Show Intro and Guest Introduction

80% of your serotonin is made and used in your gut. And do you know one of the most important things that seratonin does? It stimulates bowel motility.

We're talking poops, we're taking bowel movements. This helps you poop at the right time with great ease. Welcome to the Natural Heart Doctor show. I'm cardiologist Dr.

Jack Wolfson. Heart problems don't come from a drug deficiency. They come root causes where cardiologists never look. On this show, I sit down with experts who challenge the mainstream rhetoric and talk about what actually builds a heart built to last.

Get ready for a dose of cardiac longevity. Greetings, everyone. Welcome back to another episode of the Natural Heart Doctor show. And I'm very excited to bring to you a wonderful guest who I've known for years, and her name is Dr.

Katherine Arnsten, PhD. and Katherine is the most passionate person in the entire world about her particular passion, which is all about algae. We're going to dive into that.

So again, welcome Katherine to the natural heart doctor show, Thank you, Dr. Jack. Yes, we have known each other, you know, must be getting close to a decade.

And it's been so lovely having your friendship and professional input. Yeah, I'm looking forward to it. We both have to live a long time. That's why we both need algae, because we are going to I'm in total agreement.

There's a friendship yet to come. I am of course in totally agreement with that. And to let everyone know our ultimate backstory is that how we actually got introduced was by my daughter.

My daughter was just like a one-year-old and she was kind of crawling around at a conference on the floor. You know, my wife and I are busy talking to other people.

And she comes back and she's got like green all over her mouth. And we come over to you and it's because my daughter got a hold of some of your energy and vitality bits and the Chlorella spirulina tablets.

She just gobbled them up and that was really just kind of this divine intervention of us really becoming reacquainted with this particular product and then ultimately and quite simply discovering that you have the absolute best product in the world as it relates to algae.

So tell us about it. Yeah. Well, yes. And I still have pictures of your lovely daughter when she was that young with the green dribbling down her mouth.

She, I think she had like 50 or 75 of them in this space of five minutes, which is further proof that it's food. We don't recommend that much, but you certainly could have it.

I stumbled into the world of algae unexpectedly as well. I am actually Canadian by birth, although I've lived in the US for 37 years.

How Katherine Discovered Algae

And I mentioned Canada because 17 years ago, or 18 years, ago my younger sister in Canada developed breast cancer. She's fine now, she completely recovered.

But at the time she was preparing for chemo, her oncologist told her she needed to change her diet to an alkaline diet, to help her with her healing. Now they didn't tell her what an alkaline diet was or what specifically it did.

And she called me, not because I knew anything about nutrition, because i have an MBA and was doing international business, but I love my sister and I've always been a good researcher.

So I said, I'll figure this out. Don't worry. It turned out to be mostly a plant-based diet because of the phytonutrients and the chlorophyll that build your immune system.

However, as I was digging around, i also discovered a German scientist back in the thirties by the name of Otto Warburg won a Nobel prize for discovering cancer cannot exist in cells that are slightly alkaline, and the range of alkalinity to acidity goes from 0 to 14, so you want your cells to be like 7.2 to 7.4. So I guess the oncologist wanted her cells be slightly alkyline to prevent cancer from growing into the rest of her cell.

Anyways, I found lots of information for her foods to eat, not to, eat she did completely heal, she didn't change her diet, But then I discovered in the process the importance of plant-based nutrition and whole foods because I also eat meat because i know you're a paleo guy and I'm sort of in that vert area as well.

And along the way I kept encountering spirulina and chlorella as being mentioned as the most nutrient-dense alkaline food, highest protein in world, yada, yada.

It's a multi-billion dollar agricultural crop in Asia. Yes, algae Yes, there is algae in the ocean, but the algae that we grow, whether you go to Trader Joe's or Whole Foods, it's grown in fresh water between algae ponds.

This is not algae from the ocean. It's harvested hydroponically like an agricultural crop. And then what we do is after it's grown in the freshwater, and I was just in Taiwan a month ago visiting our farms, because we grow ours in triple-filtered spring mountain water.

I had a video crew. to show people there's the mountain. So when I tell you it's spring mountain fed, there is the mountains. It's not AI. Anyways, we grow it in fresh water, dry it without high heat into powder, and then press them into these little tablets that we call bits because they're bits of food.

Nothing else in them. One tablet has the same nutrition as an entire plate of vegetables. That's about two thirds of a pound of vegetable. And as we'll go through our discussion, what you're going to find out, and this is why I'm writing a book called Love Your Health to Bits with Algae, algae is the most nutrient-dense food in the world, highest protein in world highest chlorophyll in a world.

A hundred thousand studies in science libraries online documenting the benefits from the nutrients found in it, whether it's prevention of heart disease, prevention cancer, or prevention Alzheimer's.

This is all documented stuff. But the science hasn't made its way out into the consumer world. And so that's what I'm trying to do, is I am trying help people understand the Science of Algae itself, and then why this Science is protective and contributes to healing of any condition that people currently have.

As a physician, I'm always looking for nutrition that works at the cellular level. Microalgae like spirulina and chlorella are among the most nutrient-dense foods on Earth, rich in protein, vitamins, minerals and antioxidants in a form your body can easily absorb.

Energy Fits makes it simple, with pure microalgae tablets and nothing else. Spiralina supports energy and endurance, while chlorella helps with detox and recovery.

Sometimes the most powerful nutrition is also the simplest. Use code WULPSON for 20% off your first order. Let me ask you this. So you talked about your particular product and the idea of algae in general being the most nutrient dense.

Now, what if I brought on the founder of the sprouting company on here and he will claim that sprouts are the more nutrient dents. And when I talked to him most recently, I said, you must know my good friend, Katherine Arnsten, and she'll say that her product is the mostly nutrient-dense.

How about we have like a little debate? going on between you and the sprouting guy. Tell me why your product is more nutrient than, I mean, again, they're both incredible, but talk me through how algae is better than sprouts.

Yes. Well, sprouts, the broccoli sprouts are very, very powerful and have lots of healing properties for prevention of cancer, just like spirulina does.

So I'm not going to dis sprouts. And honestly, I don't think it's an either or. I think, it is an and solution. But the tablets are much more convenient because you can travel with them.

You can take them to the gym. I'll agree with that. I agree 100%. The convenience factor is definitely there. But just to respond to your question, I'd like to see some nutrient profiles of sprouts and compare them one for one.

So I don't know about the profile of the sprouts, but I do know the profiles Spirulina and Chlorella algae.

Why Algae Beats Sprouts

First of all, the United Nations has endorsed spirulina algae as the answer to world hunger for 50 years. They had a global conference on it in 1976, 75, and made this statement.

You can go online and read the proceedings of the conference. because it has the highest protein in the world. Spirulina has, ours has 64% protein. Sometimes it can go up as high as 70%, but most of it's not that high, but 64 is pretty high.

That's three times the amount of, by weight, three time the number of protein as any animal protein, steak, chicken, or fish. So I suspect that it is higher than sprouts protein I don't know the protein concentration of sprouts but I suspected that's one place or spirulina and chlorella is 60%. So you can't really argue with something that's been defined for 50 years as the most nutrient highest protein.

And even we do lab tests here in the United States to identify all of the nutrients, all the aminos. Also, spirula and Chlora are both complete proteins.

A lot of vegetables are not. A lot of them are missing something like tryptophan. Spirulina chlorella have all of the aminos, so it is a complete protein.

So I need to know whether sprouts is complete a protein or not. It could be, but I don't know. I know things like legumes are not complete proteins. i know that collagen powder is not a completely protein, it's missing trypophane.

so that's number one. A, It's the highest protein probably more than sprouts and is it complete and I suspect sprouts it not Number two is we have a quote from NASA that says, one gram of algae has a thousand times more nutrition than any other fruit or vegetable.

And that's why they feed it to the astronauts. They've been using spirulina and chlorella, again, for almost 50 years. In my book, I have, like I mentioned when we were talking before, over a 1,000 references.

There are some referencing NASA and how they also not only use spirula and to feed the astronauts, but they're testing it to grow it in space because it releases so much oxygen while it's growing and is the most concentrated source of phytonutrients, vitamins, minerals, and has lots of nutrients that aren't found in any other food, like an antioxidant called superoxide dismutase.

Superoxide dismutase is an antioxidant that is essential for preventing damage to the mitochondria. And our bodies

make this stuff. It's called SOD, short form, from the moment we're born.

But at the age of 30, it slows down. 40, slows it down even more. And so now your mitochondria aren't protected as they were from free radical damage.

Free radicals are a natural byproduct of the production of ATP. And if people aren´t familiar with ATP, it's cellular energy. It's what your cells need to do anything.

Walking, talking, thinking, breathing, lymphatic system, heartbeat, neurotransmitters, everything requires cellular energies called ATP and it´s made in the mitochondrion.

But like a lot of things, there's a byproduct. Like when you fill your car with gas, unless you have a Tesla, and you're driving, a bi-product is carbon dioxide and exhaust.

Well, when we make ATP at the cellular level, biproduct are these things called free radicals. Now, normally, this stuff called superoxide dismin reduces that free-radical, the most damaging free radicle is called, super oxide, it's created in the mitochondria as that bi product.

So the antioxidant called superoxide dismutase, the word dismutease means to dim. It's sort of like dimming a light. The super oxide dismutes, dilutes and dims and neutralizes that free radical called Superoxide.

But it's not after you're hit 30 or 40, your body creates less of it and it is not available in virtually any other food. And I can, if there's any of in sprouts, it it, like cabbage has a teeny in cement, a tiny, tiny amount, but spirulina has 7,000 times more super oxidizing taste than cabbage or anything else.

So once again, spirulina is going to come ahead of the sprouts in the concentration of superoxide dismutase, which is essential for protecting your heart, for protection your brain, stopping inflammation.

So there's another one. And one other nutrient exclusive to spirulin, it's not even in chlorella and it is a pigment. Now we can talk about the different algae in a second because I do want people to understand the difference between the two of them because they're quite different.

The one algae is called chlorella and it's a green algae. And when I package, I designed all the packaging. I put a leaf on it because chloella does belong to the plant kingdom and plants have a pigment in it called chlorophyll.

They also have other pigments called. you know, cardinoids, but the main one in chlorella is chlorophyll. Chlorophylls is green and it uses sunlight to create cellular energy.

So, chleorell is a green algae, and its called chloorello because of the high chlorophyll, it has the highest chlorophil in the world. It has more than sprouts for sure, even has, more then liquid chloraphyl.

So once again, there's a nutrient that the algae has in higher concentration than their spout. But that's not where I was going next. Where I'm really going is with spirulina, which is, I package it in blue because it's blue-green algae.

Why is it a blue green algae, you may say? Well, it because has two pigments. It has the green one that in chlorella called chlorophyll that we all know, but it also has a that exists nowhere else in nature.

Nowhere else. And it's called phycocyanin, and that's spelled P-H-Y-C-O- Y- C-A-N- N. Does not exist anywhere else, definitely not in sprouts. So what's so important about phicocianin?

Well, not only is it a pigment, it is also an antioxidant and it even a protein. And one of the most important things it has, well there's two critical things, the blue pigment kills cancer cells.

And I can walk you through the pathway, even chemotherapy companies put phycocyanin into their treatments now, and I'll tell you how it works. Also, that blue pigments has what's called anti-angiogenesis properties.

Now, what's angiogenesis? Angiogensis is the creation of blood vessels, which is a good thing, because you want creation blood vessel, especially when you have an injury, you need new bloodvessels or to your heart to ensure that they get the blood and oxygen they need.

However, What happens with cancer and tumors is that, they reroute the Blood vessels to themselves, to because they, need the, blood to feed themselves.

So you, want things that are going to stop that process. And that's what phycocyanin does. It stops, it has anti-angiogenesis properties, so it stops the growth of blood vessels to tumors and cancers.

Doesn't interfere with the rest of the blood to healthy cells, but it's stops it to, to tumours. And I can promise you that sprouts, as much as I love sprouts and I still recommend them to people, especially broccoli sprouts cannot do that.

So there's four reasons where spirulina comes ahead of sprouts, but like a lot of things, I don't think you should choose between the two of them. But there are advantages to chlorella and spirullina that nutritionally, convenience-wise, also flavor- wise, if you don' like the flavor of our tablets, you just swallow them and you're done.

There's no flavor, there is no repeat. I'm not sure if you can do that with sprouts or not. So, I am not going to dis sprouts, but I will say that you could uplevel to spirulina chlorella, depending on your situation and your health condition.

I think you mentioned in there that your upcoming book has a thousand references, But a little birdie told me there may be up to 2000 references. That's some pretty hardcore evidence on why this particular food, food really is medicine.

Yes. Well, and again, I want to get away from sprouts because I'm a whole food person. People ask me, what do I eat? And I say, whole foods. End of story.

It includes grass-fed beef, it includes eggs and I ate a lot of algae. In fact, honestly, you're virtually no vegetables anymore because i get everything I need from the spirulina and chlorella.

And so this is why it's so great for carnivores, paleo, Because one of the reasons people go carnivore and paleo is there's something called anti-nutrients in some vegetables, like nightshade vegetables which are tomatoes and potatoes.

Spirulina vs Chlorella Benefits

And these night shades have these things called lectins and oxalates that can damage your stomach lining and lead to autoimmune. They're not in the algae.

And you say, well, why aren't they in algae? Well, they're in vegetables, because as land plants, evolutionarily they needed to find a way to protect themselves.

So they developed these things, lectins, oxalates, to keep the bugs and the predators away, cause they upset their stomachs too. But algae is not a land plant.

It never had to defend itself from predators and bugs. it came from the ocean. So that's why they're not in there. I actually hardly ever eat any vegetables anymore, I have some salads, because I get all my chlorophyll and phytonutrients and fiber, if necessary, from spirulina and chlorella.

They're pretty powerful. But yes, there are at least a thousand, by the time I'm almost at 300 pages at this point, might end up getting 2,000. And there, and as I mentioned, there's a hundred thousand out there.

But it takes a long time to go through all the science and find the references. So I'm talking about, you know,

maybe brain health in one section or heart health and another section, exosomes.

By the way, any, all plants have exasomes and if people aren't, I wasn't even that familiar with exosoams. Exosome are, think of them as little bubble wrap that contains nutrients or RNA.

the information that your cells need and they get delivered quickly to the cell. Now supplements don't have that because exosomes or nanoparticles, as they're called in plants, are only in things that are alive.

So yes, sprouts would have them, but they are certainly in spirulina and chlorella. Not only do you get the nutrition, you get them delivered efficiently.

I make the reference to, they're like basically your cell's equivalent of a FedEx delivery. They get important information delivered exactly where they need to go in a very fast period of time and there's no waste.

With supplements they don't get where the need go and so very often you pee a lot of it out. Well, I think it really just comes down to the whole concept from thousands of years ago, which is food is medicine.

And you and I both go to various conferences, health related conferences. Biohacking conferences and we're looking at all of the synthetic lab made. vitamins and minerals.

Yes, we all bash on the pharmaceutical industry and that's, and rightfully so because there's just a much better way and the methods that we're talking about.

Uh, but then there was this whole lab made supplements area. And then, there is the truly foundational stuff that, you know, We, sell in our company and why I tell my patients, like, these are the foods.

and of course we really feature your products, your bits. for all of our patients and when you and I see each other and we're like oh there's all these red light beds and detox things and foot baths and saunas and again it's not that they're bad it just there is a foundational eating pattern and nutritional you know really just paradigm And, and at the forefront of that are, you know, obviously your products.

I talk a lot about eating wild salmon roe. Like talk about, eating seafood. Talk about. Eating the free range grass fed meats. That talk, about the organs.

And I think everybody needs to agree that the food has to be super clean and real food and unprocessed. and I, again, I just, it's so fundamental for everybody to understand this message.

Yeah, and you're absolutely right. And we're completely aligned on that. As I speak more into the mainstream world, I just keep reminding people that Mother Nature has provided everything for us.

We just have to listen to her and the things that work the best, because our bodies will heal themselves, but you have give your body what it needs and eliminate what doesn't.

The things it need are sunlight, sleep, breath, water, good protein. And I consider algae as one of those foundational things that it needs because it solves a lot of the issues.

The spirulina gives you the protein, the chlorella helps you sleep. Both of them help you with, you know, spirulin is good as a pre-workout, chlorella is as good a post- workout.

So it's very much a foundational approach to life. Simplify, simplify, and on the matter of protein, again, this is in my book, one of the benefits of doing so much work for a book is that you learn new things.

And everyone knows that your need protein for muscles. But that's just the starting gate. It turns out there's over 100,000 proteins in our bodies. The number is even considered 400,00, but I have some references that show that there are 100 thousand proteins.

eat animal protein or any kind of protein, you're doing way more than just supporting your muscles. You're supporting the actual functioning of your body.

And they have to be complete proteins because I make the analogy to Lego boxes. If you get a Lego box and you miss the few fancy things, Legos, You can't make a pretty thing that's on the box lid.

you can only make basic stuff. You need everything. And so when you get a complete protein, your body goes, oh, I can make everything I could make the fancy castle that's on that front of the box.

Otherwise, you're limited and you are not getting what you need and your can't build what it needs. Yeah, would agree, obviously. I've got four children and missing a Lego piece is very frustrating.

Talk to me about how chlorella spirulina algaes, how they impact the gut microbiome. Yes. Well, as part of that conversation, I'll define the two of them because they do work completely differently.

And chlorella is the one that particularly is useful for the gut biome. But let's go to spirulina, which was the first life on earth, by the way. It's not even a plant.

People are always surprised when I tell them that it's a bacteria. It's called a cyanobacteria. And the reason why it's important for people to know that is that it doesn't have a cellular swall for your body to break down to get access to the 18 aminos and the 40 vitamins and minerals and all that sort of good stuff.

So it is rapid absorption, the most bioavailable food. If you eat it, it it in your bloodstream in seconds. Ah, if you chew it or swallow it maybe about 10 minutes.

Spirulina's claim to fame is It satisfies your hunger and it gives you energy both in the moment and at the cellular level. It gives your energy in a moment because it has all that high protein and they're already in amino acid form.

Back to the Lego example, when you eat animal protein or any protein, your body can't absorb it that way. it It has to break it down into those Legos that are called aminos and then it can be absorbed and put to work.

Well, animal proteins does take a little longer. Plant protein can be very challenging because the protein is stuck inside cellulose walls that sometimes the body can't break down.

Collagen is in peptides, which are smaller clusters, so that's easier. Peptides are clusters anyways. But chlorella and spirulina, the proteins is already in amino acid form.

No work for your body to do to get access to it. So with spirulinia, when you take spirullina The aminos get absorbed and turned into glucose almost instantly and then it's loaded with B vitamins which then convert the glucose into energy.

So you get physical energy, mental energy and we're not talking like energy like you know what you'd get from a sugar, caffeine or chemicals. It's very steady, slow.

A stimulant is like putting paper on the fire. The kind of energy you get from spirulina is like putting a log on the fire. You wouldn't even notice it unless you're doing a workout.

you just feel fresh. That's it. Nothing, no drama, nothing crazy. Just feel awake. that's pretty sweet. So that the short-term energy. Now, the better energy is the long- term energy because spirullina has that blue phycocyanin.

I mentioned how it kills cancer cells, but what I didn't tell you is that In the electron transport chain, which is where your energy is actually created in the mitochondria, there's a little helper molecule.

It's called cytochrome C. And in a healthy cell, that blue pigment, it's like a Ferrari. it speeds up the electrons so that your electron transfer chain can make more energy.

This is one of the reasons why spirulina gives you energy because at the mitochondria level, which make all your energy through something called the electron transport chain, it has this little helper molecule that moves faster thanks to the spirullina.

So this is why the energy and then it's the highest concentration of that protective antioxidant called superoxydismutase. which restores your mitochondria or heals them so that you can grow back, they can be more efficient and you're going to have more of them.

So long-term, you have to more energy. And so this is why I call this brain food and heart food because your brain has the most mitochondrial per cell.

There's almost 2 million mitochondrion per neurotransmitter and I have the science references for that. So just like fatty fish is really good for your brain because of the essential fatty acids and the omega-3s.

And I remind people, well, where do you think the fish got the Omega- 3 from? They get it from algae. But more importantly is this superoxydismutase that protects the mitochondria.

With 2 million per cell, that's a lot of mitochondrion that it's protecting. Women's eggs are the second highest, the third highest. is right up in your area, the heart.

The heart has the third highest concentration of mitochondria. So anybody who's looking to protect their heart, had a heart situation, and wants to correct it naturally or help correct This is the algae for you.

This for heart health and brain health, and also preventing cancer. So that's spirulina. The other one is chlorella, which is a green algae that I mentioned earlier.

Now, this is known as a gut health algae, for a number of reasons. First of all, it won't satisfy your hunger because it doesn't have the same protein or essential fatty acids like spirulina.

But what it does have is pretty powerful. One of the things it has is the highest chlorophyll in the world. That's why it's called chlorella. What does chlorophil do for your gut and for health?

Well, the chemical composition of chlorophyll is virtually identical to your hemoglobin. Here's the chemical composition of chlorophyll. Here is the composition in your hemoglobin.

They're virtually identical. Your blood has iron in the middle and chlorphyll has magnesium. So number one, chlorophil builds your blood. And when you have healthier blood, then you're going to have more nourishment to your cells, to you gut, your brain, everywhere.

That's number 1. The high chlorophyll also in a gut encapsulates toxins. so that they can't be absorbed by the body. And only 3% of the chlorophyll actually gets absorbed in your gut.

The rest of it travels through your liver and down through colon. While the chlorephil is traveling, it's encapsulating toxins and facilitating killing bacteria.

Because the other thing chlorophil does is it kills bad bacteria, bad bacterial everywhere. So it is really great for colon and liver health. Now, chlorella algae also has something powerful that is not in spirulina.

It has a cellulose wall. Remember I said spirullina doesn't have one at all. This has the hardest cellulus wall in the plant kingdom. Why is that important?

It attaches to toxins, heavy metals, glyphosate, pesticides, alcohol, lactic acid, and pulls them out.

Quality, Sourcing, and Processing Standards

So it's a chelator. And you want to chelae these heavy metal out of your organs, out your cells, your blood and remove them. Very, very important for that.

that fiber that makes up the cellulose wall, guess what it does? Feeds the gut biome. So you can have short chain fatty acids, butyrate, all the goodies that your healthy gut needs.

That's really important. Now, a couple of things that people aren't very aware of that chlorella also has is the highest amount of tryptophan. Tryptophane is a precursor to melatonin, which helps you sleep.

Chloryl before bed will help you But here's a really cool thing when it comes to detox and gut health. And there's so much constipation around, this is really important for people to know.

That high tryptophan, five times more than turkey, by the way, It's also the precursor to something called serotonin, which people may be familiar with as your happy mood neurotransmitter.

But what most people don't realize is that 80% of your seratonin is made and used in your gut. And do you know one of the most important things that serotonin does?

It stimulates what's called bowel motility. People, we're talking poops. We're taking bowel movements. This helps you poop at the right time with great ease because the tryptophan is a trigger for serotonin and seratonin triggers bowel movement.

Do you know there's 1.3 million emergency visits in America a year for constipation? And if you go down any CVS or drugstore and see the rows of stool softeners and psyllium husk, it makes me cry because that stuff is damaging your gut, certainly not helping.

This is the way to get those bowel movements because the stuff that I call the junk in your trunk, the It's stuff your body didn't want. And a lot of that includes toxins.

If you don't have regular bowel movements, the blood circulates around, picks up those toxins, and redeposits them into your bodies. That's not good. So between the high chlorophyll, which is cleansing and kills bacteria, the chlorophyll that encapsulates toxins, the hard cell wall that dechelates toxins.

The fiber that contributes to healthy gut biome. Oh, I forgot the highest glutathione in the world. Glutathion, master antioxidant that your liver requires.

Your liver is like your water treatment plant. It's circulating blood and cleaning it out for you. This facilitates that. And then, of course, we eliminate it.

We help you get some sleep, which is when you repair, and then it helps you with your elimination the next morning. So this is very much a gut immune health builder.

and spirulina is very much an energizing brain health. So this pulls out toxins so the nutrition can get in. It's like having a, when someone steals your parking spot, you can't get into your parkings spot.

Chlorella pulls the toxins that are like sitting on your, what's called your receptor cells, blocking nutrition so that the good nutrition could get it.

Spirulinas nutrition in, chlora has toxins out. Love it. I love the parking spot analogy too, I use that very often. Obviously you're making a case that this is just the penultimate strategy.

This is obviously why I recommend all of my patients to get on your products. Every cardiac patient I have and I've got thousands and thousands of people on every opportunity and that's why am talking to you now and interviewing you for the Natural Heart Doctor show because I'm so passionate about your product.

Obviously you're making the case that this is such a incredible superfood at the peak of the super foods. Why is your company producing the best stuff?

There's a million companies that are selling Chlorella, Spiralina. Walk us through why your particular product is the choice. Sure. Well, first of all, this is the only thing we sell.

Most other companies that sell spirulina, not everybody, but most of them that sells spirullina chlorella, sell anywhere from 10 to 100 other products.

They simply are not paying attention like I do and like we do. Everything, every breath I take, and you know this for sure, is with algae. I say AI is taking over the world, But it's not artificial intelligence.

It's algae intelligence! I like it. To your point. So the problem is, and it's, you know, hey, I'm happy we can get any of this into people, but if you want the best, that would be us or when it comes to spirulina, fresh or frozen.

And here's why. 99% of spirullina and chlorella that are sold at retail or online anywhere in the world is grown in China or India. 99%. And they're contract manufacturers.

All they do is they take an order and they ship the stuff. There's no promise or guarantee that, or anyone even watching them, that the water is clean.

Because algae absorbs whatever's in the waters. That's why you never want algae that's grown in a lake. I won't call out the company that does, they grow in Plymouth Lake.

Never, never, ever do that. Or algae from the ocean, because you cannot keep microtoxins out of the water in wild bodies of water, just like you can't keep microplastics out.

So they get absorbed by the algae. We grow ours in Taiwan, and that's because Taiwan has always been known as the gold standard. There's only two companies that have the standards that I have found in the world that can grow for us.

And I was just in?? for a week. with a camera crew so I could show people it's not AI, this is exactly where we grow it, how we dry it. There's Catherine in the drying machine.

We're so adamant about the cleanliness of everything. A, that the water is triple filtered so there's no toxins possible and we do third-party lab tests.

Here in the United States, they cost me $50,000 a year because we test for all the heavy metals and all of the nutritionals. And I don't know any other algae company in America that tests in American.

They just get the paperwork from China and India and they can say anything on those things. So that's number one. The water is so clean and fresh. It took me a 24-hour flight to get to Taiwan.

And then I had to take a train for an hour and a half and then a bus for almost two hours to get to the southern part of Taiwan, which is where all the agriculture is.

No industry, just pure, clean air and water. So clean water, number two, this is even more important. because these other algae companies are contract manufacturers that sell to just about anybody who has a credit card, they need, and it's lower priced, They need to get to market quickly.

So they cut corners to do that, understandably, everyone does. And one of the most important corners they've cut is they use high heat to dry the algae.

Now you say, what's so bad about that? Well, some of that critical nutrients I just told you about, superoxide dismutase, that protects your heart, That protects you brain, any kind of inflammation, and there's 25,000 studies

confirming superoxide dismutase has all these healing properties, it's also an enzyme.

And when you use high heat on enzymes, they deactivate, And I have paperwork to prove it. We don't use hot heat in ours, so our superoxidized dismutation is alive and well.

So when we get the cheaper algae, I say it is like getting a car, a fabulous sports car for a great price, except you lift the hood, there is no engine in it, So it wasn't such a good deal, was it?

So if you want the race car that actually works, that's us. So that is number one. The high heat preserves the antioxidants like super oxydismidase so they can go to work for you.

Number two. that pigment that I mentioned, blue phycocyanin, proven, and you can Google, go online and Google phicocyanin and cancer treatments, you'll see the same science that i'm reading.

It is also deactivated by high heat.

Personal Results, Dosing, and Travel Use

So now you've just lost the two protective nutrients of stopping heart disease, preventing heart diseases or recovering from it, or preventing cancer or recovery.

Those are the top two things that kill me. and you're not getting any of those benefits when you get the cheap stuff. Ours works perfectly because we don't use high heat.

Now, I will say you can get those same benefits if you gets spirulina that's frozen or fresh. The downside with that is that You can't avoid the flavor.

With our tablets, they're about the size of a baby aspirin. You could swallow them if you don't like its flavor, you can avoid flavor with frozen or fresh spirulina.

Also, can really travel with it. Expires very quickly. It's hard to find and you have to keep it in the fridge. I think also a lot of the frozen stuff is frozen in plastic.

What if your heart could actually get better, not just managed? What of your recovery didn't depend on adding more prescription drugs, but on finally understanding why your is struggling in the first place?

I'm Dr. Jack Wolfson, cardiologist at Natural Heart Doctor, and we believe heart disease isn't random, it's a message. It's message that inflammation, toxins, nutrient deficiencies, or lifestyle stressors are driving your symptoms beneath the surface.

That's why our approach goes far beyond the band-aid typical cardiology approaches. What we do is if we want to prevent treat and reverse cardiovascular disease, we help you develop a natural evidence-based plan to help your heart recover.

So if you're ready to move past fear, past confusion, and past just take this and wait, you deserve real answers. Visit naturalheartdoctor.com forward slash discovery and get the answers you've been searching for.

The answers that can help you achieve your best heart health. Your next chapter with a simple free discovery call should start now. That's possible. Yep.

Yeah. So, so it's like, I mean, like those plastic bottles and stuff like that, that I've seen, and then I use maybe some from quote unquote, you know, competitors and things like.

And it is not that we even necessarily have to, again, denigrate that. But it just, it points to obviously you're leading to all the steps that you go through.

Tell me, You and I are not youngsters and you just went on a trip to Taiwan. tell me about your energy level. In Taiwan, tell me about jet lag or lack thereof for Katherine because I got a feeling you were on fire before you went while you where there and when you got back.

I know. It's hilarious because, well, I have been taking both of these algae since I started the company 16 years ago. And Dr. Jack, turned 70 in two months.

Whether it's Taiwan, we just came back from Dave Asprey's show where I spoke twice. We have a booth. Everybody wants to talk to me. I do dinners with the team.

So I'm getting like four hours sleep. My team comes back, boom, they go to bed. I don't see them for like three days. When I came back from Dave's, I went to my condo for an hour.

Then I had been invited to another conference. It never, my energy just never ends. And for anybody, that's great. But for somebody who's 70 and I got my PhD last, well, two years ago.

So my brain is obviously working and hopefully a New York Times bestseller or 300 pages. I'm just a sample of one but I can tell you I couldn't live without this stuff.

I just don't know, I sleep well, i poop well. i walk every night with two miles with a weighted vest and weights on my arms and you know I do need to do more weight lifting because that's really important for building muscle as you get older.

So I am not perfect, and I want to stress that, but i do as best i can. Well, I think what you probably need to do is then get like some five pound bags of the bits.

So that way that would be a little bit more muscle, you know, than the than one pound of bags. This is all so fantastic. And again, i love it for traveling.

You know we travel a lot as well. We're living now down in Costa Rica. I brought like I don't know six or seven different bags I do have the I do have the chlorella, you know, the recovery bits and of course the spirulina.

But one of my favorites, of courses, is the Vitality, which is a combination. So maybe talk us through, when do we use the combination product? Yeah, well, when we're starting people off, we generally recommend they buy them separately because some people just prefer the spirulina and some prefer to the chlorella.

Or if you are focusing on weight loss or brain health or heart health, or whatever, hunger, weight workouts, this is the one to give you the energy. And you feel the results from a serving.

We suggest 10 tablets. as a starter amount, maybe 15 or 20 to get better results. If you are trying to correct or protect a condition that you had, 30 is the therapeutic amount we recommend daily.

But you could start with 10. you'll notice something within about 10 or 15 minutes. You'll just notice that you're a little bit more awake. And so we always generally start people with spirulina because when you buy something new, you want to know that it's working, right?

And with chlorella, because it is more of a wellness, detoxing health algae, the results aren't as evident as they are with the spirula unless you are using it to prevent a hangover.

Because if you take 30 of these after you finish drinking alcohol, In an hour and a half, you'll be stone sober and you won't have a hangover or it will help you with your bowel movements.

But generally you don't notice it quite as quickly as you do from spirulina. And if you are doing detox, if anyone's doing chemotherapy, please take this because this will After your treatment, this will pull out the excess chemo because they used it during Chernobyl.

They used during Fukushima. It pulls out radiation. So this'll help you in that regard. I would at least start with one of each when you get started. Now, if you like both of them and you don't want to have to think about taking one or the other, that's when the blend comes in handy.

because you can have both of them any time of day you want, but spirulina is the only one that will give you energy and chlorella is only the one will help with bowel movements.

I eat both them all day long, and I do keep this at the office as well, I have them everywhere, of course, as you could imagine. So this makes it convenient.

But you then have to double up. If you're looking for therapeutic amounts of 30 and 30, then you should be taking 30 of these in the morning and then 30 at night.

But it's really more convenience of just not having to think about buying two. But they do different, like I said, this is for spirulina for your energy, for you brain, your hunger, super oxydismutase in the mitochondria and your heart.

And the chlorella is detoxed, immune health, elimination, sleep. It's definitely a healing. That's why we call it recovery bits, because you recover. So, and there's, by the way, there is no upper limit.

We have, we fuel NHL teams, NFL teams. When the NHl folks take them, they put 75 spirulina in their smoothie before a game because hockey is very fast and you need focus and that's what spirullina gives you.

And then they've put seventy-five chlorella in there smoothie after the game to pull out the lactic acid, build their immune system. By the they come in these little pouches of 30. So this is really convenient for new traveling and you just don't have to count anything.

But you can have as much as you want. Your poop will be a little green if you take as, you know, more than that. I have the equivalent of two pouches of the florella a day and two of this spirulina a date, just so people want to know what I take.

Yeah, for all my cardiac patients is typically going to be 30 in the morning of a spirulina and, you know, in evening of the chlorella. That's my protocol for them.

But just like you said, like there's no, there is no overdose. Like you're not gonna, at least that I've ever seen, obviously, I mean, theoretically you can overdose on anything, but I don't think we've, let's just say you and I, and certainly you, have never seen anyone who's overdosed on this product.

Not in these. 16 years I've been doing this and no paper, no science, I have not in 80 years of research, not a single thing that would, because there's also no drug interactions.

So, cause it's food. I think if you had 500 a day, your poop would definitely be green. By the way, spirulina, it has so much protein. If you aren't eating.

You might get a little constipated from the concentration of the protein. So we recommend if you're in that higher 50 quantity, definitely take more water to help with the processing of spirulina of protein and definitely add the chlorella.

because this will help with any constipation. I have another tip for consti-pation, because it's a bigger issue than most people think. If you're on medications, you are traveling, if you stress, eating dairy, processed foods, and that's about 99% of the people right there, I had this very unusual tip, again, a food that I stumbled across about a year ago, fresh pineapple.

It's the bromelain in the pineapple that helps with digestion and elimination. So anybody who's really still suffering and they clearly need a little extra fresh pineapple does a trick.

You know, have a quarter cup every day and you will be good to go, literally. Well, and I know you are exactly on board with this, but I do want to clarify fresh organic pineapple because pineapple is highly, highly prone to being sprayed by not our friends at Dole and Del Monte and the people who ruined the island of Hawaii and other countries.

Closing Thoughts and Where to Learn More

So one thing I sent you a video about six months ago. And the video was we have, we've rescued cats and we were in an apartment where we had our cats.

And I saw, I was, you know, woke up in the morning. I. Was making my coffee and I see one of the cats is scratching at the outside of. The bag of, the vitality bits.

And I'm like, you know what, I'll open up the bag and I will feed it to the cat, right? Cats are carnivores, blah, but I dumped a few on the floor and that cat started eating it.

And then the three other cats, they come over and now, now I am like dumping, emptying the bags on are just devouring the vitality bits. It was so cool.

And I videoed it and I sent it over to you. The animals know what's good. You can drop any other vegetable on the ground and a cat would like run away from it.

A dog would run from away it, and yet here we're feeding this to the animals. Follow the wisdom of nature. And I don't know if you remember, you sent me another video, I think about a year ago.

You were babysitting a pet raccoon and you gave them a couple of tablets from the Vitality Bits and they gobbled that up. And then you put the vitality bits on the floor and that little racoon went straight into the bag and never came out.

Yeah, so we were staying at a friend's house and they rescued a raccoon. So we weren't necessarily babysitting. Those things are dangerous, little critters.

Hey, this is all phenomenal. I'm in love with your product, not as in-love with it as you are, but I know in all honesty, obviously I love it, I loved the passion.

And I love all the research, all of the science. I love the quality. My wife and I so pride ourselves with quality and aligning ourselves who are quality.

This is a product. I got it right in front of my face. We use it all the time. we travel with it. Our kids take it, the animals take. So Catherine, I can't thank you enough really for your passion about such a wonderful, wonderful product in a world that again, it's just so unaware of root cause.

And just so indoctrinated by mainstream medicine and pharmaceutical companies, and so much can be prevented and treated and reversed with food. And at the top of that food list, we got it right here.

We got your, your bits, uh, from your company. Well, thank you. In fact, one of the things I've started working on is I want to have algae added to the food pyramid because they flipped it.

So at least now it's sort of right where you got protein and vegetables at the top of food pyramids. Algae is smack dab in the middle. It's protein, and it gives you the same benefits of as vegetables.

So they changed the pyramid every five years. Last year they just changed it so I've got four years to get it on the Pyramid so the people can truly understand it is food and it needs to be taken by everybody in the world.

Mother Nature has provided its first life on Earth four billion years ago. I call spirulina spiritualina for that reason.

Something spiritual about this stuff and we just have to take it.

Love it, love it. Love. I won't hold my breath for it being on the food pyramid, but I am excited about your upcoming book and everybody who's listening to this, of course, stay tuned.

You're going to go over to remind me of the main website. Is it? Is it energybits.com? And actually we have a discount code for your community. Wolfson gets some 20% off any products on our website.

So come to energy bits. com and also you can read pre-register for the advanced copy of the book. And I'll be doing an odd audible. I have two more weeks of writing.

It's almost done. on the homestretch and then we do all the prep work and all they audio and the graphics and I do have the cover done though. So that's good.

And it will come out January, 2027. I can't wait. Yeah. Well, I think you can tell I'm a huge fan and certainly from a cardiovascular standpoint, the benefits that we see, all cardiovascular diseases, just like all diseases starts in the mitochondria, you made the case that this is just the perfect mitochondrial food.

You're talking about vitamins, minerals, proteins, fats, enzymes, detoxification through superoxide dismutase and catalase, and glutathione production, glutothione peroxidase.

All these different cofactors and it just Food is medicine, you're talking about the best food. And again, Katherine Arnsten, energy bits in the house.

Thank you so much Katherine for another great episode of the Natural Heart Doctor show. We'll see y'all next time. Thanks for listening to the natural heart doctor show, if this episode challenged what you thought you knew about heart health, make sure you follow the show so you don't miss what's next.

And if you're ready for a deeper personalized approach, you can schedule a complimentary discovery call at naturalheartdoctor.com forward slash discovery.