Introduction and Dr. Eliaz's Background

Hello. Welcome back to the Heal, Thyroid and Reverse Hashimoto's summit. It is Dr. Jen. So I am so excited today to have an expert in what we're going to talk about healing after thyroid cancer and integrative approach.

Dr. Isaac Eliaz, he is an expert in his field. He has an amazing book, new book that's out that we will talk a little bit about. And he treats patients from all over for cancer and for all other things.

He is the leading expert in the field of integrative medicine and what he specializes in, not only cancer, but detoxification, immunity and complex conditions.

Dr. Eliaz welcome so much. Tell us a little bit more about you and how you went from conventional medicine to a more integrative TCM approach. Right. So my journey is a little bit different.

I did. I didn't go from conventional. I started the journey knowing that I will not do conventional medicine. So it started as age 15 when I lived in South Korea.

I'm a native of Israel and I learned taekwondo doing yoga and became a yoga teacher. And so when I went to medical school in Israel, it's seven years I knew that I'm going to do alternative holistic medicine, which it wasn't very clear then early eighties, what really it means.

So as I went through medical school, I became more and more training. In yoga was the yoga teacher. I got training shiatsu. I got trained in Chinese medicine for three years while going to medical school.

So when they got my medical license, I did an internship. Then I came to the United States. I got my master of science in Chinese medicine, and I studied vertically, classical homeopathy and in nutritional medicine and into this I integrated the meditation practice.

It really started in my teens. And then when I came to the States, I got deeply involved in meditation, and for 20 years would go to the mountains for one, two to 1 to 3 months a year to meditate.

And for ten years they did have day meditation, everyday work. So all of this culminated in this simplified concept, The Survival of Paradox, which is the name of my book, which I finally wrote in my early sixties.

It expresses this very basic phenomena. So I write tweet, I treat cancer. I tweet how to to heal diseases. I have a multi-dimensional, esoteric background, but I'm also a bona fide researcher, which is very large.

And I grant and I study specifically the role of removal of Galectin three, the key survival protein through a therapeutic of a resource. And our focus is sepsis actually, and kidney injury and, but there are other roles for it.

So yeah, I mean, I take different pathways and in this sense the thyroid becomes very relevant. As you and I discussed before the interview, it's so tempting to look at the thyroid as an isolated organism, isolated event.

It's often unfortunately done in endocrinology without really understanding what is the meaning of our metabolism, why and what is the role of the thyroid in regulating our moment to moment metabolism and what effect it and why would the thyroid work harder and why would the thyroid slow down?

Is the thyroid slowing down because something is wrong or it's not slowing down because it's trying to help us? You know, the thyroid is really a regulator.

It's really like the the the canary in the mine. And that's why you see thyroid, right. So prevalent. I mean, really, it's

it's really endemic. Everybody is on thyroid medications and you see Hashimoto's for example, so, so, so, so prevalent.

So when we, when we start to see the thyroid in this holistic approach is something that regulates our life, then suddenly there are different ways of understanding the thyroid, of treating the thyroid, of balancing other elements that relate to the thyroid.

And so in this sense, it's a it's a great topic. Yes, absolutely. I love how you said that. You know, it does regulate everything and we can't just look at one number some time or a test age.

We have to look at the whole picture. We have to look at, you know, are you stressed out? Why is your body stressed out? And it's funny, I worked in the emergency room last night.

I had a s h was a little bit elevated.

The Survival Paradox and Thyroid Regulation

And I'm like, you know, are you under stress? How is the rest of your body? And she didn't think she was under stress. And she had had this month long hospital stay a few months ago.

And I'm like, your body is under a hole right now. So I think we as patients even sometimes can forget that we are very complex. We are not just one organ, one specialty.

And I love that you were the one in your medical school class that was doing all these other things. And were your colleagues I mean, do they look back now and they're like, wow, I wish I would have done, you know, classes with you in meditation or do they still not get it?

No, no. Some of them actually I used to teach that, too, and some of them would come and learn. And we had an unusual class. It was Tel Aviv Medical School and a lot of great people, but very alternative group a musician mathematicians.

So quite a few of them were studying alternative medicine and quite a few of them got involved in complementary medicine. It was really a certain years.

It kind of drove alternative medicine, Israel into the future all the way to now, you know, like 30 or whatever, 40 or 40 years later, actually, who gosh, time is going by.

Yes. So definitely. But it's it's these were times when really there was very little information and there's very little information available. It's hard to find valuable information.

But on the other hand, whatever is available, you really study vertically, really studied. Did you really take in pain the benefit when you are flooded with so much information, you don't know what to hold to, what is real, what is not real.

So all of this affects us. But yes, it was it was quite it was quite it was quite a journey. It's still a journey. And we just have to remind ourselves that every patient is amazing.

Every patient is an amazing story. Right. And the thyroid is one place where we can regulate ourselves. You know, you asked if we so in this sense, maybe we should touch quickly on the survival paradox, because then they can take interest in thyroid.

No, they think about it. So my book is Survivor Paradox really introduces a new paradigm. And the paradigm is that what makes us survive is what actually makes us sick.

And shortens our life. And stress is an example of a survival response. And because it's so innate in us, it's built in

us. It it gets triggered within a fraction of a second.

So it gets triggered through the sympathetic nervous system by either fighting, which equates to inflammation, which is not a cause, it's an outcome, or to hiding in isolation and which great to to, to fight process with creating a shield about around us, which very much can drive autoimmune diseases.

But I'm different in the body. I'm not feeling safe. I'm going to hide and I'm going to attack because that's really the definition of. So the sympathetic nervous system is easier to change policies, whether you take a deep breath, relax, you take a walk in nature, you meditate, you dance.

Whatever works for you. The biochemical system has special proteins called alarm proteins. The key one galectin three. I've been researching for almost 30 years and once it turns on it doesn't turn off so much so high.

Galectin three, for example, is correlated to thyroid cancer. So once the Galectin three gets triggered, it then will will cause inflammation, it will cause fibrosis, it will cause immune dysregulation.

And in this sense, blocking it with more effective prospecting is the simplest way, but also, as you mentioned, by changing our life. So with understanding this, we look at the thyroid and the thyroid is our metabolic gauger.

So it's our metabolic data from in the hormonal point of view. So it's not as fast as a sympathetic system and it may not respond in with respond in a fraction of a second is not as fast mainly as Galectin three may be as it will respond within a minute or 30 seconds and a few minutes.

I've demonstrated it in my research, but it will trigger the whole hormonal system for my metabolic point of view. So for me, never home on that point of view, we have never we have never transmitted from the brain affecting our system, right?

We live to age and then cortisol goes up very, very quickly. And then we live we live adrenaline hormones that are part of a sympathetic system. It's kind of like and it's interesting if we look at adrenaline, right?

It's interesting. There's power that is in the brain that is but it independent of the adrenal, it can start right away. So the thyroid in this sense is part of our middle axis.

So it's sexual. So in the pituitary, what stimulates our sex hormone, then our thyroid would give us the vitality. The energy is that ability to reproduce and would gives us the ability to regulate.

Metabolically is in the same area very interesting. So it affects our body long what we call the midline the very basic line of our existence from an industry point of view, every philosophy, every ancient medical system looks at it.

And then we've got this could be thyroid. We just have to, you know, to aim for it. I'm not a single, but it's in the middle. And then we got to adrenal the back. Interesting.

Two of them balancing because of the different qualities, energetic qualities they have. So when we understand it, we see that thyroid. I mean, my, the way I look at it, is it a day to day, moment to moment, metabolic regulator that will be affected by long term signaling our adrenal our cortisol response, our mineral cortical response?

They relate more to what we call intelligence and our capacity to our genetic tendencies or to our epigenetic tendencies to fear trauma. And they really these they are what gives us the drive, the power, the capacity, the endurance.

And within it, we got a choice how we regulate it on a moment to moment. And the thyroid. The thyroid is very wise in that it works in the moment, but it's watching all the time.

What's happening in the body. So for example, if we go into the field of oncology in general and not that specific for the thyroid, we will notice it.

Cancer patients, if their cancer advances, the thyroid will slow down, the TSA will go up and the natural tendency is to treat it. But when the thyroid slows down, metabolism slows down.

If we got a mile to walk in, the mile is really what we have left in our life. If we run it well, this is going to end very quickly. If we're going to slow down, we will survive for a longer period of time.

So the body will slow its metabolism because it knows that it has been taken over by an entity, a tumor. It has its own autonomic system that the body cannot control anymore.

And the only choice it has is to shut down the metabolism for the whole body. And in this case, we have to be very careful about correcting tired thyroid without seeing why.

And often you will give you know, I remember from my history patients, no matter how much thyroid medication you give them to be 20, 30, 40, it's screaming, okay, I like this.

I try to slow down. To slow down, slow down. So in this sense, it's important to understand the regulatory both and then to understand that the thyroid of and will want to work harder because the adrenals or the adrenals are overworking and the thyroid will slow down to downregulate.

So the this ongoing relationship between the thyroid, our day to day activity, to our potential to our adrenal, what we call intended between between the ministerial fire and the imperial fire, the metabolism that really drives the whole life in the moment to moment, both of them will relate to mitochondrial function.

Both of them will relate to mitochondrial function, the thyroid brain, and more in a more immediate moment to moment basis, the adrenal more in a capacity, more in the basic movement.

Now, naturally, if the thyroid is so sensitive, it will be heavily influenced by outer consequences, like stress, like having too much on our plate, like not being able to be direct, not being able to be direct.

And we have to go around, you know, and we see it often, you know, now finally changing. There's a long way to go. But women in the marketplace, you know, in the workplace that have been discriminated, they can talk to their boss in the same way they have to go around.

So this not being able to be direct, the energy in the body goes around. And what happened, the thyroid has to push so the energy makes it all the way up.

And so as a result you get burnt out and you get so much Hashimoto's for example. So it's much more prevalent in women and so this is in an exemplar. So when we understand the thyroid in this way, then wow, suddenly the thyroid is this magical organ.

It's not just something to 43, you know, let's let's give you something to read. It's much more than this. I love it. So beautiful. Dr. Eliaz. Thank you for sharing.

And like you said, the busyness and women, women are affected with thyroid problems so much more common than than males. And part of this is we are kind of burning the candle at both ends.

A lot of the women I see, most of my thyroid patients, they're women in their thirties and they have that family, that career, they want it all. And this makes total sense with how you described it and with relation to the mitochondria too.

So let's talk about cancer a little bit. And as an integrative physician also is a traditional Chinese medicine doctor, what is your view on the role of thyroid in health and disease?

So we really for me, the thyroid is really we talked about the regular theory, a concept. So we really everything how do we maintain a healthy thyroid and what makes the thyroid not healthy?

And so when we talked about this direct flow, it's almost like the blood coming back into the heart. It's almost like we put energy out and we want to get energy back.

So in this sense, the thyroid, if we look at the thyroid metabolism, is already smart, that it is it produces T4, which is inactive hormones and then T4 needs to be converted to T3 and it's converted in the liver mainly, but also in the kidneys, also in the microbiome, the gut.

Thyroid Hormones, Cancer, and T3/T4 Balance

So in this sense, if we have an issue with our liver, if our liver is big, as if it's not detoxifying, well, if it is if it's overworking, we will not have a good conversion of T4 2 to 3 and one of the most common mistakes is to just try to treat people just with synthroid.

And it's interesting in the US, in many countries it's already done and said only synthroid is available. In this country we see an ongoing a consistent attempt to wipe out that 43 combinations.

I mean, you know, I mean it used to be native thyroid, it's gone even NPY thyroid which is less less by Indians and then a thyroid, much less side effect is how to get only certain pharmacies carried.

And I mean we do have a T3, we have slow release D3, but when we give the body a T 43 combination, we are really mimicking what's happening in the body they see full in the history of the body.

When we give a cancer patient T4, we are telling them your liver will know when to convert right? Well, your liver, the cancer patient liver has to also get rid of chemotherapy and radiation therapy and tumor pieces which are made hopefully shrinking of the treatment or tumors who are producing hormonal effects and tweaking and changing the body.

And it all comes to this amazing over text over relied on organ makes no sense to have a cancer patient you know rely on the conversion. So that's one part I'll get to the toxicity in a moment.

So that's one part that really has to be well understood. But different is we behave very differently in relationship to cancer and it relates actually to Galectin three and to the importance of using the picked the sort of more effective perspective is a necessary supplement in any kind of cancer.

So t four So there are certain components in the body called integrins. Integrins are sticky molecules that help cells stick together and they are necessary.

The cancer uses them to have cancer, so stick together to create a metastatic process to go through them both sites. And it's part of the aggressiveness of the cancer specific integrins we don't have to mention the next Integrins are carried by this protein Galectin three, which is a shuttle allowing protein to the place where we need to fix the to the cut.

Let's bring integrin. Let's stick things together. Well, also the inflammation because of cancer T4 stimulates integrins, which means T4 will stimulate cancer.

And you can see the body's immediate response is just kind of the thyroid is made to respond quickly produces is let me slow down before right so yeah I remember a study I think from the nineties it always fascinated me.

Patients, terminal patients getting radiation therapy, the palliative care, the ones with the hypothyroidism, low thyroid lived much longer kind of what I gave the image before.

So now you got T4. Now T3. On the other hand, it has anti-cancer effects. It blocks integrins and it slows down the metastatic process. So for every cancer patient, if there are any people here that are dealing with cancer, not a thyroid, any cancer, you want to look at your t 43 ratio and within the normal range have your teeth will be at a higher level compared to two to T4 totally and absolutely overlooked.

And it's, it's insane, you know, it's like that's like giving opiates to patients will actually drive cancer growth. Yeah, it is terrible pain. You do it, but you have to know when you give an opiate to a cancer patient, it's the beginning of the end because something called opiate growth factors that glow cancer, you give opiate, opiate growth factors go down.

So there's a mechanism to it. And that's the whole mechanism of the patient shutting down. So back to the thyroid. So that's the importance, especially for cancer and for every disease when the inflammation and hyper viscosity post COVID, COVID long, all a lot of thyroid problem, a lot of hyper viscosity balance.

The T forties and within it when we do four doesn't convert well 2 to 3, it takes the wrong highway. They reverse t three by. Yes. I love what you're saying with all of this with the cancer.

I did not know that with the T for in T three. And that is fascinating. And you have seen this clinically with actual patients and yeah, that's amazing.

So that's with any cancer you're talking. About, it's a basic phenom manner. And, you know, it's nice to get fancy, expensive treatment. This is simple.

This is just understanding. And also, it's like the cancer patient and anybody with chronic disease is exhausted, is tired. They want to take the energy and fight the cancer or heal from the cancer.

Whatever vocabulary worked for you, why have them put energy into converting into something else that they can get more readily available? And what happened in this point, because of the feedback with with that poor thalamus in the pituitary there gives them D3 also the pituitary get to rest the whole system gets a break and you really get a time for repair.

And so it's a very it's a very commonly overlooked the other part is it big thyroid is very active. It's very highly affected by toxins. It's key in general.

And for cancer because cancer related, we know glyphosate for example, the most commonly used pesticide just for people who don't know £1 per person per year, £330 million a year, water soluble in a flat area.

It will go ten, 15 miles and it affects the gut lining affect the microbiome. We talked about microbiome and thyroid conversion. It affects the blood brain barrier causing no inflammation.

But it is specifically relationship to thyroid cancer because of the metabolism. And so when we look at thyroid and the normal conversion, if the body is bombarded with toxicity, heavy metals, environmental toxins, mycotoxins all toxins and pesticide, because why if you have mold in the house, you can move out of the house every day.

You get pesticide. There is no way to really escape everybody's business. I mean, the blood in the urine and I've made this a little bit of a crusade in the last two, three years.

I think I developed a product called Life for Detox, and we now have the second layer of results. We are about close to 15 people, and except for one person, we are dramatically reducing the level of life with it, which for me is a commitment I've made a few years ago.

So if we look at it, it's delivery, it's picked up and it's under high pressure. It will not convert with and if your thyroid is especially affected by heavy metals.

So interesting when you do correlation therapy, when you do detoxification therapy, you almost universally will fix the abnormal reverse. T3 So now we are looking at the thyroid metabolism in a greater context and we are looking at it specifically in cancer.

And when you have thyroid cancer in other after surgery or you had radioactive iodine, now your thyroid itself, the organ that is regulating your metabolism is affected and you definitely makes life more difficult in the end.

So that's another positive that that is really important. But when we look at iodine that is so needed for for the thyroid cause, the same class of negatively charged ions include chloride and include bromide and include fluoride, and all of them can exchange with iodine and can cause thyroid damage, thyroid toxicity and effect conversion in other parts of the body.

And in this sense, for example, one thing I didn't like for detox, I did the kelp because kelp has positively, negatively charged ions, including a little bit of organic iodide.

Not too much. I put a low dose so Akimoto patients can take it, but you want to exchange with the toxic negatively charged ion, not only with positively charged lead, mercury, arsenic, cadmium, nickel, you know, uranium, cesium that I've done a lot of research on a motivated perspective pulls out works really well we published so you want to see the whole picture and you really want to start understanding wow, thyroid is not an isolated event.

You know, it's really it is a magical organ. It is being bombarded is a reflection of our toxic life and toxic environment and also especially for women, but also for men, is the inability to express ourselves.

You know, we can say what we want. We get shut in the thyroid. And I know my own experience. I usually don't share this, but I really had to survive. The first year of residencies and get my medical license and I please forgiveness.

I was planning. I knew I'm not going to be able to finish residency at age 41 when I had to drive every day 105 miles each way from my home to the residency.

I don't know how I did it. And in the last day and I was in a very conservative area in the Central Valley. I mean, if you want to know Isaac and somebody else is like in any me conservative area, religious area, Christian area, it's not a good match.

But I survived and in the last day of the first year, I got acute viral infection, no antibodies, but it just burned through my thyroid. And I could see since then, you know, usually after viral, you don't recover completely because it's like a huge thyroid storm and and I can see the difficulty in regulating, you know, the head before I was regulating so well in my body weight and energy, it really shifted.

And, you know, it's like, yeah, through it with the viral infection. But it set on me surviving in a very difficult environment and can tell them, you know, it was a very interesting dynamic because I was I was an intern, but I had people from all over the country flying to see me.

So they would book their appointments in the clinic. You know, they would put like three or four to the poor community. They would actually paid cases.

They couldn't believe somebody can pay for the place. They didn't just they can see me and then it will see them in the hotel at night, and then they would leave town.

And many of the doctors who were teaching behind the scenes where my patients in the evening at home with their families.

Toxicity, Detoxification, and Thyroid Cancer

So the interesting it everything interaction but then after the end of the year it was just too much for my body and the thyroid is the one that gave it it couldn't regulate anymore.

So this is my own personal experience, but it's happened on a moment to moment basis. So every time we take a deep breath, we let go. We become more spacious.

Our body gets a break, you know, with so it gets a big. Thank you for sharing that story. And I, I deal with that with patients sometimes. They, they're not feeling heard.

They're, you know, or they just have like a throat. They feel like a lump there. And they feel that they're not being heard at work, at home. And they do have some thyroid problems.

And especially now with how toxic our world is, it's very it's just the amount of thyroid cases and how much damage we're seeing to our thyroid. Like you said, you know, bromine, there's brominated, you know, in our bread and certain breads they put that in.

Chlorine is everywhere. Perchlorate is in our water. That's how they clean and sanitize our water. So you need to make sure that your drinking water in the thyroid is just very sensitive.

Very sensitive endocrine organ for that. So as an integrative physician who specializes in cancer treatments and prevention, what's your experiment experience with diagnosing and treating thyroid cancer?

I do see this on the rise a little bit. Also. If and expect expected to be on the rise and it's it's often overlooked just because they often with thyroid cancers are no symptoms if it's a cold if it's a cold nodule and the doctors don't do physical exams as much anymore, you know, it's kind of stunning, right, how little they do.

And so, you really need to examine the thyroid really well to really to really feel something. And one thing that we're not just trained in this country, actually in Europe, it's done in the standard way in Europe when you go to your primary care is an ultrasound and if they check you, they do ultrasound of your abdomen, of your, you know, even lower abdomen, and they also window of your liver.

And they're also a good result of your thyroid. It's part of their training, I think it's starting to to to get into the system. It's a great, safe tool. So a so that's that's one part we really thyroid cancer is not common enough that we screen for it.

But we want to look at changes in our hormonal expressions, you know, in there within the thyroid. And we really want to take an active role in really doing ongoing detoxification.

And that's a great way, but it's the good news is that the vast majority of thyroid cancer is very slow growing and the easy to cure basically just by removing the thyroid part of the thyroid or giving radioactive iodine that kind of burn like the radiation type because the thyroid cells absorb iodine and it's radioactive, it just burns it.

And one interesting thing that sometimes can be done, it's tricky is there is a way to make the radioactive iodine kill all the thyroid cancer, but still leave some thyroid function.

So you're not dependent on an on replacement. So it's a very delicate dynamic that can be done after some time when you know that the necessary treatment has happened and actually motivated respect and can play a role in it.

But it's one of these cancers that we don't we don't examine as regularly. We don't have a marker, you know, specifically for for thyroid cancer. So we want to look at imbalances.

And also, you know, if you feel any pressure in your thyroid, if something feels abnormal, you know, and then also make sure that whoever is giving you your annual physical exam, ask them, please do a good thyroid test.

And it's not a bad idea to ask for an ultrasound of the thyroid every few years because this called nodule and it's called because it's inactive because it's not producing thyroid, an abnormal cell.

It's called nodules grow very slowly for years. So even if every five years you're doing ultrasound, it's probably enough. But it hasn't gotten into mainstream, despite the fact that there are 50,000 cases a year in the United States.

It's not like a rare cancer. It's actually common. But we have these understand the thinking that it's all because it's not very aggressive. It's well, for the person who has an aggressive thyroid cancer, they don't care that 95% of the

thyroid cancer, the most aggressive for them, can kill them.

And in this sense, if you have thyroid cancer, you want to look at any toxicity you have, any lack of expression, any imbalances, any microbiome, gut issues, anything that produces inflammation, produces conflict, but it's a struggle and doesn't allow the liver to detoxify.

Look at it is would being put into the fire of cancer. So if you can remove the wood, there will be a lower fire. So when you are if you have, let's say, you know, a if you have like the most you know, the most common common cancer, like the papillary cancer, 80% and usually surgery.

And you're done. You have to remember that moving forward afterwards, it can still metastasize, can still spread. What will happen after the surgery is totally dependent on your lifestyle and on the complementary methods you have from a conventional oncology.

The only thing they can do is try to diagnose earlier recurrence, but in many levels when there's a recurrence of the recurrence. So in this sense, we know what you're talking about in in lifestyle changes, in detoxification changes, and try to do them on a regular basis.

There are certain times of the year or the spring in the fall are the best times for for detox programs. And if somebody post thyroid cancer, it's not like other cases where you have to immediately jump on it.

You have time. You want to slowly change the mechanism that drove the cancer so that it doesn't come back. And you want to look at your thyroid supplementation in the wise, you know, in a wise ti 43 ratio, you know, just like you and I doing many of the integrative doctors do.

And this is really what makes integrative doctors very often more suitable to balance thyroid issues and endocrinologist. It's remarkable. It's like, you know, it just blows my mind.

I don't want to hurt any adequate endocrinologist, but, you know, they're not so many glands to deal with. So what you and technology is amazing potentially because endocrinology hormones are amazing because our existence, we exist in time and space.

This is our body and we exist through our lives and we move in time and in space. Western medicine is interested only in space, only in pathology, only in tissues.

Chinese medicine, for example, is interested in time, in movement. That's why they take the pulse, the diagnose. So feeling something that is moving, not something that is that steady.

The connection between space and time is endocrinology because the hormones every diurnal cycle, right. And the monthly cycle and they create physical changes in time and in this is endocrinology is amazing because in the field it connects both yet it is so no they are that it's really it's painful.

Truly painful. What a missed opportunity. Yes, it's very black and white. I feel like conventional endocrinology and patients, they often time, which is kind of ironic.

They feel very unheard at their appointments. And there they are. Thyroid health and it takes them six months to get it. You know. So. Yes, it's it's really interesting.

And I love that you brought up the thyroid. So, yes, touching the patient, feeling the thyroid. When I was in medical school, I was feeling my thyroid.

I had had some nodules they were watching. And then one of them got a lot bigger and it was me just feeling my neck to myself. And that's when they did surgery to rule out cancer because the biopsy was inconclusive.

And a lot of the times these biopsies, they are inconclusive. So that's kind of tricky and that's stressful for patients,

too. And sometimes you just have to go to surgery.

So I did not have the thyroid cancer.

Biopsies, Galectin-3, and Modified Citrus Pectin

That's how my Hashimoto's was diagnosed surgery when I was in medical school, no one had even checked my antibodies. So that's why I'm really very passionate.

And it's yeah, it's, it's well, it's it's insane, right? Yes. And people have to understand, whenever you do a biopsy, you create an injury. And we ever you you get an injury to the body twice to repair.

And whenever the body tries to repair, it introduces growth factors that will make things that you don't want to grow. Started growing, and this process is driven by this protein.

Galectin three. I know we didn't talk a lot about it today. It really is a truly different focus, but that's why I modified it. Respecting is a must before biopsy and before surgery.

So if if regular doses 15 grams a day pre biopsy please. So pre-surgery you go up to 20 grams a day for one week and you keep it until you get the results of the biopsy because you want to prevent the new blood vessel growth if it's cancer.

And some of the most important research on on what if it was beginning the initial big paper was its in animals to prevent prostate cancer from metastasizing and this was published in the Journal of National Cancer Institute in 95 you just it's made from the pill of the citrus fruit.

It wasn't a drug, so it didn't get the attention. You know, I'm just now we are publishing our first multicenter trial on prostate cancer, showing 90% respond to motivated perspective in biochemical relapse.

And it took almost 30 years, almost 30 years talking about perseverance, you know, I've been in this journey all this time. So it takes it takes time.

But we have the biopsy is not a natural process, you know, and often in thyroid for good reasoning, actually, you don't want to start with moving your household nodule.

It's a very vascular area. You know, you do fine needle aspiration. When you find inspiration, you do enjoy the tissue. So it's essential to have a a proactive protocol around biopsies so you don't pay a price in the name of diagnosis.

That's that's awesome. So with the modified citrus pectin, so are you with your thyroid patients, with treatments, are you continuing that post-surgery or are you monitoring their galectin three levels every couple of years with an ultrasound?

How how is your approach with these three? That's a great question. So in general, galectin three drives aging drives inflamm aging. So that's why I say comfortably and the we are being interviewed now, but this is going to air into the future.

So actually as of this talk, I have no financial interest in pictures. So lastly, I don't I'm not involved with this anymore. I created something as part of my legacy.

I'm going to support it, but it's to move it on to someone else so I can say comfortably pick this is the most important supplement somebody can take. I have no doubt about it.

It's somebody who studied formulating in the eighties, really a pioneer in formulations because it addresses a basic driving force for aging. And you do not more effective to restricting based on the galectin three level for for a very

complex reason.

It relates to metallic proteins is in a ratio between a single galectin three in the in the pentameter that are counted as one by that by the analysis.

But a you want to follow galectin three because one if the patient is relatively healthy and Galectin three is even over 1415 that's that's it. That's a red light.

And within a cancer patient, if you see a collecting three elevated in other diseases and when you get better galectin three is going down for this patient, Galectin three becomes a very good marker.

So it's, it's mainly that if you have mobility three, you need more modified perspective to really block it. And, and that the reasons are usually for people who have had cancer should stay on 15 grams a day.

Yeah. If the cancer is not, if you're very healthy and in good health, you had thyroid cancer and it was taken out in five years. Went by. Yeah, you can go down maybe to ten grapes, but there's a big clinical difference when you take a lower dose and a full dose.

Now, interesting for many people, five grams a day would make a big difference. But if you have a disease fever condition that is inflammation driven, a autoimmune driven, it is circulatory.

Even though inflammation driven, cancer driven, you got to be the full dose of 15 grams of any. So I like how you said don't really just count on the galectin three levels.

You can use them to monitor, but that doesn't mean that modified citrus pectin isn't going to help with your effort. Exactly, because we've seen the prostate cancer studies people with local galectin three.

It was still very beneficial. It's important for us. Is it drive for the fibrotic driver of the patient for the inflammatory especially if you take also TGF better and you want to see is galectin three driving beta up when you're de-escalating three TGF beta will come down or in line patients.

The relationship between having a more of a fibrotic drive because there's no inflammatory drive so related to they can be abnormally low and then TGF beta would be very high in the compensatory hiding.

You know, everybody's trying to shield the spiral cages, hiding, the person is trying to cover it up. They can't they can't put out a good immune response right in the city.

57 would be low, the cytokines would be low, the garlic is abnormally low. At 445, you give them motivated perspective. It goes up to seven and eight.

It's more regulated therapy suddenly 0.3 and not undetectable and TGF beta drops down and the patient feels better. So there's always dialog. We have a dialog from a survival point of view, right?

We started this conversation, we go to the inflammatory route. We are fighters, we go, Oh my God, let me hydrate both. Both are not very effective and healthy.

So the Galectin three drives, both of them in more effective perspective, can balance both of them. And in more significant cases, we have to help the body a more dramatic way.

And that's one of my focuses in the last decade. What I've considered a disruptor is therapeutic offerings is where we filter the blood from inflammatory compounds.

Is it really to allow the body to recalibrate on a greater scale? Because it's amazing how much inflammatory compounds we have in our blood and organs, and we have no idea.

But when you do after races and you look at the big, you see it with your eyes. I see it with my eyes. Yeah. And you're actually out there treating all these patients, doing the clinical research.

That's why I. I loved your book. I thought it was excellent because you're actually boots on the ground and seeing and treating patients, which sometimes people write books and they're they're not clinical.

So I love that. Can you talk a little bit about the resus touch on that a little.

Plasmapheresis, Long COVID, and Closing Thoughts

It's called so a plasmapheresis, which now get more, more, more attention with the COVID is a process where we take the blood out, we separate the cells from the plasma and we filter the plasma from a for specific inflammatory compounds with the one device approved in that it states filters oxidized lipids, C-reactive protein fibrinogen and many growth factors and positively charge heavy metals and mold toxins very different from plasma exchange which people are confusing and at this stage, including doctors, including people in the field of averages, because everybody does plasma exchange, it's done in the hospital.

You take out the plasma and you give back fluids with albumin. It's a good process. It's helpful in certain severe but immune diseases, graft versus host.

But we're really throwing the baby with the water so it really weakens you a selective therapeutic offering. This doesn't weaken you. My specific research project, hopefully I'll be able to finish it is removal specifically only of galectin three like in a pool the middle or the cook that holds the whole thing and create a big chain.

So initial research is supporting it. We are now in the in large animal safety study. We hope to be studying it in the clinic in a year or two in the intensive care unit.

Wow, that is so exciting. And you're using this modality mainly on cancer. Patients are also chronic disease. Like you've mentioned. In the in the clinic.

We use it on cancer patients a lot on chronic kidney disease. We use it on line, patient visit animal toxins and we use it a lot for COVID long haul. It's dramatic for long because there's so many so many inflammatory components just and there's so much hyper viscosity.

One of the things with COVID Longo and we almost every COVID is it universally the lipid profile changes, cholesterol goes up and becomes more oxidized and this balances out.

That's amazing. Especially with the long haul. I I'm seeing so many patients, their adrenals are not producing as much data. Okay. Like you said, they're almost just this scarce.

They're they're sluggish. So this is amazing. And have you noticed that modified citrus pectin is helping with these patients also? Definitely. Because the spike protein is almost identical in structure to galectin three.

It makes sense that the virus wants to survive, so survivor protein will be not too different in our survival protein. So it uses it uses the spike protein to attach, you know, to the surface of the cell and in this sense, blocking it so, so galectin three blockers have promising in COVID long haul and hopefully they will be studied more in the future.

Wow. This is so fascinating. And I know we got a little off track from the thyroid, but this is really important information to to learn about, especially with cancer and chronic kidney disease, which is running rampant in the US.

And, you know, we really we really didn't get of the thyroid because thyroid is a regulator. It's a one thing that just regulates everything. And I see, especially in cancer, I see how it's so, so tempting to start treating it, you know, and, and yeah.

So it's really, it's really my goal today was to really pain the thyroid, give the thyroid the credibility to and accredited users, you know. Yes. And it is it's you can't just talk about the thyroid without talking about every other organ in the body because it affects everybody.

So, Dr. Eliaz, thank you so much for being here and sharing your expertize and all your clinical knowledge. And it's been such a great talk. Thank you.

Thank you. Thank you for having me.