

## The ABCs Of Minerals Part 2

Christa:	You're watching Food as Medicine TV where we help you heal from the root cause. This is part two of the ABC's of minerals and we are literally going to go into minerals from A to Z and give you a really good quality understanding of what they do in your body, how they can contribute to a myriad of functions, and ultimately help you feel and look better.
Christa:	[00:00:30] Here with me today is Rick Wagner. Hi Rick.
Rick:	How are you, Christa?
Christa:	It's nice to be back with you.
Rick:	Same here.
Christa:	Clinical nutritionist, the encyclopedia for all things minerals. Top quality. If you missed our first show, you've got to go back and watch that show to really understand how important minerals are to maintaining all aspects of your health for the rest of your life.
Christa:	So Rick, [00:01:00] you're the mineral man. I want you to tell us about what are the most important aspects of all these minerals. I'm going to fire you with questions A to Z.
Rick:	Wow.
Christa:	I can jump in too. I'm a nutritionist, don't worry.
Rick:	Okay.
Christa:	The first mineral we're talking about right here is boron. What's boron? Why do we need it?
Rick:	Well, it's really funny because what it is, is borax. It comes out of the [00:01:30] soil. It is very, very essential for good bone strength, the production of hormones.
Christa:	It is huge in our society that is really hormonally imbalanced.



Rick:	Right. And very possibly, a lot of that is due to the deficiency of boron.
Christa:	Yeah. And boron also really helps you. It provides the enzymes that help you use your antioxidants better. Correct?
Rick:	Right. To make C-reactive protein and other immune factors. [00:02:00] So it will keep you much more healthy.
Christa:	C-reactive protein is an inflammatory marker for the heart so it helps keep your heart healthy and then calcium. We know we need calcium for bone health and for nerve function, but what else, why else do we need enough calcium?
Rick:	And what's interesting is how much do we really need, number one. But number two is that it has some very, very interesting, distinctive roles. It is essential for blood clotting. Hemophiliacs, I am sure, have no calcium [00:02:30] in their system.
Christa:	Oh, wow.
Rick:	It is essential for energy production and it's essential for nerve transmission. But not in huge quantities. Think about how we got calcium 200 years ago. It wasn't available in the dairy store, in the supermarket. And there wasn't refrigeration. Maybe you got cheese once in a while if you're really lucky. We got calcium from greens that we ate that grew out of the ground and we didn't get anywhere near a thousand milligrams. Our calcium is much more [00:03:00] dose-related to what you would get naturally.
Christa:	And more bioavailable so your body can use it efficiently.
Rick:	Yes.
Christa:	Okay, so I love chromium. A lot of people are deficient in chromium because they can't regulate their blood sugar. It helps them regulate their blood sugar and what else?
Rick:	That probably is the most significant role of chromium and what's happened today is it's been refined out of our diet. If you are not eating full on whole grains, you are not getting And [00:03:30] whole foods.
Christa:	The complete whole grain.



Rick: The complete whole grain.

Christa:	That's also maybe soaked a little for better bioavailability before you cook it. And so chromium, and we use it in our adrenal programs because blood sugar regulation is the one thing that will help you live longer and better across everything.
Christa:	Copper is next. And one thing that I didn't know before filming this about copper is that it's essential for collagen production and everybody's taking collagen and all over the place. So explain [00:04:00] that a bit.
Rick:	I don't really know quite how it works as far as the production of collagen. Again, it activates enzymes to do it, but it's working then in conjunction with silica.
Christa:	Okay, that makes sense.
Rick:	Yes. And the other aspect of that is that it really helps in the body's ability to manage iron and zinc.
Christa:	So if you have enough copper, then you may be able to maintain decent ferritin levels.
Rick:	Mm-hmm (affirmative).
Christa:	Interesting. [00:04:30] That's another thing I learned here today. Okay, now iodine. We love iodine.
Rick:	And we don't get enough.
Christa:	We love it to support the fire. We don't get enough. I'm going to skip ahead and say, let's talk about and let's talk about selenium at the same time because we have a lot of thyroid problems and we also have a lot of Hashimoto's, autoimmune thyroid disorder where we need the selenium and we can't necessarily take the iodine without the selenium.
Rick:	And what's fascinating about that is, okay, where can we get our iodine and our selenium? [00:05:00] It turns out that iodine is not an element that you find naturally in the soil. Iodine is manufactured in the sea by seaweed and kelp. And so it turns out also that that same seaweed does make selenium. To



get your selenium, normally they recommend eating Brazil nuts. Well, is that it?

- Christa: They don't really work as well to refill selenium stores.
- Rick: [00:05:30] Right.
- Christa: That's the final product there.
- Rick: And so in research done on tissues of the breast, thyroid and prostate, in men, they found that cancerous tissues were completely devoid of iodine and selenium. Healthy tissues on the other hand, had good levels of iodine and selenium in them. The reason is the presence of heavy metals, particularly mercury, because the body is using up its [00:06:00] iodine stores and it's selenium stores to try to pull out the mercury out of the tissues and when you have amalgams or other steady sources of mercury, you deplete those two elements quickly. You have to be taking a lot.
- Christa: We all know someone that's been affected by cancer and how having adequate mineral sources can help you prevent that. This is such a simple way to support your health and to safeguard your health. And then also, [00:06:30] Rick was talking about heavy metals. That's something that is the underlying root cause of cancer and something that everybody should know if they have and address it seriously. It's not something to put off for a few years when you get some more time.
- Christa: Okay, next, your number one product, the reason why you got into this. It made huge strides in your own life by giving you back your mobility in your neck and avoiding surgery for bone spurs and that's silica. I know you can talk about it until the cows [00:07:00] come home but just give me the nuggets you know about silica.
- Rick: The basic knowledge of silica or the function of silica I think was developed or understood around the 1920s, 1930s. But really it wasn't put into any practice until the 1970s when a Dr Edith Carlisle, at UCLA, did extensive studies over about a 10 year period on silica in animals. And she primarily used chickens, [00:07:30] I think some rabbits and rats. But what she would do was exclude or restrict the silica intake of the animals and see how they developed. And particularly with chickens, from an egg through to a maturation of a chicken without the silica in their diet...

Christa: Those poor chickens.



Rick:	They grew to half the size and know the feather development and their beak development and their [00:08:00] bone development was extremely impaired. Added it back in, no problem. And so that was the raw material for the analysis that we did to determine what was going on.
Rick:	Dr Edith Carlisle was amazing. And from there we have taken it to, "Okay, how can we make it into a format that's really, really easily taken and bio very, very bioavailable and it's in this liquid format?" What's interesting [00:08:30] about a chicken is that Have you ever seen a chicken in the yard and watch it peck at the ground?
Christa:	Mm-hmm (affirmative).
Rick:	Well, it's not pecking 1t seeds because it ate those seeds up a long time ago. It's pecking at mica. So it eats the mica and turns the Mica into calcium.
Christa:	That's pretty incredible.
Rick:	Yes. And in fact, the human body can do the same thing. It can turn silica into calcium.
Christa:	Our bodies are amazing.
Rick:	Yes.
Christa:	And it's a beauty product, girls, [00:09:00] for skin, hair and nails. And I just washed my hands in the bathroom and I saw that you have that moisturizing lotion with silica. So I'm excited to have that be my new moisturizer. The next order of business here is going to be sulfur.
Rick:	I would say its major role is in quelling inflammatory responses, helping the body to deal And keeping in mind that an inflammatory response is natural. It's the way we deal [00:09:30] with pathogens that we're exposed to, to get rid of them. And what the sulfur does is help in quelling that response. It is also very important for bone health and just immune function.
Christa:	So you're saying that sulfur can help lower the inflammation set point of a body.
Rick:	Yes.



Christa:	Which is amazing. So, inflammation is your body's natural response to any kind of invasion. But what happens, it's good, it's healthy, we need it. [00:10:00] And what's happening, what I'm finding, in droves, is that the inflammation set point is set higher. Like Time Magazine, you remember the cover of that magazine? Inflammation is a silent killer. And now the body is living in a chronic state of inflammation, which is the beginning root cause of all disease. So having enough sulfur in your diet What foods do we get sulfur from?
Rick:	Mainly cruciferous vegetables, cabbages, broccoli, brussel sprouts. Garlic is an incredible delivery mechanism, [00:10:30] and onion, for sulfur.
Christa:	Great. Now let's talk about magnesium. Magnesium is amazing.
Rick:	Science has identified at least 300 enzyme functions that magnesium catalyzes or makes work in a cell. Your heart can't relax without it. Your muscles cannot relax without that. So anytime you have muscle cramping, magnesium.
Christa:	Any cramping, ladies, around PMs time [00:11:00] as well, magnesium deficiency.
Rick:	Headaches.
Christa:	Headaches. Yes, magnesium can help with headaches and nerve function and click you into your parasympathetic nervous system, getting you out of fight or flight.
Rick:	Maintaining good bone health. It's very, very important for bone.
Christa:	We did a whole show on the miracle of magnesium.
Rick:	It's really good.
Christa:	Now, we did talk a lot about zinc in the last show but now we're going to touch on it again. So here we are, A to Z. Zinc is the final [00:11:30] singular mineral to discuss. Immunity.
Rick:	Zinc is really, really significant, especially with our immune system. But also, again, our sense of taste and smell. Bone strength, again. Nerve strength. It



	works a lot in conjunction with nerve sheath protection and stability. And what we see a lot is the degradation of the nerve sheath, which then creates issues.
Christa:	Are you [00:12:00] talking about the myelin sheath?
Rick:	Yes, the myelin sheath.
Christa:	So the myelin sheath is the electrical insulator of your nerve cells. Very important. So I didn't know that zinc had a major function in the machines.
Rick:	It has a [inaudible 00:12:12], along with silica.
Christa:	It's so incredible. Okay, so you make your large bottles, I take the smaller bottles, they're more concentrated, less water. And if this is completely overwhelming to you, I get it. I understand.
Christa:	This is a mineral, the multiple minerals where you're getting all of your minerals in one [00:12:30] place. And I had said this is what I give to my son, put it in his water bottle, put it in as in his milk bottle, his goat milk bottle. And so your general advice for refilling your mineral supply and making sure you're covering all of these bases to get all the wonderful benefits that we just discussed would be what?
Rick:	Hair mineral analysis.
Christa:	Hair mineral analysis. Don't guess at it, test it. They are a hundred bucks. You can order it from your website for free. Send in your hair, get [00:13:00] it back, see exactly what minerals you're deficient in, and then you can supplement accordingly.
Rick:	Right.
Christa:	Okay. And what else should they do in their water or on their food?
Rick:	Salt.
Christa:	Yes, good quality salt.
Rick:	Sea salt.
Christa:	No table salt. That's not even real food. Pink salt, sea salt.



Rick:	And real quickly with regards to table salt versus sea salt, what's happened is historically we used sea salt for everything. It was our supplement, our mineral [00:13:30] supplement. We would preserve fish with it, we would preserve meat with it, we would preserve all kinds of things. And that became our real source of all the minerals. What we've done is we've discovered that there is a source for minerals, this sea salt that is not polluted in any fashion.
Rick:	So the question is how polluted really is the ocean? I think there are some issues depending upon particularly where you're sourcing this, but the sea salt we're getting is bubbling [00:14:00] out of the ground at 11,000 feet in elevation in the Andes of Peru.
Christa:	That's incredible.
Rick:	It's amazing and it's-
Christa:	We discussed last time, we're not quite sure how that's happening, how that's even possible, but we'll take it.
Christa:	Before we wrap up, you reminded me of a question I forgot to ask when we were talking about iodine and seaweed, and we get the question a lot, is there any non polluted iodine? How you get the seaweed from Japan. We say, "Oh, [00:14:30] because of the radiation, maybe you should get Korean seaweed." What is
Rick:	We have found a source of seaweed that is amazing. It is sourced from Patagonia.
Christa:	Look at you, sourcing from South America.
Rick:	Right. Patagonia from my perspective is as pristine an area there is on the planet. There's no one that lives around there, so there are no sources of pollution [00:15:00] and it's truly, truly an amazing spot. We resell this particular product on our website. We do not manufacture it, but it was developed by two Russians that worked in the Russian government during the cold war and they had built huge buildings with all kinds of sensing devices for checking out on what the Americans were doing.
Rick:	Well, they found out that after about every 30 days, people got [00:15:30] so burnt out that they had to go and take at least 30 days off. During that time though, they fed them seaweed. This seaweed was harvested off of the Russian



coast on the Eastern seaboard of Russia. It resolved all of the issues that these people had been experiencing with all of the EMFs and other electromagnetic frequencies that they were being exposed to in these surveillance buildings.

- Christa: That's incredible.
- Rick: Yes, it was seaweed. And so these two guys-
- Christa: It was medicine at it's finest.
- Rick: [00:16:00] Yes. After they left the service of the Russian army or whatever it was, the CIA that they were in, they said, "We're going to start making this." So they started harvesting off Russia, but then they got into some big conflicts with some of the company, and so they said, "Well heck, we'll just go down to Patagonia."
- Christa: There you go. Now they just need to start selling it in those sea snacks.
- Rick: That would be good, yeah. Like kale. We have it in capsules [00:16:30] and it's really easy to take them. I take it every day.
- Christa: Perfect. You are a brilliant wealth of knowledge. Thank you for having me and us in your beautiful facility and for really dedicating your career to your passion. I can't even imagine how many lives you've changed with producing these good quality effective minerals.
- Rick: Well, thank you very much. It's been a pleasure to explain them to you.
- Christa: There you have it, the ABCS [00:17:00] of minerals. I hope this helps. Thank you so much for watching and we'll catch you next time on Food as Medicine TV.