Introduction and Guest Background

For the. Welcome back to the reversing Marcel activation histamine intolerance summit. I'm your host Beth O'Hara of mast cell 360. And I'm really delighted to have with us today, Doctor Isaac Elias, who's an expert in the field of integrative medicine.

And he focuses on cancer detoxification and complex conditions. He's a respected physician and researcher, a bestselling author, an educator, and a mind body practitioner.

And he partners with leading research institutes including Harvard, National Institute of Health, Columbia, and others to coauthor studies on integrative therapies for cancer, heavy metal toxicity, and other areas.

He's also the founder medical director of Army Tarver Medical Clinic in Santa Rosa, California. And he's one of our biggest supporters for this summit, making it possible to get this information out to you.

So I just want to send to Doctor Elias a huge amount of gratitude for your support and in helping us get this summit out to people. Thank you. Thank you. I'm so happy to be part of this summit.

It is such a not only an important topic, but a topic which is growing in its importance and its impact on the health of so many people. It definitely is.

And I wanted to just ask, how did you get into the fields that you specialize in? Because it seems like for all the practitioners that we're talking with, there's something that drove us into these areas that are as common and particularly in the kind of discoveries that you've made, we're going to talk about.

So I'm a little bit of a different story. I started my journey in the healing outdoors, age 15, and so I was always drawn to multi-dimensional thinking.

And my father was an engineer. I was in Korea. The family from a native of Israel. So I learned I practiced when doing yoga in Korea, when I was there for about a year and a half, and I continued with it.

So when I went to medical school, for a six year program in Tel Aviv University, I already knew that I'm going to be an holistic doctor. I was already a yoga teacher.

So as I went to medical school, I trained in yoga. I trained yoga teacher, then in shiatsu. I learned Chinese medicine for three years, and when I did my internship and got my license, I came and did my master of Science in Chinese medicine and really focused very deeply on Chinese medicine, on acupuncture and herbs.

Then I studied classical homeopathy for many years. So I really studied integrative medicine in vertically, taking every field for a few years. And then by the age of 40 I realized, wow, I really did the big journey.

I went and did a residency and got my medical license in the United States. And through all these years I specialized in cancer. But I also was very deeply involved in meditation and healing, especially through Buddhist practice.

I spent 20 years, two months, a year in the mountains meditating and for ten years day. So all of this is comes together now that my one of my missions in my early 60s, my my third act is to share my knowledge, heal my heart and my decades of observations, some of it through my book, The Survival Paradox and through teaching.

And then as an entrepreneur inquisitive researcher, I developed some important preparation to do some more. Effective prospecting is the key from the nutraceutical.

It is 80 published papers, multiple studies. And I'm a research also in the galectin three. I've just got my second very large in the age grant for almost $2 million to research the effect of removal of galectin three in sepsis, which is so relevant to our topic today.

So that's a little bit about who I am and my background and, and my journey. And that's one of the things that I love about your work is we have, similar what seem like diverse interests, but they really all dovetail together around looking at both our perspectives, our minds, how our nervous system is functioning, what's happening socially, culturally, in terms of how this trickles down to what's going on.

Biochemistry. And then I love that you're also very rooted in the science and the research of it.

The Survival Paradox and Chronic Disease

In addition, and, one of the things that really made excited about talking today was reading your book, The Survival Paradox, and it touched on this, this bigger picture, this bigger perspective, how all of these come together in terms of what's happening in chronic health, what's happening in cancer, what's happening, and mass cell activation.

So why don't we jump in there? Because I know this has been a really foundational book and, one that if people haven't read, they should pick up because it's a paradigm shift.

Can you describe for people what the survival paradoxes? Of course. So the S11 paradox is a paradigm shift from the point of view that in integrative medicine, we recognized for some time that inflammation drives every chronic disease.

And in acute diseases, in medicine with Covid and the cytokine storm have recognized it. But inflammation is really not the cause. It's the expression what causes inflammation.

And then irregularities in inflammation and immune response is our survival drive. So the same thing that makes us stay here and stay alive and survive through multiple generation, the same drive is it drives.

It causes us to age quicker, to be sick, to be unhappy, to suffer. So when we look at this little bit deeper, when we say, what do we mean the survival, our survival response is so innate in us, in every cell in our body for, for, for endless times.

So if this is true, it has to be automated in the first automatic response that we can control is our autonomic nervous system response, our sympathetic response.

What do we do? We either fight which creates inflammation or we flight. We run away by hiding and escaping we create fibrosis. Both of them will lead eventually to dysfunction of the tissue, to organ failure into early death.

And every disease will see this mechanism. So when we recognize it, recognize wow, if we can tune in into our survival response and transform it, anything and everything is possible.

And the reason is because everything is changeable. So we have this sympathetic or automatic response which we know we all can get stressed and be and know our heart rate goes up.

And then we take a deep breath. We go out to nature, we meditate, we dance, we do whatever we want to do. We take a few deep breaths. We bring oxygen to the tissue.

The survival response, the survival crisis goes down and we can balance it. Although the more we are in a sympathetic mode, the more we are unable to do it and the effect goes up.

But we also have a biochemical response and the biochemical response starts in minutes. And this biochemical response is driven by a protein that is called galectin three, which I've been researching and made some of the most important discoveries that when we blockade, we can prevent and attenuate inflammation and fibrosis, the

basic drivers of every disease.

So I've done it by developing Victor, but motivated, respecting. And now I'm trying to do it by removing galectin three through therapeutic and for resists filtration of the plasma.

So this is the big picture. And I'll dive into Galatians three as soon. But this is extremely relevant for MCI because MCI is an inappropriate survival.

It definitely is. We know that mast cells and normal behavior should be to create inflammation appropriately. And then reregulate back down. And this role of the nervous system in mass activation, something we talking about again and again in the summit, because it's been underappreciated and under-recognized.

But mast cells line every nerve ending. They line all the nerve sheath. There's receptors for neurotransmitters and neurotrauma zones. Their muscles are releasing neurotransmitters or peptides.

There's that constant crosstalk with the nervous system. So whatever happening with the nervous system is simultaneously happening with the mast cells in that interface.

And that's what I did my master's research on was that that interface in that role and what was happening there. One of the stories I share with people that illustrates how powerful this is, is that one of my first mast cell symptoms I get when I'm triggered is I get hand swelling, and it'll happen in seconds, and I can trigger it by spiraling on stressful thoughts.

And then I can shift my nervous system into a parasympathetic state through the training I've done, and watch the inflammation drain out of my fingers.

Exactly. I mean, within two minutes. Wow. Exactly, exactly. So this is the sympathetic level, because when your blood vessels contract and expand. Yeah, that's thank you for sharing it.

I'm sure I assume you already shared it, but that's that's the story. So when we look at the survival response and we mentioned galectin three, which again I'll get to a little bit later.

Galectin three is in the upstream survival paradox protein. So a small change in galectin three will create a fountain of change in interleukin six. So for example, in our research in sepsis when animals get infected with sepsis then we see galectin three rising before interleukin six the main cytokine to start the chain.

Then then galectin three will go up a little bit. Interleukin six will go up a thousand fold compared to once or twice only doubling of galectin three.

And then you will you will have systemic damage. When we block lectin three we attenuate dramatically the il6, rise. And there is no damage to the kidneys.

There is a decrease of deaths from 60% to 20%. But even in ICU, when patients who were under systemic stress because of sepsis or because after cardiovascular surgery, no preexisting condition, it just come to the ICU for sepsis because they're hospitalized after bypass, because they have to go the level of galectin three at admission will determine who will die from sepsis and who is going to actually get acute kidney injury.

When a Covid patient comes into the E. R., regardless of the symptoms, the level of galectin three is the E. R. will determine later who is going to get into the ICU and is going to die.

So when we understand this, when they're saying, wow, there is this there's a sympathetic system that you were you you are connected enough to reverse.

And I'm so glad you started with this, because it's really one of my missions with this interview. And in my next interview is to really bring this home.

Okay. And then there is a biochemical. So if we look deeper at the survival paradox, from the point of view of the muscle activation, we have muscle activation on the physical level, on an emotional level, on a psychological event, on the mentally ill or in and for example, in the Buddhist tradition, it's the often talk about the body, the physical body, speech, the expression, the breath.

Like you said, when you can work with the breathing, the breath, the sound in the mind, the thought pattern, now the central nervous system changes with the muscle, occurring in the place that affects our mental function.

But they are occurring on the biochemical level already. So when we want to address, we want to address the we and we want to really address it mka on the level of the physical, on the level of our expression, how do we talk like a patient?

We say, oh, I can take a supplement. I always react the moment you say, I always react and you're into this moment, you're going to react. So that's the speech.

And the third thing that somebody's going to say, oh, I'm going to do fine. But inside they say, no way I'm going to get sick. So these are this is the work.

And I remember I had one extreme case of a patient that is almost 20 years ago that's such severe MCA. They had to go with the respirator everywhere. And they got to a place where instead of expecting to get triggered, they got it to a place where they became open in Non-Judgment and accepting everything.

And this allows them to go into like CVS pharmacy and walk in the perfume aisle and embrace the smell. And nothing would happen. Now, this is an extreme example of this transformation that you are describing.

So the idea is that this comes and you change it, but there it is. It can we change our self so it doesn't come. So that's a meditative process. That's what what I teach when I teach a what I call open heart medicine, how we connect with our heart and not with our head.

And then we can avoid it. And again, we're jumping to deep ground. But I just want to give a taste because in the head we always judge. We like it, we don't like it.

It's going, oh, it's going to be terrible. It's going to be okay in the heart.

Mast Cell Activation and Nervous System Links

We never judge. The heart takes any blood. It comes in, connects with the universe and gives out blood without judgment. So the moment we we function from our heart and we all are capable of functioning from our heart, and we all are capable of getting lost in our head, right?

I you do it, you do it. Everybody does it. So really what MCA patients have to know? Do you have a choice? You really have a choice. I just was treating somebody with severe MCA, well, well-educated.

And they came with a certain symptom, out of many symptoms. But really life is nonfunctional. And they came for therapeutic references. And I knew that they have an issue in the sense that the reservoir of I have to tweak.

But they were so anxious about it, they said they couldn't handle it. So they came to the clinic, they flew in and they told this person, no, I heard you don't want to do this.

They said no. And anyway, they suddenly decided to really do it. And while I was doing these, certain symptoms had for eight years disappeared. But they did certain small pain from the injection that I told them in advance.

100% of the people are going to get this. It was amazing to see how they were catching this pain and starting that spiral down of the symptom instead of saying, oh my God, my symptoms of eight years is gone, you know?

But I caught them with we can with creating enough space and just letting them relax and, and and then the first offering this treatment, they were so stressed it was a little bit hard for them.

They left two days later. They were just they were surrounded by light. You could see the happiness, the cellular happiness, you know, now I don't need less than 48 hours.

You know, it's something we need a little bit more. But this is the this is the ability of the patient to recuperate. And it requires it takes two to tango.

It takes the patient. And for the health provider, it takes the health provider. You know, we buy into the diagnosis. We buy into an expectation. We've been buying to what we're going to do.

And by doing this we limit the possibilities. So when I see a patient for the first time, I have no preconceived ideas. I ask them to write free style.

What's important for them, not yeah, they feel the question is, but it's really what's important for them. And then if I take the pulses when we them now we zoom in, we know we develop the scale.

But in person it's a little bit better. There is no preconceived idea. So you let the story come, you let the space for things to change. So really, the more we have space, the less we have congestion, the less we have biofilm, the less we have areas which are which have no oxygen with the less we have a stress response in the body.

So that's an example a little bit more of the survival paradox specifically for Amica. And the beauty of this, I'm describing this because there are solutions.

There are really solutions. And I think in this sense, you know, what are you doing with the summit and the fig that you are bringing the nervous system and our thinking process with respect, that certain people are very allergic and they are biochemical triggered hundred times faster than other people.

And we have to accept the difficulty. We don't have to doubt it. It's very important. It's part of acceptance. But we have to see where is the possibility and we have to recognize it again in this summit.

I don't have time to talk about it, but for decades I've been drawing these diagrams about multigenerational healing and then epigenetic games and oh my God, I'm not crazy anymore.

You know the science behind what what what I'm saying. And we move in behind what Chinese medicine said a million years ago, it got lost. So the experience we have now is a result of multiple experiences from our past during this life.

That's the scar from our ancestors on a genetic level and on an epigenetic level. In my book, I describe my my severe, intense chest pain since I was a child.

I'm named after my grandfather, Isaac. And so describing the chapter about healing the scars of survival, which is really very similar to the topic, how I'm named after my grandfather, who died at age 50 in Israel.

He was a Holocaust survivor. And when my grandmother died almost 50 years later on the gravesite, my mother finally said, you know, ten out of his 12 siblings were killed by Hitler.

Nobody talked about it. So he's tormented in his stomach and got stomach cancer at age 50. And I knew this pain is not mine. And when I healed my pain through meditation and through letting go a few years ago, I have no more pain.

I can pressures, I mean, almost 60 years later. It's insane. But my mother was able to suddenly watch movies about the Holocaust she couldn't watch before because the healing went back to him, because his energy is affecting me, his epigenetic is affecting me, and this effect affected here.

So this is multi-generational healing. That's all ultimate capacity. And the reason why I'm telling this story, and the reason why this book is there is a paradigm shift, is not everybody is going to be a miracle, but anyone can be a miracle because we always have the ability to change.

In your story that you're told is a great example of this. So you really you really opened with the ultimate solution. But the road to get there are many you and I know very well.

And the key is to find what what works. I find the exact same nervous system programs, the exact same, spiritual practices don't work for everybody. But define what does.

And it's really about feeling deeply safe. And a big part of my healing has been to stay off the news. And because I get stressed by it, and I'm an extreme empath, and I find that many people dealing with mass activation or empaths and we feel everything, and we have to really have discernment about what we're going to allow in, what we're going to allow affect us.

And even those beliefs. So when I was early in figuring out what was going on with my chronic illness, I would be in these patient groups where everybody was spiraling downward mental.

So I had to pull myself out of that, and I always held on to that. I could heal, that I knew I could completely heal. I didn't know how, but I knew it could happen.

And every time I hit a roadblock and I'd have meltdowns and I'd give up, and then I'd get up again the next morning and go, I know this is possible. And to keep going.

And for people who don't know my story, but I just want to share that I was in horrific chronic pain and in level ten pain. I was bedridden for periods of time.

I could barely walk. It's not like I had a mild case of mass cell activation, and it took me time to hone these things that you're talking about. But they do work, and now they're part of my daily practice.

I sit in nature every day and connect with what's bigger than me, connect with the energy. And, and there's a, a huge healing that happens just in that.

Totally. And I love what you're talking about with the generational pieces as well. And research is validating what you're saying, that with these generational traumas, we have these epigenetic genetic expression changes, we have these mitochondrial changes, but we can shift that.

And there's a saying also that we can heal seven generations back and seven missions forward. Right. So it's really important to realize. Yeah. So definitely and actually we're not affected only by the past.

Galectin-3, Inflammation, and Fibrosis

We also are affected by the future, believe it or not, because time goes back and forth and that's the value. So as long as we are self focused on ourselves now, we we're still staying in the higher realms.

And I want to go into practicality. As long as we are self focused on our own drama and our own symptoms, then we are not open to this multi multi-generational effects.

That and they are not. And we also they are not, they don't become resource for us. And as long we realize everybody has their own story, we're all in the same boat.

We all want to be happy, we all want to feel wealth. So that's important. So the meditative process and and then I didn't plan on jumping so quickly. So the meditative process is first not to hold to things that are not good for us.

So if news is not good for you, you go to, to a place which is spacious. Oh, when you have your thinking process,

you slow it down enough so you can recognize it.

Get between the thoughts. The place when there is no activity. Just like the gap between our breath, which is easier to recognize. Just a gap between the self contracting and releasing.

You know, each cell is close to a million reaction a second. But the ultimate healing comes when we realize that in the activity, in listening to the news, you can still stay in the same place.

But it takes a lot of training and it's not something that is easy to come by. But what you're doing, you are avoiding the stressors and is you know, I know everyone listening knows Covid hasn't helped to the health it the political environment haven't helped you.

The lack of trust with the fake news, the split in the Covid between yes vaccine and no vaccine. And you know, and so they've been all these divisiveness is creating lack of trust.

And when there is no trust there is no safety. You know, way often you have a trauma in life. Let's say something happened to you in your in your career or, or or somebody betrayed you.

And the tendency is not to trust. And it's very, very, very limiting. It's constricting. So the first step is you have to cut down the stimulus. Now, just like you said, I don't listen to the news.

And then the system starts detoxifying the backlog. This one example, what are we doing there? For reasons people ask if my liver system is not working well, how therapeutic of this can help?

Well, this with the right supplement with the right healing. I am creating space. We are clearing the backlog and now you have a chance because your body can handle ongoing toxicity if you are.

If you are improving efficiency. But if we have so much backlog, sometimes multi-generational, sometimes toxicity, it's an issue. So Covid is adding to it.

The Covid cytokine storm, the ongoing inflammation. This is an unregulated survival response. An interesting galectin three which by the way I, I haven't defined it, but I will in a moment.

This survival protein. Well the spike protein of the Covid is practically identical to galectin three because the coronavirus also wants to survive, just like we want to survive.

So if we create inflammation around the struggle with it is inflammation, it is going to really kill us. So for me, cytokine storm in this approach in galectin three, it's almost 30 years.

So in one level you know what my my working my approach is coming to to the frontline because it's so recognized to a point where I get grants from the NIH was the focus is the relationship between galectin three cytokines and kidney failure in sepsis.

You know, because it's the thing that kills more people than anyone. So in this sense, I think the MCA is a reflection. So there is MCA on one end and then it releases so much Sibo, so much abnormality in the gut. Why?

Because we don't respect the microbiome, which is another community that we have to feel safe and it's to be mutual nourishment. And then we got all the pesticides and heavy metals in mycotoxins that my mycotoxins are produced as part of the survival of yeast.

You know, fungus and, and pesticides are produced to kill something. And when they come in, they change the membrane environment. You know, a lot of my work is about extracellular intracellular receptors.

I kind of like see them in my head, you know, feel them. And how do we shift? So yeah, we got to address one thing or I overlooked it also. We all know it.

I overlooked pesticides I mean I'm saying it is not I wasn't aware but we are all brainwashed to accept it a little bit of pesticides. It's okay if you eat a little bit of poison.

It's acceptable. Well, I don't think so. You know? And so we have this enormous amount of pesticides being put into the ground, 1 pound a year of glyphosate per person.

United States. And it bio accumulates and it affects our gut lining and our microbiome, and it changes the permeability of the gut and systemic. So mast cell is activated by galectin to.

So when it changes the gut and it creates systemic inflammation and inappropriate macrophage response. The equivalent in the brain is activation of microglia in fibrosis.

So if we look at Alzheimer there is 10 to 20 times times concentration of galectin three in the Alzheimer plaque. Amyloid plaque in the amyloid plaque gets worse.

More galectin three comes in. So it's bad that we started today to talk with the fibrotic part. So in this sense it's it's a really important topic. And if there's a chance I want to a little bit explain what is the galectin three.

So people know I definitely let's go there next because we're talking about how these different expressions, we're talking about Covid complications, long Covid, we're talking about sepsis, we're talking about the plaques and Alzheimer's and other neurodegeneration.

And we're talking about mass activation. These are just different expressions of the same underlying problems completely. And it's how it's showing up for people differently.

So let's talk about what is the galectin three and what is it role in mast cell activation. So galectin three is the carbohydrate binding protein. It's the protein that has his and his structure like the droid like this where carbohydrate attach.

So it attaches to different ligands to inflammatory ligands to hyper viscosity like going to sticky ligand stick cells together to ligands that affect the immune system to growth factors, to to repair molecules.

And it's expressed within minutes when we have an injury in the body, when we have stress in the body, physical, emotional, mental, and it goes to the area of trouble and it delivers these compounds that produce an inflammatory response, because that's how the body repairs.

I mean, a muscle response is this is a is a danger response. We know we got to react. And a little bit of galectin three creates an ongoing response. It's like we turn on the alarm and we never turn it off.

So we need to touch to a ligands ligand. One ligand attaches to the other. So first we need galectin three gets activated. It produces a pentameter of five galectin three.

They then attach to each other and create great biochemically structurally a lattice formation a coating. So Gallagher three is the skeleton of the biofilm.

It is the skeleton of the autoscaler. What to plug it to build the micro environment where cancer can grow, where there's not enough oxygen. It also builds the area where chemicals can hide because they housing metals bind to to oxidize lipids.

Mycotoxins are very greasy. They love. Where do we get mycotoxins then? Don't happen in the air. Is the beautiful sun. They've been in dry, damp, unventilated areas which this lattice formation creates.

Does this areas of hiding these when things cook up it can be cancer, can be autoimmunity, it can be infections. It whenever they stress, they wake up from the reservoir.

And it can be an inappropriate a must mast cell response because this area is always under survivors to it. So whenever galectin three in the in the extracellular space it activates macrophage.

It also blocks insulin receptors. The cell goes into a survival mode, a Ampk doesn't work anymore, M2 one gets activated and the cell is a sensitive no oxygen hypoxia inducing factor goes up and it activates PDK.

However, kinase, which blocks the entrance of pyruvate into the mitochondria, you get mitochondrial dysfunction, the basis of every disease. So this is an extra cellular effect.

And this happens on a cellular level. This happens on a tissue level. And this happened on an organ level and systemic level. That's why with all the different understanding is the first step of blocking galectin three with modified is to respect and respect the.

So it is a foundational step for MCA it whatever dose you can tolerate. Ideally you go up to 15g a day, but this is what allows every treatment to work better. Why?

Because we are exposing the tissue. We are allowing oxygen to come. We are changing the metabolism. So for example, you know, I started this work started with cancer because they saw this.

So when when we look, in animal models, when there's prostate cancer and we modify it to prevent metastasis, we finally published a multicenter drive on biochemical relapse of prostate cancer with 80% response.

It slowed or stopped the cancer growth after the prostate was removed. But the interesting, the people who responded with studied for another year and close to 100% of them headed the response stay for a whole year.

So it's not a more effective perspective to kill the cancer it allowed the body to take care of. So, for example, now we have doctors who are well, I know who are giving a peck this salt to every Lyme patient to prevent the hook.

So my response why? Because it can bind to heavy metals.

Modified Citrus Pectin and Practical Use

It can bind to different toxins, but it regulates the abnormal inflammatory response with the is like you know, it's like siblings. The inflammatory muscle activation that goes side by side.

And and it is in this sense, that's why it's a it's a foundational product. So we got to address the differences that why we see in studies blocking electrons.

We help with kidney disease, with liver disease, with heart disease, with Alzheimer, with never inflammation, with cancers, with immunity, with autoimmunity. Why?

Because like you said, it's a foundational process that affects everything. And that's why the survival paradox is a paradigm shift. And I want to share with people who followed me for a while.

And I know I told you this already, that initially I was worried that the modified citrus pectin was going to be too high histamine because of it coming from citrus.

So I had shied away from it for quite some time. And then I got to talk with you, and we went through the information and I said, okay, I'm going to try it.

And so I try everything on myself. And I noticed inflammation coming down with it, even with some small doses. So I thought that was exciting. And then I started bringing in my protocols when we were ready for the biofilm stage.

And we've gotten some stability where I felt like they could handle the exposure of the immune system to the toxins or the metals or infection load that was hiding behind these lattices, and we're actually seeing really good results

with it.

So I have to walk back my early concerns because I'm always conservative and I'm always skeptical. Assist me. Yeah. But I just wanted to share that and share what we're seeing.

And we've seen, some good results with it and inflammatory levels. We've seen a number of people who there's, there's a lot of overlap and mold toxicity and cancer.

And we've seen some really good results with it in cancer. And I know a lot of your studies are on that. And for the super sensitive people we've found just bringing in, it's the right timing when we bring it in and we start just very small.

So one mistake people make who are very sensitive is they start with a whole scoop and it's too much. And then they say, oh, I can't do that. But if we start with the sprinkles, we can build it up and let the body clear some of these things slowly, instead of it just being rush hitting their system.

Yeah, definitely. It's the right approach. You know, when you take motivated, respecting. So it's not really it's made from the so the albedo from the white part inside the say it's really it's a carbohydrate.

It doesn't have the different like it doesn't affect the cytochrome P450. It doesn't have the the thing that people are worried with citrus, it doesn't have the thing.

But we we didn't do enough of an education that the focus was on research. So but because of the page it's buffered with sodium and potassium. More potassium than sodium.

So often the digestive not often. Usually the digestive discomfort is not because of the victim it's in. Again, it's a specialized spectrum. It's not regular pectin won't do it of course.

It's modified to a very low molecular weight specific structure. We showed it gets absorbed into the into the bloodstream. But it's really the electrolyte that causes the digestion to kind of get used to it.

Just like if we drink salty water, you know, or you know, we, you know, we live between our stools. So as we get used to the electrolyte part, within a few days it will go away.

And that's a great example for someone with MQA. Not to expect that because they have one symptom that all the other symptoms are going to come. That's that's another example.

But yeah, each one with their own, with their own doses. Some people have to start slow. It's always good to start slow with like, you know, one fourth of a scoop if you're sensitive.

Whenever we scoop, but usually within a week or two you can build up to the full dose. And but some people will find out five five grams a day only because they're sensitive does what they need.

And they really don't don't don't need most the usual dose. You see an effect clinical effect when you take the the the full dose. And of course it's you know, and with your protocols we have to support that.

The system in the body we have to do other things. So but I think the idea is of the beauty of this. The wisdom of, of, of addressing galectin three is that we are doing it.

We are exposing, we are binding and cleaning. And in the same time we are regulating and attenuating, taking down the phase of the inappropriate, inflammatory, response.

And yeah, it's really surprising. I mean, some people, you know, it's amazing they take the first dose and say, well, I mean, like they will describe it's life changing because the first time they can bind and they can take care of the inflammation in the same time, usually when because what is the image when you start opening the drawer?

Is it like opening all the drawers in the kitchen, putting everything in this or the ground on the sink countertop? It's a mess. But here is we are opening.

It's being clean in the same time. And that's really the beauty. I mean, you touched on something that's really important, and I just want to make sure that we dive into it a little bit more so people understand that this doesn't happen with just any respect.

And it's really about the molecular size. So this is where we're talking about modified citrus pectin right. You just explain a little bit more of that and why you want to grab just any citrus pectin.

So citrus picking is a very low, a very large chain of a certain sugar called electronic seed. And it is terrified, which means it's not charged. And it's a it's a good binder of cholesterol in the digestive system.

It can bind some lipid soluble toxins, for example, in my product life or detox you will see respect. It's not modified. It's high molecular, highly high is terrified for fat soluble toxins.

Different purpose. We modify the victim specifically to a very low molecular weight like, you know, 1/20 of the size, very specific. So if pectin can be 2 or 300 kilo daltons, it's between 5 and 12 kilo, that any specific structure that allows it to bind to heavy metals grades charge.

It also has the high component of remnant electron and to which is the immune component in mistletoe. So it also regulates and helps the immune system.

So for example, patients to go on immunotherapy with Pd-l1 inhibitors if their galectin three levels are high, they will not respond to immunotherapy.

So it has this regulatory effect, this chelating effect. And mainly it breaks down the galectin three lattices. So regular pectin doesn't do it. The one issue is it modified it to speak to the generic name.

So I with a lot of broad science over the decades of my work. So all the published paper, this 80 papers, the only MCP commercially available is pick the solids.

It's specific. It's different because anybody can take a regular pectin and say it's modified because if you extract something from the off, the modified the peel.

So it's really the specific one. So thank you for I kind of forget to explain this, but it's a very specific preparation that does the trick. And we'll have a link to the specific type that you're talking about on our Summit resources page. So people can find it.

They can go right there. They don't have to try to sort through all the options on the market so they can find that at mass. So 360 that comes summit and you'll get all your resources.

And we'll link to what you're talking about. And we'll have your book link there too. Right. And I will also all the participant, all the register will get a select chapters of the book.

And in the chapter on what effects it respective in the table, how to use it. So yeah. Because in my book I don't give recipes, in the book I change the way of thinking and then go through every disease and then see how you change it.

But now we've got 80 pages of protocols. Once you go through the process and the different understanding, then there's a lot of information. So of course it will be shared in the summit.

I will share it because the nice thing is there are practical solutions. Yeah, there are definitely. And I know you have some other things you're noticing that are effective and muscle activation.

And I love to hear what people are seeing day in and day out in a clinic that's working, because we're all coming from these different angles, and we have to keep expanding what we're doing and learning from each other.

So I'd love to hear from you and learn from you what what else you're seeing working for people. So I think there is a multi-faceted approach, but I think we get to and you mentioned Beth a moment ago, we got to address the micro toxin pesticides, heavy metals and how they affect.

So I, I was really keen on you became my project about two years ago. And what the other project is, you can see. And so I developed a product called glide for detox.

And the idea is glide for detox is that we are just bombarded with glyphosate.

Detox, Glyphosate, and Brain Inflammation

In glyphosate, it's not only the direct toxicity, but life of the formulation includes a lot of toxic stuff in the formulation, which is not regulated in most of the glyphosate spraying is in in commercial agriculture, but in flat areas, glyphosate can can travel ten, 15, 20 miles.

It doesn't matter if you are in an organic field, the glyphosate will destabilize your gut lining, so it will create leaky gut and autoimmunity. It will, as a direct relationship with chronic kidney disease, the most common disease in all the elderly aged 17%.

And it produces inflammation. It's like life, and it is very similar to glycine, which is a never protecting amino acid, the smallest amino acid. And it's an inhibitory, relaxing amino acid.

You get the glyphosate, you get the excitatory nerve damaging. And when something is excitatory, you can imagine what it does for mka it helps you to worry, you know, so and then it delivers certain heavy metals like aluminum into the brain.

And according to to some, some researcher like Stephanie said, she says that it's actually exchanges with glycine in the connective tissue, which makes sense.

Certain antibiotic it affects the gut will create weakness of connective tissue. So the idea is I created this this product, which I will talk maybe in the second interview.

They days it. How do you address a pesticide glyphosate micro toxin together with the unique ability of specter. So to remove heavy metals, which we have published extensively on lead on mercury and arsenic and what we are seeing that it's really making a difference, like even this weaker.

So if you're patient, it just came for the first visit after a basic consultation and using the pictures or with the like for detox. And wow, you know, people are getting their life back because if you we can regulate the inflammation with the gut level and start decreasing the load of pesticides.

We are pulling people away from the survivors. And because of the narrow inflammation that is driven by galectin three, what galectin three does, it disrupts the blood brain barrier.

It creates a blood brain barrier permeability. So more inflammatory compounds going through the brain, it activates specifically the microglia. So we go into this inflammation mode which drives Alzheimer's and Parkinson's disease.

But because of this and because of not getting enough oxygen, often because the metabolism is different, we get micro events of lack of oxygen coming to the brain.

And when you have a perfusion injury reperfusion, which happens with stroke, of course with Tia. But we have many events all the time. You know what happened in galectin three?

We trigger the post perfusion injury, inflammation and fibrosis, meaning there's a brain damage caused after a lack of oxygen is driven by galectin three is a repair mechanism and study just published a month ago or two months.

When you give what defines introspecting in studies in tissue study. What effect it was making it really reverse and prevented damage. So we got to a and of course gut brain connection.

You know, it's like the big thing, but it's the basis of the stomach, spleen, digestive school of thought of Chinese medicine for millennia, where when we had a study group for Chinese medicine in the 90s, we we determined Alzheimer and and dementia to be the next epidemic of the 21st century based on the weakness of our community, of our safety, just like you, that just just like we discussed about it.

So we got to address the pesticide spell and and we got to to move from a suit from a, from a survival mode with some like lifestyle sleep staying away from electronics and also we have to support circulation.

We got to have normal circulation. So exercise is is big but also herbs for different compounds. It helps circulation. And we can talk next time a little bit more about the detail.

So to recap we've covered so much. To recap, some people have some clunky action steps. We have to start shifting the paradigm of how we're viewing our chronic illness, whatever it is to this healing mode, this healing paradigm, and out of this survival paradox.

And we do that with our mindset. We do that with the the ways that we're thinking with our feelings. We do that. We can do that with energy work with meditation, spiritual practices.

And we have to create this space between our thoughts. We we need to detox the metals, the micro toxins. We need to work on the pathogens. And we have to address this galectin three layer.

It's going on. And we have to really be mindful of the life of Saint and protect our guts, because we're living in this world where we're probably not going to be entirely glyphosate free, even though we're eating organic and being careful that we live in this world where we're going to have to take care of ourselves in these particular ways longer term.

But what I also hear is a lot of hope that people can turn. These things are absolutely cover up. Absolutely. I mean, absolutely. I mean, m'kay, patient can be turned around.

So there is a difference between trying to suppress the reaction by taking antihistamine and transforming the reaction moving from reactivity, which is a survival response to responsiveness.

How do we do it? Why can we do it? Because we are built to do it. What do I mean? Every cell in our body. And it's a good place to kind of give a bigger picture.

Every cell in our body wants to survive, so it takes nourishment and it let go of toxins, but it also recognizes it's part of a bigger community.

Healing Paradigm and Closing Remarks

So if we have 50 trillion cells in our body rounding it, each cell has one up to 1 million reactions. The second the thing is, we are alive is a miracle.

50 trillion cells with all of these reactions, putting out what they don't want and taking what they want, the only organ in the body that takes what everybody doesn't want.

Connect with the universe, and then nourishes the whole body with no discrimination. There are all. There is a rigid outer. It is the heart. So when we move and connect with our heart, everything is possible.

Now we are built physiologically to do this, otherwise we won't be alive. And who does the heart nourish? First is part of nourishing others. And in order to nourish others, it nourishes itself through the coronary arteries.

So self-love, being easy with ourselves, loving ourselves is part of loving others. The heart doesn't nourish itself until it finishes its work, the only organ in the body with us.

And that's why the medicine is in the heart. And we look at heart failure. The worst heart failure is fibrotic heart failure. And who drive this heart failure?

Galectin three. So we have the physical solution of dissolving this separation. And we have the bigger picture as you described and all these together.

If we change it, MSI is no place to exist. There's no right to exist, shouldn't have been there to begin with. It's just our life consequences, our toxins of all levels, our multi-generational effect created this response.

So we address it biochemically. Sometimes we have to suppress it. In the beginning, we start changing it with breaking this, this, this, did this lattice formation.

And we connect. And when we connect and we feel safe, there's no I'm saying it's impossible to atoms. Thank you so much for all of your generous sharing and we will have the products linked on on the summit resources page.

And if people want to continue to work on this, what we've been talking about in terms of the paradigm shift, not I am nervous system. I know you have some programs.

We have one a nervous system program for people. There's lots of resources to find something and to get going with it. So thank you again. I can't wait for our next interview.

Thank you so much for having me.