Boost Your FertilityWith Essential Minerals

Aumatma Simmons, ND, FABNE, MS with Caroline Alan



Aumatma Simmons, ND, FABNE, MS

Welcome, Caroline. It's great to have you here. I'm very excited to chat with you about what minerals are and why they are important for fertility. Let's just start with general sense. We were talking offline earlier, and we said fertility is on a massive decline. We know that for men and women, it's going down the drain. You stated that there's also a mineral decline in our population. What do you think is happening? What's the connection there?

Caroline Alan

It's so interesting because if you think of something simple—not simple, very complex, but basic—a woman growing a baby inside her body. One of the things I want to start this conversation with is helping people understand how important minerals are in your body. If you think about your entire body, all of the structure and all of the tissues are made of minerals. If you took all of the water out of your body, you'd be a little pile of minerals. Think of that. If you look around your room, the table, the chair you're sitting on, the floor of the walls—everything—all of the structure in the world is made of minerals. If you take a plant and it grows out of the soil, the way that it creates the structure of the plant is by sucking the minerals out of the soil. The way the mother grows the baby in her belly is by sucking minerals out of her body.

Aumatma Simmons, ND, FABNE, MS

Yes. That's an interesting analogy.

Caroline Alan

Create a place where the egg can be implanted in the uterus. That uterus lining is filled with minerals. You are mineral-depleted. Your body struggles with just two basic functions: keeping your hair and your nails strong. These are important things, but keeping your heart beating all of the biosynthesis processes for hormones, cortisol, thyroid, etc., etc. How does it work? This is an interesting thing. If you think about your cells, you're made of 37 to 150 trillion cells in an adult



human. Inside your cells are these energy-generating units. They're called mitochondria. We've been told that word is getting out there more and more.

Aumatma Simmons, ND, FABNE, MS

Yes. Fertility folks love the mitochondria. We love it.

Caroline Alan

Here's the thing. What fuels mitochondria? There are two things: minerals and amino acids. Now your body makes a lot of amino acids through the biosynthesis process, but all of the minerals that your body utilizes have to be ingested. They have to come into your body from the outside. Now, why are we minerally depleted? The main reason is that there are a few reasons. The first is because our food supply is depleted of minerals. Why is it depleted? We've been growing those plants in the same soil for 75 to 150 years. The soil is depleted of minerals; they say that to get the same nutrition you got out of an apple when you're that your grandfather ate, you'd have to eat six or seven apples today to get the same nutrition. There's a lot of data about that, about the nutritional quality of our food today. Second, we're all drinking bottled and filtered water. But the water, most of it has no minerals. That's exacerbating the situation. Mineral depletion is on the rise and has many chronic symptoms, many of them low-level things that crop up. As you get older, they become more and more acute. They start as annoyances or chronic things. I don't sleep very well and seem to have some brain fog. Maybe I'm a little anxious, and then they turn into gut dysbiosis, etc., etc.

Aumatma Simmons, ND, FABNE, MS

Yes, and often. Unfortunately, infertility is a symptom, some more often than the disease. It's pointing to the fact that something else is going on under the surface that isn't being addressed, or that there's a need that the body has that isn't being supported by our diet and lifestyle.

Caroline Alan

That must mean we tend to put it on ourselves; I just don't eat well enough. I don't work out enough, and I don't take enough care. I drink coffee, or we do put a lot of pressure on ourselves to be better. What I say is, what if it's as easy as getting minerals back into your body? What if getting minerals back into your body would increase the energy level in your body so that it could naturally create that healthy environment? Uterus in your uterus or create that or sperm function for men, on and on. It's funny. I just realized that I had a real infertility problem and was struggling to keep a baby. I learned, of course, later that I was extremely mineral deficient.

Aumatma Simmons, ND, FABNE, MS

Yes, it's a big component. I think that there are. Let's talk a little bit about just general low-line deficiencies versus an overt deficiency that might show up on testing. Because I feel so many people have those minor symptoms that we don't always correlate to mineral deficiency or



mineral depletion, as we should call it, versus those people that were, Yes, you're overtly deficient. We could see it on a blood test. We should do something about it.

Caroline Alan

Several pieces in here are great for myth-busting this whole conversation. First of all, if you're testing minerals in the blood, that's great for things like iron. But most minerals need to get into your tissues. The ultimate way would be to test using a biopsy. I mean, what you need to know is how much of the minerals that you're putting in your body are getting into your cells, because in your cells are your tissues. You might show a big mineral imbalance or deficiency in the blood, but it's not necessarily telling you what's happening in the tissues or what the body's uptaking into the cells. I would recommend people go: and do a hair mineral hair test analysis or do something called an Oligo Scan, which is a new test. It's the state of the art of mineral testing. It uses photospectrometry, and it shines a light into your tissues. It's noninvasive, it goes through an algorithm, and it returns data that's very specific about all of you. It gives 15 minerals, plus heavy metals and vitamin levels. Also overall oxidative stress and some things that are useful to know, especially if you're dealing with infertility issues.

We could talk specifically about specific minerals that are important when you're trying to support fertility. But what I want people to understand is that you and I could get into that. But it's more important to think about minerals in your body, in a full spectrum, because I've spent a lot of time in grocery stores and healthy stores talking to people in the aisle, looking and picking up individual pill bottles. They're, as my doctor told me, people sometimes have six or seven pill bottles in their cart, and the things they're carrying; are selenium, magnesium, and iodine. Then it's iron, chromium, which is zinc, think how many pills they're taking. It's not effective to try and get minerals into your body that way. There are a couple of reasons why most of those mineral supplements are made with rocks, shells, and bones that your gut would hardly break down.

The healing gut is very well versed in digesting those because they're going into your gut. They rely on your gut lining to be very healthy. Many of us have some level of leaky gut or problems with our gut absorption. Then they have to be absorbed into your bloodstream. No, that's cool. When you do a blood test, you find out somebody has certain levels of minerals in their blood's bloodstream, but so many of those minerals have to be in the cells to do their job as cofactors for energy generation via the mitochondria. It's the three stages; digestion, absorption, and then assimilation. Who knew that minerals? It's one thing to just be well-versed in what I call the carb mentality. I need gas. I need oil put into oil. She told me I needed 320 milligrams. I better put that in every day.

Aumatma Simmons, ND, FABNE, MS

Absolutely. In terms of a broad-spectrum mineral, what is a good way to get that broad spectrum?



Caroline Alan

Yes. What happened for me was that I was in ill health, and just by taking something called plant-based minerals, these are two substances called humic and fulvic. Just by taking those, I was able to radically, in a positive way, change my health.

Aumatma Simmons, ND, FABNE, MS

Yes.

Caroline Alan

Change anything else. As a result, I did all this research, and it made me, first of all, rethink how people think about minerals and putting them into their bodies. But ultimately, what it introduced me to is what I call Mother Nature's mineral replenishment technology. Now I explain what these are and how they work. You'll get a feeling of wow; they're truly a natural technology.

Aumatma Simmons, ND, FABNE, MS

Yes, I want to know more. What are humic and fulvic minerals? Where do they come from? Why are they great in terms of their broad spectrum? Tell me more.

Caroline Alan

Yes. I talked about how a plant grows in the soil and how the way it creates its structure is by pulling the minerals out of the soil. Within that, the plant dies and decomposes. All that mineral material goes back into the earth. As those plants decompose, there's something that's created. It's a result of the decomposition of freshwater plants. It's these two molecules, humic and fulvic. Now these are our products. Imagine an entire rainforest. Back when the dinosaurs lived, a huge meteor hit the Yucatan. It caused such a problem that it killed 75% of all life on Earth. All those rainforests decomposed over millennia back into this incredibly mineral-rich substance. It's called humic in our case, There are other forms like Shilajit. Many people, people call it that. In the Himalayas, there's some other material around the Earth as well, but it's we, as is called humic. It exists about 10 to 12 feet below the earth. It's a black, crystalline substance. It holds in it all of the minerals that your body needs naturally formulated in the ratios of minerals that your body is made of. It is this.

Aumatma Simmons, ND, FABNE, MS

That's incredible.

Caroline Alan

Isn't that cool? Your body is a set of cellular systems that evolved from the earth. Started with single-cell organisms and multi-cells, and then ultimately our whole body. But all these cells operate the same way. You're the plant behind you. If it's a real plant, the cells in that plant are operating as we think your cells operate. Because minerals that came from the outside of the cell had to get inside the cell. There had to be a technology to support that because that cell and



those cellular systems were not going to thrive unless nature could see you're out of a way to get minerals inside the cells. Beautiful substances, humic and fulvic. I'm going to talk to you fulvic first. It's truly an amazing molecule. First of all, it's a flavonoid. What is a flavonoid? It's an intracellular transporter. It's a molecule that's much smaller than a cell. When a channel opens in the cell wall, most things that go across that channel require a certain receptor because the cell is going to keep out any toxins or negative substances. It's only going to allow things through that are beneficial to the cell. The beautiful thing about the fulvic molecule is that any channel that opens the cell recognizes it as a beneficial substance, and it goes straight through. This fulvic molecule is an extremely strong electrolyte. It can carry 60 times its molecular weight of nutrients and minerals into the cell via one of these channels. That opens up into this. Then it does what no other molecule on earth can do. It changes polarity. Now, this is truly miraculous because they have and they don't. Even when you start studying it, you get down into quantum mechanics, singularities, and stuff because they don't know how a molecule could change its polarity like that. It changes with polarity. Now all that nutritional content and mineral content fall off inside the cell, where it's available to the mitochondria as a cofactor for energy generation.

Aumatma Simmons, ND, FABNE, MS

You can get into the cell to support the mitochondria.

Caroline Alan

Deliver all that content.

Aumatma Simmons, ND, FABNE, MS

Bypass all of the things that the body has to do to get things in and out of the cells.

Caroline Alan

Exactly. Imagine those pills and powders that you usually take, and maybe some small amount of them gets digested because they're made from rocks, shells, and bones. But some get digested and absorbed through your gut lining, depending on the health of that gut lining, and get into your bloodstream. That's cool. It's in your bloodstream. But what is flavanoid without the fulvic, the amount that is going to get in the cell is only about 5%. You can only take 5% of what you've taken in pill and powder form. You multiply it by 60 times when you have fulvic in your system. The cool thing about the fulvic is now it's in your cell, it's dropped off all its nutritional content, and now it's in the opposite polarity. What clings to it is bio-waste, cellular detritus, autophagy, and all the stuff from autophagy, etc. The environmental toxins that have gotten inside your cell, the free radicals that have gotten inside your cell—it carries those out. The link to the molecule opens, and now another channel opens, and it carries those out. Then it changes its polarity again.

It's those things off inside your bloodstream; now it's partner, the humic molecule in your bloodstream. It's very different. It's a large molecule relative to a cell. The way I imagine it is a



velcro ball hanging out in your bloodstream. It's very sticky on the outside because it's an extremely strong electrolyte molecule, and there's a huge number of receptor sites on the outside. It chelates with heavy metals. It just goes through your bloodstream, collecting heavy metals. It collects biowaste; it collects free radicals. It's thousands of times more effective as an antioxidant than any other superfood mix. It also does things with some challenging environmental toxins, such as glyphosate, which all deals with glyphosate toxicity and will gather the glyphosate molecule that builds a biofilm around it, and it starts breaking it down more quickly so that even though the molecule, the glyphosate, is still in your system, it no longer can have its negative effects and molecules. This humic molecule has all these things clinging to it. It fell at a certain point. It gets so heavy at a molecular weight that it falls out of the solution and leaves your body through all the elimination channels. That's key, because when we're doing elimination protocols, usually they require certain elimination pathways to be open, but the humic molecule uses every elimination pathway. When you think about it in nature, you can't figure out that certain pathways have to be open. It just has to say, this stuff needs to get out; let's take it out wherever we can. That's what it does. It uses your sweat, your snot, your saliva, your breath, you are rubbing your hands together. All of your skin.

Aumatma Simmons, ND, FABNE, MS

Incredible. I'm wondering, where do I get some?

Caroline Alan

They support nutrition in your body. Yes, they support intercellular detoxification. That means getting stored heavy metals or toxic things.

Aumatma Simmons, ND, FABNE, MS

Yes.

Caroline Alan

That's and stored in your that's out, and also clear the whole body of those things. The humic molecule does one other thing, which is cool. That it increases cell wall permeability. If you're in a room right now and you have one door and one window that are both open, a certain amount of air and whatever else can enter and exit. But with three doors and three windows, more could go in and out. More effective, your intercellular transport can be more effective in removing inflammation, removing of just keeping the body clear of all of the cellular detritus, etc., free radicals, etc.

Aumatma Simmons, ND, FABNE, MS

Yes, that's amazing. I think I feel it. I don't think I knew as much detail about these minerals as I've heard or studied a little bit about them, and I feel I've had pretty good benefits for myself. I've recommended it to a few people, but knowing what it does makes it even more incredible.



Caroline Alan

That's what we've tried to do—create. We haven't tried. We have created mineral supplements that are very easy to take and are liquid. They taste water and rather than that. I call it the supplement graveyard that we all have at home. A couple of walls. This practitioner told me this and this one, and all of a sudden I'm taking 20 pills, and I'm, I don't want to stop all of them, and they end up in the. The beautiful thing is that you can just take this liquid. Here it is, and drink it. Use me, and you've got all the minerals that you need in a day. You're done.

Aumatma Simmons, ND, FABNE, MS

Amazing.

Caroline Alan

More than 20 pills. The beautiful thing is that when I drink that liquid, it absorbs directly through the tissues of my mouth, throat, and esophagus. By the time it hits my stomach, my body's already beginning to utilize some of the mineral content because it's made of plants, and fulvic molecules are very small.

Aumatma Simmons, ND, FABNE, MS

Yes.

Caroline Alan

It's been fun to work with people who've tried all sorts of other supplements. A lot of electrolyte supplements are different things and have them report back about how they're coming back into a sense of their nervous systems relaxed, they start to sleep better, the brain fog clears, and they start feeling that balance. Then, for fertility, what do we need? We need to have this natural homeostasis, this natural balance in the body's needs and cortisol. All these things are counterproductive.

Aumatma Simmons, ND, FABNE, MS

Absolutely. We see so much of that in the people that we've worked with, where they have these low-level symptoms, even menstrual pain. If I can just pick on that for a second, because so frequently they're told, it's your hormones or you need this, you need to be under birth control. That's where they have been throughout their lives. Then they come to us and we're period, pain is not normal. We don't consider that to be normal. How do we figure out what's happening to you and get you out of pain? The majority of the time, people at the minimum have a lowered amount of pain. Ideally, they go from wherever they are to not having anymore, which is great. I think that minerals are a key component of that because if we think about magnesium, just one mineral—that's not even all of them—one mineral that is so crucial to being a cofactor for hormone production and a cofactor in so many different pathways and also working on the muscles over a muscle relaxant.



Caroline Alan

I was at my gym a few weeks ago, and there's a woman who teaches Jiu-Jitsu there. I had given her our minerals a couple of months earlier, and I walked into the gym. She said, Come here. She pulled me into her office, and she said she was beaming and smiling. She's I've been through my period and I'm, okay, that's cool. This is the first day of my period, and I'm at work. I'm having no pain. That is insane. She had, what, double menstrual cramping pain and I felt so terrible when I was young. It's, I know what that's. So many women who take our minerals after 2 to 4 months have their menstrual pain go up and their cramping go away. Why is it? Because what I try to help people understand is that all cramping in the body is a mineral deficiency. If you have endometriosis or fibroids, there could be some other reasons why you're having pain, for sure. However, the cramping can be alleviated. I'm going to tell people, any of the women out there who do have menstrual pain, that we have a product called Insta-Lytes. For acute cramping, when you have that first day and you get the cramping, you just spray this directly on your abdomen, your legs, and your lower back. You'll feel relief within minutes.

Aumatma Simmons, ND, FABNE, MS

Very quickly.

Caroline Alan

Chronic issue of having menstrual pain. If you start taking the minerals regularly, what happens is that the body doesn't have to go into that cramping because it has all the minerals available. Here's the thing to know: what is a cramp? It's literally that the muscles in the area do not have the mineral cofactors available to generate enough energy to release the muscle. It's what it is, then, at a super micro level.

Aumatma Simmons, ND, FABNE, MS

Complete cleansing.

Caroline Alan

Of minerals in your body, and you have them ambient, so they're trace amounts rather than large amounts of pills and powders, and they're just floating all this full spectrum of minerals. Your body goes. I need some magnesium here, and I need some phosphorus here. I need some copper here. I need some boron, I need some selenium, oh, I need some chromium over here, and I need some molybdenum. These minerals are not going to be important.

Aumatma Simmons, ND, FABNE, MS

So I'm assuming this is a yes, but would you consider how humic and fulvic minerals safe in pregnancy?

Caroline Alan

Absolutely. Super. They're fantastic for pregnancy.



Aumatma Simmons, ND, FABNE, MS

Okay.

Caroline Alan

Yes, they're safe. They're always saying that the only time you need to think about it is number one. If you're a person who has had autoimmune diseases, Lyme, mold exposure, and you're very sensitive about what you need to do, or maybe you've had long COVID, which is what I had, You can see I put my minerals into my water here, and when I drink this, no sensitivities occur. If I drink my humic straight, I think it's because of the spike in protein loads in my body. If I drink it straight for about three days, I'll get a rash. Some very sensitive people, if they drink it as a shot after about three days, will start to have headaches or have different symptoms.

Aumatma Simmons, ND, FABNE, MS

Interesting. Do you think it's just a slow absorption over time because you're taking sips of the water instead of a shot all at once?

Caroline Alan

That's exactly it. We're calling it the slow introduction method. It's beautiful. If you think about your body, you think about what we know about the gut microbiome, and you think about whether it is healthy. When it's healthy, it's a lush forest that grows. Everything's growing. Now take a wheelbarrow of magnesium and throw it on the forest floor. There's a concentration. The forest floor and the plants don't thrive. You use these plant-based minerals, these humic and fulvic substances, and the following substances that have the full spectrum of minerals naturally formulated in those ratios that your body utilizes. You never have to worry about too much of one particular mineral. What's causing any response is just the ability of the humic to detox and any kind of symptom of that. It's just the body saying, Yes, I can get rid of the stuff, and I'm going to do it all. Now start the process by just starting with a little. I've worked with many people who've come to me and said, I'm having this response experience, and every single one of them can work slowly introducing the humic to their system.

Aumatma Simmons, ND, FABNE, MS

Okay, awesome. Thank you so much for joining us and sharing all of your wisdom about these amazing plant minerals. I feel like I learned so much today. I appreciate your time and that you are sponsoring the Beyond Infertility Summit. I think it's huge to be able to share this with women who are struggling with fertility. I feel this can make a huge difference.

Caroline Alan

Yes, if I can. I feel that I could help one woman get remineralized so that her body can support all of the stuff that's necessary to grow a baby. That would be a beautiful thing.



Aumatma Simmons, ND, FABNE, MS

Yes, I agree. We're going to help so many more. One, and let's say 10,000.

Caroline Alan

If you want to hear more about minerals, how they work in the body, and all that. You can call me the mineral geek.

Aumatma Simmons, ND, FABNE, MS

I love it. I think you had some cool studies about minerals related to fertility. We can put that in the show note so that people can download it and get access to some tangible scientific data about minerals and how they've been supported.

Caroline Alan

Yes. We'll put those in for anyone else who wants to geek out like I do, and they're going to find us at BeamMinerals.com.

Aumatma Simmons, ND, FABNE, MS

Also, we will have that in the notes as well. Thank you so much for being with us. Where can people connect with you if they want to find you guys directly?

Caroline Alan

Yes, you can go to beamminerals.com. If they want to connect with me directly, just send an email to info@beamminerals.com, and they'll make sure to get me connected. I do provide links to people where they can set up a little chat with me.

Aumatma Simmons, ND, FABNE, MS

Okay, cool. Awesome. Thank you so much for joining us, Caroline. It's been great chatting with you.

Caroline Alan

Thank you so much, Dr. Aumatma.

