Introduction to Trauma, Mitochondria, and Algae

Welcome to the Biology of Trauma Summit 3.0 We're talking about the trauma disease connection and because mitochondria and the immune system are so hit by trauma and they experience that shock.

And you could also say that the immune system becomes traumatized. The mitochondria become traumatized. And we go into this low energy state, high inflammation state.

I needed to bring on Catharine Arnston. She is an expert speaker in algae nutrition. And what we're going to go over is how this can specifically be used for improving our mitochondrial health at a level that I think few of you have ever heard before.

So I'm excited to have this conversation because we're going to talk about the specific nutrients and then how to use those so that you have something practical that you can walk away with.

From this interview. Now, Catharine's journey and we may get into this a little bit, Catharine, Catharine's journey into this world of algae actually started when her younger sister was diagnosed with breast cancer and her oncologist at the time advised her that an alkaline diet would be helpful.

And so Catharine left her 25 year corporate career to throw herself into figuring out with her sister what what does this mean and how can we actually create an alkaline diet?

And this is what is the result is now Catharine has been researching algae, writing papers, giving presentations, lectures, conferences, now speaking on over 150 podcasts to talk about the benefits of algae and specifically how it can help us on this cellular level that we're talking about when it comes to the trauma disease connection.

So welcome, Catharine. I'm so excited to have you here. Thank you. Thank you so much, Dr. Aimie, I'm so thrilled to be here. Oh, my team knows that. I know. Algae to me is like my child.

So I love to share it and help other people understand it so that you can benefit from it. And probably the first thing to do is to explain what algae is, because in America, in Asia, the Japanese and the all the agents have been using algae for over 50 years for longevity, health, any kind of mental capabilities and for nutritional purposes.

But and 99% of algae is grown in Asia and 99% of it is consumed here, consumed there. But here in America, it's not grown. And so people either don't know about it.

They think it's just pond scum closing their beach. And I'm here to tell you that it is a nutritional rockstar. If you thought chia seed was big stuff, what you really hear about what algae does because it's it blows chia out of the water big time.

Same with chlorophyl water. So so first of all, algae, as you're starting to gather, is a food. It is actually not a supplement.

What Algae Is and Why It Matters

Then we grow hours in in freshwater, which is very important because algae will absorb was ever in the water and don't want toxins. And I'm just going to show you this quickly, a quick picture.

This is an algae farm. This is the Spirulina Farms is a Corella farm. So first of all, algae is everywhere. It is in the oceans, the lakes, the rivers and streams.

But we harvest it as a food crop as they do in Asia. So when you take our algae to and we grow, grow it, then we dry it into a powder, then we precedente a little tablets that you can take by the handful.

A few of them, we call them bits because they're we call their bits of nutrition. This is about the size of them. We're going to be talking today about spirulina, which is a blue green algae.

So it's a darker color. And then there's Corella, which is a light. It's just a a green algae with just chlorophyl. So number one, spirulina and and corella are are both algae and they are harvested as food crops and then dried into a powder and then pressed into these tablets.

Now, the reason why you want algae in your diet is because twofold our food supply is so damaged that even if you eat a healthy diet of lots of vegetables, you simply are not getting the nutrition that your grandparents had.

It is impossible. Mono cropping has destroyed our soils. Vegetables are growing so far away that they're harvested before the enzymes and the nutrients can get into the fruit or the leaves.

So by the time they end up on your, you know, they're put it on a ship and then they put in a warehouse and they're put in the grocery store. By the time they get to your plate, you've lost literally 80% of the nutritional value.

And if your body doesn't have the nutrients it needs to to survive, let alone be living optimally, you will start to suffer and suffer. Your suffering goes as deep at to the cellular level and the mitochondria, which we're going to talk about in a minute.

So that's number one. Is that you aren't getting the nutrients that you need. And the second is we're we're surrounded by toxins. The average adult now has 700 toxins in their bodies.

And Lorella, what you're going to find out pulls out toxins and it builds your immune system. Spirulina is the one that's very nourishing. And we're going to talk about that in a minute.

And Lorella is a wellness detox algae. So these tablets that we have produced for you that you can swallow, you can chew again, they're about the size of baby aspirin.

They are so nutrient dense that every single tablet. So here's here's one little tablet I, I like to eat. My every single tablet has the same nutrition as an entire plate of vegetables.

That is crazy. Right. And the reason I came up with that calculation is we have a quote from NASA says, One gram of algae has the same nutrition as a thousand grams of fruits, vegetables, 1 to 1000 that NASA's been feeding algae, Chlorophyl and Sperling algae to the astronauts for 50 years.

It's like, well, when were they going to tell us about that? Right. The other thing you need to know about is that algae is the highest protein in the world.

The United Nations has endorsed spirulina algae, which is one of the algae we're going to talk about today as the answer to world hunger, because it has three times the amount of protein as steak.

There is nothing in the world with more protein than spirulina algae. And it has 18 of the 20 aminos, including the nine that your body can't make. So it's a complete protein and spirulina as you're going to find out, is a bacteria.

It has no cellulose wall. So it gets into your bloodstream so quickly that it almost bypasses digestion. I chew them, as you can see, but most people do swallow them.

But it's very concentrated nutrition. So concentrated you're going to find out we sell our tablets in large bags with a thousand tablets per bag. Each bag is the same nutrition as £551 of vegetables.

Think about that. That's like over 30 grocery carts of vegetables in one bag.

Spirulina vs. Chlorella: Energy and Detox

So when I say this is efficient nutrition, trust me, I'm telling you the truth. And there is nothing in the world with more nutrition than spirulina and coral algae.

They both have over 40 vitamins and minerals. They both have over 40, 60% protein, but they do completely different things in your body. And we're going to talk about that next because spirulina, we call our energy birds because it energizes your brain, your body and your mitochondria.

It's very nourishing and contains nutrients not found anywhere else in the world. And Corella has the highest chlorophyl in the world and has a hard sell while that attaches to toxins.

And we're going to talk about that in a minute. But so Lorella is for building your immune system and pulling out toxins and spirulina is for nourishing your brain, your and your mitochondria and protecting them so that you can because your mitochondria are you're going to find out in a second is what generates energy, cellular energy.

It's called ATP. And cellular energy is needed for absolutely everything that you do. I say cellular energy is like money. When you have more money, you could do more things and you have more choices.

When you have more cellular energy, you could do more things and you have more choices. So it doesn't matter whether it's cellular energy for walking, talking, thinking, digesting, protecting your health.

Everything requires cellular energy. And that cellular energy is created for you by your mitochondria. So everything that you do is you should be thinking about protecting your mitochondria and your mitochondria make energy from the food that you eat.

I tell my anyone who listen to me, I never eat alone. I'm eating with my mitochondria. They're always keeping me company, but they don't. They can't reach out to pull out food or, you know, take a handful of algae tablets. So I have to do that for them.

But they're with me all the time and your mitochondria are on your team. They want to help you, but you have to help them by giving them what they need and sadly and to pull away the things they don't need.

So is the sad situation we face ourselves with is that we're missing the nutrients that your mitochondria need and we're also surrounded by toxins that your mitochondria don't need.

And algae solves both of those problems for you effortlessly and scientifically proven. Well, and I would say that my personal experience has been that when I was really struggling with my trauma response and noticing that I was going into what we call the freeze response.

And what I teach around the biology of trauma is that the trauma response is an energy problem. Your mitochondria have somehow decided, I don't I can't make enough energy to support this high level of stress.

And so it just shuts down. And in that process, when I notice that my body going into this trauma response, one of the thing is that my body would start to crave was clear Bella and Spirulina and I know.

Right. And I would never be able to put I don't have the research. I haven't invested that time that you have. But as you're talking about this, it all makes sense because of course you're both helping your mitochondria but you're also helping your immune system.

Yeah detoxifying and those are always things that are part of this trauma response, both contributing to the body, getting overwhelmed because we have so many toxins, we can't handle it all or we've got too much inflammation or the result of that and you've got all this inflammation and just clearing that out also helps to improve energy.

So as you're talking, it makes total sense. Now, why my body would just crave algae, right? And it would go into

this low energy. Yeah. Yeah. And people are always amazed at how much energy I have.

And honestly, I've been eating out both Spirulina Corella for 13 years every single day. I don't know how I would live without it. And this is why I'm so passionate about it, because I want everyone else to have the same high energy.

I'm healthy, I sleep well, I digest well, I poop well, and I'm almost 67, so I'm not like in my thirties or forties. I mean, this is something and I'm going to be taking this for the rest of my life.

I'll probably live to 100 and but and my longevity will also be with health because who wants to live long if you're not going to live well, it just isn't any fun.

So I want to help people in a way that's natural and that has been provided to us by Mother Nature. And before we end this interview, I'm going to tell you a really cool story again documented in science that proves why algae is the answer for our health.

And it's and by the way, I forgot to mention it was the first life on Earth almost 4 billion years ago. And I'll I'll circle back to that in a few minutes.

But let's let's dig into this the benefits of spirulina for the mitochondria and the benefits for Lorella, for your or your or your immune system. Yeah. So I'm going to show you a picture.

This is your cell. And inside your cell you have your nucleus and a bunch of other stuff. And these little peanut shaped things are what are affectionately called mitochondria.

Now these are the mighty these mitochondria are what generate that ATP. And just to show you how powerful they are, there are 2 million mitochondria per cell in your brain.

Next highest are women's eggs that have about 700,000 mitochondria. Pacelle The next highest after that is Your Heart, which is about 7000 and then about 5000 in your muscles.

Things like your fat and your skin don't have many mitochondria because my highest concentration mitochondria are where your highest energy needs are.

And think about takes a lot of energy to make a human right and your brain uses so much of energy to think so. Inside the mitochondria is where the actual ATP is produced.

How Trauma Impacts Mitochondria and Energy

But what they don't tell you is that a byproduct of ATP production are free radicals. And what you probably also don't know is that your mitochondria have their own DNA.

Yes, you have your own your seven 22,000 regular DNA called nuclear DNA. But your mitochondria have their own DNA. There's about 13 of them. And guess what?

The mitochondrial DNA is located exactly where the ATP is produced, which is exactly where the free radicals are now. They get damaged every nanosecond because they're sitting ringside where all of the free radicals are being released, because that's where all the the energy ATP is being produced.

And if you've ever sat near a bonfire or got too close to a fireplace, you know how sparks would fly. So think of your free radicals like those sparks and those sparks are literally frying and damaging your mitochondria.

Now, the reason why your mitochondria DNA, the reason why this is so important is because your mitochondria DNA control all of your cellular communications.

They control your regular DNA. They control everything that goes on at the cellular level. So when they start getting damaged, they send wrong signals or they die, they mutate.

They go through a process where they it's called necrosis and they spill all their toxic contents out to the rest of the cell structure. So you want to be protecting your mitochondria DNA so that they will live longer.

And when they live longer and better, you will live longer and better, too. So here's a closer look at that cell and where the ATP is produced and where the DNA of the mitochondria are getting damaged.

So there's two ways to reduce to protect your mitochondria. One is to reduce your free radicals in the way you do. That is with that, your dietary choices.

Turns out that sugar and processed foods generate the most free radicals. So the easiest thing to do is to cut out processed carbs. That's cookies and crackers and breads.

They don't contribute much nutrition to you anyways, if any at all. So that's the first thing because you want to reduce your free radical load, you could go on a keto diet, but you don't have to just, you know, low carb.

But the best way is to fast intermittent fasting is great or algae because algae or intermittent fasting or fasting produce virtually zero free radicals.

Now, I want to show you what happens when your mitochondria get damaged. Here's a picture of a healthy mitochondria. Here's a damaged mitochondria. See all that empty space in the middle?

In the process of generating ATP, there's these little molecules and they transfer electrons from one little station to the next. And it's like a relay race.

And, you know, in a relay race, someone has to pass the baton and then they pass the baton and then hopefully they cross the finish line. Well, then you're in your mitochondria.

It's a very similar thing, except what's being passed are the electrons. The trouble is, if the stations get damaged from free radicals, they expand and they get further and further apart from one another.

It's like asking Tom Brady to throw a pass in a stadium that's four times the size of a regular one, so they get dropped more. And when more electrons are dropped, they turn into free radicals, which cause more and more damage.

So as the damage occurs, it gets worse and worse and worse, which means your energy gets lower and lower and lower. And when you have less cellular energy, remember, you have less energy to do anything and you have fewer choices.

So we need to find a way to stop that process. So again, first option is to reduce the free radicals. The second option is to remove the free radicals.

How do you do that? Well, normally you would have antioxidants. Antioxidants stop free radicals. But the problem is your mitochondria have a second inner membrane.

It's the only cell structure in your entire body with two membranes and virtually no antioxidants can get in there. You could eat a room full of blueberries or a room full of oranges.

No vitamin C, no vitamin D. Nothing can get into that inner membrane. But there are four that can. They are melatonin superoxide dismutase. I know it's a mouthful.

Chlorophyl and glucose iron. Now the good thing is algae has three high concentration of three of those four. It has the highest cost, especially spirulina glucose, iron, superoxide dismutase.

And we'll talk about chlorophyl because mostly algae have the two highest ones. But the most important one is called superoxide dismutase, also known as sod.

And that gets into that inner membrane and stops the free radical damage. And what does that what does superoxide do? It basically turns the free radicals into water.

So like having a fireman in there, putting out the fire of the free radicals. So now your mitochondria are protected, they're saved, they're not mutated.

They can function better, they can live again. So if you are having damaged mitochondria, all of your cells, everything in your body is constantly regrowing.

So it's not a death sentence. You just need to pull away the things that are causing the damage to give them a chance to restore. And spirulina has the highest superoxide dismutase in the world.

Now here's the trick. Superoxide dismutase is an enzyme and enzymes get damaged by high heat. And we are unique because we're the only company that I know that does not use high heat to dry our algae.

All the other companies use high heat because they're lower price and they need to get to market quickly to sell more. And I started the company just to help my sister.

And so we've always used the highest quality processes. And so even 13 years ago when I started, I heard that high heat would damage the enzymes and I didn't even know about superoxide dismutase at the time.

So I said, Well, we can't use high heat, so we've never used high heat. So our superoxide didn't taste is alive and well and can work. Get to your mitochondria and deliver those critical antioxidants that stop that free radical damage.

Spirulina for Mitochondrial Protection

By the way, there's 25,000 studies documenting the benefit of superoxide dismutase for other health issues, whether it's brain disorders, heart health, but if any kind of disease, any kind of trauma that's interfering with your optimization of your health and in this case, trauma at the cellular level, superoxide dismutase will still do the trick.

The other amazing thing is that spirulina has a blue two pigments in it. That's why it's called the blue green algae. The blue pigment is called phi cosine, and it's a long word, but it's not found in any other food in the world.

And it is also a powerful antioxidant and there are also tens of thousands of studies documenting how helpful spirulina the psycho sign is for stopping all kinds of damage at the mitochondrial level.

So very nourishing. It satisfies your hunger. It gives you energy mentally, physically. But most importantly, we'll get to the cellular level to protect that mitochondria.

So it's very, very powerful. And these nutrients aren't found. I think super oxygen, there's a.00000 1% in broccoli or cabbage, but they get damaged when you in digestion.

But because spirulina is a bacteria so there's no cellulose wall for your body to break down to get access to it. It does get to the to the mitochondria very efficiently.

So it's pretty it's pretty sweet. So that's barely a nourishing for the mitochondria, protective of the mitochondria. And honestly, if you don't like vegetables or you don't have time to eat, it's helps you in every single way.

You just we recommend ten tablets a day. You could take five you could take more NHL players. They they put 70 they'd have 75 before a game with fuel Olympic teams there is no upper limit because remember it's food, not a supplement.

So let me switch over to a Corolla because it's quite different. It evolved a billion years after spirulina. Spirulina is called the sun of Bacteria First Life on Earth.

Lorella is a plant and it has one pigment in it. It's chlorophyl. Remember, chlorophyl is what makes plants green. I don't have the image here, but we'll send Dr.

Aimie's a slide presentation. You can see this image later on the chemical composition of Chlorophyl is virtually identical to the chemical composition of your hemoglobin.

It's your red blood cells. And so Chlorophyl has been used for centuries for helping build the blood and helping people with their health and their immune system.

Because when you have healthy blood, you're going to have a healthier immune system because your blood delivers nutrients to all the parts of your body.

And so you have to have if you have healthier blood, you're going to have more a healthier immune system. So that's number one. It builds your blood. Chlorophyl is also, interestingly, a fat based pigment.

Why is that important? Well, all of your cells have a what's called a lipid membrane around them, which is a fancy word for saying that your mitochondria have a lipid membrane around them as well, but they have that second inner membrane where we're going to get to in a few minutes anyways, because Chlorophyl is a fat based pigment, it heals that cell wall just like an omega three would, just like a vitamin D.

So and if you haven't noticed anybody who's listening or watching, who has pets or dogs when dogs aren't well, they will instinctively go to eat grass.

And it's because of the Chlorophyl Chlorophyl is very healing to your entire body and particularly to your cell wall and getting to the immune system.

You've probably learned by now that 70 to 80% of your immune system is in your gut, that's in your lower intestine. This is where your bacteria are. This is your gut biome.

And chlorophyl is very cleansing to your gut biome and corella because it has a hard cell wall, has fiber in it. So it feeds your gut biome. Those the fiber that needs to support a healthy immune system, your immune system and your gut are connected to your brain.

By the way, with the by the vagus nerve. So people refer to your gut as your second brain. And I totally agree. We all know that we have these gut feelings.

Well, it's real, isn't it, Dr. Aimie? I mean, it is a it's another brain for you. It thinks for you. So, Gloria, because it has that highest chlorophyl in the world that builds your blood and your cell wall and also your immune cells and your immune system hard.

The fiber builds your immune system. And that hard cell wall, this is the biggest claim of fame for the Corella is it pulls out toxins. It's been used for decades to pull out mercury, all heavy metals, lead radiation.

And the United Nations used it after Chernobyl to pull out radiation. We work with biological dentists to pull out mercury. It attaches to the heavy toxins and pulls them out because of that hard cell wall.

And it also has the highest glue to on in the world, which is an antioxidant that also removes toxins, plural or spirulina does as well. But clearly, because it's so healing, it has the highest amount and so much of those toxins are in your liver.

And that's where glucose iron is predominantly concentrated.

Chlorella for Immune Support and Detox

So because Corella has that healing ability for your immune system and cleansing ability and because your body goes through a detox repair cycle when you sleep, we generally recommend the corella before bed.

Now you can take it any time of day, but definitely before bed because that's when you're going to get the maximum benefit. Corella also has the highest millet, so tryptophan, which is a precursor to melatonin and melatonin helps you sleep.

So we suggest people consider taking spirulina in the morning. In the afternoon, that's when you need energy and you're off for your day. You just throw back with some water, a couple, a handful of the tablets you can have them throughout the day and then Lorella at night before bed again.

You can take it any time of day. Ten tablets would be sufficient for wellness purposes. You need 20 or 30 tablets for detox purposes. Another way to remember them, because I'm always trying to help people understand the difference between the two of them.

And I speak at a lot of conferences that are held at hotels. I said, think of spirulina like room service. You know, room service brings you everything that you need for your day.

Very nourishing, right. And then the end clearly is like housekeeping cleans out all the junk in your trunk and cleans out the space. So you've got room to do other, other things.

So this is think of this as room service and this is housekeeping. I love that. And as you're talking like this, to me, this is just amazing that we have this tool available for us.

Right? Like, we're not we're not stuck. We may. You talked about this cellular regeneration so that even if we have had low energy, even if we had toxins, even if we've had this damage chronically to our mitochondria, we can still take algae and have the benefits because of the cellular regeneration.

So it's never too late. It's never I tell people it's never too late to feel great. And and also the other thing, when you are having a any kind of health issue, doesn't matter what it is, it's overwhelming.

And it's also very difficult to change behaviors. And so rather than just telling people to completely change their diet and it's unfamiliar territory and they don't have the recipes and they don't have the time and, you know, maybe they have difficult digestion and this is effortless.

And it's I didn't mention, but there's 100,000 studies documenting the benefits of the two algae, but 60,000 for spirulina and about 40,000 for Corella.

It's been used safely in Asia for over 50 years. The Japanese are, well, renown for their best longevity, lowest cancer rates, lowest obesity rates. Why should they be the only ones benefiting from this?

I want you to enjoy the same benefits and it's effortless if you can swallow water, you can get the nourishment that you need to get back on track to regain your energy, to help you through these issues that you're dealing with, with trauma, a nourished body is a is a much healthier body.

You'll have a much greater likelihood to start feeling better about yourself and about the world. And it didn't take and you didn't have to give up anything.

You didn't have to change anything. That's what I, I really love about it. And that's why I got so excited when I discovered algae. And it's been endorsed by international agencies for almost 50 years.

Just it's not grown here and no one's explained it to you. So that's what I've spent 13 years digging into the research. I've probably read 5000 PubMed articles at this point.

I don't want you to have to do that. I've done that for you. So my job is to help you understand what it does and why it why it works. And I now I want to show you my resistance, my little final point about why algae is so amazing and so natural.

As I mentioned at the very beginning, algae was the first life on earth before it started growing. Earth was just gas and water. There was no life and no oxygen.

Now nobody knows why. If single cell called a sign of bacteria started growing. But it did and it generated ATP and in the process byproduct, it released oxygen.

So after a billion years, there was now and it was an anaerobic cell. Anaerobic cells mean it grows without oxygen. So now there was a billion years later there's oxygen on earth.

So now aerobic, larger aerobic cells could grow, but they weren't generating ATP as easily as the other little small cell. So I can imagine the the conversation going like this.

The large cell says to the little cell, hey, little guy, I see you're struggling because of course, now they're not always oxygen and they can't survive oxygen.

The large cell says, little guy, how about we join forces? We'll protect you from all that oxygen and you generate ATP for us and we'll all coexist. And that's exactly what happened.

Cyanobacteria, like spirulina, which was a single cell organism, got absorbed by the larger cell. But instead of being digested, it co-existed and became mitochondria.

Cyanobacteria grew into mitochondria, so this is where they inner membrane of the mitochondria came from. It's from its original days when it was by itself as a single cell and when it got absorbed, the larger cell put that second lipid membrane around it, but the first one didn't disappear.

So it makes complete sense to me why algae gives us everything that the mitochondria need because they're basically family, right? They. And so it just makes so much sense to me that here we are, we're in this very complex world, high stress, looking for complex solutions.

Practical Use, Quality Standards, and Closing Thoughts

And the answer always comes from simplicity and from ourselves. You you'll always say it's your love, your your success, your happiness, your spirit is comes from inside.

And so but we're all so distracted that, you know, we look outside, but it's all inside. And so are the mitochondria. They're in their and they came from, you know, we're from the origination of algae.

So I'm so happy to add it's all explained in as in a evolutionary biology, it's called into symbiotic theory for anybody who wants to look it up on Google.

But it makes me feel so comforted to know that all of our health issues ultimately are driven by mitochondria and all of the answers for the mitochondria.

I think ultimately come from algae. So Spirulina Lorella, they're waiting for you. And in fact, we have a special discount code biology if you want to visit our website ENERGYbits, it'll give you 20% off everything all the time, any time.

So we're here for you and we just want to be part of the solution because I think it's just been waiting. It has been waiting. And that's exactly what we teach.

Here is the answer is in simplicity, actually not getting more complex. It's actually simplifying and within ourselves,

within our own body. And when we give our body what it needs, it does the healing process.

And that's exactly what happens here with the algae when we give it what it needs, right? Then it finally has the energy. It finally has the resources to clean up the mess and to help us be feeling that better.

Yeah, yeah. And just be cut. And I tell people, algae isn't new, it's just new to you. And if you think about it, up until maybe ten years ago, you didn't know about chia seed or matcha or chia or college in powder or even CBD.

But these are things that have been used by other Indigenous groups in other countries for centuries. And so as algae has been used for centuries, but it's never been explained or grown here.

So I just want to assure you it's not new. It's a heavily documented in science. It's just not been explained to you very well. And that's what we're trying to do to help everyone because we certainly need some help right now the way.

We do it. And I really appreciate the thought process that you've put into the production of it, right. So that we're not we're not using high heat that's going to kind of denature the proteins, right?

You've put in the thought and the process to know how do we maintain the quality of this so that we're actually delivering these nutrients at the body needs and not making them less efficient in our process of production?

Yeah, and it's and that's just one example and other examples that we grow it in triple filtered spring than water because algae will absorb whatever's in the water. You never want algae from the ocean or lake because there's micro toxins in there.

And but I forgot to mention, we do third party lab tests because we only sell through our website energybits.com or through doctor's offices, functional medicine, chiropractors, longevity centers.

And they need to know that the nutrients that we say are in there are there, and that there aren't any toxins. So we do constantly lab tests and we provide those to practitioners.

So they they feel quite comfortable with the product. And just on the Corella, another thing is that it has that hard cell wall that needs to be cracked and almost everybody else uses the original technique which was to tumble the Corella tablets with glass beads, and it was the glass that would crush the cell wall.

But the glass heats up and led from the glass leaks into the corella, so that's not healthy. So when I started the company, I learned about that and I said, Well, that's not going to work for us.

So we we don't use that process. We found a new process a little more expensive, and we passed the corella through a sound chamber. And it's the vibrations that crack corals.

So it's just one of many, many things that we've done to try to ensure the highest quality, highest safety that our tablets are safe enough for newborns, children of any age as teenagers, grandparents, pets love them.

That's a true test of your pets. Love something because you know, they're smart as we are. So you never know. And there's no interactions, drug interactions.

It's just spirulina. Everybody in the world should be taking spirulina every single day for the rest of your life. And because it's so nourishing and so much protein, you'll have your groceries.

You'll you'll be saving time and money. So, again, very efficient nutrition lasts for like three years. Never goes bad, frankly, ever. So and it's effortless again.

I can't stress enough we're in a society that wants instant gratification. Well, spirulina gives it to you. You'll feel more alert within half an hour, 20 minutes.

Clairol is more of a wellness preventative algae. So you don't see that immediacy, but with spirulina. Absolutely. And you might take it for helping with your mitochondria help.

But your skin's going to improve. Your digestion is going to improve your certainly your mood will improve your brain capability. Everything so so it's it's kind of a one stop shop.

And I'm I'm just the voice of algae. Mother Nature gave it to us. You know, we're just blessed. I'm just blessed that I discovered it, and now I can share it with you.

And I really want to acknowledge you and thank you for the work that you've done. Leaving the the career that you had to dedicate yourself to this and dedicate yourself to the process of, of the quality delivery for people.

Obviously, starting with your sister, knowing how important it was to have a clean algae and and then being able to say, no, it shouldn't stop here like the rest of the world needs to know this.

So thank you for the work that you do in this world. Thank you for being on the summit. Thank you for sponsoring the summit and really appreciate your time here.

Thank you, Doctor. Aimie, I'm grateful to be here and I wish everybody absolutely the best. And remember, it's never too late to feel great. I love that.

It's never too late to feel great. I am your host for the Summit, The Biology of Trauma Summit 3.0. Thank you for your time and I will see you on the next interview.