Introduction to Catharine Arnston and Algae

Welcome to the MS and Neuroimmune Summit. I'm here with Catharine Arnston, who is the, CEO for ENERGYbits. Now, Catharine is a algae expert. she is, as research, this understands the medicinal and health benefits of algae.

and we're going to hand it back to Catharine so she can tell us her own unique story of how she got so inspired, to use algae to support healing journeys.

Catharine. thank you, Dr. Terry. So, yes, I've spent 14 years researching algae. from a nutritional perspective, as well as the, medicinal benefits. most of which are unknown outside of Asia.

And you have to say to yourself, well, how does somebody become an algae expert? And that's a great question because I tell people I didn't choose algae.

It chose me. I'm actually Canadian. I lived in Boston, Massachusetts for the last 33 years, but I mentioned Canada because that's where my journey to algae began.

my family's still in Canada. I'm very close to my two sisters, and 15 years ago, my younger sister developed breast cancer. she completely healed. I just want to let everyone know that's the best news.

But as she was preparing for her chemotherapy, her oncologist, which is a cancer specialist, told her she needed to change her diet to an alkaline diet to help with her healing.

Now, they didn't tell her what it was or why it was good for her. So my baby sister called me. I knew nothing about nutrition, but I'm a good researcher, and I love my sister.

So I said, I'll find out what this alkaline diet stuff is, and I did. It was a plant based diet. Because of the phytonutrients and chlorophyl that have been proven to build your immune system.

And also back in the 30s, a German scientist won a Nobel Prize, a German scientist by the name of Otto Warburg for discovering that cancer cannot exist in an alkaline cell.

And so it needed to be slightly alkaline. So I, I think it's these two reasons my sister's oncologist wanted her to have an alkaline diet. So I researched foods for her.

I was so enamored with what I was learning. I decided to give up my corporate career of 25 years. I have an MBA, and I went to back to school to study, nutrition.

And then I taught nutrition, and in the process discovered algae, the most alkaline nutrient dense food in the world, endorsed by the United Nations for 50 years as the answer to world hunger because it has the highest protein in the world.

Three times steak endorsed by NASA as being the most nutrient dense food in the world. NASA says algae has a thousand times more nutrition than any other fruit or vegetable.

It's the most studied food in the world. It's there's over 100,000 studies documenting the benefits of Spirulina and Chlorella, which we'll talk about today.

And it's been grown as an agricultural crop. Yes. Algae is a food. It is not a supplement. And it's been used in Asia Daily for 60 years. where it is as big an industry, agricultural industry as the beef industry is here.

The only trouble, it seemed, with algae and, learning all about its, medicinal properties is that no one outside of Asia seemed to know about it. because it's not grown here.

And why would anyone tell you about it? So 14 years ago, I decided I would, devote my life to helping people outside of Asia learn about algae, why it's so important for your health.

It's the most alkaline, nutrient dense, anti-inflammatory.

How a Family Cancer Journey Led to Algae Research

healing has a healing, antioxidants for your mitochondria, and which are critical for, protecting you or managing any kind of, multiple sclerosis symptoms.

So that's how I became an allergy expert. I'm actually now getting my PhD because I've done so much scientific research. I call myself a citizen scientist because I'm pretty much self-taught.

And I'm here to help you self teach yourself as well because the science is there. It's very confusing. I will admit that in particular with MS. Most people think it's strictly an autoimmune disease, but recent research have been finding that it's also a mitochondria, an inflammatory disease.

And I'm going to show you how these two algae, spirulina and Chlorella can mitigate that inflammation and actually protect your mitochondria so they can grow back and your health can be restored.

So let's take, go back to the alkaline comment. So the alkaline certainly very, very helpful for people with, cancer worried about cancer risk, in your research, was, being alkaline helpful for people with, multiple sclerosis in neuroimmune conditions?

I don't have an answer for that. but I will say that when your cells are slightly alkaline, the range goes from 0 to 14. And 7.1 is where the, the, health of the cell, is, it's best if it's 7.1, which indicates slightly alkaline, which indicates there is oxygen in the cell and the cells are healthy and communicating to one another when they become more acidic, which often comes from eating acidic foods, processed foods, sugar, gluten, meat is very acidic.

then you open yourself up to having slightly acidic cell, pH, which is not, does not support health. And so because algae is the most alkaline food in the world, because it has the highest Chlorophyll in the world, Chlorophyll is the most, alkaline nutrients that I've been able to find that's been measured and has especially, Chlorella has 500 times more.

Chlorophyll than arugula and 25 times more Chlorophyll than even liquid Chlorophyll. And these are numbers from the Linus Pauling Institute's website.

So the alkalinity piece is important for, preserving the health of the cell, but more importantly, is preserving the health of the mitochondria. because the mitochondria are what are responsible for generating cellular energy.

And everything in your body occurs because of cellular energy. And to help people understand. And so when you don't have sufficient cellular energy, it makes it very difficult for any part of your body to perform optimally, whether it's your brain, your digestion, your heart, your lymphatic system.

the way I describe it is, if you don't have enough cellular energy, it's like going to a dinner party, and maybe there's 100 people and you have one, one, one cupcake to share with everyone for dessert.

Nobody's going to be happy because they didn't get much dessert. Same with your body. If your body isn't getting enough cellular energy because you're mitochondria have been damaged or they've been, destroyed, which happens, you have fewer mitochondria as you get older, if you have less cellular energy, none of your body parts are going to be happy because they're not going to be performing optimally.

And as you're going to find out, spirulina in particular has antioxidants that protect the mitochondria from free radical damage, which allows them to, grow back in a healthy fashion and also to, protect them from the damage that occurs, which mutates them and causes, cellular dysregulation.

So, you're going to find out why spirulina in particular is helpful also Chlorella, but it's this the mitochondria, damage is what's the, and what is causing all chronic diseases, not just multiple sclerosis.

It's also, you know, heart disease. Alzheimer's is certainly, you know, mitochondrial dysfunction, leads to accelerated aging. It increases anxiety, depression, and, visual, you know, optic neuritis, macular degeneration of the eyes, leading causes of blindness.

so keeping our mitochondria happy is key to, staying healthy, and healthy aging. I tell people I never eat alone. I always eat with my mitochondria because, high carb foods, processed foods will generate more free radicals.

And when they're more free, radicals literally exhaust your mitochondria. So just changing your diet to something that's, less carb based process carb based will immediately, reduce the number of, of, free radicals that are being processed, as a byproduct of ATP production.

And to help you understand again, what mitochondria are, I tell people think of your body like a building, you know, building. You have offices and in the offices you have lights and as but you need the lights to be able to work in the office.

Well, in your body, your body's the building, your cells are like the offices, and your mitochondria are like the light bulbs. They keep everything working.

Now in a building, when the light bulb goes out, maintenance comes and replaces it. Everybody's happy. But in your body is your mitochondria get damaged or or die.

If you don't have proper nutrition to allow them to regrow, the lights go out. And as you have more and more lights, which are your mitochondria going out?

This is when more and more inflammation occurs. This is when more and more chronic disease occurs and it's a downward spiral. And I can help you understand how the process by which that is occurring or or first, maybe I could help you understand what algae is.

So maybe we should go back to what are algae. Yes. Well, algae is algae plants. Yeah. We're sort of, so algae is its own food category. It's not technically a plant.

It's not. It's not a fruit. So it's its own food category. And within algae as a category, there's two types. There's macroalgae and microalgae. And we're going to be talking about, microalgae today.

But, but let me tell you what macroalgae is. It's that stringy stuff that washes up on shore, also known as seaweed.

What Algae Is and Why Spirulina and Chlorella Matter

and it's called seaweed because it's it's only in the sea and it's still good for you because it has high fiber and iodine. but it has virtually zero nutrition.

That's not what we're talking about today. We're talking about microalgae, which is microscopic in size. It's so tiny that you could get a million of them on the head of a pin.

And it has either no fiber or virtually no fiber. And it's everywhere. It's in the sea, but also in the lakes, the rivers, the streams. You're swimming pool, the soil or the soil.

And so that's what we're talking about. And there's tens of thousands of strains of microalgae. But the microalgae

that we sell and that you would probably find in Target or Whole Foods, wherever you go to find spirulina and chlorella, they are not from the ocean.

Yes, there is microalgae, blue green algae and green algae in the ocean. But the strains we're talking about today, spirulina, which is one blue green algae, and Chlorella, which is one green algae, are harvested as food crops.

We grow them in triple filtered spring mountain water. Here's a it's aquaculture. This is spirulina farm. It's grown in freshwater, not the ocean. And this is a Chlorella farm again.

Triple filtered spring, mountain water, not the ocean. These are harvested as aquaculture. Not. And from the ocean. Where are they being grown? Are they being.

Well, we're known as having the highest quality that are grown in Taiwan. and we're known for having the highest quality because a we grow ours and triple filtered spring mountain water, which is important because algae will absorb whatever's in the water.

So if you're in a lower quality farm or you're from the ocean ocean, they'll be mycotoxins, then probably the most important thing you need to know is that we do not use high heat to dry our algae.

So all of the nutrients, including very important, our antioxidants. We're going to talk about today, superoxide dismutase, which is the most critical antioxidant to protect your mitochondria.

We preserve all of those because superoxide dismutase is an enzyme and high heat damages enzymes. There's also a very important, pigment in spirulina.

It's the blue pigment. It's why it's called a blue green algae. It's called viscose iron. And that has healing properties as well. Also destroyed by high heat.

So we grow our algae again in triple filtered spring water, dry it without high heat into a powder, and then we press them into little tablets that we affectionately call bits because they're restoration and there's so much nutrition in one tablet, it's equal to an entire plate of vegetables. So, whether you if you don't like vegetables, you're not near a grocery store.

You don't can't carry vegetables when you're traveling. Your kids won't eat them. Your husband won't eat them, or they give you gas. They go bad quickly.

Algae is your answer because just from a nutritional perspective, it will give you massive nutrition. We sell them in large bags. And using that quote from NASA, I decided I discovered that each bag of our tablets has the equivalent nutrition as 551 pounds of vegetables.

So even before we get to the healing properties that are found in spirulina and Chlorella for multiple sclerosis, they are just the most nutrient dense food in the world and ours are have the highest efficacy, which is why we're only sold either through our website or doctor's offices.

because of the extra care we have gone to to preserve all the nutrition and make sure that they're toxin free. So whether you know family or yourself, these are the most nutrient dense food you'll ever put in your body.

You know, as we're talking, you know, when I travel, I get so, concerned about, the quality of the food that I'm eating. and if I, am uneasy, like, okay, I'll just have to.

Yeah. And like me, you know, I want to be sure that, I'm not going to get into trouble. so taking, you take more of these energy bits with me when I'm traveling?

Yes. Well. I've not thought about that before until just now. Like. Yeah. Okay. This this would make traveling a whole lot easier. They come in little pouches, which actually you can also buy on Amazon, you know, for $6.

Each pouch has 30 tablets in them. So a pouch of energy bits, which is spirulina, could be lunch. There's 30 tablets, one calorie per tablet, zero carb.

So it's ketogenic. great for, diabetics, balances your blood sugar does not decrease your ketones or increase your carbs. Great for fasting. 40 vitamins and minerals, 64% protein, high chlorophyl.

This will keep you, stop you from being hungry for probably five hours and one calorie per tablet. So very efficient. Nutrition. And then we're traveling.

We're exposed to all kinds of, bacteria, and, you know, other sort of immune boosters, and Chlorella pulls out toxins and build your immune system. So this will protect you, pulls out radiation.

you know, heavy metals, lead, mercury radiation, aluminum alcohol. So this will be good for lunch. This would be good at night before we go to bed to preserve your, your health.

And in fact, I don't think I actually showed you what they look like. The little tablets. These are the two algae that see the darker. Okay. Yeah, yeah, this is spirulina.

See, it's a slightly darker color because it's a blue green algae. So it has those two pigments in it. Blue I sign in and the and the green one is chlorophyl chlorella has just one pigment in it which is the green pigment called chlorophyl.

And so that's why I designed all the packaging. I designed it so people would know that the blue one is spirulina because it's a blue green algae, and the green one is chlorella because it's a green algae.

So Chlorella because you were asking if it's a plant. Chlorella is technically a plant, which is why I put a leaf on the package. and we can talk about the two benefits.

But spirulina, it's not even a plant. It's a bacteria. It's a sign of bacteria and bacteria. And that was the beginning. That was the beginning of photosynthesis.

Evolved from cyanobacteria, which is now the really cool things about why spirulina in particular. But both of them, have all the nutrients your mitochondria need and have the antioxidants that can get into the mitochondria because virtually no other and eat well, there's only a handful of antioxidants that can get in.

Or I'll tell you, the ones that can't vitamin E, vitamin C. And also, by the way, drugs cannot get into that inner membrane of the mitochondria, the ones that are in the highest concentration of the algae, glutathione superoxide dismutase and chlorophyl can and I can show you why and how that all works.

So algae is like the key that unlocks the door to mitochondria health. And mitochondria unlock the door to your health so you can see how their and their family, they came from the same place.

So just on a high level, you can see why. Because algae was the first life on Earth almost well 33. 4 billion years ago. And they've shown through endosymbiotic, scientific theory that mitochondria are evolved from the sun or bacteria.

So it's pretty interesting to me. So we start out, with bacteria. we, we get the cyanobacteria, which leads to oxygen. Yes. Which leads to die off of many, many, single cellular life forms.

but then that leads to. Then you have of tendrils because it was an anaerobic cell.

Mitochondria, Free Radicals, and Cellular Energy

And generated, ATP so much, of which a byproduct is oxygen. So after a billion years, there was enough oxygen on Earth for other life forms that were aerobic to, to evolve.

And, one of them was was, chlorella. In fact, they have this little chart, show you. So at the very beginning, three that billion years ago, there was a sign of bacteria and, it was an anaerobic cell and released oxygen after a billion years, larger cells that were aerobic could exist on Earth, but they didn't generate ATP as well as the anaerobic cell.

So the aerobic cell absorb, engulfed the single cell in anaerobic cell and it became mitochondria. So the inner membrane that's existing in the mitochondria that exists nowhere else in our cell body is a leftover from those prehistoric days when it was an anaerobic cell by itself.

And then a, a lipid membrane was put around it. All of our other cells in our body have a lipid membrane, including the mitochondria. But the mitochondria are the only cell that has that second inner membrane.

And most, most drugs, most antioxidants can't get in there. this is sort of what it looks like. So here's your mitochondria, which are mitochondria but lipid membrane around it.

And then there's this inner membrane inside. And this is where ATP is produced. But this is also a byproduct of ATP. Are free radicals. People don't tell you that.

And the mitochondria have their own DNA. And they are located exactly where the free radicals are being produced. And so they are ringside to where all the free radicals are being released.

And the most damaging one is called superoxide because it has three unpaired electrons. So your body, Mother nature, is so intelligent, from the moment you're born, your body creates that superoxide dismutase.

But by the time you hit 30, your body decreases in its production and then by 40 you have virtually none. So this is when most damage, this is when most chronic disease occurs.

You, your your your mitochondria are protected from all that free radical damage until about the age of 30. And then by 40 or 50 you have no superoxide dismutase being produced.

And so your mitochondria are no longer protected from the rain of free radicals that are a byproduct of ATP. You want ATP, that is cellular energy. So as you stop having cellular energy, you basically die because you can't you can't your body can't function.

The downside is that as a byproduct of this ATP, you have free radicals. You'll never get rid of them completely. but when you have too many free radicals, this is what causes Ros.

This is what causes inflammation. This is what causes mitochondria damage, particularly your mitochondria DNA. Most people don't know that their mitochondria have their own DNA.

There's only 37 of them compared to your regular 22,000. But those 37 control all the other regular DNA, the communication in your cells. And so when they get damaged, it's like they're like an air controller at a at an airport.

There's not many of them, but they control everything. Same with mitochondrial DNA. There's not many of them, but they control everything. And when they get damaged, this is what leads to cellular inflammation.

This is what leads to decreased ATP production. And when you have less ATP, you have less cellular energy. And when you have fewer mitochondria, you, it just it's a downward spiral.

So that's why protecting your mitochondria, from damage or from dying is critical. It's critical to prevent multiple sclerosis or to manage it. And which of the, algae is most critical for protecting the mitochondria?

Well, I believe it's it's the, spirulina, which we call energy bits. We have a second brand called Beauty Bits. and so one of the things I actually call spirulina is brain food, because your brain has the highest mitochondria.

And so one of the things because this is so protective of the mitochondria, one of the first things that improves is your brain. Now multiple sclerosis is a neurological disorder.

And so, and there's a great book that, you probably I'm sure you've read a Doctor Chris Palmer's book called The Brain Energy Brain energy. Our book is about how he believes all brain issues, post traumatic stress disorder, Alzheimer's is due to damaged mitochondria, and because spirals.

Tina has the, a very high concentration of superoxide dismutase. And there are 25,000 studies that have been done proving the, ability of superoxide dismutase to help protect heart disease, Alzheimer's, probably multiple sclerosis, reduce inflammation.

It's proven. The problem is you can't find superoxide dismutase in any food. It's just it's there's, a small amount in, in, nuts. Brogan Greene is a green drink of, like, the, the name, but it's predominantly in spirulina, and, I also chlorella, but mostly in spirulina.

And so because it has a and because spirulina is a bacteria, so it has no cellulose wall, it gets absorbed instantly if you chew it within minutes, if you swallow it because there is no cellulose wall for your body to break down to get access to all the nutrients like the superoxide dismutase.

But the problem is super oxide dismutase is an enzyme in almost all of the other lower priced algae companies. They have to get to market quickly, so they use high heat to dry their algae.

And guess what? That high heat does? It kills all enzymes. No inclusions. Help me understand, what keeps my gut from digesting the enzyme? Once it once I take this virulent.

It's because it gets absorbed so quickly. I don't want to say it bypasses digestion, but there's. So it's so rapidly absorbed into your bloodstream, it will be absorbed instantly if you chew it sublingual, because it gets into your bloodstream through your mouth and because it gets absorbed so quickly.

even if you swallow it, the effects are amazing and it's and it's ATP energy. We call it energy bits. But I have to remind people it's not a stimulant.

It's not like caffeine or chemicals or sugar. chemicals. Those kinds of things are like putting paper on a fire. This is like putting a log on the fire because the energy comes from the at the cellular level, where ATP is produced in something called the electron transport chain, I don't want.

Oh that's marvelous. Yeah. You want me to get geeky on you? Yeah. Yeah. I think people enjoy, do you want to walk? Walk them through the electron transport chain? Yeah.

I think audience will enjoy that. I love this. So the, so let me first story. So in your cell okay. Here's your cell. And inside the cell you have your nucleus.

And in there you have these mitochondria okay. And just think of it in your brain. You have 2 million of these per cell. So these guys are really important.

They're generating all the cellular energy. But remember inside the cell these mitochondria is where the ATP is produced a byproduct is free radicals.

And this is where your mitochondria DNA are. And they control everything that goes on now inside this mitochondria in that inner membrane. Right okay.

The way the ATP is produced is this this is called the electron transport chain. And it's embedded there embedded in those inner membranes. And the best way to describe this I tell people is, you know, you thought we all watched the relay race right?

I relay races, you have a runner and they pass the baton to the next runner, and then that runner runs a distance and they pass the baton. And then the hope is that they'll get to the finish line before anybody else.

Well, sort of a bit like this with the way that your ATP is produced. But instead of having runners, you have I think it's one you have molecules and instead of passing a baton, they pass electrons.

So the key is to make sure those electrons get passed very efficiently and quickly so that the, the instead of running the winning the race, the, the goal is to produce ATP.

So this is the way it's supposed to look. By the way, you have a couple helper molecules, CoQ10 and, and, soup, CoQ10 and cytochrome c that speed up the process.

And the blue pigment that's in the viscose iron. And, it speeds up that cytochrome c molecule in healthy cells. It's sort of like a Tesla volt makes the ATP go even faster.

But in a senescent or cancer cell, it ejects the cytochrome c molecule. And kills the cancer cells. So that's a cell. So now that you've seen those, those, sort of that relay race that's embedded right in and how ATP is produced, here's what a healthy mitochondria look like.

See how close those little molecules are. They can pass the electrons along. Lots of ATP is produced very efficient because they're the electrons are being passed along very efficiently.

There's very few electrons leaking out because it leaked out. Electrons turn into free radicals and free radicals damage that mitochondria. And this is what causes inflammation.

So this is a healthy happy mitochondria.

How Spirulina and Chlorella Support Health and Detox

But oops. Here's someone that's maybe been eating a lot of carbs. And what's happened is the it damages the mitochondria. And the mitochondria starts to expand eventually.

Doctor. walls you'll know it. It becomes it explodes through necrosis as the mitochondria gets, wider and bigger. Look what happens, though. Those relay race guys, the molecules, they can't pass the electrons very well because they're so far apart from one another.

It's sort of like asking Tom Brady to throw a pass in the middle of a huge stadium. So number one, because they're not efficiently passing the electrons along, you don't get as much ATP because they drop the ball, they drop the baton, they drop the electrons.

So number one you get less ATP. Number two, those electrons don't just disappear. They leak out into the mitochondria, which then they become more free radicals which cause more Ros, more inflammation, which causes the mitochondria to expand even more.

So this is a downward spiral. So you want to see how what happens so tight healthy mitochondria are very efficient. Lots of ATP not a lot of electrons leaking out.

Not a lot of inflammation damaged mitochondria completely. The reverse very little ATP, very very massive amount of electrons leaking out which becomes free radicals.

This is what it really looks like. This is a real picture of a damaged mitochondria and a healthy mitochondria. See all that blank space in the middle?

That's where the, molecules have become, spread apart. And so they can't be passing the electrons very efficiently. This is what causes and contributes to multiple sclerosis.

This is what contributes to Alzheimer's. This is what contributes to your, cellular inflammation. And so because, your body normally has this antioxidant called superoxide dismutase that removes the mitochondria or the free radicals, but stops you stop having it after the age of 30.

because spirulina and to a lesser degree, Chlorella, it restores the ability for the, the mitochondria to, to neutralize the free radicals, because what it does is it turns the free radicals into water.

It neutralizes them. So this is it takes the superoxide, the superoxide, which is a very damaging, free radical and and converts it into water. That's a superoxide dismutase.

That's why it's called dismutase. so this heals in protects the mitochondria. The best way I describe it to people is like, you know, you know, those big golf umbrellas you see with people?

Well, when you're born, it's like inside your mitochondria. It's like they all have these big golf umbrellas protecting them from the rain of free radicals that are a byproduct of ATP.

And then as you get, you get to 30. That big golf umbrella has shrunk down to like maybe one of those totes. So it's not as effective. So more and more free radicals are being released because they're not being neutralized.

And then after the age of 40, you're just flat out being drenched in free radicals because you no longer have the protection of the umbrella called superoxide dismutase, which neutralizes the free radicals and turns them into water.

Okay, so. The this. How many of these well, would you be taking? You know, we're over where we have them. As we know, our mitochondria are under attack. and, we're or we may be over 40 and we're trying to, age healthily, so.

Yes. What is this one energy a day to day. so we generally recommend and because they also satisfy your hunger, they give you mental energy, physical energy.

They're great for weight loss, great for anybody taking if you're diabetic pre-diabetic blood sugar issues. that that would be spirulina. But ten tablets.

So ten of them, they're about the size of a baby aspirin. If you're healthy, we recommend ten tablets a day. And we recommend the spirulina in the morning.

In the afternoon, because that's when you're tired. That's when you're hungry. There's no contraindications. Zero. you can give this to your newborn. And in fact, in Japan, it's the only thing when they put it in water, it's the only thing that keeps babies alive.

If they if they're preemies and they can't digest mother's breast milk. So it is safe because there's no, no fiber. And I did the analysis to find that the nutrient value is virtually identical to mother's breast milk.

So ten tablets of spirulina in the morning, preferably all at one time because that well, you'll notice the improvement. However, if you have a health condition like M. S., the therapeutic dose is 30 tablets.

And that's why we have them in these little pouches. There's already 30 tablets in a pouch. we also sell them in large bags. So if you took ten tablets a day, a large bag would last you three months.

If you took 1030 tablets a day, it would last you a month. But even ten tablets a day, it works out to a $1 a day to protect your health, to protect your mitochondria, you'll buy.

You'll need fewer. You'll replace your multivitamin, your fish oil, your CoQ10. Your collagen has more collagen than collagen powder. and then Chlorella, which has the most chlorophyl in the world.

This would replace your need for vegetables ever. You never have to eat another vegetable again if you don't want.

This will also pull out toxins. helps pull out, you know, aluminum from your brain.

All these things affect the brain. So ten tablets if you're healthy, 30 for medicinal quantities. And actually, there is no upper limit. I hesitate to tell people how much I've been taking.

I've been using them every single day, both of them for 14 years. And I have over 100 a day. I eat real food. I generally intermittent fast throughout the day and then, you know, around 4:00 or 5:00 I have a real meal and I and I eat, really, I eat whole foods, everything from eggs to grass fed beef.

but I these have saved me my, people. I am I am 68 this in a couple of months, so I'm, I'm inching towards 70. So I'm no spring chicken. I'm not any 20 year old.

I've been around the block a few times. This is not my first rodeo. And my brain is as active as a 30 year old. I have mostly young interns working for me.

They're all in their 20s. I travel nonstop, I never have a day off. I'm never sick. I sleep like a baby. I want you to feel as good as me. And what? And the great news is.

And Doctor Wells, you'll you'll you'll, you know, agree with this. Your body is constantly changing. We have 30 trillion cells in our body. And every day, 30 trillion done in every 30 trillion grow back.

So whatever health condition you currently have, Ms. or whatever, it's not a death sentence. It's not it doesn't have to stay that way forever. But you know, you have to give your body some help.

You have to give your mitochondria an umbrella. we know to plug our cell phone in to recharge it if we want to use it the next day when you have to recharge your body, too.

And you do that through, nutrition, through proper movement, sleep. and but I can't help you with the, the movement. Well, actually, spirulina gives you energy.

So you want to move more? Chlorella has the highest tryptophan in the world, so it will help you sleep. so we can help you with that? these are food. These are not supplements.

This is a gift to us from Mother Nature. So I can't take credit for algae. But what I can take credit for is growing it so carefully that we preserve all the nutrients for you and so that you get very high efficacy.

So I think I heard you suggest ten tablets in the morning. Spirulina, if you're healthy, up to 30 tablets if you're suboptimal. so if you have MS. or another immune condition. Yes.

10 to 30 in the morning, Spirulina and 10 to 30 Chlorella in the evening. Yes. And the reason for the Chlorella at night is it's a detox and wellness algae.

And when you sleep, that's when your body goes through a detox repair cycle. Chlorella has something called Chlorella growth factor, which speeds up the growth of your cells.

Both of them increase, the circulation and creation of stem cells, which also helps with, your healing processes. This also has a very high amount of K2, which moves excess calcium out of soft tissue, like your brain and into your bones.

has the highest concentration of Chlorophyll, which is a, stimulates peristalsis. So a lot of people who are on medication get constipated, or if they're eating the wrong foods, they get constipated or they're traveling, they get constipated.

Chlorella. We'll we'll correct that for you. And it does it naturally. So very much a healing. And it has the highest tryptophan, as I mentioned. It won't make you sleepy, but it will help you get into a deeper sleep.

Tryptophan is a precursor to melatonin, so it's clearly.

Dosage, Daily Use, and Where to Find ENERGYbits

I'm going to have to adjust this. I've been taking bath in the morning. So I'm going to switch my Chlorella to the evening. Well you can take up any time of day with food instead of food.

with water doesn't really matter. But, we want people to get the maximum benefits. And so generally the Spirulina is good for energy, hunger, nourishment, and Chlorella is generally best after a workout.

Or if you've been drinking alcohol or b before you go to bed. So like I said, I've been I eat so many, I both of them throughout the day, but I always definitely have the chlorella before bed for sure.

Well, this has been wonderful. and, well, tell us again where people can find you. Yes. So our website is energybits.com. And two things that I wanna let you know So there's lots of science.

We're very focused on science here. so you can learn about algae. You don't have to just buy it. But, and if you are going to buy it, the bags are the best value.

And again, if you took ten a day, that would turn out to be a dollar a day. And we have a 20% discount code for you, MSS, that will get you 20% off. So you get good value.

It works on all of the products. We're also going to have a handout, that will, as a gift. So you can download this 16 page booklet about explaining how superoxide dismutase, which is the very powerful antioxidant in Spirulina and Chlorella that protect your mitochondria, this will help you understand what is really happening and how it actually works.

So we'll be sure that that gift is available and we'll put the discount code on that gift again. So for the 20% discount it's MSS. but honestly, if you I want people to know a couple things.

First of all, algae isn't new. It's just new to you. It's been around for centuries. 3.4 billion years. the Egyptians used it 2000 years ago. The Aztecs in Africa or in Mexico use it 250 years ago.

It's been used daily in Asia for over 60 years. You just don't know about it because it's not grown here, although I'm hoping to grow it. And, no one's explained the medicinal properties to you.

So you didn't know about Chia or QR or matcha or collagen powder? Probably until about ten years ago. But those have been used in other countries for centuries.

Same with algae. So it's not new. It's not a trend, it's just something that you didn't know about. But and the other thing is to, you're not going to get all these benefits from an algae that is, been exposed to high heat, which will damage a lot of the nutrients.

particularly with Spirulina, you could get frozen or fresh Spirulina. or ours. We ours is actually considered raw because we don't use high heat. So that is another alternative to get the same efficacy.

but, if you, if you look after your mitochondria, I promise they'll be able to look after you again. Thank you so much, Catharine, for spending some time with us.

And I look forward to, continued collaborations you have. You better believe it. Thank you. And I wish everybody on the best in your healing journey, and hopefully you'll let algae help you with that.