. And it's an area that they do a lot of research and they published on CKD and Aki. But so but why you know the kidney has to filter all this stuff, you know, and it's filtering it.

Well then on the other hand you get no like for that it involved in practically every disease of of no inflammation. But it's this combination with galectin three.

If you look at the Alzheimer plaque, Alzheimer plaque, his 20 times the concentration of galectin three compared to a normal normal tissue. So galectin three will potentially aid glia cells to go into an inflammation and astrocyte to go into an inflammatory cycle without stopping.

So similar to the macrophage in the bloodstream. Right. It's, there's some fascinating study that don't want to go too much into it. But if you look great studies published two years ago showed when you did an injury in an animal model, they created acute kidney injury.

It increased galectin three levels and then it traveled to the heart and caused fibrosis and damage to the heart. When you give it to an animal who could not produce galectin three, oh, you use the MCP, you prevented the effect.

Again, these are like done by big third party epidemic institute. But when you took in animals without the ability to to produce galectin three, okay.

And you injected bone marrow, that could produce galectin three, the damage done to the kidneys sent a signal to the bone marrow that produced galectin three, the travel to the heart and created the damage so that an example of this injury response is inflammatory compound.

So galectin three would create an inflammation and glial response. Life was it would create it. And that's why we have to address both of them. And in the gut you would have said we have to address the biofilm, change the microenvironment, and we have to address the toxins, remove the pesticides.

These are the manifestations of these very basic processes that are so damaging to us. Yeah. It makes me want to ask you a philosophical question, which we don't have to answer today, but I just is that like what?

You know, we have grown into a world of inflammatory diseases, and it's not just the inflammatory diseases of the aged, because we're finding it in younger and younger people, all these chronic inflammatory diseases and galectin three, pardon me, is.

Such a basic part of our physiology that we used to be able to control it probably better of course. So when is you know, I mean like again I mean it's the lack of control that's getting us into trouble.

And that's that question is, I mean, like, is it just the toxin load? I mean, like over the last 120 years and obviously the change in the diets and now the introduction of the chemicals, whatever it is, it's produced quite a change that we are now seeing such inflammatory disease in young people.

So it's really about pacing. You know, inflammation is heat right. See. And heat is kinetic energy. And kinetic energy is created by friction. If anybody listening you take your hand and you rub them to produce heat, which degrades, you know, degrades whatever cells are being degraded by the friction.

So we are now in a play in a, in a time of inflammation where this space between activities is getting shorter, the space between our reactivity is getting shorter.

Right? In the past, even it's insane. 40 years ago we would send a letter when I, my my father with the civil engineers and he worked in South Korea and I would write letters in 10th grade to my friends in Israel, and they would mail the letter, they would know what's happening.

And every two weeks I would get a letter and they would read it. Then came the phone and this says, well, now if you don't answer a text in two minutes, what's going on?

You forgot about me. You know, I was in shortens. Also, I was pinned. The space between our thoughts shortens and we create a very condensed area. So these are two.

And this is so important for microdosing people. This is like I'm going to give now a dual okay I will define this as a dual okay. So in the level of the mind we want to create space between the thought to reduce our reactivity.

That's how job to do because our tendency is to hold, to grasp, to identify, to survive. But if we move from our heart, from our brain, from our thinking to our heart, our heart is no concepts.

The heart flows all the time. It never you, never stops to think the moment it's contract with dead. We get hyper viscosity elevated lipoprotein a no oxygen.

So when we move into our heart, we are increasing the spaciousness. And from the point of view of mycotoxins, one of the key things to really consider is it our relationship to our symptom.

Okay. So it's very important because that's where muscle activation solving. So if we look at the survival response, one of the characteristics of survival is that some people allow means they always see the the driver going or if they ride the Jewish mantra, right.

Yeah. What is the Holocaust? We forgot what we see, you know, was the optimism the other part. But so we overreact. So you have a headache and you know, oh, when I get this headache, usually I'll feel tired.

And then I'll get this kind of symptom and this guy and we go down the habitual chain of symptoms. But if we could just let go of the headache and not identify it with other things, not hold, do it, not struggle with it, we are reducing the survival response.

The fungus in our body is getting a message that there's less danger. You can relax. You don't need to protect yourself because mycotoxins are excreted to protect the fungus.

That's why they excreted at any cost. And the irony is, is said bout with infections with cancer. Eventually, if you kill the host, whoever is visiting the host is also going to die.

You know it's not good for anybody. Harmony always works better. So this is a whole approach that is happening to us right now. And this is why, while I'm a researcher, I spend a lot of time in teaching meditation and healing and

the group of patients that responds best of the patient with chronic fatigue, with mycotoxins, with this chronic inflammation where it's very dramatic.

And the reason is it's easier for our body to communicate in these areas, it's much harder to communicate with a cancer cell, which is completely independent.

It's dysregulated. It doesn't want to listen. So using the mind to affect cancer is very challenging. Using the mind to affect inflammation is not as challenging.

And once we create space what happens? Oxygen comes in. And then once oxygen comes in we are relaxed enough. Suddenly our insulin receptors work better, Ampk gets activated, we produce more ATP, there's less hypoxia inducing factor.

Mitochondria is starting to celebrate. Glyphosate is not stealing our nutrient. And you get all the B vitamins in in PD. AG is working well. Pyruvate dehydrogenase.

Everybody's happy and we can produce energy in a relaxed, efficient manner. I mean, it's amazing how glycolysis produces 100 times faster energy, but it's a terrible inefficiency of two ATP per glucose and tons of lactic acid in hypoxia.

So this has a vicious cycle. So, you know, because I know I know how you work on the how you think and we think sipper. Similarly, we have to address an acute issue.

We can say, let's talk about what happened to your grandfather three generations ago. Right. But in the same time we got to address the bigger picture.

And that's the true. That's the true, a journey of healing. So it's a combination of seeing the really big picture, which is beyond concepts, where you don't even set up an idea what your patient has.

You just let it express itself, but into it. Eric, you know, you you look at your entire your history, the doctor decades of experience. So you see it, you listen and suddenly the insights come up.

Right? And that's that's the that's how we work. And it's that if you limit yourself to a preconceived idea, like an algorithm for, for the regular doctors, that they really I feel bad for, you know, the bright people who just took a different path then you really don't have choices.

Anything out of your scope creates survival response, creates fear, creates skepticism. Because what would happen if everything you believed in was found to be not true?

Heart, Letting Go, and Healing the Survival Paradox

For you and for me? We move on. It happens all the time, I think. I mean, I yeah, you know, I always say if I knew, you know, I wish I yes, the smallness of thought is just what happens when you, when you start with, with algorithms, with cookbooks.

Yeah, yeah. And again you need them when it's life and death in the moment. You know, one of the reasons I don't think I was, I was not as great of an E. R.

doctor as I had wanted to be when I first started medical school was because I could say, oh, it could be this, but it could be six other things, too.

Maybe, you know, and, you know, when you when you're in the ICU or in the emergency room, you need to make a decision quick, you know. But yeah, could be but with the could be is what allows life and when allows the expression of the other person.

Because you know I say chronic disease is about the is an individual is the individual expression of the other being. You know, it's so it's when you when you don't restrict you, you're gives the person more options.

You know often I always tell cancer patients you always have option at your deathbed you have options. How are you going to die? How is going to affect the environment.

And you we always have options. We always have options and options create space. Space creates letting go. And when we let go, everybody is happier. Everybody I mean, it's, it's sometimes incredible how like, political and geopolitical, a crisis has happened because both parties are not willing to let go of something that will work better for both of them.

You know, it's insane, right? And so, you know, you'll see this all the time. The same thing happening, the dialog between our body. If you look in my book, The Survival Paradox, where really put all these decades into into it, which it's a good book.

I mean, you know, it's a, it's a, it's a, it's an excellent book, especially because at the end you've given some just succinct just to do things that are not too difficult with good explanation.

It's not the kind of like how to take care of yourself books that you have to change your whole life. You just have to be open to pieces. Yes, but it's also a journey.

And so, so, you know, we we so we really have to really know what what is going to what what will it's going to take, you know. And so I think when we understand this and suddenly we go to the biochemists, we recognize galectin three and we understand why the studies were MCP helps antibiotics in life.

It, it promotes healthy gut. You know, we did the number of the MCP for everybody. So the modified citrus pectin just and you know, so we have multiple papers on, on on picked us on and its effect on the gut health because it's part of releasing this struggle survival response.

But then we really have to address pesticide and more and more emphasizing it. So in this sense, you know, in in in life for detox, what they did is recognizing the different kingdoms.

I took a different kind of pectin. It's not a regular pectin. It's a packet is high molecular weight and is more in. This binds better lipid soluble toxins which are very important, especially with mycotoxins.

Yeah. And it stays in the gut because they need to address the gut. So this was my plant a binder she picked. The soil is not the binder that they always picked this or this or that.

This is galectin three. It's also a binder of heavy metals of toxins, but it addresses a fundamental survival issue when you come to addressing, the pesticide in mycotoxins.

So you've got the pectin and then you've got the, then you got the alginate, alginate and pecans, both of it belong to a group of called poly urinates.

They bind really well to positively charge heavy metals to toxins. They are really swamp cleaners. You know, when stop, Singspiel, you put alginate, but then we're using kelp.

And kelp is documented. One to bind to glyphosate. But also kelp has life. It offers us nutrient, it offers us minerals. And so. So this way we are covering the water issues, the plant issue.

And then we come to the Earth. And for the Earth. One of the most amazing lift over of of the earth process. Is she legit and full of acid in the descending levels and full as it was well documented.

Known to bind to glyphosate. All of these compounds stabilize at tight junctions in the gut. So we're getting better integrity. And then for people interested in formulation, you always want to fuel your formulation and then fueling it

with glycine.

Because glycine healthy glutathione detoxification helps narrow inflammation. And so when you put it together we are seeing not only helping the gut, but we also are seeing helping in inflammation based.

And we are now I'm shifting some of my research activities and in the level of clinical trials to do this formulation, because I feel we need to make a strong statement and get some decent papers published.

So we get listened to. You know, I mean, in my career right now, you know, I get I got some some grants from the NIH as a principal investigator, and I'm not part of academia, but I've done enough work.

And if enough people were amazing people from academia who are working with me, it was acknowledged even by the NIH. So we have to do the same thing with pesticide.

So it moves from rumors and alternative to showing it. And offering a solution. The worst thing we can do right is like just cause cause. Fear without offering a solution is the basis is understanding the survival paradox.

Because the same way that we want to survive, the fungus wants to survive the Covid 19, the coronavirus wants to survive. It's not surprising that the spike protein of the of the corona is practically identical in structure to collecting three.

It's its survival protein, you know, and how it function by creating inflammation. Yeah. So it's really we have to recognize that everyone wants to survive.

And as long as we can create the harmony. But as you said in emergency said we got to bring the person into balance. You know, we gotta make the decision.

I mean, and then then I think, I think it's it's really our only way out, Eric. I mean, it's, it's we're kind of a little bit spinning out of control.

Yeah. No, you I mean, I loved what you said in the middle there about, you know, how creating some space, not demanding, you know, I mean, and that's just in all things in our health, in our world, a little bit of space.

Don't have to answer that text message in 30s. And. Yeah, just but and allowing, you know, and just understanding that even the microbes that we worry about the mycotoxins in the, the, the you know, the fungus that live.

But you know what? We have lived in harmony with these for billions of years, you know, many years. Yeah. You know, our cells grew up, the system grew up together.

So it's not like we're implacable enemies. We really have to find a way to coexist again inside this polluted world that we've created every. This is fundamental.

What you said to it. Like, like people need to kind of repeat. It's fundamental to healing because, you know, Western medicine is based on finding a pathology and treating it.

It's not it can't hold to the concept of maintaining health. It's nonexistent in medicine, is based on a pathological change which loses, by the way, it's dynamic.

If you think about Indo Asia, everybody has parasites and they all live their life. There is a certain level of of harmony, you know, of of living with it.

So it's the same thing happens here. And we really have to get to this point. But it's a journey because often we we know we need to recognize we can do our best, but we don't come with the here in a in like a clean paper.

We have our genetic predisposition that we are carrying and we have our epigenetic predisposition. And the you

know, there's a very beautiful saying it.

It's not a biblical. It's an old Talmudic saying that says our culture we value should need to know everything is predicted already. But we have a choice.

The prediction is our genetics. The choice is our epigenetics. And so we have a choice to change. And when we change, our environment changes. You know, in my book, I write the story about I have a chapter towards the end.

My last three chapters are about how to heal. It's called Healing the Scars of Survival. And I talk about my stories, the Holocaust, survival, and how it affected my grandmother, my my, my grandfather, then named after I never met in my mother.

And now when I heal from this without telling them, it affected my mother because she was carrying the trauma from the previous generation. So when we go, when we are working this level, we are creating multigenerational healing.

Yeah. So all of us, all of us have, you know, so many cultures had their own holocaust, their own traumas that they carry every generation with somebody else.

You know, I mean, it's kind of amazing, you know, thinking, I mean, I'm living a good life. And most of the siblings of my grandfather were killed by Hitler, and I mean, know them.

And nobody told me about it, but it was carried in him. It was passed to me. I had physical symptoms in my chest. Always. It pains. They couldn't explain.

I was a yoga teacher, and when I let go of it with meditation, with my own healing, all the pains went away. But then my mother, who could never look at any movie or any program about the Holocaust in the early 80s, suddenly was able to watch TV programs and go to to like to like special evenings about that you would never be able to do before.

I didn't tell her about it. It's our connection. So more healing is bigger than what we think. And what we need to recognize is we need to be humble about our understanding and understand that linear thinking and logic is one simple plane in this multi-dimensional reality that we we can perceive with our regular, you know, thinking process and just being open to it, then we have a lot of possibilities.

And that's why I love one of my most favorite saying is not everyone will be a miracle, but anyone can be a miracle when we can be a miracle, what is a miracle?

I know everything before we started, I think a miracle is something that is not expected, right? So if you can define a miracle as 1 to 10,000, pretty impressive, you know, 1 to 100,000.

That's really a miracle. You know, 1 to 1 million is like mind blown. As long as we keep the same habits, nothing is going to change. So it's expected.

The more we can change our habits, the more a miracle can happen to us. Why? Because we take a different highway. And we always have this option with every breath and with every thought.

So if people wanted to really look at it from my point of view, which is my big passion, and I teach, you know, on a volunteer basis, I teach many in Israel, but I will start teaching later this year in the US because I've spent decades, training in Buddhism.

And no two months, a year in the mountains for 20 years and for ten years, if they retreat, if they will remember it. Is it talking when I was going to live on three years and you're going to come and take the clinic?

Yeah, yeah. Remember, and I go to the mountain and then I spent months and months on my own. So really, we

really have to really understand the multi-dimensional experience.

And then it all boils down to connecting with our heart and opening it and allowing everything to flow. You know, that's really what it's about. Isaac.

That was just beautiful. Thank you. I mean, there really that was that was a teaching. You know, I hope people appreciate, you know, how how multi dimensionally important that is.

You know, we have. Yes. You know, modified stitches packed in. But it doesn't matter how much you take, changing your heart will let it all happen. And it's interesting, Eric, if you think about my specialty in therapeutic services.

Yes, which I use a lot in microdosing, I'm treating the person outside their body, but they're making it bigger than their body. So for me, it was interesting in my own journey, kind of, you know, you asked me to to share that on one level, I is very from younger.

This very strong draw to esoteric to meditation, not because I had a dream, I had a great childhood. Something is a calling in me. In the same time, I ended up being the leader, leading clinician, driver of galectin three and dissolving it, which creates isolation.

You know, the one of the key organs, the galectin three, effects, is heart failure, but not all heart failure. Ejection preserved heart failure, which is when the heart becomes fibrotic, it becomes hard.

We are not giving. We can't expand, you know? So it's always fascinating for me how I came to it for me. Cuz science breakthrough publication research and for my own non conceptual just, you know, being in the mountain studying with many of the great meditation masters in the Himalayas.

And now that I'm not as young, I it's coming together. And so really my journey now is sharing it in every possible way. That's really what drives me to to share.

That's why I wrote my book. It's, you know, it took me, only took me into my early 60s to put things in writing. Well, what I thank you for doing it. I mean, it is beautiful.

And, you know, I can only say it. It is, you know, you spoke so much wisdom and it is so true that, you know, our medicine is, you know, the NIH. It's all based on pathology, which is not it's useful, but it doesn't get you back to health.

It just keeps you from dying, which is, you know, many of us will take that. But if you want to be alive, right, you have to go for health. Yeah. Compassion and healing. Yes.

And that is a non-linear process for sure. But to me, thank you so much and know but every conversation we do, I learn so much. That's tough. But it's been inspiring to talk to you.

I mean it, you know, because I can, you know, I can relate. You know, I can. I can just feel that I can just, you know, I think both of us. I remember our first conversation in the car over 20 years ago.

And, you know, each I looked at each other, said, oh, my God, yeah, we can understand each other. You know, it's funny. Somebody to talk to, you know.

Yes. And, yeah. So it's a journey that we will continue that. Thank you so much. Thank you for the opportunity. Well, yes. Really? Yes. YouTube does. So many blessings, Isaac.

And, just people should just read the book. It really is. It's just a work of the heart. And, and also just, you know, I can only say that the, the, the, the pectin products, the, and and the thought I want to end this just with the thought, the balance that you put into it, because that's what comes from the deeper work.

You know, there's the biochemistry, but, yeah. Is it is from that deep understanding of, of, of the Tibetan medicine, I think that brings the balance to, to what you create.

So thank you again. Thank you. Nice things. Bye bye bye.