

# SEAWATER MINERALS

## AND THE COMING AGRICULTURAL REVOLUTION

An exclusive interview with Ocean Grown,  
producers of mineral-rich,  
seawater concentrates

WITH MIKE ADAMS

Ocean Grown is a company that provides concentrated ocean minerals for farmers and organic gardeners, allowing them to produce mineral-rich crops and vegetables that support peak human health. In this interview, Mike Adams talks with Ocean Grown president John Hartman, who discusses mineral deficiencies in soils used for crops as well as the serious implications for human health.

**Mike:** Hello, everyone. This is Mike Adams, the Health Ranger, and today I'm joined by John Hartman, the president and cofounder of Ocean Grown, a harvester and marketer of ocean minerals for enhanced health that can be accessed online at **OceanGrown.com**. Thanks for joining me today, John.

**Hartman:** It's a pleasure to be here.

**Mike:** You're joining us from Florida today. Can you please tell us what your product does, what it's for, and how it might benefit people?

**Hartman:** What we do is go out to sea on the east coast of Florida, because that's where the clean water is. We have a proprietary process, and what we do is extract the minerals out of seawater. Seawater has all 90 natural minerals in a very particular proportion, and I'm sure that proportion will come up several times in this chat—and it's terribly important. That proportion is used by anything that grows, whether it's vegetables, flowering plants, trees or grass.

**Mike:** So these are minerals that people can put on their home gardens?

**Hartman:** That's right.

**Mike:** Are any commercial growers using the product as well?

**Hartman:** Yes, we have quite a few commercial growers, because our intent and our mission at the company is to reinvigorate the food supply, because it's terribly lacking in minerals that are so important for health. We've predominantly gone after commercial growers, because we really want to do that in a quick fashion. However, we do have a loyal following of wheatgrass growers and home gardeners that also use it. It can be used anywhere.

**Mike:** What happens to people's produce yield when they put this product on their garden? What kind of results do they typically see?

**Hartman:** Well, that brings up an interesting point. What we do, as a company, is promise equivalent yields, although, generally, our yields are higher. The point is, when you sit down with an agronomist and growers, the last thing they want to talk about—the last thing that crosses their mind—is the quality of the food. All they talk about is yield and disease resistance. Are we going to be able to

harvest in 90 or 91 days? These are the kinds of things that interest farmers. It's what the commercial marketplace has brought everything to, and people have forgotten why they grow food.

**Mike:** So what's in the food when it's raised on Ocean Grown minerals is very different from what's in food that is conventionally grown. Is that what you're saying? So, what can people expect? I mean, how many more minerals are in a tomato grown in a garden with Ocean Grown minerals? How much greater mineral density will it have, compared to a conventionally grown tomato?

**Hartman:** Well, typically, if you go to a grocery store and buy a tomato, it looks lovely. It can be blemish free, bright red and look so nutritious. But typically, those tomatoes—from a hothouse or even out of the ground—have 12, 14 or 15 elements. Tomatoes are genetically disposed to pick up 56 elements, and it's always the same 56 in a certain proportion. That's what tomatoes pick up. Every vegetable and fruit is different, but that's what tomatoes want. When people buy fruits and vegetables, and take them home and taste them and they taste like cardboard, people say, "What happened?" What happened is that they were completely depleted. They are like virtual food.

**Mike:** It's really just a shadow of the original tomato that people should be eating.

**Hartman:** That's right, and it brings up an interesting point made first by Dr. Murray, who was really the discoverer of how to use ocean water and minerals to grow food. When you sit down and think about what commercial agriculture has come to and what modern cultivation techniques have come to, you're not really looking at somebody growing food. What you're really looking at is a strip-mining operation, because when you grow a crop of corn or wheat or whatever it may be, and you ship that to market, you ship some quantity of elements in a certain proportion and quality off to market. What current practice calls for is that you put back three elements, even though you might have shipped 56 or 74 elements off to market.

**Mike:** To be specific, when you say "elements" here, you're using that in a sense of the table of elements?

**Hartman:** Yes. I'm using that in the chemical sense, but people use the word interchangeably with mineral elements.

## **Commercial fertilizers provide only three elements to crops**

**Mike:** When you say they put three back into the soil, these are the three common components of every commercial fertilizer on the market, right?

**Hartman:** That's right: nitrogen, potassium and phosphorus.

**Mike:** So, farmers can grow something that looks like food, but they're only putting three elements or minerals back into the ground.

**Hartman:** That's right. Even if they were growing cattle for beef, the same thing would be going on. Cattle are fabulous foragers. They graze the grass and pick up the elements, and they become part of their body. Then the cows get shipped to market. It's a strip-mining operation with no easy solutions, and putting back three elements is not going to do it.

## **The health consequences of mineral depletion of crop soils**

**Hartman:** One of the things that we quote from time to time is that the United Nations has come to a realization that I give them a lot of credit for: Two billion people out of the six billion inhabitants of the planet are suffering from micronutrient malnutrition. Personally, I would quarrel with them slightly, but the fact that they recognize this is impressive. I believe that six billion people—all the people on the planet—are suffering from micronutrient malnutrition, and many doctors have done a lot of work with how DNA replicates itself. One of the things they've come to understand is that many millions of replications happen every day, but every replication needs a mineral to catalyze it. On a given day, because minerals are not in our food, there's something like 250,000 transactions that can't happen because there is a missing element—whether it be cobalt, selenium, gold, tin or platinum. They're missing.

**Mike:** The long-term result of the mass demineralization of the population is that we end up with chronic disease acceleration, right?

**Hartman:** Absolutely. You know, people think we're living longer, but that's not really true. We're living longer, but for the last 10 to 15 years of our lives, we're completely debilitated, hooked to a machine or some drip bottle, extending life because we have better insurance. But it's not a better life. It's not a longer life. It's just extension.

**Mike:** Right. It's a life with no clarity of mind and no physical stamina. I think the big question from people, though, is, "Why do I need minerals in my food?" People think they can take a calcium pill and solve the problem. What would you say to someone who came up to you and said, "What good is this? Why do I need minerals in my food?"

**Hartman:** Well, first of all, as you stand there, you—just like animals and soil and fauna—are made up of 90 minerals. And when you are born, you have 90 elements in your body. A certain percentage of those are shed every day in your waste, and they need to be replaced. So how do they get replaced, and what's the chemical mechanism for their replacement? The only way they can be replaced in the body is in an organic form. Now this is a tricky subject—organic and inorganic—because the food movement has been misnamed, and they get the wrong idea about the chemistry or the process. What's going on here, though, is that each thing that comes into the human body needs to come in its organic form—and in a chemistry definition, it has to have carbon complex molecules as it comes into the body. In other words, it has to come in as fruit or vegetable or meat—something that is a carbon compound.

**Mike:** So you can't just grind up seashells and eat that and expect to get all your calcium.

**Hartman:** No, absolutely not. I mean, there are some animals that can do that because they have a different digestive system. Cows are ruminants; they have multiple stomachs, and they have special bacteria that allow them to do that. They don't do it well, but they can do it. Humans can't do it at all.

**Mike:** We have to get our minerals in plant form. That's what you're saying?

**Hartman:** Right, and when you take a vitamin pill, most of that is going down the toilet.

**Mike:** Unless it's a whole food concentrate that was raised on a lot of minerals. That's a different story, correct?

**Hartman:** That's right. Again, you have to take your food in an organic fashion. Basically there's a symbiotic relationship between humans and plants. Plants inhale carbon dioxide, strip off the carbon, compound it with other minerals and elements to make a carbon compound, and exhale oxygen. You inhale oxygen, attach carbon to it that plants have stripped off, and exhale carbon dioxide. It's a lovely relationship. That's the way it works. So when an organic farmer says, "I'm going to put manure on my field," that's fine, but it's going to have to break down, liberate the carbon atom and become an inorganic element—and that element goes into a solution with water, and the plant picks it up. The plant cannot directly pick up organic compounds. It gets tricky, because the whole industry has the wrong name. Everybody thinks that the only good food is food that gets manure put on it. The sad part is that the chemical farmers actually have a more readily available product for the plant. They don't have very many elements, but at least they are elements that can be used right away.

## How ocean minerals nourish the soils, crops and consumers

**Mike:** So how does ocean water fit the blueprint of plants here?

**Hartman:** Well, ocean water is just a remarkable, remarkable solution. It's uniform all over the world. In other words, with a few exceptions, if you take samples of sea water all over the planet, it will have all 90 elements in the same proportion in the same order. It's reliable, and humans have tried to duplicate seawater with no success. It's a very difficult thing to make, but there it is, and it's perfect just the way it is.

**Mike:** So when seawater goes into the soil, how are plants readily able to use it?

**Hartman:** We dilute it down, because it's strong. We didn't invent seawater, and it's a perfect product as it is. What we try to do is to make it as economic for people to use as possible. Our proprietary process is to concentrate it so it's economically viable and so that we can ship it halfway around the world.

**Mike:** What kind of concentration is it of ocean water? Like 10:1 or what?

**Hartman:** That's a piece of information that we don't give out yet, because we have a provisional process patent pending, but we will be able to share that soon. There are certain things we don't mention yet, and that's one of them. What you have is a highly concentrated solution that you can ship to the Midwest, and then it gets diluted back down to a safe level for a plant, and what you're putting down on the field is an ionic solution. I know this is a lot of chemistry, but it's actually really simple. The ionic solution is made of elements that have either given up or taken on an electron so that they have either a positive or negative charge. The only thing the plant can feed on is an ionic solution; so the plant is getting, literally, an IV of food. When you go out and watch farmers using spreaders to spread all that matter all over their fields, it is in no way food for a plant yet. It's kind of haphazard, because how readily that breaks down and goes into solution with the rainwater or the irrigation water depends on how much rain there is or how much moisture there is. It's terribly complicated to do farming the way they did in the past, but this is so easy. It's got everything, and it's very easy to apply.

**Mike:** When a person gets your product, it's called Ocean Solution, and Sea Solution is another name of the product, right?

**Hartman:** Right.

**Mike:** People dilute it themselves, just using their garden hose, right?

**Hartman:** That's right. They can use well water, city water and so on.

**Mike:** How much water do they add to yours?

**Hartman:** They would add a hundred parts water to one part Ocean Solution.

**Mike:** So the Ocean Solution goes a long way. Then they spread that on the garden and wait? Let nature take over from there?

**Hartman:** Right.

## **Why eating mineral-rich garden vegetables can make a huge difference in your health**

**Mike:** The point of all of this is not only to make healthy soil and healthy plants, but also to help enhance the health of people through enhanced nutrition. That's where this is all heading.

**Hartman:** Yes, and I think it's time to steer us back to Dr. Murray, who is a phenomenal character in history, and some day I think he will be recognized as such. Dr. Murray was an intern, a medical student, in the 1930s, and you can imagine what an intern's life is like. You've seen it on "ER" and other shows. It's just basically 12 hours of deaths and the horror of cancer and all the diseases that come through a hospital, with not many solutions in the 1930s, as you can imagine. To clear his head, Dr. Murray would go out to the docks. He was an intern at Mass General in Boston, and he would go out on the docks at night to walk and clear his head.

One night, he came across a commercial fisherman who had just come back from being out at sea. Just out of curiosity, he said, "Look, I'm learning to be a doctor in the hospital here, and all day long I deal with people who have cancer and strokes and tumors and all this kind of thing. Just out of curiosity, what do fish get?" The fisherman didn't hesitate one second. He just shot right back and said, "I've been fishing 40 years, and I've never seen a sick fish—not one." You can imagine what an event that was for a man who's very scientific and has a very inquiring nature. This really lit the light bulb for him, and he made it his life's quest to figure out what it is that is special about seawater.

In the 1930s, straight through to his death in 1983, he researched this. He did massive research. He went out on ships and collected samples—animals from the sea. He would autopsy them and send tissue samples back to a lab in Chicago that he had a relationship with. He said, "What's the difference between these two tissue samples?" The lab would say, "There's no difference. They're identical." And he said, "That's interesting, because one is from a 60-year-old whale, and the other is from its offspring." Sea animals grow very large, have tremendous longevity and are never sick. For instance, there are freshwater trout and there are ocean-water trout, and they couldn't be more different in

their health patterns—but, genetically, they're practically identical. However, because of the lack of minerals in freshwater, freshwater trout are always sick in some way. So this inspired Dr. Murray to do some tremendous research on animals—chickens, pigs, every kind of animal—and what he saw was tremendous differences in their health and how they grew.

**Mike:** How much research did he do with humans?

**Hartman:** Well, remember, he grew up in a time when lab instruments were not particularly sensitive and with very little funding, so I would say his human research was fairly limited, although he did get interesting results. I encourage people to read his book, "Sea Energy Agriculture," which is available from us. It's really his quest to find out what is special about seawater and all the experiments that he did. Another interesting thing that people recognize commonly now is that the absence of lithium in your diet causes bipolar disorder. People are sensitive to it, and this is fairly understood now, twenty-something years after Dr Murray's death. Every disease, I think, at the end of the day, will be traced to some missing element.

## How humans are really seawater creatures

**Mike:** Ultimately, if you go back into our ancestry, we have strong ties to seawater. We even have ocean chemistry inside us, and in the first stages of fetal development, we actually grow gills, just like fish.

**Hartman:** I'm glad you brought that up, because your blood plasma, which is the clear part of your blood, is like seawater—every element in the same proportion. In fact, there was a French doctor who, in the early part of the 19th century, did therapy that injected clean seawater intravenously into humans. He had tremendous results with terminal patients and extremely ill patients, and it's a therapy that is still ongoing today. There's a South American doctor who—and I know PETA people will be appalled, and I love animals too—but he drained out three quarters of the blood from a dog and replaced it with clean seawater, and the dog was up and running around half an hour later, no problem.

**Mike:** Wow, that's very interesting. It's definitely a horrifying experiment, and I'm against experimenting on animals, but it certainly demonstrates an interesting point because you can imagine that most people's blood is lacking some of these elements.

**Hartman:** Another interesting discovery that is now well known is that seawater, hemoglobin and chlorophyll have very similar chemistries, except that seawater is based on sodium, human blood is based on iron, and chlorophyll is based on magnesium. Other than their prime elements being different, the other elements fall in order, in proportion. And chlorophyll and hemoglobin have very similar carbon chemistry. They are the same shape molecule, the only difference being the iron and the magnesium.



It's very easy for the body to convert chlorophyll, like you have in wheatgrass juice, to blood. I mean, it's a tremendous treatment for somebody who, for instance, is anemic.

**Mike:** I think it's important to connect these dots again. Chlorophyll is the blood of plants, hemoglobin is the oxygen-carrying part of blood in people, and ocean water is the blood of the earth. That is wonderful.

## Getting Ocean Grown seawater concentrates

**Mike:** Your website, again, is **OceanGrown.com**. Can you give us a little description of what people can get there. What can they order, and how do they get it?

**Hartman:** Let me give you some background. We've been in business five years, and we've been on the market two years. But we're trying to build a distribution network, so typically we try to dissuade commerce through the website because we try to encourage our distributors. If there is no distributor in your area, we'd be happy to take the order, but, wherever possible, we try to push orders through distribution. We have a growing loyal following of distributors, and that's coming along very well.

**Mike:** How do people find local distributors?

**Hartman:** Just drop us an email and we'll respond.

**Mike:** So there are retail stores in cities around North America where people can find this?

**Hartman:** Yes, and it's growing all the time. Someday, I hope we'll be in the big box stores. You'll be able to find it on every shelf like you see Miracle-Gro today.

**Mike:** I don't know if you can answer this, because of the pending patent, but people are going to wonder where your ocean water is from? I hope it's not from Miami Beach.

**Hartman:** I'm glad you brought that up, because, typically, when people first hear about Dr. Murray, they race down to their local ocean if they're fortunate enough to live near one. But think about what ends up in coastal waters. You've got chemical plants dumping things in there. You have sewage and all kinds of other things going in that coastal water that I don't think you'd want in your food—heavy metals in odd proportions and that kind of thing. What we typically do is go out to sea at varying distances, anywhere from 30 to—our longest trip was 600 miles—and we are in very clean areas. We process the water at sea, so what we have when we come back is a concentrate that's ready to package and ship, but we don't do that just yet. What we do is quarantine that product in our distribution

center and send samples out to an environmental lab to get tested for volatile organic compounds, like chemicals and pollutants. We don't ship that product unless there is no detectable pollution, and there are 70 different things that they look for, and their detection limit is half a part per billion. When that test result comes back, it has to say ND next to every pollutant: "non-detectable." When we get that test result back, we liberate whatever that voyage produced to be packaged.

**Mike:** So you're saying there is still ocean water that's fairly clean on this planet?

**Hartman:** There is, but not coastally. You can't just run a pipe down to your local coast. Even if you're on some island in the Caribbean and you think, "Well, maybe I'll just put a pipe in the water," you might be lucky. But if you look at the boating regulations at what can be dumped at sea, it's pretty staggering what boats are allowed to dump if they're far enough away from a coast.

You know, God invented this; we're not taking credit for inventing seawater. What we're trying to do is collect it in a way that doesn't damage it or change the proportion of it or hurt the aerobic bacteria that are in it. We are very careful about how we do it and where we do it, and we work to make sure that it's pollutant free, and we try to make it as economic as possible to ship. We are within a year of having a higher concentration, which will further reduce the shipping costs. But before I forget, I just want to mention this aerobic bacteria. Seawater has about five times more aerobic bacteria—and that is the friendly kind, the kind that stimulate roots to pick up elements and nutrition—than the healthiest soils. To give you an idea of what aerobic bacteria can do, they can help the soil fix nitrogen, which is very important to soil. The role of the bacteria is terribly important. It comes with seawater, and we do everything we can to make its life happy and healthy and to preserve it in our product.

I think Dr. Murray mentions in his book that seawater bacteria can fix 40 pounds of nitrogen per acre. Currently, chemical farmers are putting about 200 pounds of nitrogen on an acre, let's say, to grow corn, so that alone will help them reduce the need for that much nitrogen. You say, "Why do they have to add anything at all?" Well, the reason they have to add nitrogen in the first place is because they use highly hybridized species of corn that require it, and it's kind of a self-fulfilling process. You have these companies that are hybridizing corn, and they need more of the product they sell.

## **What about the salt in seawater?**

**Mike:** Here's a common question that I'm sure you must get: If there is salt in seawater and you put seawater on your crops, won't it increase the salt content of your tomatoes? What about people who are worried about too much salt in their diet? It sounds like a silly question, but I'm sure you get it.

**Hartman:** It's a great question. Think about when you go to a hospital. What's the first thing they give you?

**Mike:** Sodium chloride.

**Hartman:** They give you a saline solution. So what is so important about sodium that it happens to be number one in seawater and number one in health care? Well, it controls the osmotic gradient across the cell wall, for one thing, so it can help transport nutrients – and, for that matter, medicine—across cell walls. That’s terribly important in a human, but also in a plant.

When you put sodium in a certain concentration on plants, it changes the osmotic gradient stem of the plant, so it allows copper to get up into a tomato, which needs copper awfully bad to be a good tomato. Sometimes you go into a garden store and you’ll see copper you can put around your tomato plants. I guarantee none of that copper is making it into the tomato, because it doesn’t have the osmotic gradient to get it there. Sodium is very important for humans, animals and plants.

Now, to get back to your original question, about someone like a heart patient that’s on a low-sodium diet. We’re going to come back to this organic and inorganic thing again. If you give a heart patient inorganic salt, or sodium, it’s terribly bad for them. If it comes in its organic form in a fruit or vegetable, it will do no harm. Celery has one of the highest sodium contents naturally of any vegetable, and it’s totally safe to give a heart patient. Of course, I’m not a doctor—so I have to put in a disclaimer or the lawyers will be all over my case—but a doctor won’t have a problem with a heart patient taking ocean-grown celery, which has a high concentration of organic sodium.

**Mike:** People are familiar with using sea kelp or ocean kelp on their gardens, and they understand that that contains a lot of trace minerals and macro minerals as well. How is Ocean Grown better than using sea kelp or other ocean vegetables?

**Hartman:** Well, the first thing you have to look at is that, just like terrestrial vegetation, seaweed has different uptakes of sea minerals. So you might have a kelp that only takes up 56, like a tomato, and you might have a kelp that only picks up 40. So you have to ask yourself, “Has the science been done that says, ‘Okay, this species of seaweed pickup all 90 like wheatgrass does?’” The first problem is, I don’t think anybody’s done that research, and the second problem is that seaweed comes to the farm or home grower as an organic compound, so it’s not readily available to the plant as food. When you put that kelp product onto your plant, it’s still going to have to compost and break down before it’s available to the plant.

**Mike:** It’s like putting manure on the soil, except it’s sea vegetable.

**Hartman:** That’s right. The good part is that it came out of the sea, and chances are it has more nutrients and trace elements than manure. But if you have a perfect solution, why not use it? It’s in the right form, and it has all 90 elements.

**Mike:** What about changing the pH of the soil? Does ocean water have any kind of strong effect on the pH?

**Hartman:** Well, it's neutral or fairly neutral. It has a pH of eight, so it's slightly alkaline. The fact that it's slightly alkaline will affect the pH, but I think people fuss and worry about pH a lot only because what they're doing is so unnatural, so they have to go to these other extraordinary means to try to compensate for what they're doing. I think that what people will find is that pH is much less important—in fact, maybe not important at all if soil and the plants are getting nutrition.

**Mike:** I've done a lot of experiments with hydroponics and even aeroponics, but I've never done it with ocean water. I've already ordered some of your product, and I'm going to try that. Do you know anyone who's been doing hydroponics with your product?

**Hartman:** We do, and many of our customers do. What we do in our office is grow wheatgrass hydroponically, completely soil-less. It's very reliable, very easy, and anyone can do it. In fact, if you contact us through the website, we can send you a 14-page “how to” printout, which hopefully we'll post on the website soon so people can download it. It tells you what you need to buy (which is totally inexpensive), so you can have your own wheatgrass on a shelf in your kitchen, if you'd like. It also gives you indications of how you would grow other things hydroponically and aeroponically. The big difference with aeroponics is that a plant dies as soon as the roots get dry, so that's the key. You've got to keep the roots damp, and if you can do that, it will do very well.

**Mike:** They also come back quickly once you turn the water back on. I've had that experience a few times. I've seen a plant recover in 20 minutes, and it's just amazing. What about sprouting at home and using a bit of your product for sprouting?

**Hartman:** When we grow wheatgrass, we soak it for 24 hours in our diluted solution before we put it in a tray or before we plant it. One of our customers is a farmer in Montana, and he's even gone to the extraordinary extent to soak his wheat seeds before planting them—and I say “extraordinary” because to get the planting machinery to plant them, you have to not only soak the seeds but dry them back out, otherwise they won't go through the planter, but he got tremendous results. It's the best wheat he's ever grown, and he's been a farmer for decades. So you can soak seeds, and if you get roses in the mail and you want to give them a good start, just soak them in diluted ocean solution.

## Ocean minerals could revolutionize modern agriculture

**Mike:** I'm getting the sense that we have the resources on the planet right now to revolutionize food and farming and health. The answers are all right there, and you're one of the people reminding us of the wisdom of nature.

**Hartman:** You know, our mission is really to get nutrition back in the food supply, and one of my partner's responsibility is to work on philanthropic outreach programs. We're currently involved in one in sub-Saharan Africa and one in Central America, and we try to show people in those areas that don't have access to good health care systems how to grow their way to health.

**Mike:** What about in the United States? Do you have some kind of long-term plan to help commercial growers use this product? I mean, what's your vision? If you could wave a magic wand and see the U.S. change, what would it look like?

**Hartman:** I think the first thing people need to understand is the demographics of it. I think everyone is well aware the "organic movement" is growing by leaps and bounds, and the consumers will drive the growth of it. They are going to ask their local grocery stores, "Hey, where's the organic produce?" So you'll see it grow, but, at the moment, the organic segment of the market is 2 percent of the market. We're going to cater and help the organic folks figure this all out, but you can see that we can do a lot more good if we go directly after the commercial farmers. Think about all the benefits. It's much easier to use than what they're doing. If, after a three-year period, they choose to use this in only certified organic inputs, they'll be considered organic—and they can charge a premium for their food as opposed to being tied to the commodity markets that they've been tied to all these years. Also, commercial farmers are huge polluters of groundwater—so, really, our mission is to go after the commercial farmers and systems, because I think that's where we will do the most good. It will get the best food out to the most people as quickly as possible, and it's a very green product, so it will reduce groundwater pollution, which is just terrible at the moment.

**Mike:** But to a commercial farmer who's only looking at the bottom line, does using your product make bottom-line economic sense to them?

**Hartman:** Absolutely, it does. The point of farming is to make nutritious foods. What we guarantee users is that we will give them equivalent yields without all the dangers of chemical agriculture, like poison and poison runoff. And we feel that very soon, within the next couple of years, users of our product will be able to charge a premium for their food, because now we have corroborating evidence that it is producing superior food.

**Mike:** But does ocean water on commercial farms reduce the need to use pesticides?

**Hartman:** Yes, because if [plants] are properly “nutrified,” they are much more immune to diseases. If your immune system is fully fortified, you’re able to ward off all kinds of things that people with a challenged immune system can’t.

**Mike:** So even fungicides are needed less, and infectious disease in plants is less frequent.

**Hartman:** Absolutely, and Dr. Murray did quite a bit of research with both plants and animals – and, again, get his book, “Sea Energy Agriculture.”

**Mike:** Can people buy that through bookstores, or is this only through your site and the publisher’s site?

**Hartman:** I’ve even seen it on Amazon, so try Amazon or Acres USA, which is the publisher, or go through our website.

**Mike:** Okay, wonderful. I’m going to do some testing with your product on some sprouts and hydroponic plants.

## **How remineralization can reduce appetite cravings and produce natural weight loss**

**Hartman:** That sparks something in me that I haven’t said. You know, one of the results that I noticed when I was drinking *Ocean Grown* and *Ocean Solution*-fed wheatgrass is that, as the food gets better, it’s more efficient on whatever consumes that food. For instance, in Florida, where our company is located, cattle graze on what looks like the most beautiful grass for 18 hours a day. From before dawn to after dusk, they’re grazing, and that seems peculiar because it seems like an inordinately long period of time to get their proper nutrition. But if you go to other parts of the country where you know that the soils are richer in minerals, cattle may graze only three or four hours a day. What you’ll notice when you start eating seawater-fed fruits and vegetables is that you’ll be satisfied much earlier. You’ll eat less, and you’ll lose weight if you’re overweight. This is what happened to me.

**Mike:** I just did a report on this saying the exact same thing. Those cravings for empty carbohydrates go away once you are remineralized, because you just don’t have that desire for minerals. In a bigger sense, this is an interesting way to reframe tsunamis and hurricanes and natural disasters. I mean, aren’t these events, in some sense, the planet’s way of remineralizing the land?

**Hartman:** Well, I don’t know, and now that you mention it, there was an article a couple weeks ago about how the farmers were noticing after the tsunami near Sri Lanka that the fields were just phenomenally altered in a good way.

**Mike:** I haven't seen that.

**Hartman:** I'll email you the article, but it says exactly that—it's the planet's way to remineralize. Think about it: I know the hurricane in New Orleans happened not long ago, but the levy system that runs down the Mississippi River and other dams in the world are ways man has come along and inhibited the planet's ability to replenish itself. Nutrient-laden rivers are no longer able to flood and replenish the land. That's what's going on. I mean, that's the way it should've been done with tsunamis and annual flooding, but we don't allow it anymore.

**Mike:** Right. Again, for those reading, I'm talking with John Hartman of Ocean Grown, at **OceanGrown.com**, and the products you have are *Ocean Solution* and *Sea Solution*, which are both concentrated ocean water loaded with natural minerals, 90 elements, as you said.

**Hartman:** And aerobic bacteria.

**Mike:** And aerobic bacteria. This is for your garden, for your produce and for boosting your personal health through the foods you eat. Is there anything else you'd like to add to that, John?

**Hartman:** We could continue forever, but I appreciate your time, Mike, and we're happy to help anybody through the process of using our product. They're welcome to call or write, and we'll respond.

**Mike:** Wonderful, and thank you again for your time.