Longevity and immune aging overview

At the age of 20. Our immune system has been formally developed, and so we see a gradual decline in immune function from the age of 20 to 50. There's a drop and at 60, there's a significant drop.

Just because you're getting older and just because of how the body's is wearing down. People and patients in their 40s and 50s need to be thinking about this now.

In practitioners, especially mid-life crisis, we need to look at how we support the immune system. And no wonder we see such a rise in chronic disease and cancer rates like never before.

That's the key to this whole thing, is how to get ahead of it. So for the longevity discussion, we need to get this early. We need to have this be part of the discussion.

And then we should hopefully see healthier, better aging just instead of having people on feeding tubes till they're 100 like we're talking quality of life, right?

What if aging isn't about slowing down but leveling up? I'm Doctor Isaac Jones. This is the Longevity Leaders podcast. All right. Welcome everyone. This is the Longevity Leaders podcast.

I'm your host doctor Rudy Mueller. And today we have with us Doctor Eric Zelensky. Doctor Z and I go way back I mean, 8 to 10 years ago, I would say. Yeah, he was a mentor for me and moving forward on a, a summit, a successful summit.

And so it's great to reconnect with you. And it's been a while has been, but it's wonderful. I'd love to hear a little bit more about what you've been up to.

Podcast introduction and guest background

We were just talking about how you've got seven kids now, so that's something that you've been up to. But then professionally, I want to hear a little more about what you've been doing.

A lot of pickleball, a lot of babies. I it's been fun, doc, I am going back to my roots. You know, I cut my teeth in this industry 15 years ago as a public health researcher.

And then I just got launched into this online world writing books and like you, hosting summits and just being able to reach a lot of people through content in education.

And there's always has been this call for me to get back to the research, because that's I'm that guy that that enjoys reading PubMed research got. Into. That.

And it's something that how God made me. And so a friend of mine, Reggie Black, owns a company called BW labs, and they sell a wonderful product called Beta Glucan.

He's like like, I want to do a research study on this thing and what we've ended up doing. I'm one of the lead researchers with Christie, a demo, wonderful, wonderful integrative medicine.

PhD researcher from the University of Maryland. And this is going to be a study that we're going to be evaluating how beta glucan affects immunological and biological age.

And people taking a product. So 60 people taking a product for 90 days, very few, as you know, there's very few

companies actually put their money where their mouth is, so to speak, and say, look, we're going to actually test our product on real people and see what it does.

So we partnered with Tru Diagnostics. They're going through the immune age evaluation. And we're just going to get a ton of data. And right now we're sitting on some data.

And we can't wait to publish this paper in the next two months. Awesome. So where are you with that clinical study? Yeah, it's it's completed and we are now in the epidemiological stage right now.

The epidemiological epidemiologists are now looking at the data. We're writing the intro, the conclusion. And we're looking at how we can I mean, we're sitting on seriously 10 to 15 papers just from this one study because when you yeah, we have over 80 biomarkers that we've evaluated on 60 different people.

So this one study is just going to give me a lot of work for the next few years for sure. Partnering with people like Doctor Jill Carnahan, doctor Bob Roundtree, all these folks are gotten behind BW labs to educate on beta glucan.

So it's a wonderful team that Reggie and the team have created as a medical advisory board.

Beta glucan research study and clinical setup

And I'm one of the researchers. So awesome. Oh that's wonderful. Yeah. And so with that, I mean, what really got you interested in this company? What was the one thing from beta glucan or that you're looking at or researching?

I mean, was it something where you started out looking at the hallmarks of aging and you see immuno senescence as being one of the hallmarks that needs to be directed or addressed and some sort of solution found for or like what really drove you to finding the beta glucan as being an option for you.

It was a combination of things, quite frankly, is this is evolution that I've uncovered and becoming very skeptical of the supplement industry. Sure. And I don't want to just target the industry as a whole, but we've traded big pharma for a big supplement.

And a lot of the supplement companies sell trash. They're selling petrochemical based products. And what we find is the efficacy and the clinical outcomes change from dose to dose, batch to batch.

And when you talk to practitioners they're like, yeah, I used to use this, but then it didn't work anymore. Like why do you think that was the bottom line?

Purity standards and what BW labs has. And there's only a handful of companies that I know that do this. They actually have a purification spec. Every batch is tested and their purification spec is 85%.

So they're beta glucan. And beta glucan, by the way, is extracted from cell walls of baker's yeast in this particular case. And they purify it. And what's left over is just some minor fiber and residual content.

You can never get 100% pure of anything, right? Just think about your gasoline. You'll never get 100% pure, right? So 85% pure is the highest purity standard of anything on the market.

They actually have exclusivity. No other company can sell it. And when I started thinking about this, like you literally won't accept and sometimes they've run out of product like you literally won't sell something that isn't under 85% and you're like, no.

And we're like, why? And I was having this discussion with them because the research doesn't support a lower grade, because the difference between 85% pure and 75% pure, that 10% difference is an 800% efficacy change.

So meaning this most products on full script, most beta glucan that you see on Amazon, they're selling anywhere from 60 to 75% pure, which just to point out that doesn't mean it's contaminated.

I'm not saying it's bad, I'm just saying potency. You literally have to take eight times as much of the product to get the same efficacy as one dose of a product that sells 85% pure. And that's just open up my mind to just this concept of what am I taking every day?

What type of vitamin C, what, what type of protein? And I started looking down the trail. How are these supplements made? What am I putting in my body?

And then knowing the founder, knowing the owner, seeing it behind the scenes, I'm like, I'm sold. I get this, and it's really reshaped how I view supplements as a whole.

And that's not to say beta glucan. Well, I do think it's special, but the fact that this product does exist, it is available.

Why product purity and consistency matter

It's now on full script. Docs can get in on wholesale affiliates. You know, our old world affiliates can promote it if they want to, as well as on Amazon.

But to have this available and the clinical outcomes, especially of the integrative oncologists that I know that are taking it, people like Doctor Michael Carl Feld and others, Doctor Jonathan Stegall, who's based out of, I mean, educated from Yale and Harvard from Atlanta.

I mean, we're talking people that are utilizing natural therapies to help their cancer patients just not only minimize the risk of any sort of therapies that they're taking, but actually to help with the disease itself, with consistency.

And for any doc has, you know, we need consistency in if you're buying another product from a supplier that changes on a regular basis, whether the spec is 85%, one batch 70 or the other, that's a huge clinical outcome difference, which makes your job more difficult as a doc, because you can't be scientific.

You cannot trust that what you're giving is going to give you the desired result that you want, and that causes frustration to the patient. So that's one reason why I wanted to sink my teeth into this project, especially because they already have 26 studies on this product alone, like the product itself, not beta glucan.

I mean, there's literally over 100,000 studies on beta glucan, but the actual product is in the bottle. There's over 26 studies as it is. That's pretty profound.

So I know what to say. Everyone wants to be part of a winning team. I mean, you know what I mean? Like, how many sports players ditch their team to go try to win the Super Bowl.

So that's kind of what I did. I'm like, hey, this this team is winning right now. How do I be part of it? Well, I love that. I mean, one of the things that is often overlooked as a practitioner in this space, when you first get into it, is the quality of the things that you're recommending.

Course, you know, and when you go to these CME events, they're not able to put the product name up there. Right? It's a vitamin C, it's a EGCg. Right.

So we don't know. And then you go home and you start orient this with what's not having the desired effect. Right. So when you're looking at beta glucan I love the fact that they are testing every single batch.

I mean, when you have the purity now you have a reliable standard and you're going to get reliable results and a more consistent, dosing recommendation. Right.

That's going to. Work. Yeah, that's the bottom line. Makes our jobs a lot easier as a practitioner. 100%. Yeah, absolutely. Well that's wonderful. So with this product, what you mentioned cancer.

So what conditions are beta glucan is particularly gravy in your product with from better, better way. Beta labs is the

practitioner line but better way.

Health is the line for consumers. They have a practitioner exclusive line. Okay. So we have the labs the the product itself. I mean what are you studying are particular conditions.

Is it just looking at longevity? Yes. What are some of those areas where if I'm practitioner listening to this or I'm if a client listens, I should be looking into potentially beta glucan being a good thing.

That could help me and my immune system. If you're a medical doctor, nurse practitioner, chiropractor or other health expert that's stuck in a broken system, there's a better way.

The Freedom Webinar shows you a proven five step system to build a seven figure virtual health practice, or how to modernize your current brick and mortar practice without the burnout.

Learn to create high ticket programs, automated income, residual revenue, and attract clients.

Immune resilience, modulation, and beta glucan

Ready to work with you? Book your million dollar strategy session today by clicking the link in the description. So the current research on beta glucan is pretty widespread when it comes to general health and wellness.

Immune system function, which I want to cover in a minute because, when we look at immuno senescence is one of the key hallmarks of aging, we cannot discount that.

I mean, it's more important than what we initially thought, quite frankly. And it is now becoming your immune system's age, which we do know you can measure your immune system age is more accurate than your biological age to determine longevity, and this is becoming more common knowledge for people.

And this is something that we're trying to do. We're actually improving it. We're trying to show what actually happens to people when you do trigger what's known as immune resilience, which I hope I have a minute to talk about in just a second.

So while we're talking, we just describe immuno. So now we'll go there, but we're talking. But to answer your other question, the the research behind this product because of what it does to the immune system specifically.

And we'll explain that again. But Crohn's autoimmunity, no contraindications because it's an immune modulator. Is that an immune stimulant? Heart disease Alzheimer's dementia chronic disease and chronic inflammation obviously.

Right. We go back to cancer, wound healing. We were doing a study on athletes as well. And mega marathon athlete can't release his name, but he just did an unbelievable crazy, awesome feat.

We're going to be on this podcast soon. Like the ability to recover from just extreme emotional and physical stress all at the core of your immune system and how your immune system is functioning.

So the reality is that stock and I didn't learn this in school, which I and this isn't to knock the education that we receive, especially medical doctors, because very few medical doctors know about this in terms of the training that they receive.

They have to get continuing Ed to get this. But we're taught that innate immunity is this immune system that is wonderfully, proficient at helping the body fight off threats that come to it on a regular basis adaptive immunity, basic immune system function that adapts, that responds better, faster, quicker, but up until recently, the innate immune system has been known as not having any sort of memory.

Well, that's completely incorrect. And we know that's incorrect. And now that this concept of okay, your body can be

your immune system can be trained, essentially trained immunity that your, your innate immune system, which before never had a memory, which is focusing on natural killer cells and macrophages and other biomarkers that kill and destroy, that actually can be smarter, more adaptive in the future.

Yes, that's a huge finding. And the fact that there is something that I'm coining as immune fatigue, but the the research is kind of silent on a phrase on this.

And someone needs to call this we can stress out and we could cause our immune system to essentially create damage to itself. And that's the precursor of autoimmunity.

So immune tolerance is this concept where the immune function will actually start to interact with pathogens in a way that prevents inflammation. Immune resistance is this concept that your immune system is just ramped up.

It's seek destroy, seek, destroy. If immune system isn't tempered by this immune tolerance, what happens is your body will become immune fatigued and that will create damage.

And so when we're looking at immune boosters, that is the complete opposite concept of what we need to do. And I was never taught that. And how many well-intentioned people right now are popping the Vitamin C's and the zinc and all the things before they go on an airplane or, oh, it's flu, cold, Covid season, pop this pill, pop that, boost my immune system.

You don't want to ramp up something for the sake of ramping up a it's ineffective. Would be it could cause damage to immune system in the future. And so there's something in the middle of all of this.

It's called immune resilience. And immune resilience is a term that's well found in in the literature. It's about ten, 15 years old. It's still haven't gotten into the medical Journal Chronicles to get into the medical schools yet, but it's the body's ability to adapt to respond, to not be fatigued and to have the immune function stay where it needs to be.

It's essentially immune modulation. So when you look at immune system, you want to modulate it. You want to create homeostasis, you want to regulate it.

And at the core is immune resilience and immune resilience. Now because of that because it brings homeostasis. You want to take products that quote stimulate immune function.

You want to take products that temper it down. You want to take products that bring balance to all of it. That becomes quite confusing to people because they all interact with each other.

I mean, give me a protocol that if someone that's thinking in terms of this and so most folks aren't thinking in terms of that, and that's why we're positioning, because out of everything that we've seen, the baker's yeast derived beta glucan, because of the specific 1316 linkage, has the ability to work in all of those areas.

So it will it will stimulate an immune resistance. It will stimulate immune tolerance, it will stimulate immune training, and it will stimulate immune resilience.

And then you look at like, wow, it's not like a wonder drug. It's just this very unique concept or this very unique chemical structure because it has a specific lock and key linkage with that in one C or three receptors, which are known as the glucan receptors.

And so it's like the body was made to interact with glue cans. People have heard and maybe we should have mentioned this earlier. Mushrooms have beta glucan, oats a beta glucan.

I don't know if, you know, if you saw the recent study mind blowing oat beta glucan on a human trial. And animal studies this year have been shown to actually help the body detoxify and reduce exposure of PFOA forever.

Chemicals. Really? It acts. Yeah. It helps. It's the only thing that has been tested right now that can cleanse the

body of forever chemicals. And it's just the glucan concept, the glucan linkage, the glucan ability as a fiber, but to stimulate the immune system.

So you have oat beta glucan, which is good for detoxification of forever chemicals, heart health. That's what made Cheerios famous, right? Heart health.

And then you have mushroom beta glucan, which is great. You have algae beta glucan, but baker's yeast specifically has that special 1316 linkage that works in a way that no other chemical that we can see in the plant.

It does. And when you purify it, you take away all the other question. We always get, well, it's made from yeast. Well, there's no proteins. You're purifying it.

You're extracting it from the cell wall has zero, zero ability that we know to have an allergic reaction or contract anyone, even with immunotherapy specifically, even with autoimmunity, because it's an immune modulator, it helps regulate.

And when you regulate the T cells of CD4 and the CD8 T cells, that's one of the key biomarkers in immuno resilience and gene expression. So I'm going to go more into this into the talk that we have today.

And I really wish we had more time. But the reality is is through a wonderful, complex system of metabolic reprograming shifting the energy in the mitochondrial function to do what the immune cells need to do.

And what we're seeing with the CD4 CD8 balance, practitioners can actually measure immune resilience now in a way that we didn't think was possible. And immune resilience. And this was the key.

A study was published from the University of Utah in April, 167,000 people, roughly, that people with stronger and more adaptive immune resilience have a biological age jump of 15 years.

It's that important. And what we're trying to do and what I'm trying to do in my own life is just to see how am I interacting with my immune system in a way that supports it to do its job, not to burden it because it's already burdened.

Study dosing, results, and closing remarks

And we can go in all day long about environmental toxins and and whatever it is that people are doing to themselves or earning themselves. But as a practitioner, immune system function might not be at the forefront of what you're trying to do.

But I guarantee you, if you're not looking at it, it's not going to help your patient get to the level that they need to get to in the the speed that you want them to get to.

And I've talked to enough practitioners and be like, yeah, you know, we'll worry about immune function as a wellness strategy post. You know, post recovery.

No, no it needs to be part of it. It is core function of how your body reacts and responds at the epigenetic at the mitochondrial level. And so when you have your immune system taking up so much of your metabolic energy, this is really this is quite frankly mitochondrial dysfunction 101.

And we're not having that discussion. And the end of the day, the thing that just blows my mind is what makes people live longer, healthier lives. And we're starting to see that natural decline of immuno senescence doesn't affect centenarians like it does the average person.

And the key part of that is immune resilience. And their immune systems just adapt better so they recover quicker, or they don't have the manifestation of cancer like the average person does.

This changes everything and it changes everything. How we see the immune system and how we see our health. And also for me, it changes the products that I take and just open up this can of worms of like, I need to be smarter, I just shouldn't work harder now.

Beautiful. I mean, when we look at pharmaceuticals, we're either trying to ramp up immune system function, we're trying to dampen it. And then that same thing as you mentioned earlier with the supplements.

So what I'm hearing you say is almost like beta glucan is the conductor to the orchestra. That is our immune system. I'm going to take that. I'm going to write that down. And, you know, I like it.

That's a good one. Yeah I mean that that's essentially what it is. We're able to ramp up when we need to ramp up. We're able to calm and we need to calm.

But it's overall creating this immune resilience that, will allow people to have an immune system that functions appropriately when it needs to and how it needs to.

Yeah. Yeah. That's beautiful. And to prepare people for the future. Sure. And here's the big thing that we all need to realize at the age of 20, our immune system has been formally developed.

And so we see a gradual decline in immune function from the age of 20 to 50, there's a drop and at 60 there's a significant drop. Just because you're getting older and just because of how the body's is wearing down, people and patients in their 40s and 50s need to be thinking about this now.

And practitioners especially midlife crisis. We need to look at how we support the immune system. And no wonder we see such a rise in chronic disease and cancer rates like never before.

That's the key of this whole thing, is how to get ahead of it. So for the longevity discussion, we need to get this early. We need to have this be part of the discussion.

And then we should hopefully see healthier, better aging just instead of having people on feeding tubes till they're 100 like we're talking quality of life, right?

Right, right, right. This is it's it's such a blessing. So with the research that you've done in the, in compare or pairing with and partnering with True Diagnostics, which is, I'm assuming what you looked at when you're talking about the immuno.

Yeah. Age. Right. What age groups were you looking at? What kind of results? What kind of dosing were you doing to be able to see the I don't know because I know it's pre published. I don't know. Yeah.

Yeah yeah. So you can't we did a broad spectrum of age. The main thing was people have never taken the test before. They never taken beta glucan before.

We're looking at all the different. There's 75, again, 75 different biomarkers. And we're looking at the organ, 11 different organ systems just to determine the dosing was, 1000mg.

All right. So 1000mg. So that would be two capsules. So essentially the dosing is 500mg for every 50 pounds of body weight for an individual. So we wanted to give them a balanced dose.

It's more of a it it's not like a maintenance wellness dose. It's not a chronic disease dose that practitioner's like cancer or an integrative oncologist are using.

But it's one of those balance in between the two. So that was that's the study 60 days I'm sorry 60 people being on the product for 90 days. And I believe the last person just gave in there or just submitted their report.

So it's always you got to wait for the last stragglers, right, right, right. And again, it's really exciting. The results are

preliminarily pretty, pretty fun.

But, keep an eye out, keep a look out. Check out BW labs.com. And of course disrupt. And I hope we'll share more, with what we're doing here with the conference and with your podcast.

So thanks again for having me. Yeah, absolutely. My pleasure. I appreciate you being on here. I appreciate all the work that you're doing. I'm excited to see your research.

And it will be, as long as we're seeing the great results that I'm anticipating, it'll be part of all of our protocols. So thank you again, doctor Z, for being here.

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