## Intro to algae and summit overview

Welcome back to the conquering Chronic Inflammation Summit. I'm your host, Doctor David Jacobs, and today I'm interviewing Catherine Anston, an expert in allergy nutrition.

She runs Energy bits.com. And we're talking all about how to use algae, different types of algae, green algae, as well as blue green algae for detox, Milo, mitochondrial health and longevity.

How to reduce inflammation using algae. And if you guys want to take advantage of her chlorella or her spirulina, she's got some amazing products. Go to energy bits.com.

Use the coupon code jackers at checkout that will save you 20% off. These are amazing products. I personally use them the spirulina as well as the chlorella and I give them to my kids.

So I give them their age and chlorella every single day and they just chew them up. Their little, their little bits and they don't have to swallow a pill or anything like that. And they love them.

And, great for detox, great for mitochondrial health. As you'll learn, we're going to do a deep dive on it in this interview today. So without further ado, let's go to the interview with Catharine Anston from Energy bits.com.

Here with doctor Catharine Anston, algae expert. And, you know, this is actually I've interviewed her six, five times. This is the sixth time now. Really? Have you?

So we've had many great conversation. It's all about algae. It's a really, really interesting topic. I came across algae about 20 years ago when I first started my journey into natural health, and I've always been intrigued by it.

And, you know, doctor, doctor Catherine as, as well. And she was so intrigued that she actually started a whole amazing company, energy bits, all around algae and getting algae nutrition content and really good algae nutrition products out to the world.

And so always enjoy our conversations. So Doctor Catherine, by the way, congratulations on recently getting your doctorate as well. Thank you. Thank you. Yes, I was very proud of myself.

I'm a I'm a lifelong learner like you, doctor talker. So, but it was nice to be able to show myself that I could.

## Why algae matters for nutrition and detox

The brain was still working. Yeah, and I'm almost. I'm telling you, next year I'm turning 77 zero. So I want to be an inspiration for other people as well.

That, you know, we don't have an expiry date on our forehead. Like lots of especially women were told by society, hey, you know, just if you keep yourself healthy and, and energized and I do it with algae and other some natural, modalities, we can have a wrong a long runway and enjoy that runway.

And so I want to inspire people to use me as an example of how that can be done. Yeah, absolutely. Well, you definitely are an inspiration. Anybody that knows you or has seen you, at 70 years old, nobody would believe it.

I would think you were 50. You know, like, you look 20 years younger. Thank you. So, yeah, you take great care of yourself. And obviously the algae is a key part of it.

Now let's talk about that. Why? What is algae? Why is it so beneficial for our bodies? Yes. Well. And why is it so

beneficial and needed at this time in our world?

Well, I there's three things that I want to explain why algae is so needed, and then we'll get into what it is. We're in an environmental, nutritional and health crisis all layered on.

It's the trifecta of the perfect storm. And it's a terrible storm. And on the nutritional side, we're not getting the nutrition that we need. Nobody is, because our soils are so over crop that there's no minerals in the soils for the plants to pull up.

Even if you are eating vegetables. So and they come from far away now Mexico, Costa Rica. So they are harvested before they're ripe. So all the enzymes and the nutrients don't even get into the fruit or the plants.

So at number one, we're being fed but we're not being nourished. Big difference. Number two, even if you, if you are lucky enough to feed yourself some healthy vegetables, 99% people are not.

They're eating those processed foods which are not only lacking nutrition, they contain things that are detrimental for our health, like glyphosate and, seed oils and, which are inflammatory.

So, so the nutrition pieces and so you'll find out from today that spirulina algae, especially ours, fills all nutritional gaps. And it does it effortlessly because you can swallow them, chew them out into a smoothie.

But 40 vitamins and minerals, highest concentration of protein in the world. Highest concentration of chlorophyl phytonutrients in the world. So effortless way to fill those holes in your boat because we're our boats are sinking.

So that's number one. Number two, the other reason why we're having health and nutritional issues is because we are surrounded by toxins. The average adult in North America now has 700 toxins in their bodies.

These toxins are everything from heavy metals, glyphosate, mold. Mold has become a huge issue. And you're going to find out is that Chlorella algae, which is a green algae, pulls out all heavy metals, all pesticides, glyphosate, lime mold, alcohol, lactic acid.

And it is your answer to doing that because when the toxins are in your body, they lodge into your receptor cells, in your in your cell membranes. And even if you are getting proper nutrition, like maybe from the spirulina, it's like having someone steal your parking spot that the nutrition can't get in.

If the if the toxins have taken up the spot on the receptor cells. So we need the chlorella to pull the toxins out, get you know, it's like having a, that the police car come and pull the car out of the spot where it shouldn't be.

So the nutrition can get in. So that's number two. Those two are environmental issues, the lack of nutrition and the excessive toxins. But there's a third issue that I want to address today.

And I talk a lot about this. And it has nothing to do with the environment. It has to do with our biology. We have been on Earth for 2 million years. And so up until about 150 years ago, we died at the age of 30.

Evolutionarily, our bodies think that we are preparing for death after the age of 30. This is why things like melatonin slow down. It starts incrementally, very small amount and 30s starts to gather speed and 40.

And by the time you're 50, your melatonin is very, very in short supply, which at melatonin is necessary to help you sleep. And sleep is necessary because that's part of your repair.

Restore cycle and detox cycle. In addition to melatonin dropping, hormones drop women's estrogen. This is when we get into perimenopause and menopause.

It's just the way our biology is set up. Our bodies think we are preparing for death. And so it slows down on some very important nutrients that have kept us alive and vibrant up until 30 or 40.

There is another nutrient that also gets to be, reduced until there's virtually zero at the age of 40 and certainly after that. And it's an antioxidant called superoxide dismutase, also known as Sod.

And many people have probably never heard of this antioxidant, but it is even more important than even gluten cion, which is known as the master antioxidant.

And why is it so important? Because this antioxidant superoxide dismutase.

## Spirulina vs chlorella explained

And we'll get into detail more in a minute, is what stops the free radical damage of your mitochondria. And we're going to talk about how important the mitochondria are, because they're what generate cellular energy, also known as ATP.

And you need cellular energy for everything, for your neurotransmitters, for your lymphatic system, for your heartbeat, for your elimination, absolutely everything.

And when you have less of it, it's like having the lights in your building go out. When you don't have any lights in your building, you can't do any work, right well in your body.

When your mitochondria start getting damaged from free radicals, it's like the lights in your body going out. And then they go out and more and more of them will get damaged.

The fewer and fewer lights you have, which means that less and less work your body can do. And this is when chronic disease kicks in. Doesn't matter whether it's Alzheimer or dementia or brain fog or weight gain or metabolic health.

It's all ultimately due to damaged mitochondria. And the good news, and we'll talk about this later on, is that spirulina algae, especially ours, has the highest concentration of this missing antioxidant called superoxide dismutase.

So when you take the spirulina, it's like turning your lights back on so we can help correct and prevent a lot of these chronic illnesses just by getting the spirulina into you.

But it has to be raw spirulina like ours, because this antioxidant is also an enzyme. And all the other less expensive algaes use high heat to dry their algae to get to market quickly, so it deactivates it.

But anyway, so what I want to address is the fact that there's three overlaying issues going on a lack of nutrition, too many toxins, and evolutionarily our bodies, our star are not any after the age of 30 and 40, producing nutrients that protect us as we get into our our older years.

And you'll find that's the the algae spirulina and chlorella. So have all three problems and does it effortlessly from food. How cool is that? Yeah, really really cool.

And so, you know, basically chronic inflammation is going to result from like you were talking about high level of toxicity. So when the toxin load gets too high deficiencies and things we need that includes nutrition.

But it also includes things like good movement, good breathing patterns, sleep right. Things like that. Yeah. And then an inability to adapt to stress. Right.

We need to have kind of a, a certain resilience factor because we're all going to deal with stress. And so we need to be able to adapt to stress. You were talking about how as people age, they lose some of these kind of key resilience factors like melatonin and stuff like that, that are that are so important.

So yeah, it's it's you know, for a lot of people, they have low resilience, they're deficient and they're very toxic. And

so it's just, they're creating this inflammatory storm in their body.

Now, you talked about a couple of different types of algae. You talked about the green algae Chlorella, and he talked about the blue green algae spirals.

Right. And so let's kind of break those down and go into that a little bit more in a little more detail. Terrific. And I do want to show people that the tablets, if you're watching on YouTube, they're very tiny.

They're about the size of a baby aspirin. And, and, I do want to assure people that this is these are we call them bits because they're bits of food. We grow them in fresh water.

So there is algae in the ocean, but ours are grown in triple filtered spring water. So it's very much a food. All we do is we grow it carefully in fresh water, and then we air dry it without high heat into a powder.

And then we press them into these little tablets that we affectionately call bits. And they're so nutrient dense, it doesn't matter whether we're talking spirulina or chlorella.

Each tablet has the same nutrition as an entire plate of vegetables. It's about a pound of vegetables. And that calculation came from a quote that we have from NASA that says one gram of algae has the same nutrition as 1000g of vegetables.

So that's about, and so when we have these large bags of tablets, each bag I use that to determine that each bag has about 551 pounds of vegetables in it nutritionally.

So just to give you another, perspective, that's about 30 grocery carts of food. So when we talk about the two algae, they do different things. And I'm going to walk you through what they do differently.

But first of all, I want to help you understand why they're called, spirulina is why it's called a blue green algae and why Chlorella is called the green algae.

It's because spirulina has two pigments in it. It has the green one, which we all know, which is chlorophyl a, but it also has a second pigment in it called cycle sign.

And and it's a blue pigment doesn't exist anywhere else in nature. And the water based pigment, which is when, when you put it in a plate, you'll see how the water disperses and the blue color disperses.

And it looks like a beautiful Aegean sea. But with Chlorella, it only has one pigment which is chlorophyl. And notice how it clumps when you put the tablets in the water.

That's because I found out that the chlorophyl is actually a fat based pigment, so that's why spirulina is really good for, reducing inflammation in your blood vessels because it disperses very beautifully.

And Chlorella is very good for your health of your cell walls because your cell walls are made of fat and so chlorophyl if it's unheated, it behaves like an omega three.

If you get this, medicinal amounts of it. Problem is, none of our plants have medicinal amounts, but Chlorella has 500 times more chlorophyl than any than any other plant, like a regular and 25 times more than liquid chlorophyl.

So you're getting the medicinal quantities. But let's go back to the two algae. So I just want to show you that they do look different. And the reason why.

So spirulina is a blue green algae. And so I package it in a blue bag. I designed everything so that you understand that was a blue by a blue algae. Blue green.

And it came from the ocean. It was the first life on Earth, and its claim to fame is that it provides you with energy,

energy, mentally, physically. And all this energy comes from the high concentration of protein is, not only just high protein, it's a complete protein has 18 of the 20 aminos, and the protein gets into your body instantly because the protein are individual aminos and algae.

This is different from my collagen, which are in clusters of peptides which are slower. But then the slowest comes from animal protein because your body has to break down all the aminos before it can be absorbed.

That can take three days, that can take, you know, 4 or 5 hours of the protein in there. Algae gets absorbed instantly, particularly spirulina, because spirulina is actually not even a plant.

It's a bacteria. And the reason why that's important for you to know is because there's no cellulose wall for your body to break down, to get access to the 64% protein.

That's three times the amount of protein a steak, the 40 vitamins and minerals, and the superoxide dismutase, which is what generates the energy at the cellular level.

So when I say it's energizing, it's not like a stimulant. There's no caffeine, chemicals or sugar. It's at the cellular level. So when you have a, a stimulant, it's like putting paper on a fire and you get a burst and then you get a crash.

When you take spirulina, it's like putting a log on the fire. It's very steady energy because is at the cellular level. And we'll talk more about how that works through this, the process called the electron transport chain.

So whenever you take spirulina, if you chew it you get it into your bloodstream instantly because it goes in through your mouth.

## How Energy Bits is grown and processed

I will say most people do like to swallow it because it's very chewy. But if you do swallow it 5 or 10 minutes, it's fully absorbed. And by the way, one of the first things that you'll notice is that your, your focus is better, your brain health is better.

Spirulina. That's why I call spirulina brain food, because not only is it loaded with essential fatty acids, which is important for your brain anyways.

And, we know that fatty fish are called brain food because of the high omega three. And I tell people what? Where do you think they get the omega three from?

They get it from algae. So you can cut out the middleman and go straight to the algae, to the spirulina itself. But more importantly, your brain has the most mitochondria.

Purcell there's 2 million mitochondria. Purcell. So when you were getting all this great, great nourishment that's going into the body, into the mitochondria, especially that superoxide dismutase, the first thing that you're going to see is that your brain is more focused.

This is great for ADHD, autism. If you're writing an exam, driving a car, doing surgery, and if you're an athlete, you want to take this before a workout because the ATP, your body can't store ATP.

So it's directed to where whatever, where the greatest need is. So if you're running or doing a work, a workout, you will run further or faster and you won't notice it and you'll or your life more and you won't notice it and that.

So spirulina very energizing at the cellular level, which is why we call our energy bits. So we could help people understand what it does. It's also terrific for satisfying your hunger.

There's only 30, one calorie per tablet. So if you had like a little pouch, we have them. We send them in these little pouches. They just have a couple here.

There's 30 in a pouch that could be lunch. And if you're on a GLP one, please take spirulina, because that has even the United Nations for 50 years declared spirulina the answer to world hunger, because there is nothing in the world with more protein than spirulina by weight.

So if you're on a GLP one or you're losing one on a weight loss program, please take at least 30 of these a day. It will preserve your lean muscle mass.

It will give you all the nutrients that you need. I call spirulina your nutritional insurance because it has all that protein and all that superoxide dismutase and 40 other vitamins and minerals, all the electrolytes, all the vitamin A, all the BS, everything.

So, the only I don't take any other supplements, in fact, other than vitamin C, because I don't eat a lot of fruit. So and there's not much vitamin C in here.

So you can eliminate a lot of your supplements by taking spirulina, which is food. Remember this is food, not supplements are made from extracts. And your body can't recognize most of them so that you, you become you.

You only absorb about 10% of many of the supplements. There are exceptions, of course. But in most cases that is a situation. But you will absorb 99% of what's in the spirulina.

So it's very it's not just what you eat. As you know, doctor joggers. It's what you absorb. So this is very, very bioavailable. Nutrition. Yeah. Absolutely.

So basically the chlorella, the green algae rich in chlorophyl helps to pull toxins off the cell membrane. Right. It's got that kind of fatty base. So it's really good for clearing toxins from the cell membrane.

And then the spirulina being water based and also rich in sod superoxide dismutase helps to clear the blood. Bill. Absolutely. Yeah. All the blood, you know, basically help cleanse the blood.

And then also on top of that, it's also getting into that mitochondria helping to clear oxidative stress from that mitochondria. And then it's also got a lot of really bioavailable nutrients that can get into the cells, be used for energy or used for repair like the amino acids, for example, to support overall cellular dynamics and cellular energy production. Yes.

So I did a deep dive on spirulina. So I'll give you a deep, deep dive now on Chlorella which is a green algae. And we package in green to help you understand it.

And it does belong to the plant kingdom, which is why there's a leaf on the package. And so the way it it pulls out the heavy metals in the glyphosate, the pesticides in the mold and the alcohol and the lactic acid is twofold.

Number one, actually three main ones, it, it that hard cell wall with the fiber attaches to these heavy metals and key lights that pulls them out. But you do need a, you know, good 20 or 30 tablets to do that.

By the way, I forgot to mention that a starter amount of the spirulina in the morning might be ten tablets. And but for therapeutic amounts or for lunch or for athletes, 30 is better.

Same with Chlorella. And ten would get you the chlorophyl and the immune support. But for detox you need the 20 or 30. So that's the hard cell wall that's attaching to the toxins and chelating them all the way out.

The other thing the Chlorella does, it has the highest chlorophyl in the world. Spirulina has the highest protein in the world. And why is chlorophyl important?

And doctor talk was just mentioned. It it builds your blood. This is a picture of your hemoglobin, chemical composition. And here's a picture of the chlorophyl chemical composition.

They're virtually identical. The only difference is your chemical has iron in the middle. And that's what carries oxygen in your blood. But this is why chlorophyl build your blood.

Yet all of our food doesn't have any chlorophyl in any anymore. Because, remember, the soil is so damaged. So chlorella is your answer for that? Is getting the chlorophyl in there for building your blood?

And also Chlorophyl guard kills bacteria. It kills it in your mouth, in your colon, everywhere. That's why I tell people, you know, if you see an algae bloom on your beach, it's Mother Nature's cleanup crew.

It is there because there were toxins in and, and, bacteria and algae is the cleanup crew on the beach, and it's also the cleanup crew in your body. So the high chlorophyl kills bacteria.

The hard cell wall attaches to toxins, and it also has the highest glutathione known in the world. Glutathione iron was a really important antioxidant that removes particularly toxins from your liver.

And your liver is your, you know, cleansing station. So we want to keep that liver healthy. The other thing it has is fiber, because it's part of the plant kingdom.

So it feeds the gut biome, the fiber that it needs to maintain the healthy gut. And it stimulates something called Perry's stasis, which is a fancy word for saying bowel movement.

So chlorella is very, very much a detoxing algae. It helps you eliminate the toxins from your cells, from your blood. It gets rid of what I call the junk in your trunk, because whatever sitting in your colon, is stuff your body didn't want.

And you need to have regular bowel movements daily. Preferably. And if you aren't, it's like I tell people it's like having a garbage truck parked in front of your house permanently, and you don't want that.

So we want to help you move out what's in your colon? And Chlorella does it effortlessly, which is why we recommend Chlorella primarily before bed. You can take it, of course, during the day with food, with the spirulina, anytime you want.

It helps with digestion. But when you are sleeping, that's when your body goes through a detox repair cycle and it prepares your body for elimination the next morning.

So if you have the chlorella in your system, by the way, it has the highest tryptophan in the world, which will help you, which is a precursor to melatonin.

So it will help you get into a deeper sleep. Won't make you sleepy, but it'll help you get there. So this is very much a an evening gut health algae, which works very beautifully in conjunction with the spirulina, which is a nourishing brain health algae.

Spirulina is a detoxing gut algae. And of course they're joined by something called the vagus nerve. So you can see that they work very differently. Think of spirulina as your Am algae, Chlorella as your PM algae.

So, or brain food and gut food, nourishment in toxins out. Just remember that blue spirulina nourishment in Chlorella toxins out. And that will help you understand the difference between the two of them.

Yeah that's great. Now obviously with energy bits this is what I personally use. I get the energy bits and use them and give them to my kids as well. I give them their age and, the various bits.

Right. What is different? I mean, we, I really enjoy your, your, your chlorella, your spirulina, but there's a lot of different, you know, chlorella, spirulina products out in the market.

What's different about what you guys do with energy bits? Yes. Well, thank you. And first of all, none of us can take claim for creating algae. This was Mother Nature's greatest invention other than us.

And it was on Earth for almost 4 billion years ago. Remember, we've only been here for two, 2 million. But the problem is, most of those other companies that sell algae, don't even really know what they're selling.

And you'll notice they probably have a supplements panel on the back of algae is food. Even the FDA recognizes that as food. One of the where the one of the few people that know that, so most of the algae is meat is grown in, all of it pretty much is grown in Asia, but the vast majority is in India and China, and they're usually contract manufacturers.

And usually the companies that sell it sell anywhere from 50 to a 500 other products. They're not paying attention. They're profit motive. They want to get to market quickly.

## Product lineup, kids, and mitochondrial support

So they cut corners and one and there's a couple of corners they cut first of all, they're not as careful as how they grow the algae. As I mentioned, we grow ours in triple filtered spring mountain water.

And why is that important? Because algae will absorb whatever's in the water. So if there's toxins in the water, they will be in the algae. And it is impossible to keep toxins, mycotoxins out of wild bodies of water, whether it's an ocean or lake.

So it does remember, that's why algae shows up to clean up toxins. It'll absorb them well. So we're very careful. So we start with very, very clean water.

So there are no toxins. So that's number one. The most important thing however, is the way that the algae is produced and dried. Because as I tell people growing algae isn't like growing broccoli.

It's more like making wine. And even with with wine, there's a number of factors. One is that it's affected by the angle of the sun. Occasionally, like a nice glass of Sauvignon blanc from New Zealand and the Sauvignon blanc from New Zealand.

Tastes nothing like the Sauvignon blanc in California or, or a sensor from from from France. And partly it's the angle of the sun. We grow ours in Taiwan, which is the gold standard for growing algae for high nutritional value.

And part of it's because of the angle of the sun. The more important, though, is the production process. Just like with wine, it's the kind of wood that's used for the barrels, how long they stay on the barrels, and all the different processes.

With algae, it's did you use high heat to dry it? Because as Doctor Jogger's nose high heat, I think it's over 114 Fahrenheit kills enzymes. It kills it in your food.

If you're, you know, boiling vegetables, you'll lose the enzymes. And same with algae. So all of these other high, lower quality algae companies, want to get to market quickly because they're lower price.

So they need to get things done. So they cut corners in one of the corners they cut is how they dry it. And they use high heat, which deactivates this very important nutrient that I want to talk a little bit more about called superoxide dismutase, because it's the antioxidant that protects you and your mitochondria for free radical damage.

And if it's deactivated, it's not going to do anything for you. It's like getting a great deal on a fabulous car, except you lift the hood and there's no engine in there.

Looks great. Doesn't perform Rs always performs because from the very beginning, even before I even knew about superoxide dismutase, I knew protecting enzymes was important.

I had no idea that how important it was. So ours works. So well and better than pretty much anybody else's because we never use high heat. So we preserve that very critical antioxidant, and we also preserve the blue

pigment, which is called fire cosigning, which is proven to kill cancer cells.

Here's what a little study about that some people need to know that phi cosine and it's spelled h y, c, o, c, y and I in the chemotherapy companies use phi cosine in in their, in their treatments now.

But, you can get it naturally from spirulina if it has not been exposed to high heat because it's also deactivated. So those are the the heat thing is very, very important.

And where to my knowledge, the only one or certainly one of the few that do not use high heat. Now I will say you can get frozen spirulina or fresh spirulina and that blue, that blue phi cosine in and the antioxidant superoxide dismutase will still be intact for you because it's frozen or fresh.

It has not been exposed to high heat. The trouble with those is they they taste terrible and they don't last. They expire quickly. You can't travel with them.

So our little tablets are these last three years. They never go badly. If you don't like the flavor, you to swallow them. There's no repeat. So it's a much easier thing to take to get the.

It's raw food, is to get the full benefit of all the nutrients that Mother Nature, provided for us. We just grow it so carefully, we preserve them, and then we do third, by lab tests.

Here in the United States because, as you know, doctor joggers, we sell through doctor's offices and longevity clinics. And they need to know that if they're recommending our product or selling it, that has to be, you know, they have to see the proof that it's safe and pure, that the nutrients are there, that we say are there and there's no toxins.

So that's really what separates us. On the production side is that and here's the interesting thing. I drew a line from Taiwan across the globe and got to Florida because I feel algae.

The agricultural industry of algae needs to be established in America. And so my long term plan may take three to 5 or 10 years. But I'm planning to build large algae farms in Florida, which has exactly the same climate as Taiwan.

So we'll have the same sun integrity. It's going to take a lot of money, a lot of time. But that's my plan because we need it here. You know, we don't want to be. Yeah.

Opposed to tariff wars forever. So I'm, I'm, I'm on the case to bring algae to America in a, in a much bigger way. And, that's that's my long term goal.

Yeah. Absolutely. Sounds great. Yeah. The more we can control here in the United States, the better, for sure. So great. Well, it guys, this is what I use. Energy bits.

That's the website energy bits.com. So I get the chlorella and the spirulina tabs. And you have some unique names for them as well. Recovery bits for the borella. Yes.

And then for the spirulina it's energy bits. Right. So the energy. Yes. Right. And I do company. Yeah. And I do want to let people know that I I started the company 15 years ago, as a result of my younger sister, and being diagnosed with breast cancer, she did heal completely, but in the process, and that was the best news.

Her oncologist told her to change her diet to an alkaline diet. They didn't tell her what it was or why it was good for her. So my sister called me, and I.

I was doing business. I'm an MBA. And I thought, well, I don't know what a Nelson diet is, but I'll find out. And it turned out to be a plant based diet, primarily because for two reasons.

The phytonutrients and chlorophyl in plants are proven to build your immune system. So her oncologist wanted her

to have a strong immune system because she was going through chemo.

And the second thing it turned out is that there's a German scientist by the name of Otto Warburg, who won a Nobel Prize in the 30s for discovering that cancer cannot exist in cells that are slightly alkaline.

So as I did this research for her and found about the importance of an alkaline diet and a plant based diet, and that algae was the most alkaline, nutrient dense plant in the universe and internationally, I thought, okay, I need to help people understand more about algae.

And that's how I started the company. But it's a long winded way to say women's health has always been important to me. But I found that women didn't like the packaging or the blue of the spirulina.

And, my friends and my girlfriends literally said, well, because it's so good for your skin and hair, why don't you call it beauty bits and make it pink?

So there are two, brands of spirulina. I'm not trying to trick anybody. I call my brands my children. And so I call the spirulina energy bits and beauty bits.

My twins, because they are identical. Women love the packaging. This is the one I have on my countertop. So whichever one, they all they both do exactly same thing.

So it's the same product. But what it's more about what motivates you more to take it. Beauty or energy, right? Yes, yes. Either way, you're going to win. Exactly.

It's it's it's just a, Hey, if the car companies know that women like, white car and men like a black car, it's no different than that. It's the same car, just different colors.

And then if you don't want to think about, well, spirulina in the morning and chlorella at night, we do offer, a blended tablet called Vitality Bits. That makes it simple, but that you'll need to take twice as much.

And Doctor, as you did mention how your children are taking it. This is fantastic for children, moms, dads don't. You'll never have to worry about your kids not getting the proper nutrition, just as Doctor Gallagher does give them the same numbers or age.

So therefore give them four days, six and six a day until they're teenagers. They can have plenty more if they want, but it gives it easy. The kids love it.

They like to chew it because it turns their tongues green and they think that's funny. And also your pets. Your pets will love this stuff. And remember, one tablet has the same nutrition as an entire plate of vegetables.

And if you're over 40, we need to help you protect your mitochondria because without protection, they're getting damaged by free radicals, which are a natural byproduct of this cellular, energy called ATP.

And until the age of 40, you have superoxide dismutase in your body. But after the age of 40, your body stops producing it, just like it slows down on other things.

And the reason why it gets damage is because your DNA for your mitochondria are located inside the inner membrane where the ATP is produced and the byproduct is free radicals.

So they're constantly getting bombarded with, free radicals. But what this super and by the way, the free radical in the mitochondria, it's only in the mitochondria is called superoxide.

It's very damaging because there's three unpaired electrons. That's the free radical in the mitochondria. So this stuff called superoxide dismutase is is what de mutes the the free radical.

And what does it do. It converts it to water and oxygen. So it protects the mitochondria from the free radicals. It doesn't stop the free radicals. I say it's like having a big golf umbrella, because if you've ever been caught in a rainstorm and you have one of those big golf umbrellas and you pop that up, you don't stop the rain, but you stop getting wet.

So superoxide dismutase is the same thing. It does not stop the rain of free radicals, but it stops the mitochondria from being damaged by them because it converts them to harmless water and oxygen, which, by the way, are two critical nutrients that keep your cells healthy.

So when you don't have superoxide dismutase, number one, your mitochondria are getting damaged and ends and dying, which leaves you less cellular energy to do anything.

This is why your brain doesn't work very well. This is when you get metabolic disease. This is when you have heart disease. This is when you have weight gain.

All of these issues are related ultimately to damaged mitochondria or fewer mitochondria. But why don't you get the superoxide dismutase back in. And spirulina has the highest concentration of it.

We can start protecting your mitochondria again. They will restore themselves. They will start growing back. Well it's like turning your lights back on because we're giving you back that big gulf umbrella.

So now your mitochondria are not only being protected from free radicals, but since the byproduct is oxygen and water and you need the oxygen as it is, the it's called the limiting factor in the production of this cellular energy.

You need oxygen for that final step. So not only does it protect your motor condra, it also gives you the oxygen to improve your ATP. And it gives you water which maintains the the alkalinity level of the cell.

So it does way more than protect the mitochondria. It contributes to all the health of the cell. But after the age of 40 you don't have it being produced.

It's just an evolutionary thing. And women get hit twice as hard because they also lose. We also lose estrogen at the same age, and estrogen is also an antioxidant for your mitochondria.

Ladies, this is why you are suffering more than men with anxiety, depression, brain fog. And it's not your fault. This is because you get hit twice as hard in the mitochondria.

But the good news is we can get them restored for you. It's like, having your, renovation of your home. Or you go in there, you put a nice, clean coat on, and new furniture.

We can get your your mitochondria working again. We can get your brain functioning again. We can get your metabolic health restored again. And it's all from food.

How great is that? And it's all natural. So. So anyway, guys, go out and get some good algae nutrition into your body. So energy bits.com. You can also get 20% off your order.

Just use the coupon code Shockers and I'll get you 20% off. These are amazing products as you can hear with, Doctor Catherine talking about it, you definitely want to support the sod levels in your mitochondria. That's what the spirulina are going to do.

And we need to detox all the heavy metals glyphosate, mold, mycotoxins, all the different things that are exposed to microplastics. Microplastics. That's where the Chlorella will come in to help your body detox.

And so, guys, check it out again. Energy bits.com. Doctor Catherine, again, thanks so much for your time and your expertise. Congratulations again on getting that doctorate degree as well.

Thank you so much. And yeah, if you guys want to be amazed, be sure to check out the video. You'll never believe that Doctor Catherine is seven years old.

She looks like she's 50. So, so thanks again for your time. Always enjoy our conversations and be blessed. Everybody will see you on a future interview.

Thank you. Thank you so much. Be well.