This $1 Superfood Could Replace All Your Supplements (Backed by NASA!) | Catharine Arnsto Transcript

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Introduction to Mitochondria and Algae

The mitochondria are the most essential thing for your health. But as you get to the age 30 and age 40, they start getting more damaged and they die. What is causing those mitochondrial cells to get damaged?

Great question. So here's the story. Meet Catherine Arnston, the unstoppable founder of Energy Bits. After her sister's cancer diagnosis, she became obsessed with algae, The most nutrient dense plant based superfood.

With top notch business degrees and relentless passion, she's here to show us how algae can transform our health. The great thing about your body is it's constantly regenerating itself.

Want to know why? What's that? Your mitochondria evolved directly from algae. There is nothing in the universe more nutrient dense than algae, NASA has been feeding it to the astronauts for 50 years.

It's so consolidated, and here's why. Chronic disease hits everybody. One in two people are predicted to get cancer now. But the reason I promote spirulina first and foremost is because it's a bacteria.

If you chew it, it is in your bloodstream in seconds. We're allowing people to feed their body the nutrients they need for their bodies to actually perform in the way that it supposed to perform.

Absolutely. And that's I love algae so much, we're not asking you to change anything. Welcome to another episode of a Healthy Point of View podcast. I'm your host, Sam Tahata.

And like always, we're bringing experts from all over the world to talk about health, wellness, beauty, and what kind of modalities and services and products are out there to make us feel good, make look good and also have great sex, right?

These are things that we talk all the time. Today we have an expert that is the expert behind algae. Algae has so many different benefits to it, a lot of vitamins, minerals, and all of these nutrients that are extremely important for the body.

And today we're going to hear about the science behind it. We have the founder, CEO, chief scientific officer, of energy bits.

How Catherine Arnston Became the Algae Gal

It's one of the most powerful products out on the market. We have here Dr. Katherine Arnston. Thank you, thank you Sam. I'm so glad to be here. And Algie's glad too because it was the first life on earth four billion years ago and it's been waiting for a very long time for it to understood.

Four billion years ago. Four million years, yeah. So I'm happy to be the voice of algae. Absolutely. That's why my nickname is the algae gal. The algae girl.

My team said, we need to call you like the Algae Queen or something. And I said I don't want to the queen because you're separated from everybody. the gal is like, the girl next door.

It's for, The gal's is for everybody and algae is everybody, so I decided I would be The Algy Gal. I love that. So now we have to get into the story of how you became the algae gal, right?

And I was reading some stuff online, you know, about your sister and whatnot and how that kind of came to about. But I mean, your just at a different level now when it comes to the Algae.

I don't think you even knew that you were going to be where you're at today because of that situation. Well, you think to yourself, how does somebody become an expert on algae nutrition?

And it's certainly not anything. I tell people I didn't pick algae, it picked me. And the situation was this, I'm actually Canadian, although I've lived in Boston, Massachusetts for 35 years, Although recently moved to Miami, which I am so excited about.

Oh yeah. and I mentioned the Canadian part because I have two sisters and they both live in Canada and very close to the mall, but both of them. And the younger one, 16 years ago, developed breast cancer.

And she completely healed. 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 her with her healing.

Now this recommendation came from her on oncologists. So not a neighbor, not yoga friend, a very serious doctor. So when my sister got home, she thought, well, they didn't tell her what an alkaline diet was, just that she had to do it.

So she called me. Not that I knew anything about nutrition because I said I have an MBA and was doing international business, but I'm a very good researcher and I love my.

Sister. I will figure this out for you. And it turned out to be a plant-based diet because of the phytonutrients and the chlorophyll that have been proven to build your immune system.

When you go through chemo, you need a strong immune. System. It turned out that cancer cannot exist in your cells if they are slightly alkaline. There's a pH range of 0 to 14. And so a German scientist by the name of Otto Warburg won a Nobel Prize in the 40s for discovering this.

So having an alkalined diet would keep the cancer out of the rest of her cells. So anyways, I researched the foods for her. She did change her diet. she did go through chemo and she completely healed.

But I learned so much in the process and I thought, wow, somebody needs to tell the rest of the world about this because it was 16 years ago. So I gave up my corporate career.

I went back to school. i got a health coaching certificate from the Institute of Integrative Nutrition in New York and i taught plant-based nutrition.

This is what truly led me to algae because as I was teaching people the importance of eating more vegetables, I kept hearing, well, it's too much work or it gives me gas or nobody eats it.

My kids won't eat it and it takes too long. It takes to much room in my refrigerator. So I thought I have to find a way to get the nutrition of plants and vegetables into people, but in a that's effortless and simple and doesn't take any time.

Right. Doesn't give them gas. And I looked at everything I found for my sister. and lifted the hood, that's when the miracle happened because algae is the most alkaline food in the world.

It has the highest nutrient density. We have a quote from NASA that says, one gram of algae has a same nutrition as a thousand grams of fruits and vegetables.

A thousand! That's a big number. The United Nations has endorsed spirulina algae, we call ours energy bits, for 50 years because it has the highest concentration of protein in the world.

It has three times the amount of proteins at stake and it's a complete protein. Has all the nine aminos your body can't make in 18. Plus it's been studied for over 75 years.

There are 100,000 studies documenting the benefits of spirulina and chlorella, but nobody in America knows about it. And it has been used in Asia daily for 60 years, it is a crop.

Algae is a food crop. It's bigger than the beef industry is here in Asia. So they've been taking it safely. They've, it's been scientifically documented.

And here's the best part of it all. it comes in these little tiny tablets. Each one of these tablets, which is about the size of a baby aspirin, each one has the same nutrition as an entire plate of vegetables.

While I'm talking to you, all of you. I just had a plate vegetables, Chew it I to mine most people do swallow spirulina because it has so much protein.

Why Algae Is So Nutrient-Dense

It's very chewy but now and we recommend ten spirullina minimum in the morning or the afternoon and Ten of those a day at least if just to fill nutritional gaps if you're trying to correct a health condition prevent a condition whether it's cancer, what does that taste like I Like chewing it, is it doable?

Yeah, I chew it with pistachio nuts, slices of strawberries, slice of apples. You can put it in a trail mix. Most people do like the chlorella, which has a drier flavor.

It's more like a soy nut. I literally eat hundreds of the, well not hundreds, but I probably eat about a hundred a day. There is no upper limit because it's food.

It's like having a salad. it s like, having kale chips, except it has none of that downside. Has no lectins or oxalates. So if you're paleo or carnivore, there's no lactins, or auxilates to upset your stomach.

ketogenic you can take it if it has or fasting it won't interfere with your fast but now if you stand at your at table drink a glass of water take 10 at a time in a second No hours of cooking, cleaning and throwing stuff out.

We have expiry dates that they last about three years. So you don't have to worry about using them all up quickly. It's unbelievable. it literally never goes bad.

And we'll talk about this later on because we do have a discount code to share with your community. You buy them in the large bags and you had 10 a day, it works out to a dollar a Dollar a day healthy to be healthy could be fully nourished 40 vitamins and minerals highest protein in the world highest chlorophyll in The world in seconds.

It's so safe. There's no contraindications You're you can give this to your newborns your children to you're teenagers everybody everybody your pets if you drop a few in your Pets your pets will love you And pets are smarter than us.

They know what's good for them. So it's amazing that it has been used for so many years. It's been scientifically documented. Its been endorsed by international agencies.

But people in America or outside Asia simply don't know about it. Why? It's not grown here. 99% of algae, spirulina and chlorella, are grown in Asia. So it's Japan, India, Taiwan, Korea.

Let me ask you about that. Why is it growing in Asian? What is the environment that it needs for this algae to grow? Well, first of all, to answer your first question, why is in it Asia?

It is a really interesting story. I don't want to go too deep into it, but it started with the Americans had found out about algae as a result of the Germans feeding it to their people after World War II.

It all goes back to these German scientists that were studying algae for its health benefits and stopping cancer, but they found it also had the most nutrition and the protein.

They used it feed their peoples after WWI. After WWII, when the Hiroshima bomb was dropped, the American government through the, I think it was the Master Plan, anyways, they committed to helping Japan get back on their feet, and they sent lots of food to Japan, And they included chlorella algae.

Now, i don't know where they got the chloella from, but they did send it to them because of the high protein. But they found out, what we're going to talk about today, Chlora is a wellness algae, it pulls out toxins, including radiation.

So they fed all the Chloera to the Japanese because of the protein, but it turned out they healed from the radiation. Interesting. So the American and the Japanese government said, well, what was that stuff?

We want more of that. The Carnegie Institute, and I have the papers to prove it, back in the late 40s, they built the first mass production of chlorella algae to explore the health benefits.

But typical in America fashion, it was more complicated than they thought, and after a year they shut the lab down. And by the way, that was in Boston, Massachusetts, which is where I've spent the last 35 years living.

So after they've shut down that lab, the Japanese basically said, Well, if you're not going to figure out how to grow it for mass consumption, we will.

So the Americans gave all of their research to the Japanese, and the Japanes are very patient people. And they spent 10 years trying to find out to how grow chlorella algae for mask consumption.

And they finally figured it out. And that took them into the late 50s and early 60s. Starting the early sixties, you may remember there was a burst of interest in spirulina and chlorella.

It was part of the counterculture Vietnam War period. But this is why the algae industry is based in Asia, because it started in Japan. So all the raw product for the energy bits is coming from Asia?

Yes, we grow ours in Taiwan. So to answer the other question about is it a good climate, yes. Because growing algae isn't like growing broccoli or carrots.

You can't grow it just anywhere. It has to be in a tropical climate and we grow ours in Taiwan and Taiwan is known as having the gold standard and it's again like wine because the angle of the Sun it just happens to be the best place to grow algae you get you know China India all the lesser expensive algae that you find at Trader Joe's or or you Walmart I'll promise you comes from China and India and they cut corners and They don't grow it as carefully as we do So it's not as powerful and doesn't it missing some of the nutrients.

We'll talk about that later on but Taiwan is the gold standard How long does it take to grow that takes about six to eight weeks to? Grow it. It's grown in freshwater.

So, it is not the ocean. Yes, there is algae spirulina and in the oceans and in lakes like Klamath Lake but that's where microtoxins are so you never want algae grown in a wild body of water so this is grown ours is growing in fresh water and it takes about six weeks to grow it maybe eight and then we air dry it without high heat and we press them into these little tablets that we call bits, because they're bits of nutrition.

There is nothing else in here. One ingredient in our energy bits is spirulina, and one ingredient is our chlorella, which is chlorella. Nothing else. Now, chroella, is that the same thing as chlorophyll?

Well, it has the highest chlorophyll in the world. That's why it's called chlorella, because of the chloro-fil. It has 500 times more chlorofil than arugula and 25 times chlorophyll than liquid chlorophil.

Now, liquid Chlorophylls is good for you. But when you take liquid chlorophils, you're only getting the Chloryphil when You take chlo-rella. First of all, You get 25x more Chorophyl than Liquid Chlorophils.

Plus you get 60% protein, 40 vitamins and minerals and important nutrients that we're going to talk about like superoxide dismutase that protects your mitochondria from free radical damage.

So they help you with your longevity. Has the highest glutathione. I know a lot of your drips are glutothione, this has the high glutathiol in the world.

This is really great to stack with IV dripps or just take it alone. But it's very rich in chlorophyll. Now liquid chlorophil typically comes from what, broccoli?

It is? Usually wheatgrass or broccoli sprouts. It's from sprouts, but chlorophyll is a pigment. Chlorophylls is green pigment and it's in green plants.

But when you get chlorophyll water, it is made predominantly from either a wheat grass or from a sprouted. What are some of the benefits that people get from chlorophil?

Well, first of all, I probably have it in my little booklet here. The chemical composition of chlorophyll is almost identical to your hemoglobin, which is your red blood cells.

So number one, one of the benefits of Chlorophyl is that it builds your blood. And when you have healthy blood, you're going to have a healthier body.

Growing and Processing Energy Bits

Right. That's number 1. I'm sorry. Maybe my colleague can find me the picture of that chlorphyll. So that's number one. Number two, chlorophyll kills bacteria.

So it kills the bacteria in your mouth. If you chew it, it kill bacteria, and your colon kills bacterial everywhere. And a lot of people, they only know algae because they see it as an algae bloom closing their favorite beach.

Poor algae gets the bum rap. Well, algae kills bacterias and absorbs toxins. You couldn't see the toxins in the water, but you can see algae. Algae is the clean-up group.

It does it in beaches and it does in our body. Part of it is through the chlorophil. Chlorophyll, interestingly enough, and most people don't even know this and it took me a while to figure this out, is a fat-based pigment.

We're going to talk about spirulina as well because it's a blue-green algae because that has two pigments. It has the chlorophyl but also has a Blue one called phycocyanin which has healing properties that we'll talk.

But chlorphyll and its a water- based pigment Chlorophyll is a fat-based pigment. Why is that important? Because your cells are made, all have a cell wall that's made of lipids, which is the fancy way of saying fats.

And this is why we take omega-3 and vitamin D and Vitamin A to nourish those cell walls. Well, because chlorophyl is also a Fat-Based pigment, it also heals the cell Walls.

So, and you want healthy cellwalls because this allows your nutrients to get in and and toxins to get out. And so chlorophyll helps that happen because it's a fat-based pigment.

So very, very important. Just back on the blood part, it builds your blood. Chlorophylls and both algae are the most alkaline foods in the world. That's how I got into this.

My sister's doctor wanted her to have an alkalined diet to make sure that the alkalinity of her cells state alkaline to keep the cancer out. But your blood needs to be even more alkalined than your cells.

It needs be 7.34. And why is that? Well, your hemoglobin, they are these round structures that have an iron atom in the middle, and iron is what carries oxygen.

Now, Mother Nature is so clever. What she did was she put a negative charge around the hemaglobin. Sort of like when you hold up magnets and they repel one another.

So with this negative they repel one another which allows them to stay round so they can move through the capillaries and so it allows him to hold the the iron atom so you can hold oxygen but when you have an acidic diet sugar and processed foods and too much animal protein or or when your too stressed and you release chemicals that are acidic it strips off that negative charge because it's which causes the blood to clump.

Now it can't go through the capillaries. It can hold oxygen very well. This is why you get fatigued. So your body instantly pulls minerals out of your bones, out your cells, and out organs to neutralize that acidity and bring it back to that alkalinity.

But if that happens too frequently, it wears your immune system down, causes osteoporosis, all sorts of problems with your system. So this is why algae in particular, because it's alkaline, but also because I have so much chlorophyll, which builds your blood and restores that alkalinity charge.

to the hemoglobin so they don't clump. People don' need blood thinners, just take algae. It's not a thinner, it just makes your blood more viscose so it can travel where it needs to go and bring you the oxygen.

Now with the chlorophyll, I've also seen where people utilize that as a natural deodorant. Yeah, because it kills bacteria. Right. It kills, and this is why it's great for your pets too.

If you have dogs, they have bad breath. Here's the photo of the image, thank you very much, that shows the chemical structure of hemoglobin. And here's a chemical of chlorophyll.

Virtually identical. Someone thought that I took the picture of the hemoglobin, just colored it in green. I said, no, this is the way it is. You can go online and see this.

Most people are not aware of these sorts of things. This is why everything we do at Energy Bits is science-based. We're trying to help people. As I've said there's 100,000 studies, I read about 4,00 PubMed articles myself trying figure out why does this stuff work and why do ours work better than anybody else's?

And there has been this little cookie trail that I've had to follow and reconnect the dots in ways that are amazing and every time I find something out about algae it's like oh my god you do that too.

It's almost unbelievable because it is literally a miracle food. If the science wasn't there I would not believe it and in fact when I started the company I was by myself for the first four years because I didn't have a science background.

I only got my PhD last year. Congratulations on that, by the way. Thank you so much. And thank you in natural health because wanted people to know that I'm serious about this and I am serious in helping them.

But it took me that long to believe what I read. This can't be possible. If it was so good, why don't people know about it? And it's because it has not grown here, it is all grown in Asia, and there has been no incentive for anybody to educate people about it.

And I remind people, well, you didn't know about chia or matcha or collagen powder or bone broth until maybe five or ten years ago, yet those things have been existing in other countries and used by indigenous people.

For decades, algae was used by the Aztecs. 250 years ago, it was their main source of food. They had big ponds, and that was the main protein. And they were a very healthy community until the Spanish conquered them.

Here's a funny story. When the Spaniards came into Mexico, they saw these big pond scums, so they drained

them, And the Aztecs lost their main source of food and protein and some people attribute the fact that they got taken over because they were weakened and they didn't have the strength that the had before.

The history of algae is remarkable. So let me ask you this because I'm gonna go back to the alkaline diet. Before energy bits came about, what did an alkalin diet look like?

Well, heavily plant-based. And you can go online, and there are charts that show you the alkalinity of certain foods. Fruits, some fruits are more acidic than others.

Berries are very, mostly alkaline. Anything green, because of the chlorophyll, which is alkalin. Almonds, interestingly enough, are alkalined. Other nuts are acidic.

Lemon tests acidic, but to your body is alkali. But here's the problem. There's a great book called The Plant Paradox written by Dr. Stephen Gundry and I've been on his podcast.

Chlorophyll, Blood Health, and Detox

The paradox with plants is that they are good for you in some ways, but they also have what's called anti-nutrients. These are nutrients that are not good, and some of them are called lectins and oxalates.

And plants like spinach and kale have very, and almonds unfortunately. Raspberries. I'm not sure, raspberries, I didn't know about that. Have very high lectins and oxalates.

Now these are very sharp proteins that can puncture your stomach lining. if you're sensitive to them, and cause autoimmune. A lot of people go carnivore because they develop this auto immune from eating too many plants.

So, I have come to the conclusion that kale is actually not good for you because it's so high in lectins and oxalates. But algae doesn't have any lectin and So you can get all the benefits of plants without any of the downside.

So normally an alkaline diet would have been very heavy on the plant side. But now you get the all benefits on an alkyline diet, whether you're paleo, carnivore, vegan.

doesn't matter and not have any of the downsides. One of big things with the alkaline diet that I've noticed, even with patients going through cancer, through the radiation and chemotherapy, is drinking alkalin water, which is a water that has a pH balance of above like an eight, making it very alkalined.

So one of things you mentioned is your cells have to be at 7.1. The blood was 7.34. The reason why the 7 is important is because it indicates there's oxygen in the cell, which indicates that the mitochondria are functioning properly, and they're communicating properly.

And so cancer invades when the cells become acidic and they become damaged because the mitochondria are damaged. And they switch from the generation of cellular energy, which in a healthy cell is generated primarily through a process.

Well, it's called ATP. It's generated through something called the electron transport chain. But because the mitochondria are what generate all of your cellular energy.

And so you need the Mitochondria, the most essential thing for your health, absolutely the essential. But as you get to the age 30 and age and even worse when you to 40, they start to they've been they started getting more damaged and they die.

So you have fewer of them, which means you less cellular to do anything, whether it's have your brain work to fend off any kind of viruses or diseases like cancer.

A cell that is damaged, a cell doesn't have properly functioning mitochondria, is not generating as much ATP and

becomes more acidic. And then what happens, this is an opportunity for cancers to grow into the cell and they switch into a different type of generation of cellular energy and it's not as efficient as the ATP is for.

So the key to life is to keep your mitochondria healthy and happy and functioning because and the byproduct of a properly functioning mitochondria is oxygen and I'll let you I can explain how that all works and when there's oxygen in the cell the the cells healthy it's alkaline and and it can keep cancer cells out.

We have cancer in us at all times. They don't multiply and become a problem if our immune system is strong and our mitochondria are strong, and can them under control.

It's when the mitochondrias start getting damaged and aren't functioning, which means our system gets depressed that the cancer can start to invade the cells.

So what is causing those mitochondrial cells to get damaged? Okay, great question and it's the million dollar question. And I've spent years figuring this out and I'm so happy to share the function because I have learned that when you know something, it will take the fear away.

It's when don't know what's going on, you become so fearful and then you grab at whatever solution is presented to you, and very often, if we can help people understand what's really going on in their body, they relax a little bit more and they will allow, your body will heal itself, but you have to give it time and you give what it needs and take away what is doesn't need.

So here's the story. Your mitochondria generate this stuff called ATP. Adenosine transphosphate. Yes, yes. Good stuff. Now, a byproduct that nobody knows about of this generation of ATP, which you want because it's what fuels everything.

It's the electricity for your body. Think of your mitochondria as the power plant for you body and it is also the light bulbs for the body, so you'll want this ATP stuff.

But a bi-product are free radicals, it just the way it it. So Mother Nature was very clever because, and this whole ATP production is done in the mitochondria.

Now what most people don't know is that your mitochondrion have their own DNA. We all know that we have about 20,000 regular DNA, but the Mitochondria have 37 of their, own and 17 of them are used for this ATP protection.

You think, 17, you know, DNA, how important could 17 be? Well, those 17 control all the other 22,000 of your DNA. I call them the air controllers, because at an airport, there aren't many air controls, but they control everything.

Your mitochondria DNA there are many of them, like an air controller, and they are located exactly where the ATP is and exactly were the free radicals are.

So they're bombarded by free radicles all of the time. or rather they would have been bombarded if it wasn't for this one antioxidant called superoxide dismutase.

Because super oxide dismuase neutralizes those free radicals and turns them into water and oxygen. And what are some of these free-radicals that your body can potentially have?

Well, the main one, free radicals are always a molecule with an unpaired electron. And nature loves symmetry and harmony. So when you have a free-radical, which is a molecular with a un-paird electron, it is free, because it strives for balance.

What it will do is it'll steal an electron from a neighboring molecule and cause tissue damage, cell damage. Fortunately, there's these things called antioxidants that have extra electrons that they donate to a free radical to neutralize it.

And that's why people take blueberries and vitamin C and all these other, vitamin E is also an antioxidant. Here's the problem. Your mitochondria are the only cell in your body with two membranes.

Now all of your other cells have one membrane, this lipid membrane I talked about earlier, and they have little channels in them called porins. that allow antioxidants in and out.

They also allow other things in a note, but your, and your mitochondria has that membrane too. But it has a second inner membrane that is impenetrable by virtually all antioxidants.

Nothing can get in there. It's like a lockdown. If it's, like being in the ICE unit at a hospital, there's the second membrane. There are only a handful of antioxidants that can into that inner memory and all of them are in the algae.

And the most important one is one that probably people have never heard of before. An acronym is SOD, but it stands for superoxide dismutase. Why is this so important?

Well, the type of free radical that is released as a byproduct of ATP is called superoxide, and it is the most damaging free radical in your body, And it's only produced in the mitochondria.

And you say to yourself, well, what's so damaging about this particular free-radical? It has three unpaired electrons. Remember I said, most free radicles have one un-paird electron, so they steal one from another tissue, unless there's an antioxidant nearby.

So the free, radical, the Mitochondria level is super oxide, It's three times as damaging because it has three unpaired electrons. But Mother Nature has blessed us.

She gave us an antioxidant called superoxide dismutase, which basically dilutes the free radical and converts it into water and oxygen.

Mitochondrial Damage, Aging, and Free Radicals

We have this antioxidant in our bodies from the moment we're born. And the way I explain it to people is like, it's like having a big golf umbrella. You know, if you have one of those big Gulf umbrellas, you're caught in a rainstorm, whether you are golfing or shopping.

The rain doesn't stop, but you don't get wet because you have this big gulf umbrella that's protecting you. That's what superoxide dismutase does for you and your mitochondria from the moment you're born.

It acts like a big golf umbrella. The free radicals, like the rain, are still coming, But they're not hitting and damaging the mitochondrion because this superoxidism mutase converts it into water and oxygen.

so your mitochondria are saved. Now by the time you're 30 the production of this SOD superoxide starts to drop. So that big golf umbrella is now about the size of a totes umbrella.

Your mitochondria, they're sort of dodging the rain, dodgying the bullets, getting a little hit, you know, but they are still somewhat protected from all these free radicals.

By the time you're 40, your body has stopped production of this superoxide dismutase. You have not good at all. And interestingly, this is exactly when all of these chronic diseases start kicking in.

Heart disease, cancer, inflammation, dementia, brain fog, all these health issues just hit people very hard at the age 40 and on. And I believe it's because the mitochondria, which were protected up until that moment by this superoxidism taste, it is gone.

And now your mitochondrion are being damaged. They're not functioning properly. There's less of them. So now

you have less cellular energy to do anything.

So you have more oxidative stress inside of the body? Way more oxidation, way more inflammation. And women get hit twice as hard. Really? And here's why.

Nobody's talking about this because at 40, they're either in perimenopause or in menopausal. At that age, that's when your estrogen levels drop. Well, everybody knows that that is what happens when you get to menopsis, but what they don't know is estrogen acts as an antioxidant for the mitochondria.

So women at age 40 have lost all of their protection of the myocondria because they no longer have superoxydismatase and they've also lost the protective nature of that mitochondrion from estrogen.

This is why women suffer more than men from depression, brain fog, Alzheimer's, because they are hit twice as hard. Because here's the interesting thing, the highest amount of mitochondria are in your brain.

There are 2 million mitochondrion per cell. two million mitochondria per cell in your brain. So when those mitochondrion start dying and are damaged, the first thing that gets hit is your brains.

And we've done our own clinical studies. We've given people, we did one here in Florida at a non-profit group called The Gray Team. Their function is to help military veterans stop their suicide rate, which is almost at 50%. So they're looking at all kinds of interventions to help these poor folks.

So we did a little test. We took a small group of veterans who had been discharged for 10 to 15 years and had post-traumatic stress disorder, couldn't sleep, was give them 30 tablets of spirulina a day.

We told them not to change anything else. inflammation was completely gone in their brains. They were thinking better, sleeping better. One gentleman had multiple sclerosis as tremors went away.

It does not take long. The great thing about your body is it's constantly regenerating itself. If you're healthy, the bad news is that's not a guarantee.

You have to keep giving your what it needs, which is proper nutrition, proper sleep, movement. On the other hand, if you have a health condition, it doesn't have to be, and it shouldn't be a death sentence.

Your body will heal if start giving it what it needs to nourish it and get it back on track. Things like alkalinity, things like superoxide dismutase.

And the amazing thing is, as I mentioned, these antioxidants that are in the algae can get into that inner membrane of the mitochondria. You want to know why?

Why's that? your mitochondria evolved directly from algae. How crazy is that? And it's scientifically proven. You said you guys have ran research and everything.

In that research, are you utilizing any biomarkers when you're running those tests? Well, we did another set of tests last year with a company called MeScreen, and they have all these biomarks.

I'm familiar with them. That test mitochondrial health. So in that case, we had the participants do a MeScreen test to evaluate their mitochondrial health.

Once again, We gave them algae every day, but this time it was for 30 days. We actually tested them at day seven and tested again after 30 And Hemal Patel was the scientist who oversaw the findings for us.

He is the chief scientific officer for Dr. Joe Dispenza. So he has quite a brain trust working with him, so we were quite confident in the results. And when he saw the result, even after seven days, he said the only time he's seen such reduced inflammation and improved ATP production was on another test that he had done with somebody,

another group.

and they took a group of people and put them through intermittent fasting. And it took three weeks of intermittent fast to achieve the same reduction of inflammation as seven days of taking algae.

90 days of intermittent fasting or seven days have taken the algae plus the results were better because they just when you're doing intermittent and fasting what happens is your body goes through a process of what's called autophagy which is cellular cleaning sort of cleaning up your room so everything works better and also you go through what a a uh process called apoptosis where the cells that are sick they're called senescent cells, are killed off.

So again, but they do it without inflammation. It subdivides and all the DNA is redirected. When you use algae, you get all those benefits. You get the autophagy, the apoptosis, and you also get improvement of the ATP.

it has nutrients that improve the production of ATP, which I haven't addressed yet, right. Which I'll tell you right now. So we've been talking about superoxide dismutase as an antioxidant and spirulina, this is why you want spirullina.

It has the highest concentration in the world of super, it's not found in any other food. You can't get super oxide dismutease anywhere. They've tried it in capsules, but it gets degraded in digestion.

Spiruline algae has highest the concentration, however, You can't buy just any spirulina because that super oxidism taste is also an enzyme and enzymes are deactivated and killed by high heat.

So all those lesser expensive, lower quality algae that you can buy from Trader Joe's or Target or wherever. they cut corners to get to market quickly, and they always use high heat, because they need to dry it quickly and get it to the market.

That deactivates that superoxide dismutase. So it may have been in there originally, but it's not there anymore. It has to be frozen or something? No, you just can't use hot heat.

Ours, we never use heat so you could either use R-algae to activate that active super-oxidized dismuase, or you can get frozen spirulina or fresh spirullina, most people don't like that and it is hard to It's hard to find, it's very expensive and it expires quickly, so it was quite messy.

If you don't like the flavor of spirulina, you just swallow it. And the reason I, and chlorella has the second highest amount, So you can still get lots of super oxidized mutase from chloella.

But the reasons I promote spirullina first and foremost is because it is a bacteria. It has no cellulose wall. So there's nothing for your body to break down to get access to it, if you chew it it in your bloodstream in seconds.

That means all the nutrients, all of the protein, and all super oxydismatase is getting where it needs to go in seconds. So you will feel the results almost instantly.

Chlorella does belong to the plant kingdom and it has a hard cell wall, which attaches to toxins by the way, lead, mercury, radiation, aluminum and chelates them and pulls them out of your body.

So this is a chelating wellness detoxing algae and spirulina is nourishing, energizing at the cellular level algae. This, because your brain has so much mitochondria, algae spirullina, is brain food.

And because chlorella has fiber in it which feeds your gut biome, chlorophyll which kills bacteria and gives all your immune system all the nutrients it needs, this a gut Health algae and of course the gut and the brain are connected by something called the vagus nerve So as you heal one you automatically start healing.

I mean, that's a big thing the good and brain. Yes Yes, you want that but this is brain food and I tell and people know that fatty fish are known as as brainfood primarily because of the omega-3 and in them and i remind people

well Where do you think the fish get the Omega 3 from?

They get it from algae. They just consolidate it in their body. But unfortunately, and a lot of people take fish oil for that reason, but the Fish oil is usually rancid by the time you get.

So and there's too much overfishing of the oceans. I tell people, look at when you take the algae, you're getting the omega 3 that you would have got from the.

There's only one calorie per tablet. If you are counting calories, this is a very efficient way to do it. It has three times the amount of protein per weight as fish.

and it will never go rancid. So it's far more and more bioavailable. You get all the nutrition instantly with any kind of animal protein. It can take up to three days to digest and then your body has to break it down.

What are the nutrients? Because you said there's a total of 44 different nutrients. We measure over 40. There's whole food and there are lots of books about this whole food contains so many nutrients.

There's not only the vitamins and the minerals, there's other micronutrients, pigments, phytonutrians, enzymes, coenzymes. The great thing about algae is it's food.

Spirulina, Chlorella, and Cellular Repair

It is a whole-food. When you eat whole foods, and particularly algae. Mother Nature has crafted this for us. We just, I can't take credit for algae, that's Mother nature.

I cant take for growing it so carefully, we preserve all the nutrients so that you get the best value. You get everything that is working for you. If you got the cheaper stuff, it's like getting a great deal on a car.

and then you find out there's no engine in it. So it looks great, can't do anything for you. You can get a cheaper algae, but it's not gonna do what this stuff does for.

When we look at the magnitude of vitamins, minerals, amino acids, everything that's inside of the product, you start seeing there are other products out.

They have a magnitude of these different nutrients as well, too. So I want to talk about like, how does it compare to like sea moss or Shilajit, you know, which are these other type of nutrients that come from, from nature and have all these nutrients.

Sea moss is from the ocean. And of course, it can't keep toxins out of the oceans. There's always going to be micro toxins. You want be a little careful.

there is nothing in the universe more nutrient dense than algae. NASA has been feeding it to the astronauts for 50 years because of that. It's so consolidated and here's why.

This is a microalgae, and I'll back up because usually I start with an explanation of what algae is. Algae is its own food category. it's not technically a plant, it is certainly not an animal.

Within the category called algae, you have macroalgae and microalgy. Macroalge is that stringy stuff that you see washing up on shore. It's also known as seaweed, dulse, or kelp.

Now macro algae is still good for you because it has very high in fiber but has virtually zero nutrition. High fiber, zero nutrition, and it does have iodine and that can be good for some people, not so good others.

But it's only in the sea. That's why it is called seaweed. Microalgae is the complete opposite. First of all, it's everywhere. It's in the oceans, the lakes, rivers, streams, aquarium, soil.

Spirulina has virtually no fiber, or virtually, no-fiber. And it is most nutrient-dense food in world. So, macroalge, high fiber. No nutrition. Micro-algie.

High nutrition, virtually-no- fiber It is so tiny, you can't see it. That's why it called microalgee. It's so tiny you can get a million microalgae on the head of a pin.

So that's why when you consolidate it into this tablet form, there's the same amount of nutrition as an entire plate of vegetables. And I use that quote from NASA that said one gram of algae has the of fruits and vegetables to get that calculation.

So when you buy a large bag of our algae tablets, there's a thousand tablets in the bag, that bag equals 551 pounds of vegetables, nutrition in vegetables.

Not the fiber, the nutrition. That's about 30 grocery carts of food. And I'll just show you how if I can get this thing open, what a bag looks like. So it's the most efficient nutrition in the world.

Right there, there's 30 grocery carts of nutrition. Wow. Amazing. And it has an expiry date of three years. It never goes bad. We have preppers that buy this stuff, 20, 50 bags at a time.

If you think the worlds ending, this is for you. 551 pounds of nutritional, right there. You can take one, you can 10, 30. We fuel NHL teams, Olympic teams.

NHl players take 75 before a game because it gives them a focus and power on the ice. And then they take the 75 of the chlorella afterwards because they pull out lactic acid.

This is a recovery. It builds your immune system. It helps your muscles restore. This has something called the chlorella growth factor in it, which speeds up the growth of your cells.

And we recommend this at night, because that's when your repair happens, most of it. But right there, 551 pounds. As I said, we have a discount code. What is that discount?

Just so people know. Uh, well, I think we're going to do a liquid Vita. I was liquid. Vida was going be your discount code. Is that right? Yeah. Perfect.

So guys, and you guys know that it's pretty straightforward. Yeah, so you go to energy beds.com and use liquid data as your. Discount code and get 20% off.

And so when you, when at the 20 percent off, you take 10 tablets a day, a bag will last you three months and cost you a dollar a serving. Wow. Now, if you have a health condition, or maybe you want to stack it with your IV drips, and we really recommend you do that, because, for example, glutathione, it only lasts about an hour in your body, but chlorella has the highest glutathiol in the world.

So when you take the chlorella at the same time you're taking your glutathyone drip, It's going to extend the benefits of the glutothione and make it last longer.

It'll make more effective and it'll last long. A lot of people do collagen drips. Well, algae has more collagen than collagen powder. It has up to 400% of some of the amino.

So when you take the collagen drip and you recommend spirulina in that case, because it has a lot more protein, then you're going to get a deeper benefit from the collagen drip, and it will last longer.

Any drip that you're taking, you will just get more benefits when you take either one of the algae with or after the drip. Same with red light therapy, same with cryotherapy.

Any of biohacks, just stack the allergy. We generally suggest the spirulina before just because it gets absorbed so

much faster and then take the chlorella after because, for example, let's say you're doing a sauna, even if it's a regular sauna or a red light sauna.

Take the algae beforehand because one of the ways you get rid of toxins in your body, well, there's four ways to get it rid off toxins, breath, sweat, urine and bowel movements.

So saunas are really great because it encourages the sweating. Right. It's pulling all the toxins out and so you are nourishing your bodies because spirulina still has chlorophyll in it, which is very cleansing, but you definitely want this chlorella afterwards, because it's the cleanup crew.

It will pull all those toxins that got released during the sauna, or maybe during The Cryo, maybe the Red Light, and just get rid of it. After a Swifty concert, there's lots of stuff on the floor, you want to get of all that stuff, this is what this does.

Which is really important here, we know the effects that toxins have on mitochondria. So for your mitochondrial health, something like this, eliminating those toxins are going to get your mitochondrial cells to actually perform better.

And the way I describe toxins is, you know, we talk about spirulina as being your nutritional insurance, and we talked about chlorella as your health insurance.

So you can be putting all this great nutrition in, but if you have toxins sitting in your cell receptors, these are It's like having a car in your parking spot.

You have a reserved parking, but when someone took your spot, you can't get in there. So you're giving your body great nutrition with the spirulina. But if you've got toxins sitting in the receptor cells, they can get it.

And so the chlorella pulls out the invader who's got your Now the nutrition can get in. It's a great synergy. And I started talking earlier about, you know, we were asking about other things like sea moss, which are other foods, they're also whole foods.

The great thing about food is Mother Nature has put all these phytonutrients and enzymes and coenzymes that work together, that in harmony. It's like listening to an orchestra.

When you listen to a individual soloist, you can hear a nice violin or a flute or something. But when you put that violin and that flute together with the rest of the instruments, You have magnificence.

And that's what you get from whole food versus supplements. An individual supplement is like that individual violinist. Maybe it's doing okay, but it could be better.

Harmony. You know, you want harmonies, synergies, greatness, and that's what you get with algae. You don't have to worry, should I take it with other fats, alone, or with food.

It's all figured out for you. I love it. Just get it in there. One and done. You know, the other thing that I really love about what you guys have, too, on your social media, it's not just, hey, take the tablets.

There's even recipes that people can make. Little snack bites and healthy foods and stuff. You know, I saw quite a few videos of people actually grinding it up, you know and putting it into recipes and whatnot.

So that'd be a good thing for the listeners to actually go on the social media and check out. Absolutely, and we're very active on social, our handle is at energybits.

And we are trying to make it… We're trying to make algae sexy because what it does for your body is almost unbelievable. Maybe you'll take it because you're an athlete and you want better performance.

You want a better focus, but you are also going to have better mitochondria health. you will have less likelihood of chronic disease. Chronic disease hits everybody.

One in two people are predicted to get cancer now. And one of the things I want to tell you about is spirulina is called a blue-green algae because it has two pigments in it.

The green one, which we've talked about already, called chlorophyll. But it also has a pigment called phycocyanin that most people have never heard of before.

It's spelled P-H-Y-C-O- Y- C- O- N. What does phicocianin do? It kills cancer cells. There's how you spell it. P-H-Y-C-O- C- Y-A-N-I- N. I want people to be able to Google that because phycocyanin is being used by the chemotherapy companies now in their cancer treatments.

Really? Wow. And I tell people, and who wants chemotherapy? Yeah. nobody that I know of. So when what it does, this blue phycocyanin, remember I talked about that electron transport chain?

That's how energy is created in the mitochondria. Well, the way that energy in this electron transfer chain, it's sort of like a relay race. We've all seen relay races.

You have a runner with a baton, they run a certain distance. They pass the batons to the next runner who runs a distance and hopefully they, however many there are, cross the finish line first.

Well in your mitochondria the way that the ATP is produced is very similar. Instead of runners though you have these molecules and instead of a baton being passed from one runner to the next you, have electrons and so the so one molecule passes the electron to, the one who passes it to, the next one passes, and the final thing generates ATP.

So the speed at which those electrons can be moved along is what determines how much ATP you get.

Clinical Studies, Performance, and Product Benefits

How close they are, how few free radicals are released. And so first of all, you got zero free-radicals from taking spirulina. Carbs generate the most free radicles.

So please, simple carbs, processed foods, sugar, so eliminate that. But back to the phycocyanin. In those four molecules, which are like the relay race, there's a little helper molecule.

It's called cytochrome C. It's like having a Tesla because it speeds up the molecules, those electrons moving along. Now in a healthy cell, the blue pigment speeds that molecule, that electrons.

That's one of the reasons why spirulina gives you energy because speeds-up that process between the, molecules. However, in an unhealthy cell which is known as a senescent cell or a cancer cell.

The blue phycocyanin detects that it's an unhealthy cell or cancer cell, and instead of speeding up the energy, it ejects the cytochrome C molecule which kills the cell.

It releases something called capases, which then causes apoptosis. This is why I call spirulina intelligent food. You need to be intelligent to take it and it knows what to do in your body.

How crazy is that? I've heard of super foods, but never heard intelligent foods. What other intelligent are out there? Yeah, yeah. Well, both algae are intelligent because of the various things that they do, because the nutrients that aren't able to be found anywhere else.

There is no phycocyanin anywhere. Some people take methylene blue. They were asking me, is it the same as methyline? Methylene blue is produced. This surpasses, methylene blue is fine, not beating up on methyylene blue,

but this is way better than methyline blue plus it's food, plus is from nature.

And it is the most eco-friendly sustainable crop in the world. Methylene Blue doesn't do any of the things that I've just talked about. So it betters than Methylene Blue for sure.

but it's intelligent food. And same thing with chlorella. I call it also intelligent, food because it knows what to do in your body. They did an experiment, you know, the trouble with chemotherapy is when you get chemotherapy, it kills all of you, all the cells, even the good cells.

There was an experiments where they injected the chemo, they inject a chemotherapy into the, into chlorella, and I believe, I can't remember the actual report, but I believed they gave it to the patient intravenously.

The chlorella was able to find the cancer cells, attach to cancer cell, s and deliver the chemotherapy just to a cancer's cells. Left the rest of the cells alone.

So it made the chemo therapy more effective? it directed the chemotherapy specifically where it needed to go. So instead of doing just blasting all your cells, which is usually what happens, it found the cancer cells specifically.

The benefits of these two algae are, they would be unbelievable if they weren't so well documented. I know we've gone way past the COVID phase, but just recently there was a study released, because these studies take so long to do the study, collect the data, write the paper, publish the papers.

This paper was published in 2024, and it was during COVID, it done in Israel. And what they did is they took COVID patients, half of the COVID were given standard care and the other half were giving standard and spirulina.

The patients that got the standard plus the spirula not a single mortality, not single death. And they were discharged on average within seven days. the group that did not get the spirulina, very high mortality, and they were in the hospital for weeks, if not months.

So that was just one more example. The list is endless of what this stuff does. And it's not only scientifically documented, we have our own anecdotal evidence.

We've had people write us and show us their cancer scores and And I have to, just to be clear, because I don't want the FDA to shut me down, it's not the algae that's doing it.

It's the nutrients found in algae, that have been proven in science to do these sorts of things. There are 25,000 studies that document the importance of superoxide dismutase, SOD, to reduce inflammation, prevent heart disease.

prevent Alzheimer's, prevent any kind of dementia. So it is very well documented. The missing piece to it, is that people don't know that this superoxide dismutase exists in raw spirulina.

Again, it has to be raw, or it's been deactivated. There's also all kinds of studies proving that phycocyanin, and you can go on Google, Google phicocianin in cancer treatments, you'll see there are studies, proving, that it kills cancer cells.

And so I just want people to know, you can get the phycocyanin from the spirulina. Here's one example. There's a test where they put, they dyed cancer cells purple, and then they phicocynin into the petri dish.

And this is a photo, the 24 hour period, if you got a close up you would see that virtually all the cancer cell were gone after 24 hours. Unbelievable, right?

So I'm just here to share, what scientists have known, but scientists like to talk to other scientists. It's very complicated jargon that the scientists use, and most consumers either don't even know the PubMed exists, they don' t know about the science, don t have the time to read the Science.

I mean, I have dug deep for 16 years to find the Sciences, connect the dots, So I can share the information with average person people in a way that helps them understand how their body works and why algae has all the nutrients that their bodies needs to function optimally.

Aging is natural, declining is not. We have been taught by society that it is and we need to change that conversation. And listen, I agree with you 100% on what you're saying here.

And what your doing here is you are feeding, you allow people to feed their body the nutrients they need for their bodies to actually perform in the way that it's supposed to perform.

Absolutely. And we used to perform that way until our soils got so damaged, our food no longer has nutrients in it. Most Americans in particular and Europeans are eating processed foods which are drained of nutrients and in fact they have things that interfere with the absorption of the nutrients, they're messing up your gut biome.

How to Use Energy Bits and Final Takeaways

So we're telling people now what not to eat and they are starting to hear us. But then you have to give them something to You have to fill the gap. If you're taking away all this stuff that is bad for them, you have give them something that's good for the.

That's the truth. And that why I love algae so much. We're not asking you to change anything. Just add it. Add. It's effortless. You can swallow water.

You can get the nutrients you need, you can start slowly, You don't have to spend a lot of money. I met Brian Johnson recently. He's a fabulous person, by the way, and the media has made him out to look like a kind of a crazy person.

But he has a lots of data collection to show people what's possible. But he's spending a couple million dollars a year to shave off all these. I think he shaved about three or four years off his life with all of these various biomarkers.

And I've met him and I challenged him. Well, I don't do any of those things that you're doing, Brian. I'm going to be 69 this year. So that's my chronological age.

My biological age, according to these biomarkers, is 30. And all I do is take algae every day. And I do take a lot, but if you took the amount I would take, it would cost you maybe closer to $500 or maybe a thousand a year instead of two million.

You don't even have to take as many, just take 10 a day, which is a dollar a days, that's $365 that you're spending on your health. And it replaces other things.

You can get rid of your multivitamin, your collagen powder, you're fish oil, please stop taking fish oils, it's rancid by the time you take it. Your grocery bill will go down, and your energy will up.

It doesn't sound like a bad deal. So Katharine, as we wrap up here, if there's one person that's listening that really resonates with everything that we've talked about during this podcast episode, they might be struggling with their health with some of the things that were talked.

What's that one thing that you can leave them off with? It's never too late to feel great. I don't care what age you are. Just give it a try. I can't help you if I get it in your body.

So just give a it try, we sell it on our website, energybits.com. We sell through clinics, maybe one day, Liquivita. But if you want to try it, in a small way, you can go to Amazon, and we'll sell the little pouches for $6. It's less than a coffee, and a copy won't change your life.

I started this to help my sister recover from cancer. Um, I'm particularly committed to helping women with their health, particularly menopausal women, because they get hit twice with the loss of that superoxide and their estrogen, which causes more mitochondrial shrinkage and damage.

but it's never too late to feel great. I want everyone, every single person in the world should be taking this because it is the answer to everything, literally.

Right. It's Never Too Late. To Feel Great. to Feel great, I love it, and where can people find you? Energybits.com is our website. And then the Liquid Vita gets you 20% off.

We have fun canisters. They come with a bag inside. You only buy a canister once and then when you are used up bag, you just refill. Were very eco-friendly and calm.

I recently wrote this little booklet. Will hand it out to people. It's called The Algae Love Story and explains how algae will love your body back to life.

we all need love. Oh, wow. And listen, it's Valentine's Day. That's right. So a little love story doesn't hurt. Yeah. Awesome. But Catherine, It was a pleasure to have you here on the podcast.

Great information. I think all of the listeners are going to gain so much from it. you know, thank you. And we'll have all the links down below for everybody to follow.

Yeah. Thank you for doing what you're doing. It takes all of us to help turn the ship around. That's the truth. All right.