

## AJR Show - Catherine Arnston Transcript

0:00:01 - Annncr

Julie Ryan, noted psychic and medical intuitive, is ready to answer your personal questions, even those you never knew you could ask. For more than 25 years, as she developed and refined her intuitive skills, Julie used her knowledge as a successful inventor and businesswoman to help others. Now she wants to help you to grow, heal and get the answers you've been longing to hear. Do you have a question for someone who's transitioned? Do you have a medical issue? What about your pet's health or behavior? Perhaps you have a loved one who's close to death and you'd like to know what's happening? Are you on the path to fulfill your life's purpose, no matter where you are in the world? Take a journey to the other side and ask Julie Ryan.

0:00:44 - Julie

Hi everybody, welcome to the Ask Julie Ryan show. I'm so delighted you could join us this week. My intention in doing this show is to provide information, insight and comfort to people all over the world by helping to answer life's unanswerable questions. We have such a treat for you this week We've got Catherine Arnston with us.

Hi, Catherine welcome,

0:01:04 - Catherine

Hey, Julie and everyone, hello, hello, hello.

0:01:10 - Julie

Delighted to have you. You guys are going to love her. She founded a company that's helping revolutionize health around the world. I think you're on a mission from God to do this.

0:01:22 - Catherine

I am definitely on a mission from God. There is no question there. I'll tell you all about it later.

0:01:28 - Julie

Yeah, well, I got a bunch of questions for you about it, but when I think of you, I think of you as the algae angel.

0:01:36 - Catherine

Oh, I like that. I've been trying to think of algae princess, algae queen and nothing else but algae angel. I'm going to take that.

0:01:45 - Julie

I think you need to trademark that.

0:01:47 - Catherine

The algae angel? Yes, because angels are there to help and guide you and bring you truth and serenity and peace, and algae does all of that, and I would love to be considered the person that helps people understand that. So I think that's it. I've been looking for a moniker for years.

0:02:07 - Julie

There you go. I must be psychic or something.

0:02:10 - Disclaimer

Thank you, there you go.

0:02:11 - Julie

Yeah, algae angel, yeah, algae angel. When I was preparing for our chat today, that name came to me and obviously it's the first thing I'm asking you and so I. When that happens like that, Catherine, I take note of that and I, like you, I'm an entrepreneur and got lots of trademarks and patents and stuff like that, and so I just thought, eh, if she doesn't have that trademark, you need to trademark that.

0:02:38 - Catherine

Yeah, I think I'll. I have a couple more things I'm going to be copywriting, so I'll throw that into the mix.

0:02:45 - Julie

There you go.

0:02:46 - Catherine

Thank you.

0:02:47 - Julie

I'm going to start with you. Why are you being led to educate the world about algae? Like I mentioned a minute ago, I feel like you're on a mission from God about this, and I'm serious when I say that this feels like it's something that's a spiritual thing, and you're being led to do this. So tell us how did this start, tell us what the back story is and why are you being led to do this?

0:03:12 - Catherine

Yes, well, I questioned this myself for the first literally five years, but I finally endorsed it, or embraced it rather. So I'm actually Canadian. I've lived in Boston for over 30 years, but I mentioned the Canada part because my family's all still in Canada. And this journey that has led me to algae and my algae angel mission happened because 15 years ago my younger sister, who I'm very close to in Canada, developed breast cancer. Now, first of all, I want everyone to know she completely healed and we celebrate her being cancer free every year. But 15 years ago, well, anytime you get a cancer diagnosis your whole world turns upside down. But fortunately her oncologist, which was a woman, and women just are a little bit more intuitive and open to nutritional issues. And so when my sister was preparing for her chemotherapy, her oncologist told her didn't recommend, but told her to change her diet to an alkaline diet because it would be very important for her healing. Now she didn't tell her exactly what an alkaline diet was or why it would work for her. So the first call my sister made after that appointment was to me. Not that I knew anything about nutrition, because I have an MBA. I was doing international internet development, nothing to do anything remotely with nutrition, but I'm a very good researcher and I love my sister. So I said I have no idea what this means, but I will find out, and I did. It turned out it was mostly a plant-based diet because of the phytonutrients I found out afterwards and the chlorophyll that are alkaline and have been proven to build your immune system, and I can give you more geeky science about how that all works, if you want, later on. Anyway, so I started researching foods for her One's not to eat. She did change her diet, she went completely plant-based, did her chemo and she completely healed.

Now, in the process of helping her, I started reading about plant-based nutrition. I must have read 100 NIH articles, I read probably about a dozen books, and this was 15 years ago and nobody was talking about plant-based nutrition 15 years ago. Everybody is now, but 15 years ago nobody was. And I'm just a very motivated, passionate person. I always have been and I saw the science about this alkaline, plant-based diet stuff and I thought, boy, somebody should tell the world about this because I'd never heard about it. So I thought, well, I need to figure this out. I don't know how to do it because I don't have any nutrition background.

So I was a big fan of Louise Hay, who was alive at the time, and she was having a figure out your life conference, a one-day conference in New York. And I thought I'm going to go to New York and I'm going to go to Louise Hay's conference and maybe that will help me figure out what I'm supposed to do with all this plant-based knowledge. And the conference hadn't even started, I was standing in the Starbucks line, I was getting a cup of tea and the person in front of me started talking about this nutrition course she had just graduated from. It took less than a year, she didn't have any science background whatsoever and she was so excited about it and I said, well, what was that program? I tapped her on the shoulder and she says what was called the Institute for Integrative Nutrition. So I thought, okay, I'm going to. I wrote that down. I went through the Louise Hay course that day, took the train home.

By the time I got home I had Googled the Institute for Integrative Nutrition, also known as IIN, and the next day I signed up and I because I thought if I'm going to do something with this plant-based nutrition thing, I need some kind of certification, I need some kind of knowledge. So I signed up for this course. I graduated in July 2009. And I thought, okay, well, now what? I've got, this little bit of knowledge. I thought, okay, I will teach plant-based nutrition. So I put my own curriculum together and I taught the importance of plant-based nutrition to people at corporations and hospitals. I didn't charge any money, I just wanted to get the information out.

And this is what truly led me to algae, because as I was teaching people the science which I was pretty solid on by then of the importance of eating more green vegetables, I got so much pushback because they said look it, my mother's been trying to give me vegetables since I was a kid, but they're too much work. They're heavy to carry home from the grocery store. They take a long time to clean, to cook, to eat. I throw half of them out. They go bad before I even cook them. My husband won't eat them. My kids won't eat them. They give me indigestion. So I thought, okay, I've seen the science of the importance of green nutrition, but if I can't get people to eat them, I got to find a way to get the nutrition into them in a way that's effortless. It doesn't cost any extra time, it doesn't give them indigestion. Blah, blah, blah. So I just went back and looked at everything I'd found for my sister and nothing was working, until I got to algae.

It turns out. First of all, algae is the most alkaline food in the world, so that box was checked. It's also we have a quote from NASA that says it's the most nutrient, dense food in the world it has. One gram of algae has the same nutrition as 1,000 grams of fruits and vegetables. One to 1,000. Never heard of. I mean that's a crazy number. It also turns out the most studied food in the world. Yes, algae is food. It is not a supplement.

And I can show you some algae our algae farms. We grow them in freshwater. Algae is everywhere, by the way. It's in the lakes, the rivers, the streams, but it's also grown and harvested as a food crop, no different than lettuce or tomatoes. That's how we grow ours. So there's 100,000 studies documenting all the health benefits of algae Art preventing heart disease, preventing cancer, preventing inflammation, preventing Alzheimer's, preventing digestion the list is endless and it's all documented in science.

Algae turns out to be a multi-billion dollar agricultural crop in Asia, where they take it every single day and have for 60 years, except 99% of it has grown there and 99% of it is consumed there. And yet also, by the way, the Japanese. They're known for their longevity, low obesity rates, low cancer rates and they take chlorella algae every day. And we're going to talk about the two algae, spirulina and chlorella. So the best part of it all I waited until the very end is that algae comes, we grow it and then we dry it without height, which preserves all the nutrients and we'll tell you why that's important and we press them into little tablets about the size of a baby aspirin.

Each one of these tablets has the same nutrition as an entire plate of vegetables, except you didn't have to clean them, you didn't have to cook them, you didn't have to dry them home in the grocery store, and if you don't like the taste, you can swallow them, but I like the taste. So while I'm talking to you right now, I just had a plate of vegetables. It gives me 60% protein, 40 vitamins and minerals, highest chlorophyll in the world. It is not only nutritious, it is like your health insurance because, as I'll go into the detail, it has so many preventative capabilities. It's unbelievable. It's a gift to us from Mother Nature. It's been. It was the. This is the spiritual part. Spirulina is called a cyanobacteria. It was the first life on earth.

0:10:28 - Julie

Okay, that's a lot to unpack, so let's let's go back a little bit here. Okay, first of all, you say you didn't know anything about any of this. Well, you know how to read and I think that's the key. When we're led to do something, most of us are stymied by fear and we go well, I can't do that. I don't have the credentials, I don't know. Blah, blah, blah. I'm a girl with a communications degree who's invented surgical devices, sold throughout the world and manufactured them. I'm with you, girl. I understand it's like I don't know how to do this stuff, but I know how to hire people who do this stuff. So that's number one. We all can do whatever we're led to do. If you can read, you can learn all of this stuff right and that and you're a great example of that Talk to us about how this, how we've gotten to this place with our nutrition.

I know that cancer cells are immortal. This blows my mind that when they take a cancer cell out of a human or out of a dog or whatever they can, it'll continue to grow forever in a petri dish, and we all have cancer cells and we all come in with them, but there's something in the environment that triggers them going into the active mode and then they migrate. Like you know, you're not going to get a lung cell in your kidney, but you're going to get a lung cancer cell. You can get a lung cancer cell in your kidney. So explain to us what's happening with. We just lost you. There you go. Okay, you're back, that's all right. So explain, explain to us please what happens when we have the environment that lets cancer and other degenerative diseases begin. And then what can we do with the algae, with other things, and also explain the difference between alkaline and acidic diets. Is it fruit and veggies, basically, or is it just veggies?

0:12:44 - Catherine

Well, fruit has sugar in it, so there'll be slightly alkaline. And you can go online and there's charts. You can just download a chart. It will show you, like, for example, lemons or alkaline, what else is alkaline. Almost berries are the most least acidic Grapes. But you can just alkaline diet. Just go online and google alkaline diet chart and there's hundreds of charts.

It's all the same information, because this information has been around for a while and you can start to learn how to balance out your diet with more alkalinity to protect your heart and your health and your cells. But you can't get any more alkaline than algae. So if you don't want to give up a lot of things that you're already doing and you want to balance them out, algae is the best way to do that, because it is the most alkaline food in the world.

0:13:46 - Julie

Okay, you mentioned the Asians have been using algae, I know, for millennia. Do you think that we're coming around full circle, where there are people in this day and age that are kind of going back to the basics and seeing okay, here are the blue zones, the longevity of different cultures and different parts of the world and what they're eating, and they're starting to say, all right, this works, worked for a really long time and now we have so much more disease because of the processed food. Are you finding that to be the case?

0:14:21 - Catherine

I think that helps a little bit. I really think COVID sped everything up because it made people very aware of their health and up until then the medical community had been saying, oh, nutrition doesn't affect your health at all. And so people became disenchanted and disillusioned with what they were hearing and so they just started their own journey of learning, which is so empowering. It can be disconcerting at first, because what you're learning is 180 degrees from what you had been previously taught. So you go on this. It's a very out of body experience almost, and I had it myself for quite a while, because nothing seemed to be true any longer. Everything I believed was seemed to be incorrect, and what's ironic is that we're just getting back to the basics of eating whole foods. That's where the magic happens the more whole foods that you eat, particularly if you are able to grow them yourself, if you are able to eat grass-fed animal protein eggs that are hatched in outdoor areas.

That's the way life used to be, and people are seeking more nutritionally oriented interventions because the other solution is either surgery or medication, and the average American over 40 now is on five medications. I'm 67 and I don't have any medications, and I have no chronic diseases either, and I eat a lot of algae. I've always been healthy, but since my journey down the algae as an algae angel, as you say I have consumed more and more of it and I seem to be getting more and more benefits. I seem to be getting younger and younger. I feel like the actual Benjamin Button in the flesh, but I think it's the. Covid pushed our buttons to find answers to questions that we weren't getting the answers to. There's been a resurgence or an explosion in regenerative medicine, biohacking, whatever you want to call it, any kind of alternative quote, alternative care which, ironically, is really the original care, whether it was acupuncture or meditation or eating close to the earth.

The irony is simplicity truly gives you the best health, whether it's sleep, walking outside, love, simplicity, less stress. It works, and you can't get anything more simple than algae. It was the original food 3.8 billion years ago. It's ancestral, it's paleo, it's keto, it's vegan. It's unbelievable. I just noticed recently, as I said, spirulina was the first life on earth. It's a cyanobacteria, it's not even a plant, but I thought, isn't it interesting that spirulina, which was the first life on earth, is? I think it's very spiritual.

0:17:27 - Julie

Yeah.

0:17:28 - Catherine

Spiritual spirulina.

0:17:29 - Julie

Yeah.

0:17:30 - Catherine

It's very what's called high vibrational food. You can do these things called Kirlian photography, which will photograph different things, whether it's their plants or pieces of furniture, and they'll show you the energy that's from them. And algae is the highest energy food that you can get, and I think it's because it was the original gift to us from God, from the universe, from Mother Nature, because it was not just the first plant, the first life. You can only be the first life once You're still here.

0:18:03 - Julie

I love that. I love that Well, and that's when people come to me as a medical, intuitive and energy healing. I'm like a human MRI, Catherine Right, I can get anybody. If you were on Mars I could scan you and I can see broken bones, cancer, viral infections, bacterial infections, whatever. And then I watch energetic healings happen in my mind's eye to, and then describe it

to my client or the caller onto my show, and people come to me. I think it helps expand their spirituality because they've seen so many doctors and gotten so many different diagnoses and treatment plans and they still have the same symptoms. And so they're saying, okay, I don't know what else to do. And so in a lot of instances they come to me and it's something that's not even related to what the doctors have told them. They've got severe mold exposure or they've got something else going on that isn't even you know. It's not an autoimmune disease. You've got mold exposure, yeah.

And so there's that when somebody has one of those diagnoses and I always say that it's spirit that works through me and with me to help facilitate healing. And that's what's happening with you too it's spirit working through you and with you to help people heal themselves, which is nobody heals anybody else. We all heal ourselves. When you have somebody like your sister who gets a devastating diagnosis like that, and they start adding the algae to their diet and they clean up their diet, I believe everything's healable. Have you seen that in your work as well?

0:19:47 - Catherine

Oh, totally. We get emails every day from people who's Alzheimer's went into remission, cancer went into remission, and I don't know if you'll indulge me, I'd like to help people understand that there's a real scientific thing going on here. The problem is nobody's ever told us how our bodies work. We know how our cell phone works, we know how our car works, but we don't know how our bodies work.

And when you don't understand something, you fear it and very often fear they've shown it not very often, but fear they've shown shuts down your ability of your brain to take in new information. So you're like deer in the headlights, and so then you fall back to maybe the traditional medications or surgeries. But there are other ways to help you. But you have to be open to it, and if you understand something, then you're not going to be as afraid of it. And so I like to show people what's happening, why they're getting sick. It all comes down to your mitochondria, which are these little things in your cells that generate your cellular energy, and why algae helps correct the situation. So if you're ready for a little bit of a science lesson, I can.

0:20:59 - Julie

Yeah, that was my next question. Talk to us about that and talk to us about I do have a question before you get into all of that. For people and I'm one of them who are highly allergic to mold and it's 30% of the population, from what I've found I mean, I can walk in a room and I can tell you in a nanosecond I'm not staying here because there's a mold problem here. My husband's oblivious saying I don't smell anything, I don't see anything, I don't feel anything. Great, Enjoy yourself, honey. I'll meet you in the car. So algae and mold are not kissing cousins, they're not going to affect somebody who's no mold is negative.

0:21:39 - Catherine

Algae is Mold, creates microtoxins that are toxins in your body that interfere with your cellular communication, your ability to your mitochondria to function. It's just very damaging to everything. Algae is like the ambulance or the fire truck that comes out to save you. It couldn't be more polar opposite from one another.

0:22:04 - Julie

Okay, okay, great, okay. So give us a biology lesson in algae Okay, all right. Or in how the body works.

0:22:12 - Catherine

Yeah, and we call the company's called Energy Bits, and we have two types of algae One is called spirulina and one is called chlorella. Spirulina is very energizing and nourishing, and so

I'm going to start the lesson by explaining to you. When I say it's energizing, it's at the cellular level. This is different than a stimulant. A stimulant is like caffeine, chemicals or sugar. And what the stimulants do? They speed up the movement of cellular cells and the communication from your brain to your body. So that's why you get perked up, but they spike and then they crash, and so it's not good for you. Algae doesn't do that. It is not a stimulant. What it does is it generates cellular energy at the cellular level, and that cellular energy is created by what's called your mitochondria. They are in all of your cells, in your entire body. And think of cellular energy to make the money analogy again, like money when you have more money, you can do more things and you have more choices. When you have more cellular energy, you can do more things and you have more choices. The problem is, as you get older, your mitochondria, which are responsible for generating that cellular energy, they die, they mutate, and so as you get older, you have less and less cellular energy to do the same things that need to be done, which is helping you think, helping you walk, helping you talk, your heartbeat, your immune system, your lymphatic system Everything is propelled by cellular energy. And when you don't have enough cellular energy, nothing works.

Think of it this way we just came off a Thanksgiving. You know, if you had a pie, a nice, beautiful pie, and you had a thousand people that you had to feed, nobody would get very much pie, right, Everybody would be upset with you, angry with you, maybe never come back. But when you have, let's say, a thousand pies for a thousand people, now everybody's happy. Everybody gets what they want. Cellular energy is the same way. When you don't have enough cellular energy, your brain isn't happy with you because it's not getting what it needs. Your heart isn't happy with you because it's not getting what it needs. Your lymphatic system isn't getting what it needs. Nothing is getting what it needs. So everything kind of goes at half-mast and then, as your mitochondria continue to get damaged and continue to die, you have less and less cellular energy left. So when you get hit with maybe a flu or a cold or COVID or something, you can't fight it off because you're at such an exposed level because you don't have enough cellular energy.

Now you're going to find out algae, particularly spirulina algae, restores the mitochondria, builds it back, protects it so it doesn't die in the first place, and gives you back all that cellular energy that you need to ensure to protect what you have and or regain what you've lost. And it does it strictly through nutrients, through nutrients found in them. Some of them aren't in any other food and many of them aren't even in any other algae because of the other. Companies use high heat to dry them. But here's your science lesson. So remember mitochondria generate all of the cellular energy for absolutely every single thing that you do.

And here's your cell, and inside your cell is your nucleus, and swimming around inside the cell are these little things, the peanut shape called mitochondria. Now, just to let you know how important these things are, there are two million mitochondria per cell in your brain. That's why every brain disease is actually a mitochondria disease. The next highest concentration you'll be interested to know is in women's eggs. There's 700,000 mitochondria per cell in every single egg. After that it's your heart. There's about 7,000 mitochondria per cell in your heart. After that's your muscles, which are 5,000, and then it gets down to like hundreds in your fat cells. But the highest mitochondria are where your greatest energy needs are. Your brain, your heart takes a lot of energy to make another human being. So here you have your cell and your little mitochondria, and inside the mitochondria is where that cellular energy, which is called ATP that's where it's made is, right inside there. But what people don't tell you is a byproduct of ATP are free radicals. And here's the other thing nobody ever tells you. Your mitochondria have their own DNA. Yes, you have your 22,000 DNA and they're all over here in the cell, nowhere near where the ATP is produced. Your mitochondria have their own DNA. There's only 37 of them and they are inside the mitochondria, exactly where the ATP and the free radicals are being produced.

What's wrong with free radicals? They're damaging. Think of free radicals as sparks that would fly off from a fire. So if you've ever sat close to a bonfire or a fireplace and sparks would fly, you could maybe get burned right. Well, that's what's happening to your mitochondria DNA, because they are right beside where the free radicals are and they get burned.

A free radical, by the way, is a molecule with an unpaired electron. So nature loves balance, and so if there's an unpaired electron, that molecule will steal another electron from a neighboring molecule to balance it out, and after that, now it's unbalanced, so it will steal another one from the next one, and on it goes. It's like going to you know you're a kid at school and someone stole your lunch and so maybe you would go and steal someone else's lunch, and so it just causes great havoc. So free radicals are very damaging to molecules. So the fact that there's so many free radicals inside the mitochondria where your mitochondria DNA are located causes all this mitochondria damage. And your mitochondria DNA control everything in your body. They control your regular DNA, they control the communication in your cells. So when they die and mutate as they do with such great frequency, you have fewer mitochondria to generate cellular energy and you have less cellular energy period because they're not working as well, and that is what's causing so much damage to you and your health as you get older.

One of the antioxidants that naturally protect you from this kind of damage is an antioxidant that your body makes for you from the moment you're born. It's called superoxide dismutase, also known as SOD. I know it's kind of a long word. Here's the thing about superoxide dismutase it's proven to stop free radical damage. There are 25,000 documents in the NIH library proving that it stops heart disease, inflammation, Alzheimer's. And so what does SOD do? It turns those free radicals into harmless water Ta-da. So your mitochondria are protected. It's like having the firemen in there to put out the fire. Remember I talked about the sparks from a fire. Free radicals are just like sparks. Now you've got superoxide dismutase coming in to stop all that damage of your mitochondria.

The problem is your body stops making this superoxide dismutase after the age of 30. So by the time you're 40, you have virtually or 50, you have virtually no superoxide dismutase. You have from the moment you're born and then 30, 40, 50, and certainly by 60, you are no longer protected. Your mitochondria no longer have superoxide dismutase to stop all that free radical damage. And here's the problem. You can't get superoxide dismutase from any other food period except algae, Spirulina in particular. Clorella has almost as much, but spirulina has the highest superoxide dismutase in the world and we've there's clinical trials we've done our own clinical trials. Because it gets into the bloodstream so quickly it gets to the mitochondria to stop this free radical damage. Because it's a bacteria. Spirulina is a bacteria. It doesn't even have a cellulose wall for your body to break down to get access to all the nutrients, including the superoxide dismutase.

0:30:47 - Julie

So the, so the the bacteria thing, though let's let's address that for a second, because most people, when they hear bacteria, they think bad, whereas there's a bazillion different kinds of bacteria in our guts and there's, so give us a little bit of a difference between what's a beneficial bacteria and what's a harmful bacteria.

0:31:09 - Catherine

Well, and for years I didn't even mention the bacteria, but fortunately people know enough now. But they're gut and there's health, healthy bacteria and unhealthy bacteria. This is definitely a healthy bacteria. A bacteria does not have a cellulose wall and it does not have a nucleus. Those are the main distinguishes of a bacteria. Spirulina, which is the other algae we sell, we call it. Spirulina does belong to the plant kingdom, does have a plant hard cell wall and does have a nucleus, but spirulina does not. And again, it's called a cyanobacteria because it



was the and it was the first life on earth and this is where all life came from From a cyanobacteria like spirulina. Everything on earth came from from cyanobacteria and I was going to show this later, but I might as well show it to you now, well, so maybe I'll wait a minute, because I do want to assure you that this concept of a bacteria should be good news because it's it's one of the healthy bacterias.

Your gut is full of healthy bacteria If you do not eat sugar and processed foods. And when you do eat sugar and processed foods, that stimulates the growth of the unhealthy bacteria and so the healthy guys don't have a chance. That's why you've got to often do a detox, a cleanse. You have to change your diet. Chlorella is really great for that because it has fiber. It has all the nutrients that your your immune system needs. But I mentioned the fact that this is a bacteria because of the speed by which it will be absorbed by your body, because there's no cellulose wall for your body to break down to get access to the nutrients like there there would be in plants.

0:32:52 - Julie

That's the main reason I want you to understand that when I'm working with cancer patients especially, I watch DNA healings. I watch the nucleic acids in the strands of DNA get resequenced and I watch them come out of a chromosome. And I'm wondering and I would love your input on this, Catherine do you think what I'm watching is is the resequencing of the mitochondrial DNA or just the regular DNA or both? Because in cancer patients normally I'll see seven strands and it's like I'm watching somebody playing Scrabble and Warp Speed. I'm watching the AC. You know ATCGs get rearranged and then when the strand is is back to a normal recipe, it snaps back in. Obviously this is an analogy for the energy healing that's happening. But I'm hearing you talk about that. Mitochondria has its own DNA and I'm wondering I'm getting that it very possibly could be the mitochondrial DNA that I'm watching, because that seems to be the root of everything.

0:33:58 - Catherine

It could be, but I honestly don't know. But here's another interesting thing is that all of your mitochondria DNA come from women, from all from the eggs. The regular DNA half is from the sperm, half is from the egg. Mitochondria is 100% from the women's eggs. And the ironic thing is, I'm telling people, mitochondria is where the action is. Everything that has to do with your health good or bad is determined by your mitochondria, and they work so deep into the cell. All this time, you know, without any thanks, without anyone knowing about them, just like women, right? They're always working behind the scenes, working hard, trying to make things work. And here's the mitochondria they're all from the women. So I thought that was pretty funny.

But since you've brought up cancer a couple of times, I do want to show you something else that's very powerful. Again, this is why I believe algae, particularly spirulina, is very spiritual. So I may not have mentioned it, but spirulina is known as a blue-green algae because it has two pigments in it. It has a blue pigment which is called phycocyanin, which you've never probably heard of before. So I'm going to spell it for you so that you can go online it's P-H-Y-C-O-C-Y-A-N-I-N. That's how you spell it phycocyanin.

0:35:19 - Julie

We'll have it in the notes.

0:35:21 - Catherine

In the notes. Yeah, now chlorella is a green algae because it only has one pigment, chlorophyll. Spirulina has both the blue one called phycocyanin and the green one called chlorophyll. Chlorophyll is what makes plants green, which you've probably never heard of phycocyanin. Well, let me tell you something pretty powerful about phycocyanin. This is why, again, I think

Mother Nature, god Spirit, created algae for us. I'm going to show you a picture because I'll give you the headline first.

Phycocyanin, the blue pigment in spirulina, is proven to kill cancer cells. I'm going to show you how that works. First of all, here's a scientific paper. They died cancer cells purple in a Petri dish. Then they put phycocyanin in the Petri dish. This is a picture of 24 hours later. The cancer cells went from that to that virtually gone. Pretty amazing, right? What's happening is I didn't get into the deep, deep science, geeky, but I'm going to do it now.

I talked about the mitochondria. All that activity occurs in the inner membrane. Mitochondria are the only cells in your body that have two membranes. All of your other cells have what's called a lipid membrane, which is a fancy way of saying fat membrane. Mitochondria have a second inner membrane. I'm going to tell you where that came from in a minute in the membrane.

This is where the actual— ATP cellular energy is created. There's these little molecules embedded in the membrane and it's sort of like a relay race. You know, if you've ever watched a relay race and someone has a baton and they pass to the next runner and they go a distance, they pass it to the next runner and then hopefully they cross the finish line. Well, the same thing sort of happens in the production of your cellular energy, except instead of a baton being passed along, there's electrons and instead of a person, it's these molecules that are embedded in the membrane. Why is this important? Because there's this little helper molecule. It's called cytochrome C and it's a fat-based sorry, it's a water-based molecule. And in cancer cells, or what's called senescent cells, which are basically zombie cells they're basically dead, but they won't go away and they're inflammatory and you don't want them and either a cancer cell or a zombie cell, that blue pigment kicks out the cytochrome C molecule that goes and targets the cancer cell and kills it. Ta-da, pretty amazing. Right in a healthy cell, that little helper molecule called cytochrome C. In a healthy molecule, the blue pigment speeds it up, it turns it into like a Tesla and pushes the electrons along even faster. So, boom, you get more energy. You get more cellular energy.

Cellular energy is what helps you breathe, think heal does everything, and that's why one of the many reasons we call the spirulina energy bits, because it's helping you with cellular energy. And this is all documented in science. But it's pretty geeky, but it's there. So these kinds of things are all part of algae. We don't put it in it. This is what Mother Nature gave to us almost four billion years ago, but no one has done the deep dive into the rabbit hole like I have to try to figure out.

I needed to find out why this was working so well. Why were people's cancers going into remission? Why was ours working so much better than somebody else's? Oh, and here's the other thing, that blue pigment that proven to kill cancer cells because of this little thing here. Well, it's damaged, deactivated in fact, by high heat. And so one of the things that I've always done when I started the company, I wanted everything to be as high quality so we could help people. So we grow ours in triple filtered spring Montmatter, so there's no toxins. We've never used high heat, so that all the nutrients in our algae are not scrambled or deactivated, including that blue pigment called phycosine, which has been proven to kill cancer cells, and you can Google phycosine and in cancer treatments and you'll see the articles that I'm referencing. The only other algae I can recommend is frozen spirulina. For the same reasons, it's not been exposed to high heat. So all the super oxidized mutase, all the phycosine is preserved because it has not been exposed to high heat.

0:39:48 - Julie

Can it facilitate bone growth? Can algae facilitate bone growth?

0:39:53 - Catherine

Oh, absolutely, because everything that grows, because we have over 30 trillion cells in our body and every day, 30 trillion die and every day, 30 trillion more grow. There's a great expression that you never see an agent expression. You never step on the same river twice, because a river is constantly flowing, it's constantly changing, so are our bodies. So if you give your body what it needs to regenerate with nutrients that it actually needs, you will have healthier growth of those cells, whether it's bone health, brain health, your gut health, heart health. It's crazy, and I've even been reading that it helps release stem cells as well. I'm still learning more about that part, so, but it absolutely stimulates growth in everything.

Everything. Everything comes down to your mitochondria. So you want to do everything you can to preserve those mitochondria and, as I mentioned, as they get damaged, they don't work as well, they don't generate as much energy. And here's another example why? Remember I showed you that picture of all the little molecules, like a relay race, jammed together, passing electrons. So this is what a healthy one looks like. See how close they are so they could pass electrons easily. Well, when your mitochondria get damaged, it expands and there's more space between the little molecules, so they can't pass the electrons as easily. So what happened? Two things happened. You now have less electrons being shared, so you have less ATP, so you have less cellular energy being produced. And second, they more electrons leak out to create more and more free radicals. This is why, as you get older and as you get sicker, you have less and less energy to heal, because you have less and less of the cellular energy that's required to do that.

0:41:49 - Julie

So you have a detox trick that you suggest. What is that? Tell us about that.

0:41:56 - Catherine

Well, it's not a trick, it's just that the algae do different things. Spirulina is very nourishing. It gives you energy at the cellular level, mitochondria level, for your brain, and is very satisfying for your hunger. So it's very much an energizing, nourishing algae. Chlorella is a wellness and detoxing algae. It will not give you energy, it will not satisfy your hunger. And the reason it's a detoxing algae is twofold.

It well, three, actually has the highest chlorophyll in the world. Chlorophyll is very cleansing. Number two it has a hard cell wall that attaches to heavy metals, toxins, doesn't matter, spores from Mold, lime, alcohol, lactic acid, lead, mercury. Pulls them all out. And three, it has the highest glutathione in the world. Those three things make chlorella algae and we call ours recovery bits a detoxing algae. It's been used for probably 50 years. For that reason, it's for a gut health, detoxing algae, whereas spirulina is a nourishing, energizing algae. And also because there's so many mitochondria in your brain, think of spirulina as brain food and chlorella as gut food, because it works in your gut, works in your immune system and pulls out toxins.

0:43:12 - Julie

So do you take them together, or do you do just one or the other? What do you recommend on that?

0:43:18 - Catherine

You could easily. Well, we even have a brand called Vitality Bits which is a blend of the two of them. We definitely recommend spirulina in the morning. You could take either one of them any time of day, as often as you want, as much as you want, because it's food. But most people are hungry and want energy in the morning, and so we suggest 10 of the spirulina tablets in the morning, more if you like. If you're ketogenic, that's great. It does not interfere with your fast

because there's zero carbs. But definitely take it in the morning. You could have 30 for lunch or 30 calories. You won't be hungry for five hours.

0:43:50 - Julie

Chlorella because it's a why is that? Why is that? Why are you not hungry when you take the spirulina?

0:43:57 - Catherine

Because it has the highest protein in the world. It's 64% protein. That's three times the amount of protein as steak, loaded with essential fatty acids like Omega-3 and other essential fatty acids which are very nourishing, satisfy your health or satisfy your hunger. It has Loaded with B vitamins which convert the protein, which are all in amino acids, into cellular energy for your mitochondria. So it's a great snack for them. So it gives your and it has 40 vitamins and minerals, so it gives your body everything that it needs. But you don't get a bloat. It doesn't take any time. You just swallow them or chew them if you want. It works, it just does. And if 30 don't doesn't satisfy your hunger for hours, take more. Maybe you're a bigger build or you're very active, or you could take less. It really depends on what you're doing, your state of your health. If you have a health condition, we definitely suggest you double or triple the amount that you're taking. But spirulina in the morning is very-. People love this. I use this. I've used it for 13 years, but for intermittent fasting. That's all I eat till about two o'clock. Well, I actually have chlorella too, just because I really like the taste of it.

Chlorella we recommend you take before bed, anytime of day, but definitely before bed, because when you sleep your body goes through a detox and repair cycle. If you have chlorella in there, it's going to be while you're sleeping and has the highest trip to fan in the world. Actually helps you sleep, gets you into the deep sleep. It will pull out toxins while you're sleeping. This is when all your repair is happening. Your brain will shrink and will help get rid of the toxins. Like aluminum in your brain.

The chlorepil stimulates peristalsis, which is a bowel movement. You want to get rid of the junk in your trunk in the morning. So you have a happy trip to the bathroom. So you can take it anytime of day, but definitely before bed. So if you wanted wellness benefits, 10 tablets a day before bed would be enough For detox. You need closer to 30, because it won't have enough to pull out the toxins. Now the good news is chlorella actually tastes pretty good. I use put sea salt on it or I eat it with pistachio nuts it's delicious or macadamia nuts, spirulina. I will admit most people do not like the flavor of it, so most people swallow it. But chlorella. Every time I give this to people and I mix it with pistachio nuts. They love it, absolutely love it. So now you're having a very healing snack before bed.

0:46:35 - Julie

Okay, all right, couple more questions as we're winding down here. You collaborate with NASA scientists who take algae while in space and you research the effect of it. Well, it's not quite true, yeah, okay.

0:46:53 - Catherine

No, we have not done direct research with NASA. We have some scientists who we work with, who have worked with science, nasa, and they've taken our algae on some. Well, they took it on a it was called a Nemo mission, which is a submarine, and they did blood analysis while they were in the submarine for seven days and the analysis showed that the inflammation was the lowest, the oxygenation was the highest test, so, but that's Dr Dominique D'Agostino and he's based at the University of Southern California in Tampa and he's a wonderful professor, phd, scientific researcher, and he does work with NASA, but and he took our algae with him on those missions, but I don't want to take any credit for the work that he did on his own initiative.

0:47:44 - Julie

Okay, Great. So we're very involved with philanthropic causes, so tell us about the organizations with which you work and why you chose them.

0:47:58 - Catherine

Well, two things actually. Well, there's many more we'd love to be involved with, but breast cancer awareness, of course. So helping fund any kind of breast cancer research. We focus on the research. And the other one is tree. You know, plant a tree we're. You know we live in a world that you know we're all part of the world and we need plants and trees are. You know, maybe it's part of my Canadian thing I'm a tree hugger, I love trees, I've always loved trees. So just bringing more trees to the world is a great thing. So those are. So one is for the environment and one is for, you know, for our health ourselves as we get bigger. There's many more groups that we'd like to support. You know, children's nutrition would be another big one, for me for sure. But there's endless great causes. So my goal is to build the company so we can support other really great organizations who are doing great things.

0:48:59 - Julie

Okay, last question why do you think we incarnate?

0:49:05 - Catherine

To learn the lessons that we didn't learn last time. To learn the lesson to how to bring joy to ourselves and to the world, to allow the gift that we were given to us to shine. So many of us, including myself, were afraid of our own gifts, and there's nothing more powerful, more rewarding, more joyful than honoring your own gift and sharing it. And I think if we don't do that on this life we come back until we learn that lesson.

0:49:38 - Julie

Well as the algae angel. We know why you incarnated, or at least a big piece of it. I think this could be my last trip. You know they say the Blues Brothers run a mission from God. I think you're part of the angelic sisters, or something to you know, to educate everybody. All right, we're going to. We'll put a link so everybody can get to it. I have a link that will give them a discount and in the meantime, tell everybody how they can learn more about you and your work.

0:50:12 - Catherine

Sure, come and visit us at [energybits.com](http://energybits.com) E-N-E-R-G-Y-B-I-T-S. We have a. We write a full blog every month. So even if you don't want to buy anything, just come to the website and learn. But if you do want to buy something, we have a 20% discount code. Julie Ryan, all one word and you get 20% off everything. And there's no time limit. Don't panic, and if you aren't sure whether algae is for you, you can always go to Amazon and buy a single pouch for \$6 and try it out, make sure you're happy with the results and then come back to the website and use your 20% discount code. Julie Ryan, we're also active on Instagram and Facebook. Energybits is our handle, but the website's the main, where the main action is for sure. Yeah, yeah, it's fun, thank you.

0:51:03 - Julie

Thank you on behalf of the world. Thank you for all the amazing work that you're doing to you know, to help people get well, to help educate us. We a lot of this stuff. If we learned it in biology class, it was a long time ago and we've forgotten it, and I think we know a lot more now than we did way back in the day. So, on behalf of the world, Catherine, thank you for everything you're doing for humanity, really, which is why I wanted to have you on, because I think you're extraordinary. I think the work you're doing is extraordinary as well.

0:51:39 - Catherine

Well, so is what you're doing. It takes a lot of us to turn this big ship around right, but I'm confident we can do it. So.

0:51:46 - Julie

I agree. Okay, everybody that's you bet that's it for this week. Send any lets love from Sweet Home Alabama and from Boston to where Catherine is. We'll see you next time.

0:52:00 - Annncr

Thanks for joining us. Be sure to follow Julie on Instagram and YouTube at Ask Julie Ryan and like her on Facebook at Ask Julie Ryan To schedule an appointment or submit a question. Please visit [AskJulieRyan.com](http://AskJulieRyan.com).

0:52:15 - Disclaimer

This show is for informational purposes only. It is not intended to be medical, psychological, financial or legal advice. Please contact a licensed professional. The Ask Julie Ryan show, Julie Ryan and all parties involved in producing, recording and distributing it assume no responsibility for listeners' actions based on any information heard on this or any Ask Julie Ryan shows or podcasts.