A Cellular Nutrition Approach to Brain Inflammation and Cognitive Decline Transcript

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Intro and EnergyBits Sponsor Message

Welcome back I've got a great guest for you today. This is Catharine Arnston, an expert in algae nutrition. She's been on the podcast many times. One of my favorite guests.

And you guys can check out her website, energybits.com. Or she's got amazing green algae products called chlorella, as well as blue green algae, spirulina and, some amazing products.

Also that the spirulina and that and the chlorella together in a product called Vitality Bites as well. I give these to my kids. I take them personally.

They're amazing. And you're going to learn all about the benefits of chlorella, of spirulina, and how you can use these to detox your body, heal your brain, strengthen mitochondria, and increase longevity.

You guys are really in for a treat here. Catharine is, a great guest and really knowledgeable doctor Catharine, I should say she recently got her doctorate.

And, again, she is a leading expert in algae nutrition. Also go to energybits.com use a discount code h b m h b m. That's healing brain masterclass. Originally use this interview for my Healing Brain Masterclass that launched in early 2026.

And so use that code HBM. That will save you 20% off at Energy bits.com. If you want to get the spirulina, the chlorella or the combination of vitality bits, use that code HBM to save 20%.

Of course, if you need anything from a natural health perspective, go to Doctor jackers.com best articles infographics. We offer long distance health coaching.

Everything you need, functional lab work, everything you need at your fingertips. Take advantage of all the great resources we've put together at drjockers.com.

And, also take a moment. Leave a five star review on this podcast that helps us reach more people and impact more lives. Thanks so much for being a part of our podcast community here, and let's go into this episode with Catharine Arnston from energybits.com.

Well, I'm here with Catharine Arnston, doctor Catharine Arnston, an expert in algae nutrition. I always enjoy our conversations. We've probably had 6 or 7.

I mean, you've been on my podcast many times and I'm an I'm a strong advocate of using algae, green algae and blue green algae. You're going to learn about.

I use it personally. I also give it to my family. Amazing stuff. And Katherine is a world leading expert in algae nutrition. But today we're going to start by talking about issues with cognition, memory, brain fog.

Brain Fog and the Algae Rescue Metaphor

There's so many people out there that are struggling with these issues. Katherine, what are you seeing with the people that that you're talking to out in society?

Yeah, well, because it's not only prevalent, it's increasing. I thought, well, let's let's how what does it feel like when

you're having a brain health issue or you're worried about one?

And, it I think it feels like you've fallen into a huge hole. Let's say you're out hiking, and if you fall into a massive crevice and what happens then?

You're scared. When you have a brain health issue, you're scared. You yell for help. When you have a brain, you are looking for something to get you out of that hole.

And so let's say you're in this hole. You've fallen down the crevice. Well, maybe you're lucky and some passers by hear you and they throw down a rope to help you climb up.

But you can't. You don't have the strength to climb up, and they're not strong enough to pull you out. And that's what happens sometimes when you take, like, a single supplement to try to help you with your brain health issue.

So then those passers by, they go and try to get some more people to help pull you out of the the hole, because now you got more strength and they get you a little further, which is sometimes what happens with a few more supplements.

But then, oops, you get stuck on a rock or a log or something, you can't. They just can't get you out of the hole and and you get more scared and you're you're feeling worse.

Maybe you're you're in the hole. You're you're hungry, but it's worse. The situation has worsened and you're getting more and more frightened. This is what happens when you have a brain health issue.

Now what if you just pulled out your phone, dialed 911, and got the search and rescue team to fly over with a helicopter, drop a ladder, you just hold on to it and they pull you effortlessly out of the hole.

Problem solved. And I want to help people understand that that's what LG does for your brain. It is your search and rescue team, and you don't need a thousand people and a thousand ropes to pull you out of the hole and only get you partly out of the hole, which keeps you frightened and not accomplishing the goal, which is to get out of the hole.

And you can do it now with LG. And we're going to go into what algae is. But the reason is able to do this. The reason why it's your search and rescue team and can effortlessly pull you out of the hole, is because of a vast number of nutrients that are found there, up to 100.

I'm going to go just walk you through a couple, you know, maybe 6 or 7 of them, because each one of them does something different. Each one is the equivalent of dialing that 911, and collectively it pulls you out of the hole.

So so one of the and spirulina particularly because we're going to talk about spirulina chlorella algae. But the spirulina is really your brain health.

Algae. And we'll talk about chlorella a little bit. It's more of a gut health algae. So what are the key things that spirulina has in high concentration B vitamins B vitamins are proven to reduce dementia up to 50% because they help create and repair nutrient transmitters.

They help create ATP that reduce brain fatigue. They help repair your brain DNA. They reduce something called homocysteine that's associated with brain shrinkage.

Anyways, B vitamins are essential for your brain and algae is loaded with them. All of them. Then there's something called superoxide dismutase, which I'm sure you've never heard of before, but it's a very powerful antioxidant.

And there are 25,000 studies proving that superoxide dismutase reduce, brain inflammation and prevent Alzheimer's and spirulina. Algae has the highest concentration of this particular superoxide dismutase.

And you can't get it from food and you can't get it in supplements. So and your body does make it for you. But as you get older, it makes less of it. And as you get older, when you have more damage to your mitochondria from excess free radicals, whatever amount of superoxide dismutase you have does not keep up.

And so the damage to the neurons and the dendrites and everything in your brain continue to escalate. So I'll spirulina algae high superoxide dismutase is another rung on that ladder that's being dropped down to another rung.

In the ladder is a pigment that also you may not be familiar with called viscose iron. And it's the blue pigment found in spirulina. It's only in spirulina doesn't exist anywhere else in nature.

Spirulina for Brain Health

Why is it another rung on that ladder that's dropped down to it has 20 times more antioxidant power than vitamin C, and you need antioxidants to reduce the inflammation in your brain.

Reduced the damage has been done to the mitochondria. It removes the Tao that gathers on the outside of your brain cells, and when that gathers, it damages the mitochondria, which damage your brain capability, damages your neurotransmitters, and causes them to die again.

Spirulina is the only source of this particular pigment called viscose iron, and another lung on that rung on the ladder is something called glutathione, another antioxidant.

It's considered the master antioxidant because it recycles other antioxidants to to to act. Now, not only does spirulina chlorella algae have the highest glutathione measured thought gluten in the world, it also contains the three aminos amino acids that help your body make your own.

Glutathione. So you get high detox because you want to detox any, any toxins that are in your brain that are causing this damage, that are leading to all these diseases, then there's something you're probably hearing a bit more about called polyphenols.

These are things that are found, there are things like heart noise and, and, the blue, the dark color that's in blueberries. These are antioxidants. And spirulina is loaded with these dark these polyphenols.

And they act as a as anti antioxidants as well. They reduce oxidative stress. They reduce neuroinflammation. They boost synaptic plasticity. They improve your learning capability by proving something called BD, CNF which stands for brain derived nootropic factor.

They improve the growth of your new cells. So these polyphenols are critical and concentrated in spirulina algae. I'll just give you three more. There's more.

But fats your brain is 20% fat. It it oh sorry 60% fat. It is the highest concentration of fat of any organ in your body. And it uses 20% of the oxygen that you take in.

When you mix oxygen with fat, there's a very high propensity for it to do oxidation, which causes free radicals. So because spirulina has a lot of, these essential fatty acids, it improves the fat concentration.

It protects it by bringing more healthy fats in. Also your brain, you'll find out different parts of your body. Most of your body parts, including your brain, need to be very alkaline, because with the alkalinity improves, the production of ATP in the mitochondria.

And spirulina is the most alkaline food in the world. There's nothing more alkaline than spirulina, so contributes to maintaining that alkalinity. And then in general, spirulina is just a high density nutrition.

NASA has says it has a thousand times more nutrients than any other fruit or vegetable, and United Nations as

endorse it as the answer world hunger, because it has, the highest concentration of protein three times the amount of, of of, any kind of animal protein.

So there are more. But now I know how it feels. And I hear from, clients how being having a brain issue is like falling down that hole, and you want to get out of the hole as quickly and as as you can.

But the individual supplements, there are other things that you can do, like improving your sleep, improving your movement, improving your clearly improving your diet.

But spirulina is your S. O. S. to get you out of that hole quickly, all you have to do is swallow it to it. How are you? Take it on a daily basis and it will get you out of the hole and help keep you out of that hole.

So it doesn't have to be as frightening or confusing, and you don't have to stay in that hole for very long. Yeah, it's a great explanation whenever I'm thinking about brain issues, cognitive decline, brain fog, even, obviously memory issues, but but then also mood issues, depression, anxiety.

I'm always thinking mitochondrial damage, brain inflammation. Right. Kind of that combination. And we know that algae really helps support the mitochondria.

Like you talked about superoxide dismutase. Right. And a lot of these, these, components of helping protect mitochondrial health and so what are some of the differences here between Chlorella.

And then also the spirulina Chlorella is the green algae chlorophyl rich and then the blue green algae, the spirulina. What are the different main differences there?

And to help people when they come to our website, energy Boots.com we I designed the packaging. So spirulina is a blue green algae and it's the one for brain health.

So it's in a blue package because it's a blue green algae and Chlorella is a green algae. And so I put it in a, in a green package. And as you mentioned, I'll talk about the differences, but you raise a good point, doctor.

Joggers about the mitochondria health, the reason why the mitochondria is so important to your brain health is your brain has the most mitochondria of all of your body.

There are up to 2 million mitochondria appear per neurotransmitter, 2 million per neurotransmitter. So, keeping them alive and healthy and working is your number one goal.

Because when they are alive and healthy and working, so is your brain. So it's really that simple now, spirulina, because it has more fat than chlorella, more superoxide dismutase than Chlorella, it has the fat cosign.

And which of course, Chlorella does not have, the more more fat, and, it that's why I say that it's really a brain health algae. And also and more B vitamins and the and B vitamins convert glucose and carbs into energy.

So you this is why you get a lift. You don't have to wait long when you take spirulina. It's the other thing. If you take, you know, ten is a sort of entry level of the tablets are about the size of a baby aspirin 30 a day.

If you're trying to correct, any kind of health issue, including a brain health issue. But so let's say you took 30 or even if you took, you know, 10 or 15 in about 20 minutes, your, your, your mental acuity would be back.

You would just feel more alert. Nothing dramatic. Algae's not dramatic. It's it's it's very steady. Because what it does is it improves the cellular energy.

So which is like putting a log on a fire. It's very steady energy, which is different from a stimulant, where you get a burst. And the crash is like putting paper on a fire.

Chlorella for Detox and Gut Support

So, so spirulina is generally I refer to it as brain, the brain health algae because of these other, these particular nutrients that are particularly well-suited for improving brain health.

Now Chlorella is also beneficial. And what differs from it is that, spirulina has the higher protein and it has those blue pigments and more superoxide dismutase.

But Chlorella pulls out toxins. It attaches to heavy metals, glyphosate, pesticides, aluminum that could be in your brain and kills them, pulls them out of your brain.

So that because a lot of these toxins could be causing the damage that have forced you to fall into that hole. So we want to so we can certainly help with that.

Spirulina is cleansing, but it's not detoxing. Now, generally we recommend, by the way, spirulina in the morning or the afternoon or before a workout or for lunch, because it helps so much with your brain, focus and your energy.

And it also satisfies your hunger, by the way. So, generally people are hungry and tired and want focus during the day. Then generally we recommend chlorella before bed, although I take it all day long just because I love it so much.

Because when you are sleeping, that's when your body goes through a detox repair cycle. And by the way, sleep is critical to keeping brain health. Why is that?

Well, when you are sleeping and you're in that deep sleep state, your brain actually shrinks. It has its own because it has a its own cleansing system.

We know we have lymphatic system that clean out toxins in our body. Well, your brain has a similar one. It's called, but it's they call it the lymphatic system.

So and in that way it works is that when you're in sleep, the brain shrinks. So your lymphatic system can do the all the scrub a dub. It's like going into the car wash, so it gets rid of all the cells.

And this happens when you're sleeping. And Chlorella has high the highest tryptophan in the world, which is a precursor to melatonin, which helps you sleep.

So it helps you get into that deep sleep. And then because it pulls more toxins out, it's like being in the super test car wash. It does all the extra stuff, you know, cleanse cleans the inside of your car and the outside of the car.

So it's very, very beneficial. Also Chlorella it's the the tryptophan is a precursor to serotonin which is known as your happy mood transmitter. Now the funny thing is serotonin 80% of it is made and used in your gut.

Although it affects your brain. So this is part of the reason why the gut health affects your brain health. And Chlorella is a gut health issue. So it does enter the brain healing, protocol, but for a different reason.

Because Chlorella has fiber, spirulina does not because it's a bacteria. Fiber is necessary for your gut biome. So all those you have as many bacteria in your body, by the way, as you do cells.

They they are working hard and but do you want the healthy bacteria to do all the good stuff so you get a lot of that help from Chlorella? The chlorophyl is very cleansing.

It kills the bad bacteria. So the the good bacteria can enjoy the fiber. And also Chlorella stimulates what's known as peristalsis, which is a fancy word for saying a bowel movement.

So you get rid of all this, what I call the junk in your trunk that your body didn't want because you want to get rid of

that. Because if it sits there, I say it's like having a garbage truck parked in front of your house permanently, because your blood will circulate in the colon and pick up the toxins that are sitting there and recycle them back, including to your brain.

So if they can cross the brain barrier. So while brain, the brain benefits directly more from the nutrients found in spirulina, the Chlorella heal the gut so that it works, beneficially through the connection of the vagus nerve to also help with brain health.

So they work completely differently. Yeah, it's a really great breakdown. And then also these these compounds, particularly the spirulina has got unique nutrients that support the brain.

Things like omega threes right. As well as the antioxidants. And then the chlorella like you were talking about you know big factor with brain inflammation is going to be chemicals.

Toxins. Right. That's going to impact brain health. And we know for example, if you are magnesium deficient then you're going to have a weakening in the blood brain barrier.

And that's going to become more permeable. So normally the blood brain barrier is kind of this tight. It restricts it restricts heavy metals and other big toxins from getting into the brain.

But so many people are magnesium deficient. And that is kind of like the key lock, right, for the blood brain barrier. And when that becomes open now, toxins like aluminum, for example, can get into your mercury can get into the brain.

We find aluminum. And, you know, when they do autopsies on, Alzheimer's patients in their brain and the neurofibrillary tangles, there's aluminum in there.

How did the aluminum get in there? It's not supposed to. Right, right. But if we're magnesium deficient, if we have blood sugar imbalance is another way that, the blood brain barrier opens up and becomes permeable.

Now that aluminum can get in there, if there's a lot of, if there's, a lot of inflammation, the macrophages will bring it over and, and start and start accumulating, basically start dropping it into areas where there's plaque in the brain.

And so how does how does the algae help with these nutrients? And also helping lock that blood brain barrier. Right. Well, like I mentioned, each rung on that ladder that's dropped down by your shirt.

So rescue team is a nutrient found in spirulina or chlorella algae. And magnesium is definitely there. In fact, you need you also need a lot of water.

Your body is 80% water, including in your brain. It has a lot of water. And so you need these electrolytes to keep your body and your brain working because that's a lot of fatigue.

Mental fatigue comes from dehydration. So you want to keep your electrolytes high. That's another ladder. That's another rung on the ladder. So I know the desperation that people experience.

I've seen it.

Mitochondria, Toxins, and Blood-Brain Barrier

And it's, it's, when they're having these brain issues and, a classic situation is when for menopausal women, they one of the things they experience as they go into through transition is this brain fog.

And it's so unexpected. And they and they. And part of what's happening is then we'll go a little deeper into the mitochondria, because this is part of what's going on.

As you get older, and certainly for men and women, we both lose the, a protective antioxidant called superoxide dismutase, which our body makes for us anyways.

But it turns out that estrogen is also a protectant antioxidant for the mitochondria. So when you're in menopause, you lose not only the you're losing their superoxide dismutase, but at the same time your your estrogen levels plummet.

So now your mitochondria are even more exposed to free radicals. And I've uncovered another interesting thing that's very that's going on for menopausal women.

And it has to do with iron. What they're finding is well, men in general have more stored iron than women do, because up until they hit menopause. Why is that?

Because women menstruate, and every month we lose blood. Now, your body stores most iron in your blood. 80% of your body. Your iron is in your blood. And that's circulating iron.

Think of circulating iron as your checking account and stored iron as your savings account. Your checking account changes every day and so does your circulating iron.

Your savings account is pretty steady and so is your stored. So the stored amount of iron that men have is pretty stable all their life because they're not losing iron every month like younger women are.

But then when you get to menopause, you don't have you're not losing that iron anymore. And so your so the average male, an average menopausal woman, has 1000mg of stored iron compared to younger women that have only 300.

Now why do why is this important and why? How does this affect brain health? Well, in the mitochondria, they're exposed to free radicals, but they have these antioxidants called superoxide dismutase or another one, that, that reduce these free radicals into harmless water and oxygen.

But there's an intermediary step. And the intermediary step is that it needs to grab on to something, a mineral called manganese. But the trouble is, when you have more iron than manganese and men and menopausal women do the body grab the mitochondria, grab on to the iron instead of the manganese?

The way I describe it, which becomes pro-inflammatory, the manganese will decrease it to oxygen water. But if it grabs on to iron, it's pro-inflammatory again.

And the way I describe it to people is like, if you have kids, you want to give them your safe toys to play with, round objects, plush toys, whatever.

Because if you turn your head and you don't pay attention, they're going to grab scissors and knives and it could get very damaging and ugly. Well, you might think of your mitochondria as kids if you don't, if you don't give them enough manganese or you have too much iron, too many scissors lying around, they're going to grab, it's going to grab these scissors, which is the iron and which will lead to more damage to the mitochondria.

And as the damage to the mitochondria increases, your brain acuity, decreases your blain plasticity decreases everything, decreases your ability to think to to solve problems, your memory, everything because it's all caused by mitochondria damage.

And so this high iron issue that hits menopausal women is new to them because they've been getting rid of the excess iron. Their manganese has been, you know, at the right levels, but suddenly.

So you got decreased superoxide dismutase, decreased estrogen protection. And now you have increased iron that is more causing more inflammatory. Not a pretty picture, but there's manganese in the spirulina.

It's another rung on that ladder. And the reason why I like it so much is you don't have to solve all these problems individually with individual supplements.

You don't have to go out and get manganese. You have to go out and get make, magnesium. You don't have to go out and get all these. They're all there.

It's it's the search and rescue team. Just call 911. They drop the ladder. The ladder is full of all these little nutrients in the algae. They they grab you, take you to safety.

It makes it easy because people are. We're also busy. And when you're ill, every step that you do everything you do is, is loaded with concern and takes up your time and and, it's it's very difficult.

And we don't want you to fall down that another hole. Yeah. Yeah. For sure. Now, for someone new to algae who wants better focus, memory, mood, better energy in general, what's the easiest way for them to start?

Well, they come in tablets. I mean, you can grind them up into a powder. So we recommend, you know, at least ten tablets in the morning. 30 is better if you're trying to correct a problem.

And the reason I like them so much is, if you swallow them, there's no flavor. They don't repeat, they don't interact. There's no drug interactions with anything.

You can give them to your newborns, your children, your teenagers, your grandparents, your pets. So it's food. In fact, yeah. And I will say, I actually, I actually really like the flavor I you can swallow.

I mean, they're really small. You can they're actually easier to smaller than pills, but I actually chew them up. I like them and I give them to my kids.

How to Take Spirulina and Chlorella

I give, you know, I've got four young kids, my twins are ten, and then I've got, a seven and a half an A and a four and a half year old daughter. And I give them their age, rounding up.

Right, rounding up. So once they get to, you know, four and a half, now she gets five, right? Yeah. I give them their age every single day. Primarily the chlorella, but I'll sprinkle in the spirulina as well.

They like the chlorella a little bit better because it comes off the teeth a little easier. Clean. Just kind of sticks in there a little bit. And that's really the only downside is like, you know, getting it out of your teeth. Right.

But other than that, it's great. And that's why you can grind it up if you want. I eat mine, I put sea salt on it. Himalayan sea salt. You can add chlorella to a salad as a garnish.

They taste delicious with pistachio nuts or macadamia nuts. We're going to hopefully make a trail mix, because the key thing is to help people understand it's food. It's not a supplement.

And yes, there is algae in the ocean and in the rivers, but we grow ours in farms. And most spirulina chlorella is grown this way. There's thousands of strains of algae, but these are the two spirulina and Chlorella that are harvested.

And the reason why most people don't know about either of them, or not know as much as they could, is that 99% of algae is grown in Asia. So in Asia, China type, we grow ours.

In Taiwan, which is considered the gold standard. You can't ride your bicycle to school or drive your car to work without going by an algae farm. It's just part of the vernacular there.

Here we see corn and wheat and soy and tomato patches, but no algae. But so part of the reason we don't know

about it yet is because we don't see it on a day to day basis.

My plan is to, although to build an algae agriculture here in America, and then the nutritional concentration is so high that each tablet has the same nutrition as an entire plate of vegetables.

But you don't have to go to the grocery store to buy all those vegetables, chop them up, you know, try to eat them. A lot of people can't, eat vegetables because it gives them gas, or the kids won't eat them and they throw them out.

So, so it's it's very efficient nutrition and again, effortless if you swallow or chew it. So, so for brain health definitely be taking ten as a starter dose every day, 15 or 20 or more.

You can have as much as you like because it's food. Like if you want a big salad or small sell, have as much as you want. Or, you know, two eggs are four, eggs have as much as you want.

And then the same with the chlorella. If you want to add that in for that detoxing ability and, increasing your serotonin and helping you sleep and helping you have a bowel movement, generally we recommend the same thing.

Ten will get you the nutritional value, but 30 is what you need for the detox. Because if it's not, if you don't have enough of it, it won't hold on to the toxins.

Now, as you pointed out, doctor joggers. Most people do like the flavor of it. It's still green, but it doesn't stick to your teeth as much. So it's, it's a so the so we call it, you know, a stick of spirulina in the am chlorella as the PM.

Another way to think about it, just to simplify things for you, is that spirulina puts nutrition in and chlorella pulls toxins out. So in and out, you know we know chronic disease is related to toxicity and over abundance of things we don't need.

And and deficiency lack of things we do need. Yes, absolutely. So it's so those are sort of the simplest ways to describe it, to take it. And again, there's multiple things that you can do in addition to taking the algae, which is, you know, improving your sleep because that's when you're detox and repair.

Make sure you're hydrated because your brain, you know, is also uses a lot of water and you need to and because the algae has the high, electrolytes, it will help preserve the water, but keep drinking more water, get some movement or movement moves the the toxins around, you know, gets rid of toxins.

Saunas are great for releasing toxins. Be sure you take chlorella afterwards because, same with your doing. Any other bio hacks like, cold plunges or cryotherapy when you're in either of those, the blood rushes into the core.

And and also your body thinks it's dying, so, it, it it gets rid of toxins. It goes through a process called autophagy. So it's releasing the toxins. But then when you step out, you don't want the toxins just be hanging around.

And, so you want the chlorella. It's the cleanup crew that's going to sweep them all up. That's also a way to get rid of what's called senescent cells, because you have senescent cells in your brain as well.

These are cells that have subdivided so many times that they can't they're not functional anymore, but they're inflammatory. And they make the cells beside them inflammatory.

So we want to get rid of those senescent cells. By the way. The blue pigment that I talked about earlier, the blue five cosine and which is really great for antioxidants, it also kills senescent cells and cancer cells.

So that's another thing that it does in your brain is it gets rid of all those senescent cells because it detects that. And, and, it triggers something called Kaposi's which trigger a apoptosis or so it's healthy cell death.

So it gives you all that cleanup also that blue phi cosine and preserves your telomeres. Your telomeres are the

little. Think of them as the on your shoestrings you've got these little your things on the end that stop the shoestrings from unraveling.

So the telomeres that, are like that, they're the protector on the ends of your DNA. So it doesn't unravel to expose the DNA. And every time you recycle a cell, it, it shrinks the telomeres.

Well, this blue focus iron and prevents that. So it also protects your DNA in your brain and anywhere in your body. So, yeah, it's really just another ring rung on that ladder.

There's it's endless. But the thing I want people to come away with is that the ladder, the S. O. S., the 911 to get you that helicopter with the search and rescue team is one effort.

And taking the algae is just one. The only thing you need to do. And then let it do all the extra, you know, carry you up and to safety, effortlessly.

Yeah. No doubt. And what do you recommend for people as far as, like, a protocol with this? Should they start with both the spirulina and the Chlorella?

How many of the tablets should they take each day? What is your typical, like recommended protocol. And then if they want faster results, is there like, like a fast track protocol? Yes.

Well, spirulina is where I start for sure, for brain health. So if you could only get one algae. But if you're budget wise or just, you know, just complexity wise, that would be it for sure.

And we do have a 20% discount code we'll share with everybody in a minute, in a few minutes. So spirulina absolutely for brain health. And quite honestly, you should be taking it every single day for the rest of your life.

Now the good news is because it has so many nutrients, we have 40, but there's probably like over 100. But we just we document 40. You can remove. You don't have to take a multivitamin.

You don't really need a CoQ10. You don't need magnesium, potassium unless you want more because magnesium is very important. But you can eliminate about five other.

You don't need collagen powder. You don't need peptides because they're in the algae, too. So, but I will point out that not all spirulina will work as well as ours.

And, and, and the reason for this is that a lot of the lower priced algae are made and grown in China, in India, and they're grown by companies that sell a lot of other products, and they're lower price.

So they need to get to market quickly to sell more stuff. So one of the corners they cut is they use high heat to dry the algae so they can get it to market quickly.

Protocol, Pricing, and Fast-Track Use

The problem is all those goodies that I listed off that do all these great things for your brain, like the superoxide dismutase, the blue five cosine, and the glutathione on the polyphenols, they are all deactivated by high heat, so you're not going to get the full benefit if you get the cheaper version of spirulina chlorella, you could get fresh or frozen.

It will do exactly same that things that ours does because ours is considered a raw. So so back to it. What to get spirulina. Absolutely. For Brant, by the way, this is great for, kids on the spectrum, ADHD, because it does all these other things that we talked about.

When you have any kind of brain issue, brain injury, depression, post-traumatic stress disorder, we've done our own clinical trials on this. It absolutely works.

Now, ten tablets of spirulina is the minimum amount to take to feel any improvements. If you're trying to correct something, 30 is what we recommend. Now you could take them all at one time.

You could spread it out through the day. If you want to get energy for a workout, then you should take them all at one time. If you want to have them for lunch or you're writing an exam and you want like I took some before my podcast with you today.

If you want them for a purpose, try to take 15 or 20 to get the maximum brain improvement. But if you don't, if you're not necessarily looking for that, but take try to take 30 a day and you, you, it has so much protein and it's a complete protein.

It's, 18 on the 20 aminos. Include the nine your body can't make. You'll find you need less protein. You'll need less food. And your your grocery bill might go down.

Your supplements bill will bill will definitely go down. So and if you take ten a day and use this discount code, we have it works out to a $1 a day because each bag has a thousand tablets.

And so if you took ten, it would last you three months and cost you a dollar a day to protect your brain. I'd say that's a pretty good deal. Now, if you're trying to make a correction, the 30 is what we recommend.

So the bag will last you, a month, but it will still only cost you $3 a day. I know people are taking peptides and they're spending, you know, $600 a month on their peptide injections.

And this with the discount code works out to 100. So. And there's peptides in the algae anyway. So like I said you can eliminate a lot of these things.

Same with the chlorella if you wanted to, you know, add more. Impact to your healing journey and get it over quicker. But you should you know, I tell people we take a shower every day.

Well, chlorella is like giving your body a shower in your brain. A shower from the inside. We are never going to be. We're never going to eliminate all the toxins in our world.

In fact, they just keep increasing. So you need to be proactive and defensive about your health, and you need to get rid of those toxins every day. So once again, taking the 10 or 30 at night time, or you can take it with food because they also help with digestion.

They also help after sports to remove lactic acid. So your muscles aren't sure. So and you have the, the vitality bit the by vitality, but also have the chlorella and spirulina together as well.

So you can either get them separate like she was talking about. Yeah. So if you get them together. But I try to ask people to start by taking them separately because you may find that you like one more than the other.

And if you start with the blended one, you'll never know for sure. So you like them both equally and you want to simplify life. Then. Then we do have this brand called Vitality Butts, which is a, blended tablet.

So you would take, you know, 30 of those in the morning and 30 at night, before bed. So you don't decrease the number of tablets. You just, you know, half and half.

So, yeah, that's great. And you guys can save 20% with the discount code h b m h as in healing, B as in brain Amazon masterclass HBM, that will save you 20% off at Energy bits.com.

So definitely go there and check that out. And Catherine it's been a wonderful interview, lots of amazing information. And I'm a huge advocate of using the algae on a regular basis.

Any last words of inspiration here for our audience? Well, I think we're all feeling beat up right now. We know we're

in a mental health crisis, a nutritional crisis, an environmental crisis, and, we're all in that hole.

We're all we've all fallen down that hole and we're all scared. And so algae, by the way, I haven't been mentioned this. It's not a trend. It's it's not a fad.

It was the first life on Earth. 4 billion years ago. Anything that's been here for 4 billion years is not a fad. But what's different is you just don't know.

But so what I'm trying to do and what we're trying to do is educate people about what's in the air.

Final Takeaways and Closing Remarks

Do why does it work so well? Why does ours work so well so that you have your, you know, your your, search and rescue team ready to help get you out of that hole effortlessly.

Because we need to change something, and our food doesn't have the nutrients anymore. Our world is so toxic, we need something different. And algae is different to you.

It's just new to you. It's. But it's not new. They use it in Asia and have for 60 years. It's a multi-billion dollar agricultural crop. Not it's a food.

Not so. So give it a try because there's nothing to lose. And if you don't want to start with the big bags, you can go to Amazon, buy a little pouch for $6 and give it a try.

We don't have discount codes on Amazon, so, just looking for their little pouches. But honestly, this is your lifeline. This is your search a rescue. We had to have two brands of spirulina girls and boys.

So, it's just been waiting for you and by the way, I'm writing a book. It'll come out in September. Walk you through analogies like the one about falling down the hole so I can help educate people a little bit more on what algae is and why it's so necessary right now. So.

But don't wait for the book. Start feeling better now. Get your search and rescue team in there. Energy boost.com. Use the discount code. HP, HP and HPM.

You got get get get yourself out of that hole. Great. Well, thank you so much again for your time, doctor. Catharine Arnston. Guys check out Energy bits.com and we'll see you all in a future interview.

Be blessed everybody.