

EPISODE 351

Nutrition Under the Sea: Beat Cancer, Boost Mood, & Fight Obesity

Shawn Stevenson: Welcome to *The Model Health Show*. This is fitness and nutrition expert, Shawn Stevenson, and I'm so grateful for you tuning in with me today.

This is a very, very exciting episode. I'm talking about a subject that I've been experimenting with for getting close here, probably about twelve years, and it's a big part of my nutritional regimen, and I was wanting to really create a master class on this subject matter at some point, and it's a huge opportunity for so many of us because it's such a nutrient dense rich really phenomenal qualities to this category of foods that so many of us don't know about, and we're not taking advantage of.

Alright? So today we're going to be talking about sea vegetables. Alright? Sea vegetables. Not vegetables you see, but vegetables from the sea.

Commonly they're referred to oftentimes it's lumped in this category of seaweeds, right? But I want to take the weed part out of it because even with terrestrial weeds, we tend to think that those are a nuisance.

Those are things that we want to kill and get rid of, things like dandelion, for example. But if you really think about it, dandelion is so robust, and you could try all this stuff to try to get rid of it.

That's the kind of stuff, if the term 'you are what you eat' is true, that's the kind of stuff you want to eat. That's hard to kill, right?

So these 'seaweeds' is this category of foods that have literally been taken advantage of and utilized for thousands of years, as we're going to go through and touch on a little bit of the history.

We're really going to dive in on some of this mind-blowing science that I think is really going to change the game for you, alright?

But first, listen, I just picked up my son from school, and we got home, and we're just kind of hanging out, and he says to me, "Dad, I don't know why people are so afraid of dying when they've never died before."

And I was just like- my mind was kind of- my noodle was baked a little bit. I'm like in my head, I'm like, "Okay, Socrates. Where is this going? What do you mean by this?"

And it really just struck me how- first of all, kids just have these brilliant insights that we tend to look past in our kind of robotic day-to-day lives as adults.

And it was really powerful what he said because we're oftentimes afraid of things that we know nothing about. We've never experienced, and so we're afraid of them.

And how many places in our lives are we afraid of things that we've never actually experienced? We might be afraid of starting that business because we're afraid of failure.

We might be afraid to write that book because we're afraid of the judgment. We might be afraid to commit to a relationship because you had a relationship before, and you got your heart broken. But it wasn't with this person that you're now associated with and we're afraid. Right?

We're afraid of things that we've never even experienced. And so for many of us, it kind of handcuffs us and it prevents us from taking action and doing the things that we are really here to do.

Of course, listen, there's a caveat here. I get it when we're afraid of like spiders, and snakes, and things like that. But at the same time, there are people who are like snake charmers, and the snake is slithering all over them.

I'm not one of those people, but they're dancing with it, right? They're dancing with it and they've embraced that fear. Right?

So it just kind of struck me and I wanted to share that with you and to check yourself. Like how many things are limiting your life and your expression and your activity because you are afraid of them, and you've never even experienced it?

What could that be for you in your life right now? You know? Is there something that you've been wanting to do and fear of what could happen has been preventing you?

So I just wanted to drop that little insight, complements of my son, Braden, AKA Socrates. Alright? And it was just really an inspirational moment for me, too.

So I love that there's these little seeds that get planted and beautiful things can come from them and seeing this with our kids.

And so on that note, again, the topic today, we're talking about this incredible category, and it's just going to blow your mind, of sea vegetables and some of these studies are just profound.

They're absolutely profound, and also the history. You know, with the blue zones, a lot of people today have talked about and know about the blue zones.

These are places in the world that have the most centenarians. These are folks that live over 100 years. And for the most part, they're still vital, healthy, still a part of the community, and one of those areas is Okinawa.

Now when I hear Okinawa, I've got to be honest, I think about *Karate Kid II*. Okay? This is where Daniel-Son left the quiet comfort of the US, and jumped over to where Mr. Miagi was from in Okinawa, alright?

And the big fight scene at the end, and they had these little tools, these little toy drum thing and it goes- you move it back and forth. If you could see me on YouTube, you can see my hands move this thing.

And then it ends up being like a fight move at the end because that's how Mr. Miagi would teach Daniel-Son was like through these random things, right?

Paint the fence, right? He's painting the fence. He doesn't know he's learning karate. Alright? So that's what I think about with Okinawa.

But Okinawa is one of those blue zones and there are so many people who are living to 100 and over who are still just vital and full of life and good health.

And a regular part of their diet is sea veggies, alright? So we're going to talk about some of those today. So super valuable stuff that we're going to cover, and because of that, and Okinawa being just south of Japan, I'm going to kick to an Apple Podcasts review that's from Japan.

So I jumped over to the Japan version of the Apple Podcasts, the iTunes site, and had this incredible review. So check out this Apple Podcasts review of the week.

Apple Podcasts Review: Another five-star review titled, 'The Essence of Game Changing,' by DanPape.org. "The Model Health Show is so empowering that I sometimes think I am the expert after listening. Numerous times, I've found myself absolutely blown away about what I thought was the truth.

Yet, I never get the impression that due to his knowledge that he is looking down on us. Not only is Shawn's Model Health Show Podcast a staple part of my brain diet, but it has helped me find what I want to do in my forties, which is to help others.

In fact, Shawn's amazing guests are so incredible that I have invaluable podcasts - his guests - queuing to be listened to next. Big ups to you and your crew. Dan Pape."

Shawn Stevenson: Alright, thank you so much for leaving me that review over on Apple Podcasts. No matter what country you are listening in, you can jump over to Apple Podcasts and leave a review for the show.

It just- wow, that just filled my cup today, and I truly, truly do appreciate that so very much. And we're just going to keep taking things to the next level, so thank you so very much. And on that note, let's dive into our topic of the day.

Alright, today we're talking about nutrition under the sea, alright? It's a little shout-out to *The Little Mermaid*, but real talk, there's a whole world- a whole new world. I didn't even mean to do that.

There's a whole world of accessibility to things that are truly, truly incredible for our health that we're just not tapping into.

And really when we think about it, all of life has evolved from the sea, and this is what makes our planet so unique and allows us to have life is the fact that we have these oceans and these bodies of water.

Water is really the key to life here on the planet, and of course, oxygen as well, which is H₂O. But here's the thing; oftentimes we don't know what we don't know.

And so I wanted to really shine a light on the subject matter, and make sure that you are well-equipped and well-aware of some of these benefits.

And it's so valuable today because a lot of times, these sea vegetables are even more concentrated in antioxidants and micronutrients than these terrestrial- AKA land sources of these different plants, and I think it's really going to be phenomenal.

And just to kick things off, there was an eight-week study published in the Journal of Nutritional Science, very well-respected peer reviewed journal on sixty adult test subjects.

It revealed that a compound called fucoxanthin, which is extracted from seaweeds, was able to significantly reduce hemoglobin A1C. And hemoglobin A1C is really the best marker that we have for monitoring diabetes. Right?

This insulin resistance for blood sugar disorders. Significantly reduced hemoglobin A1C levels in the blood in the human trial. Really, really interesting. That's just a snapshot of what we're going to get into.

Alright, so just a little history, records show that for over 2,000 years, seaweed or sea vegetables has been used as a supportive food in the Japanese diet. Over 2,000 years of documentation.

As far back as 300 BC in China, there was a writer named Chi Han who documented the benefits and wrote a book about the importance of sea vegetables. And in Europe, Mediterranean seaweeds were used as medicine during the times of the Great Greek and Roman empires.

And in places like Hawaii and the islands of the South Pacific like Tonga, sixty to seventy species of seaweeds have been used for food, medicines, and even in ceremonies, just a part of events and celebration.

So really, really interesting, a lot of documented use, but what does the science say, and what do these sea veggies really look like in practical order for our conversation today?

And we're going to jump right in and talk about probably the most popular one, which is kelp. Alright? Kelp is kind of the big boss that's out there on the streets, and in the Interwebs.

And a lot of folks are aware of kelp and some of the benefits, but we're going to dive in a little bit deeper though, and talk about kelp and a whole lot of kelp's cousins.

Alright, so let's talk about some of the benefits. Number one, kelp is one of the best sources of natural iodine, and this is why a lot of people turn to it, and this is because iodine is such a critical component in us actually building our thyroid hormone.

So T3 and T4, we can't even make it. And our thyroids are the real kind of governing force of our entire metabolism. So it's super important that we're able to build these compounds that are relating our thyroid with what's happening with our brain and what's happening with our entire HPA axis, and our other organs, and just enabling our body to do the job of burning and storing energy.

And so, iodine is literally required to make T3 and T4, so it's kind of important. And we'll talk about some of the - at the end of the show - some of the things to watch out for though, because there is a kind of nice space to be, a Goldilocks position; not too hot, not too cold, just right spot with some of these things.

So we'll come to that later, but the most important part is to know that approximately 40% of the world's population is deficient- chronically deficient in iodine.

And so this can lead to obvious problems with thyroid function, specifically leaning towards hypothyroidism, but also, the appearance of the goiter. Right?

So where the thyroid is swollen and kind of inflamed due to dysfunction. So this is one of the reasons that a lot of people have been tuned in and turned on to kelp.

And also, according to research from the University of California San Francisco Medical Center, kelp has more calcium than just about all other vegetables. No disrespect, kale. No disrespect, collard.

Kelp is that business when it comes to calcium. Alright? So that's one of the other big attributes. And gram for gram, kelp can contain over five times more calcium than milk.

Milk is that propaganda, the commercials, as that source of calcium. Much better, bioavailable, and you're not worrying about all of this suspicious nefarious potentials.

Not that all dairy is bad, but conventional dairy that comes along with it, and especially if you have an intolerance or a sensitivity towards dairy.

Get in your veggies. That's really how we get this bioavailable calcium, and kelp is one of those great sources. Also, notable amounts of iron, B vitamins, vitamin A.

There was a 2014 study revealed that there's a compound found in high concentrations of kelp called fucoxanthin, has been shown to have anti-cancer effects against human breast cancer and colon cancer cells. So now it's getting serious.

This has some true disease-fighting and preventative potential. Alright? So kelp is really something remarkable, and we need to know more about it, and also let's experiment with it, and add it in to our nutritional protocol. Just try it out.

So how do you use it? Where can you get it? Well, there's different versions of it. You've got the kind of dried whole leaves that you can use, you've got flakes, they've got little- kind of like salt and pepper shakers that you buy that's filled with like granulated kelp and powdered kelp even that you can just kind of sprinkle on your food.

And it's kind of salty, so it just kind of adds that note to things. And so the kelp when it's dry, but if you re-hydrate it, say you put it in some water to kind of re-hydrate and to cut it up to like toss and mix into salads and things like that, it's kind of slippery, as you would suspect, kind of oily texture to it.

But it's really super easy to implement, you know? This is something that I like to sprinkle on salads, entrees as a finisher, so after the entree is cooked, so adding it and sprinkling it on top of some stir fry.

Traditionally it's used in soups. Also, sushi is another place. I would sprinkle this on top of- we used to make this faux sushi back in the day. Faux means fake. It was an alternative version of it, but it was like a pate using walnuts and like some other vegetables.

It was really tasty, and I would sprinkle some kelp on top of that as well. So whether you're doing the faux sushi or the real sushi, sprinkle on some kelp, add in some of the benefits.

Alright, so again, just about any savory dish because it has that umami flavor hit, right? So we've got those different flavor sensations.

Umami is the more recently confirmed sweet, sour, salty, bitter. Umami, which apparently means 'tasty' in Japanese I believe, so that's interesting, but it has that flavor note. So mixing it in and adding it to kind of more savory dishes is a good way to go about it.

Alright, so with that said- oh, by the way, so where I get my sea veggies from, and this is a place you can save- because you know, any kind of organic retail or health food store you can find these sea veggies, but you can save some money and it's at least 15% off, sometimes upwards of 25% to even 50% off the retail prices that you'd find at places like Whole Foods.

For the same products that you'd be buying, whether it's for these sea veggies, they've got also different like kind of seaweed snacks, and chips, and things like that.

But also for your personal care products, if you're trying to avoid all these toxic chemicals that are in a lot of personal care products. And we did an entire episode dedicated to that, which we'll put in the show notes.

Things like we get our coconut oil from here, we get our nut butters, we get our snacks for the kids; we go to Thrive Market because we save money.

We save so much money, and we're also giving back when we're buying from Thrive Market because for every membership that's purchased, they give away a free membership to someone in need.

You know, this could be a military veteran, teacher, somebody- just a low income household, so that they can take advantage of these deals and these discounts, because they're not marking the prices up, because they're not using store shelf mark-ups.

So I absolutely love Thrive Market. You could pop over there for a lot of the stuff we're talking about today, for kelp, and what we're going to be talking about next, which the next thing we're going to talk about is probably my favorite.

I get it from Thrive Market, and you can go there right now, it's www.ThriveMarket.com/modelhealth together as one word. So www.ThriveMarket.com/modelhealth.

You'll get upwards of 25% sometimes 50% off these different products. It's stuff that you're buying already, you can save money from buying from Thrive Market.

And if it's your first time purchasing, you'll get free shipping right out of the gate, and you'll also receive an additional- an additional 25% off your entire cart for your first purchase.

Alright? So pop over there, check them out, www.ThriveMarket.com/modelhealth. Alright, now let's jump into the next one.

So we covered kelp, now we're going to go to my favorite, which is dulse. Dulse is my favorite. I can't lie and say that we don't call it Dulse and Gabana around my house, because we do. Alright?

It just comes out. We start singing the song, 'Dulse and Gabana, Dulse and Gabana.' We'll play a little bit of it for you.

Alright, now real talk, I love dulse. It's one of the highest potassium rich foods. If you're looking at things like bananas, and even avocado is a great source of potassium.

Dulse is the winner gram for gram. Super great source of potassium. What do we need that for? For our muscle function. Okay? In addition to several other things.

Our sleep quality is partly determined by potassium levels as well. It's involved in some of those kind of neurotransmitter and hormonal pathways that create our sleep-related hormones, and things like that. So potassium is important; dulse is the best source.

And also, it appears to have about twice the nutritional value of kale and contains up to 16% protein by weight. It's also rich in vitamins, minerals, antioxidants.

Its reddish color is an indicator because- so a lot of these seaweeds, these sea veggies are kind of green or kind of blackish or a brown tint.

Dulse has this really interesting reddish hue to it. And the red color is an indicator of a different spectrum of antioxidants, right? When we talk about antioxidants, what do we relate that to, the amount and types?

Color is one of those indicators for us. So I hope that makes sense, because a lot of these terms like antioxidants and minerals, like what are they?

When we hear 'minerals,' that's literally like rocks and metals, right? But there are these little trace amounts that we need for our bodies to function.

And literally, when you look at yourself and you see yourself in the mirror, you're looking at these compounds that you've eaten, the minerals that you've eaten, or lack thereof. You know?

It is kind of a solid part of our structure and also what's happening with our cells. So it's super important, and obviously proteins and other things as well, but minerals matter, and they can be kind of weird, but if we think about it differently, we can start to relate to it a little bit differently.

And also, so dulse is a good source of vitamin A, which is well-known to have powerful antioxidant properties which help to protect your eyes from cellular damage and reduce the risk of macular degeneration.

Now I didn't say this. I didn't say this, but dulse is often referred to as 'the bacon of the sea.' I didn't say that, okay? I'm not going to 100% agree, because bacon is bacon, but it does taste really good.

And especially when you- there's different products like you have the dry leaves, and things like that, and it's kind of nice to snack on.

So bacon of the sea, be it that or not, and I love to sprinkle this on top of salads, specifically a salad that has an Italian dressing that has a nice basil oregano vibe to it. It tastes really good. They really work well together, they like each other.

And again, this is just something to add to your superhero utility belt, things that you can experiment with to enjoy, and they have some really remarkable health benefits as well. And we're just scratching the surface here.

Next up, we're going to finesse and parlay over to something that is literally the causative agent to the majority of the air that you're breathing right now.

Okay, now this is getting into some *Twilight Zone* freaky stuff right here, but I remember I was taught in school, our oxygen- trees make oxygen for us, and that was the end of the story.

No, it's not. It's not. Upwards of 80% plus of the oxygen in our environment comes from these tiny plants in the ocean called phytoplankton. Alright? Phytoplankton.

And these tiny powerhouses, again upwards of 80% plus of the air on the planet is coming from these phytoplankton. So when I first heard phytoplankton, I immediately thought of SpongeBob, and I was like, "But isn't plankton the bad guy?"

He's just small and he has a complex, he's misunderstood. He's just trying to have a good time. Alright? But real talk, marine phytoplankton is something that I've been- it's got to be ten years now at least that I've been utilizing marine phytoplankton.

It's one of my favorite things, I have it all the time, it's just right there in my cabinet. And studies on marine- and this is why, let me dive in and share this with you. This is really, really powerful.

Studies on marine phytoplankton are still in their infancy, let me be clear, but there's a lot to be excited about.

So there was a study that was contracted with the Department of Health from Ocean and Education at the University of Utah, and it showed that those taking concentrated marine phytoplankton experience significant health benefits.

Participants were followed for three months, blood tested, and evaluated for psycho-emotional changes, and here's what the results showed.

Marine phytoplankton was found to enhance the function of their immune system. Those taking marine phytoplankton had improved markers of T cells, which are these immune cells that are really responsible for elimination for viruses, and bacteria, and various substances in our tissues.

So that's pretty cool. Wow, get a boost to our immune system. They also found that they experienced enhanced energy. They used the well-respected SF36 patient survey that determines objective health and well-being.

And those taking marine phytoplankton reported that they were enjoying more energy and experienced a greater sense of peacefulness. That's interesting, too.

Researchers also administered a test designed by Dr. Martin Seligman who was the Director of Penn State University Positive Psychology Center. You know we're about that positive psychology.

The test results indicated that those taking marine phytoplankton showed a significant increase in scores on the authentic happiness inventory.

Participants reported feeling more successful, and in a good mood, enjoying an increased ability to focus, and experiencing more feelings of joy, enthusiasm, and optimism. What? How?

That little tiny plant that's providing oxygen for the entire planet? How is it so powerful? It sounds powerful. It does. It already sounds like it should have some power to it, but the concentration of it.

Like how can we get that? How can we get that concentrated connection to it? And so that's what we're going to talk about in a moment, but I want to talk about some of the things that are going on behind the scenes potentially that are causing people to have these experiences.

Now again, just a lot of preliminary trials and studies, and more research needs to be done, but it's been going on for a couple of decades now, and it's really exciting because this food has these things.

Number one, it's a rich source of essential fatty acids, specifically EPA and DHA. These are essentially the fats that get a free pass. They have a VIP pass to cross the blood brain barrier and literally feed your brain.

If you're deficient on these things, your brain is- basically it's just accelerating the dying process. We need these essential fatty acids, specifically DHA and EPA.

Now the form that is found in terrestrial plants, which is ALA, has to get converted into DHA, which it can, but upwards of around 70% gets lost in the process.

So things like chia seeds, and flax seeds, and hemp seeds; those are wonderful, but they play other roles, but as far as getting converted to the essential fatty acids that we actually need that can get to the brain, this is one of those plant sources that's really remarkable and something that you might want to tune into and turn to because of that.

And also, a little bit goes a long way because it's so concentrated and so bioavailable in the form that we'll talk about in a moment. Also contains minerals like selenium, zinc, magnesium, chromium, and of course iodine is in there as well.

Every essential amino acid there, every essential fatty acid, 'essential' sugars, which is an interesting topic because we have essential fats and essential proteins, why not essential sugars?

Well, there are some. There are some polysaccharides, these mini sugars, and the longer the chain- because polysaccharides means 'mini,' the longer the chain, the more bitter it gets.

You know the statement, 'the bitter, the better.' So there are some medicinal properties with some of these polysaccharides, and this category of sea veggies are really the kings when it comes to high quality valuable for human health polysaccharides.

Alright, so just keep that in mind. All of that is in this marine phytoplankton. Also vitamin A, several forms of the B vitamins, chlorophyll, carotenoids, and other elements that are important for human health, all found in this marine phytoplankton.

Again, I've been using marine phytoplankton for about ten years from Activation Products, their product Oceans Alive, because it's like this- it's animated suspension.

The way that they distill it and store it, it keeps it fresh so you're not losing all this vitality. Truly it's called Oceans Alive because it really is the living energy, the live form of this tiny little plant that's providing all this oxygen to the world.

And I kind of get excited about this one because I was there. Like I was paying attention all those years ago when it came out, and I just dove into the research, and I haven't really talked about it for a while.

Because there's so many cool things, cool advances, and it's just one of those things that's just on the periphery and it's so kind of weird to talk about this subject matter.

But today, and kind of what we're going through, we now have a lot more valid science that I can talk about this and say, "Hey, I don't want you ten years, twenty years from now hearing about this and kind of missing the boat on something that could be really potentially powerful for you.

And the reason also I use the Oceans Alive is that it's a blend of two specifically cultivated marine phytoplankton strains, because there's many different types.

These have been found to be the ones to most benefit human health. When they're grown in pristine conditions, they are completely free of impurities and contaminants.

And if you go to www.OceansAlive.com/model, so that's www.OceansAlive.com/model, you can check out the marine phytoplankton that I use and have been using for about ten years, and I'm pretty sure I can get them to hook up a discount for us.

Because I haven't talked with them about this yet, but I'm going to holler at them and make sure that when this episode comes out, we'll have some form of a discount for you guys to check this out, if it's something that speaks to your soul.

If not, we've got plenty of other cool things to talk about. Alright so again, www.OceansAlive.com/model.

Alright, so now let's jump in and look at another one of these sea veggies that- this is one of the favorites in Okinawa and it's called wakame. Alright, wakame.

Research published in the Journal of Functional Biomaterials revealed that compounds found in wakame were effective at selectively killing lung cancer cells.

Wow, it's just powerful. It's powerful stuff. And also, wakame contains several unique compounds such as fucoxanthin, which I talked about earlier, and also fucoxanthin, which I talked about at the top of the show.

Fucoxanthin that has those benefits for helping to optimize and improve our hemoglobin A1C levels, right? That marker for insulin sensitivity.

So really, really cool stuff there. And both of these- and in addition to that are found to have numerous effects for eliminating different types of cancer cells in and of themselves. So there's all these different compounds in wakame that have these different capabilities.

Also it's a valuable dense source of minerals and trace minerals, vitamins, and iodine should go without saying, selenium, magnesium.

And by the way, so I want to mention this, too. When I talked about fucoxanthin, that's just one aspect, cancer fighting potential. There's research indicating it has benefits for weight loss, it has potential in optimizing our blood sugar levels, which we've talked about.

But also, fucoxanthin has been shown to literally protect your cell membranes better than most of the other strong antioxidants, alright?

So the membranes of your cells, this is like what's- in a sense, one aspect of it is giving yourself structure and keeping your cells together, which is kind of important.

But also, the membrane of the cell allows for communication between cells, and that's super remarkable because not only do we want to have healthy cells, but we want a healthy cell community where your cells can actually communicate and talk to one another. So I thought that that was really cool.

And one other peer reviewed study found that fucoxanthin, which is found in wakame, significantly reduced plasma and hepatic triglyceride concentrations.

So those triglycerides, those triplets of fats, so helping to eliminate those and reducing those blood levels, and also even with your liver, these potentially dangerous fats, right?

So we want to look more towards- when we're looking at getting a blood panel done, we need to pay attention to triglycerides. That's in some aspects far more of a concerning thing to be aware of than typical cholesterol, right?

Because we know now today the story of cholesterol. We didn't really have the full picture, and now we really do understand it a lot more than we used to.

And understand it's actually a vital nutrient because it's the seed, it's the precursor to building our sex hormones for starters. That's just one of the aspects of it.

And being a carrier molecule to help literally shuttle around other necessary materials throughout our body. Cholesterol is kind of important, but we want to make sure that we have really good balance in our overall cholesterol numbers.

But again, be mindful of that with the triglycerides and the fact that wakame might be one of those foods that can help out with that.

So again, there are so many different sea veggies for us to talk about today, and there are so many that we can cover obviously, and I'll just mention a few more and then we'll dive in deeper on some more.

But there's also sea palm, which I've had as well. Most of these- pretty much all of these I've had. Sea palm. Arame. Arame is great in like fermented dishes, right?

So you could ferment some arame along with cabbage and some other stuff. You might find it with kind of like the kimchi ingredients sometimes. You might find arame in there.

We've got nori, right? Nori is a great source of iodine as well, and antioxidants, and that's what- when you get sushi, that's what it's rolled up in the nori, the seaweed / sea vegetable that has so much value in and of itself, right?

So we've got nori, we've got bladder wrack. Bladder wrack just sounds weird, alright? That's another sea veggie.

But let's dive in a little bit deeper and talk about sea lettuce, alright? Sea lettuce. So there's actually- we've got lettuce, we've got sea lettuce.

And when you see the sea the lettuce when it's in its natural habitat, it kind of looks like green leaf lettuce when it's kind of bloomed and doing its lettuce thing.

Another name is ulva, not to be mistaken with vulva, alright? Ulva, and also in this category would be something called green laver is a pretty popular ingredient for a lot of dishes.

So it has a long history of use in Japan, it's added to soups, noodles, and other dishes as well. And it's known to help to aid in the digestion of beans.

Now you've got to think about this. Our ancestors had a specific reason that they would do things. They tested and tried and figured things out for us that we just kind of- with the commercialization of food, just kind of just ignored and just forgot about our long traditions of people who've come before us to look out for us.

And so what they found was that sea lettuce, adding to the process of making beans, could help aid in digestion of the beans.

Also, sea lettuce is a complete protein, containing all nine essential amino acids, which is pretty remarkable when we're talking about plant sources of amino acids.

And being a complete protein, it's upwards of 26% protein by weight. Now that's remarkable, too, for a veggie- a sea veggie to have that much protein.

It's also a rich source of magnesium, sodium, potassium, B vitamins, copper, zinc, calcium, and one researcher found that it has as much as fifteen times higher amount of iron.

So if you're deficient in iron, you're dealing with issues related to that, check out sea lettuce. That might be something for you. Alright, also a great source of antioxidants, like beta carotene is in there.

Alright, let's move onto another one. So I hope you're enjoying this, and just your eyes are opening to this whole new world. We've got to play a little bit of that. Play it.

This whole new world of nutrition that we have access to, and it's really powerful. And again, thousands and thousands of years, our ancestors from various cultures have been utilizing this food source, and it's been much forgotten.

But if we're talking about true wild food, we don't have access to that very often anymore, and this is one of those places where you can find some truly wild strains, heirloom, really nutrient dense foods in these sea vegetables.

So another one, this one is literally called sea spaghetti. Alright? Sea spaghetti, also referred to in some parts of the world as sea thong. Okay, I can't make that up. Alright?

Maybe it's because it's spaghetti straps, somebody came out of the ocean one day with some spaghetti strap in the butt. I don't know how this became sea thong. But you know, it's pronounced differently in other languages obviously, but so sea spaghetti.

2014 study published in the journal European Food, Research, and Technology clearly suggested that the compounds in sea spaghetti offer protection against cardiovascular disease by improving blood lipid profiles and exerting antioxidant effects as well on the cells.

So sea spaghetti is that deal. Spaghetti. Spaghetti. That's from Dave Chappelle. Just shout-out to anybody who got that.

He did a parody of Eight Mile with Eminem and he was like, "Mom's spaghetti, thongs and ready, spaghetti thong out the sea, getting fatty." You know how Eminem does it. Alright, shout-out to Eminem. Let's move on.

Sea spaghetti, next up is kombu. Kombu. It's another of the favorites in Okinawa, and it's hailing in popularity from Japan where it's most historically used as one of the three main ingredients in a very popular noodle dish.

And shout-out to everybody who is in Japan listening right now, and I hope that I'm saying this right, but dashi noodle broth.

And there was a study that was published in the International Journal of Biological Macro Molecules revealed that kombu may have an anti-tumor effect on liver cancer.

These things keep striking me as I'm sharing this today because it's so remarkable, and this is from real food that has these potentials.

And what do we do? Of course scientists are usually looking for, "Let's extract and find the super concentrate of these things." Yeah, sometimes that is absolutely appropriate.

A lot of times, we just need to eat the food because the food has these other co-factors. Nature has put them together with all of these other co-factors that enable our bodies to use them in a really unique and special way.

It's like there's instructions encoded in the food when we consume it in its natural state to get a lot of these benefits that we're talking about. And it can help things that we don't even know about yet. Right? So it's really exciting for me.

And so with kombu, we can have it dried, pickled, fermented, and also mixed in with different vegetable dishes, and entrees, and things like that as well. Very versatile as all of these different things are, but it's just something to be mindful of, take a shot, experiment with, and enjoy some of the benefits.

Alright so with that said, we're going to jump into the next one, and this one is shifting from really- from the ocean setting, the sea, to freshwater, and this is chlorella. Chlorella.

I've talked about chlorella several times, been a big fan of chlorella for many, many years, and here's why.

Number one, it's 50% to 60% protein by weight. It's up there, top three protein dense foods that we know about in the world, alright? So that in and of itself makes it really remarkable.

It's a complete protein, and also chlorella- because this is the thing with real food, is that chlorella contains lutein and zeaxanthin as well.

Now, these are two carotenoids that are found to be extremely protective of your vision, protecting your eyes, and significantly lowering the risk of macular degeneration. Right?

Man, that's really something special. So zeaxanthin, lutein, and you find that in high concentration in chlorella.

Alright also, it's a pretty decent source of Omega-3s as well, and we've talked about the importance of Omega-3s. So just three grams of chlorella delivers 100 milligrams of Omega-3s.

Now here's where it gets really interesting. Chlorella is known as a natural chelator. It's a chelator. Chelation is a chemical process in which a substance is used to bind molecules such as heavy metals or minerals and hold them tightly, and enabling your body to eliminate them safely.

So chelation is actually used in conventional medicine for treating things like lead poisoning or iron overload. And this is something that when I was studying this ten or twelve years ago, I was really fascinated that there are substances you can consume that intelligently bind to these problematic things in our body.

So there was a study that was published in the journal International Immunopharmacology that affirmed just that, that chlorella helps to reduce blood levels of lead.

Yeah, it can selectively kind of chelate, grasp onto the lead, and get it out of your system. What things do you know that have that kind of intelligence and power? That's really, really remarkable.

There was a double blind placebo controlled study published in the Clinical and Experimental Hypertension Journal that found that chlorella was able to significantly reduce blood pressure of test subjects with hypertension by the end of the twelve-week study period.

And so this is yet another aspect that these underwater sources of nutrition, when we're talking about these sea veggies, and in the case of chlorella being an algae that it's hitting on. Right?

So it's blood sugar benefits, we've got weight loss benefits, we've got anti-cancer benefits, we've got heart and cardiovascular benefits as well, and the list goes on, and on, and on.

The reason that chlorella has the name 'chlorella,' is that it's the number one source of chlorophyll that is found in a food that humans consume.

Chlorophyll is a known potential blood builder, and has a lot of antioxidant capabilities in and of itself. That dark green color is an indication of some powerful antioxidants.

So yet another reason why you might want to check out some chlorella as well.

So that leads me to- whenever I think about chlorella, I tend to think about this other one, and of everything that I've talked about today, I've probably been using this one the longest, and this one is spirulina.

And spirulina grows in both fresh water and saltwater, and this is the world's highest protein food gram for gram. It's about 70% protein by weight.

It's a complete protein as well, and it contains all nine essential amino acids, as mentioned it's a complete protein. Now, here's where it gets really interesting.

Phycocyanin. So there was a time, according to experts, that the earth wasn't as green, right? The land wasn't as green, it was like shifting towards more towards a blue hue, as crazy as that sounds. Right?

So when we see the earth, we've got the blue skies, the blue ocean, and then we've got like the green land. But it was actually- through evolution, it was at one point apparently more of a blue spectrum.

And phycocyanin is one of those really ancient compounds that's an indicator- it's like this is why there's a term of a blue green algae, is this really unique and rare ancient compound that is found in spirulina.

Now here's what's so interesting. There was a study funded by the National Institutes of Health that revealed that this compound in spirulina has been found to promote stem cell genesis, which literally means the creation of new stem cells.

From what I was taught in my university setting, stem cells- this is not a renewable resource. Like if you've got some, and then that's what you've got.

Like your body does kind of make some different stem cells here and there in different parts of your body, but for the most part, once you kind of run low, that's it. It's a wrap.

But it's not. There are actually foods that can stimulate your body to actually make more stem cells. And why does that matter? Stem cells become everything your body could possibly need.

If you need fat tissue, meniscus, if you need brain cells, if you need muscle tissue, right? If you need some cells for your liver or for your pancreas or for your pinky toe, stem cells help to regenerate those tissues. Some people need some help with those pinky toes.

So all of this found here in spirulina; phycocyanin. It's also a rich source of B vitamins, copper, iron.

There was another study, and this was published in the Public Library of Science, showed that spirulina has strong potential to prevent and even reduce inflammation in the brain. What? Incredible. Incredible.

When I hear that, I'm just like, "Reduce inflammation in the brain?" And then I immediately think like, "Captain Crunch can't do that. What are we talking about?"

Like we've got this whole paradigm over here, and then we've got this category of these powerful health-affirming foods that so many of us don't know about, or we're not taking advantage of.

And so like chlorella, spirulina is also a rich source of chlorophyll. And so by the way, on that note, there was a study that was published in 2014 in the peer reviewed journal *Appetite* found that chlorophyll can aid in weight loss and reduce the urge to eat hyper palatable foods like Captain Crunch. Okay?

Now I've got to be real with you. I was a Crunch Berry guy. Alright? I liked the Crunch Berries. Some people like the peanut butter, the original, give me the Crunch Berries. Alright?

And it's very difficult. It was probably the last thing that I was doing as far as my health process and freeing myself from all the processed food I was consuming as I was growing up.

When I was transforming my health, I hung onto cereal the longest. I was like trying to find the healthy versions of the cereal because it's hyper palatable. Right?

It's processed and it just hits these flavor notes that our system is just hardwired to become addicted to. And so it was found that chlorophyll can help to reduce that urge to eat hyper palatable foods.

That's really cool. And what's really interesting about chlorophyll is that it was also found to increase the release of something called glucagon-like peptide 1, which according to research published in the *Journal of Endocrinology*, has the potential to trigger body fat redistribution.

Okay, I know it sounds weird, like so my body fat, is that like the surgery where they take the fat out of my butt and then like put it in my neck? Sorry, that's not how it goes. That's not how it goes at all.

I had that totally- maybe it's taking the fat out of the neck and putting it in the butt because shout-out to Cardi B. I don't know.

But it's a redistribution, but it's natural redistribution of fat, but it's not that kind. It's not that kind of redistribution. It's taking visceral fat, the organ fat that is kind of- first of all, it's the most dangerous form of fat because this is fat that is surrounding your internal organs and creating this pressure and inflammation and it really has this profound capacity as its own organ.

It becomes its own- it already is its own organ, but it becomes a very powerful organ when we have more visceral fat because of the commands that it puts on the body, and kind of dysregulating our insulin, and our leptin, and just causing inflammation overall.

So what this compound is that's in chlorophyll has been found to do is to spark your body to release visceral fat and increase your subcutaneous fat.

So that's the fat that's right under your skin, which there are so many different studies affirming how important it is to have some subcutaneous fat. There's a lot of benefits.

In a recent episode, we talked about the benefits of body fat, and the amazing things that it can do for us with Dr. Sylvia Tara, which we'll put that in the show notes for you, if you missed that episode, 'The Secret Life of Fat.' Incredible.

Now, chlorophyll is triggering a redistribution of this fat from an unhealthy place in the body to a healthy place. And it also, for my mind, is giving the potential to- potentially just getting it out of your system period. You know, if we can get it free and mobilized via some of these actions.

So really cool stuff, really powerful, and we just went through a really power packed list of these underwater, under the sea veggies, and there's so much more that we are learning, and it's really exciting, but the big thing is are we stepping up and taking advantage of these things?

Because at the end of the day, we can get the information, but we've got to do something with it. And so by the way, so for me, having spirulina and chlorella and some of the benefits with one of the other high chlorophyll concentration foods - wheatgrass and things like that - is in a formula that Organifi carries in its Green Juice.

It's all there already plus moringa, ashwagandha, and it tastes good. We can get all of these things, when we're talking about the spirulina and chlorella together, in a formula that tastes really good. Right?

So it's the Organifi Green Juice. I'm a huge fan of it, my kids have it. My older son, Jordan, literally has it every morning. Like he's the most hardcore with the Organifi of any of us, and it's just because he knows the difference when he has it.

And it's really, for him, he's meeting those nutritional bases, those gaps, because he's in high school, he's going to come in contact with a slice of pizza or three. You know?

So he's just trying to make sure that he's getting his nutrients in, so he hits that Organifi, because it's a bioavailable source. We've got to get out of this mindset, this mentality of taking these so-called multi-vitamins that are synthetic, that are coming from very heavily processed versions of these nutrients.

It's not the same thing as when it's in real food. So the Green Juice formula is a concentration, low temperature processed, to retain the nutrients in these real whole foods. It's a whole food concentrate. Alright?

So pop over there, check them out. If you're not using Organifi Green Juice, you're really missing out. You've got to check them out and get you some.

Go to www.Organifi.com/model. That's www.Organifi.com/model and you get 20% everything they carry, including the Green Juice formula, their awesome Red Juice formula, which is what I'm really vibing with lately, and their Gold formula is on fire right now. Alright, so pop over there and check them out, www.Organifi.com/model.

Alright now I mentioned at the beginning of the show I want to put a couple of words of- not caution, but conscientiousness. We need to proceed being aware, right? Conscious and aware.

Because nutrients like iodine that we talked about are absolutely critical to human health, to thyroid function. We talked about it's needed and required to make your thyroid hormone T3/T4.

But too much of it can be problematic too, and in fact, you can end up having many of the signs of thyroid deficiency when we're getting in too much thyroid.

Because your thyroid is like a magnet, just kind of really sopping up a lot of that free iodine, and also other tissues as well.

And so with that said, a serving or two a few times a week is a safe and sufficient route to go when utilizing the various sea vegetables.

The chlorella and spirulina, things like that, that you find in like Organifi, which is kind of curated and tested, those things are safe and recommended for daily use.

But if you're getting like the wild dulse, and kelp, and things like that, a couple servings here and there during the week will be solid and sufficient. And sometimes, of course, a little bit more. Especially if you're using it as like a condiment and like sprinkling it on foods, those are like micro doses, and so that's cool to do daily.

But if you're like really hitting it hard, and like snacking on some of that bacon of the sea, maybe we do that every- just a couple of days out of the week. Alright? So I hope that makes sense.

Also, many Asian cultures commonly eat these sea veggies along with foods that actually inhibit the uptake of iodine by the thyroid gland, and these foods are in a category known as goitrogens, and these are found in things like broccoli, and cabbage, and bok choy.

And again, on the other side, be careful not to eat too many of these raw cruciferous vegetables too, because it does inhibit the absorption of iodine. Alright?

So surprisingly, eating a raw kale salad for somebody who has thyroid problems might be terrible for you, but we're just told it's a super healthy food.

Yeah, it can be, but the way that you're consuming it, and just being mindful, 'Is this something that's right for me?' is just all these things we need to take into accountability always.

And so again, this is just a word of conscientiousness that we don't need to go balls to the sea floor walls to get these benefits, okay? We can extract and utilize some of these things occasionally, and it's a really great adjunct to an already healthy nutrition approach.

And again, I just want to make sure that you know about these things so that you can take advantage of them.

Now also, sea veggies can absorb and store minerals in concentrated amounts. We know this, but this in some instances might not be 'good' minerals. Right?

So this could be in the category of what we call heavy minerals, AKA heavy metals. So that said, be mindful of eating seaweed that may be growing in polluted places.

This is why I like places like Thrive Market and Whole Foods because they're curating and getting it from the best sources a lot of times. But purchase organic, wild harvested where available.

And just be assured that even still, the heavy metal content in seaweed is still usually well below the maximum concentration allowances in most countries, regardless of where you buy it.

Alright? So just be mindful of that, because a lot of the foods that we eat every day are going to have trace amounts of these different things, but that's cool.

Our bodies are hardwired to handle those things, but we want to make sure that we're doing our best to get it from the best sources. Alright?

So I hope that makes a world of sense and a world of difference, and I hope that you got a lot of value out of this episode. It was really fun to go through some of these things that I've been enjoying for many years, and also talking about here or there, but to really create a master class on it, and to get more associated and connected, and also talk a little bit about the history, and how long this stuff has been a part of human cuisine and human health.

It's just really inspiring for me, and so if you got a lot of value out of this episode, please share it out with your friends and family on social media.

On Instagram, I'm @ShawnModel. You can tag me, and same thing on Twitter. On Facebook, I'm @TheModelHealthShow. Okay? So tag me- take a screenshot right now. Take a screenshot of your phone, tag me on Instagram, post the show, let me know what you thought about the episode.

Let your friends and family know what you thought about the episode. Alright? I appreciate you so much for tuning into the show. We've got some powerhouse episodes and show topics coming up, so make sure to stay tuned. Take care, have an amazing day, and I'll talk with you soon.

And for more after the show, make sure to head over to www.TheModelHealthShow.com. That's where you can find all of the show notes, you can find transcriptions, videos for each episode, and if you've got a comment you can leave me a comment there as well.

And please make sure to head over to iTunes and leave us a rating to let everybody know that the show is awesome, and I appreciate that so much.

And take care, I promise to keep giving you more powerful, empowering, great content to help you transform your life. Thanks for tuning in.