Introduction to the Summit and Guest

Welcome to the Conquering Chronic Inflammation Summit. I'm your host, Dr. David Jockers. And today, I have the honor of interviewing Caroline Alan, The Mineral Geek.

And in today's interview, we're going to talk all about the role of minerals in cellular health and inflammation. And so Caroline has become devoted to educating people about how minerals operate in the body, why we need to supplement our mineral intake in the benefits of natural humic and Volvic plant based mineral substances for replenishment in the body.

She is the CEO and co-founder ofbeamminerals.com a really, great company that's putting out some awesome products. And also she is called The Mineral Geek and she has a great website, Mineralgeek.com, that you can check out as well.

And we're going to do a deep dive on minerals in the role of humic and folic acid complexes, which have really swept the natural health world over the last several years and become some of the most powerful supplements, powerful detoxification and cellular energy production.

supply means that are out there, and you're gonna learn more about that and how that can benefit your health as well. So without further ado, let's go into the interview.

Well, Caroline, great to connect with you. Here you are, The Mineral Geek. And so I'm excited to geek out about minerals. something I'm very interested in in it absolutely critical for overall health.

And so let's start with your story, how you, how you became The Mineral Geek. well, I didn't make that name up, by the way. People just started calling me that because I couldn't stop talking about how minerals changed my life.

Caroline Alan's Health Crisis and Mineral Recovery

so they were like, oh, yeah, she's that geek. Anyway, my story starts about ten years ago. I was coming out of a corporate career, and I was in, in high tech.

kind of a top Gun for hire in that world. And I had. I was really in ill health, which really started when I was young with autoimmune and mold exposure and gluten intolerance as a young person, and kind of grew throughout my life into, major gut dysbiosis or inflammation of my gut.

bad inflammation in my mouth with receding gums and bone loss in my teeth, soft dentin in my teeth, recurring sinus infections and flatlined adrenals that, I had try.

I tried so many different things to try and heal those. And I went to so many specialists and doctors and naturopaths and every, every kind of person you could imagine energy healing.

I was like, I'll try anything. And, then my, now business partner suggested I try these plant based humic and Volvic mineral complexes, and I was I they were really easy to drink their liquid.

So I drank them and I took them every day. And two months in, I went to my dentist and my dentist. I had my teeth cleaned, which was usually quite painful, and there was very little sensitivity or bleeding.

When my dentist looked in my mouth, she was she was like, wow, this is amazing. The pH in your mouth is totally different. The tissues no longer look red and inflamed.

They look healthy and pink. What are you doing? And I was I kind of thought for a minute and I was like, well, I think it might be these minerals I'm taking.

She's like, well, just keep doing it. Then four months in, I had my adrenal test and I went to my natural part to look at to view the results. And she looked down.

She was also like super surprised. She's like, this is fantastic. We had been working. I'd been working with that particular practitioner for about nine months, trying to even get any lift from my adrenals at all, with all sorts of different supplementation and different things.

and they were one third of the way up the chart with their natural sawtooth pattern, which was incredible. huge change. Same thing. She asked me what I was doing.

I said, you know, I think it might be these minerals. Then, over a, you know, I went through one season and another season, no sinus infections. and over the space of about 8 or 9 months, I just like all these chronic like symptoms, whether it was like some gut problems, like all my gut inflammation just went away.

It just resolved my elimination problems whether I was stopped up or the other way. all these things just started resolving, and I was like, how could these little cups of liquid make such a difference when, I had tried so many other things and they hadn't. So, I just was left with a lot of curiosity.

Yeah, absolutely. When you get great health results, I mean, you're, it is sometimes pretty amazing. And you, you start really realizing how people are suffering unnecessarily.

And so let's talk about the role of minerals and why people in our society are so mineral deficient. Well, so when I started researching, I started, you know, looking into minerals and how they work in the body and then mineral depletion and why I was mineral depleted or deficient.

and then I looked at how minerals get back into the body, the replenishment system for minerals in the body. And during that process, I had so many moments, it was like literally I, I kept going to my partner and going, do you realize this?

And he'd be like, yeah, it's not amazing. And it was like my brain was exploding and what? There's a couple of things that I think help, kind of frame the conversation.

And the first is, and this is really a paradigm shifting conversation from, the one where I, you know, people in the mineral aisle at the health food store are buying, you know, like magnesium gluconate and iodine and selenium and zinc and chromium and ELECTROLYZE, and, you know, they're trying to fill all their mineral needs with single mineral supplements.

Why Mineral Deficiency Is So Common

what I recognize through this process, first of all, is that your entire body is made of cells. Now, we're used to thinking about our body like parts.

You know, I've got a liver, I've got a kidney, I've got a heart. I've got systems, cardiovascular systems, hormonal systems, you know, endocrine systems, all you know, then I've got spheroid and, adrenals and etc., etc..

Right. And when something goes wrong, we tend to go and look for somebody who can help us with that one particular issue. But minerals work at a cellular level.

Now the beauty of that is that that means that supporting minerals in your the mineral replenishment in your body can support every single tissue fluid biosynthesis process, system, etc.

you're supporting everything at this incredibly foundational level. It's it's really, really cool. When I when I saw that, I

was like, well, no wonder, you know, so I just don't want to talk on, you know, forever.

I want to give you an opportunity to interject. Yeah, sure. I mean, minerals, minerals play such a critical role in so many functions of the body. So what are signs and symptoms that somebody may have?

Mineral depletion. Some of the real obvious ones that, people have that kind of people often recognize as mineral depletion is cramping. So if you have night cramps I always remind people if they have night cramps, their heart is also a muscle.

So you need to think, really, if you're having regular cramping or cramping from menstrual cramps, or you know, bad chipping nails, hair falling out, even skin issues, you know, like, even eczema and psoriasis, these things can be, can change radically with good mineral support. So the reason, the reason, so but I'm sorry, but there are a lot of other things that people don't necessarily think of as mineral depletion, such as anxiety, depression, sleep issues, not being able to fall asleep or waking up like 4 or 5 times a night.

Brain fog. Not being able to gather your thoughts and focus like ADHD can be, is is absolutely affected by mineral depletion and deficiency. so the when you start, when you start kind of going down the rabbit hole and understanding how minerals work, and then you start really study seeing, how how mineral depletion affects the body, you begin to, have a different view about how important it is to get all these minerals back.

Yeah. Yeah, yeah, yeah. It's good. So there's a lot of different things. I know fatigue is another big one that, just lower energy production. It's so really big.

One big thing in our society in general. And minerals play a big role with that. Now, obviously, you know, a poor diet can be a big factor when it comes to being mineral depleted.

But are there certain toxins, environmental toxins and other factors that are causing the mineral depletion? Yes, there are so. Well, first of all, what I want people to know is that you cannot get enough minerals from the foods you eat anymore.

And that's extremely important for people to recognize if you are eating foods from the grocery store, if you're not going out and foraging or hunting, you know you are not getting the minerals that you need in your body.

It is. And why is that? Is because when plants grow in soil, the way that they create all of their structure is by minerals. It's it's actually it's just like basic science, actually, all of the structure in your body is made of minerals.

If you if you took all the water out of your body, you'll be a little pile of mostly minerals and some amino acids. It's it's like a pretty small pile, you know.

So what we do when you are in nature, a plant grows in the soil and it sucks the minerals out to create its structure. And then at certain point it dies and it decomposes and all that minerals content goes back into the soil and becomes again over a long period of time, bioavailable to the plants again.

But we, in our infinite wisdom, we cultivate. So we grow plants in the soil. We take the plants away from where they grew, and then we eat them over there.

Or we feed them to animals that eat them. Now that soil. Slowly, over time we've been cultivating and hundreds of years in some cases thousands of years in the same soil.

Now, in the same way that it's not very easy. Or there are there are simple solutions, but, it's not easy to get all the minerals back into your body using pills and powders and flavored drinks.

It's also not easy to get it back into the soil in a way that's bioavailable to the plant. So this has been an issue since the 1930s. They say, to get the same nutritional value from an apple that your grandfather eat, you'd have to eat like six apples today.

It's that different. So that's that's the fundamental issue of why we are struggling with mineral depletion. Also, if you recognize that we're all drinking bottled and filtered water, which mostly also doesn't have, minerals, you know, we also all used to drink from the hose when we were kids.

Right. and get a lot of minerals just from the water that we drink, but now it's devoid of minerals, and that's really exacerbated the mineral deficiency issue for kids and for particular, kids are now running off the sports fields with cramping or, heat strokes.

Different, depletes severe depletion issues. So getting minerals into your kids is really important. Now, there are, some substances that are also both creating mineral imbalance and heavy metal toxicity, as well as, chelating out minerals.

So glyphosate we've all heard of many people have heard of. Glad to say it's a weed killer that is sprayed on genetically modified foods. Now, mostly these are grains.

They spray it on the fields, right on the food. The plants are modified to not die. The weeds die. So now they can cultivate more easily without having the contamination of the weeds.

It's also used as a desiccant, which makes things grains dry quicker. So it's sprayed on oats, particularly to make and rye to some other grains so that they dry more quickly.

And the challenge with glyphosate is that your body recognize it as glycine, which is the most prevalent amino acid, and it just easily absorbs it. And then it creates all sorts of problems in your body, one of which is chelating iron, molybdenum, and copper specifically out of your system, which are extremely important, especially in young kids who are having who have developing cognitive abilities as well as physical growth.

Yeah.

Humic and Fulvic Minerals Explained

And glyphosate will also affect your gut microbiome, which plays a big role in absorption of all nutrients in your body and will contribute to gut inflammation and leaky gut or intestinal permeability as well, which is going to drive up immune.

Basically just an inflammatory immune response and could even drive autoimmunity as well. So glyphosate is obviously a really, really big issue. And a lot of people, they don't just spray it on you know, food.

There's a lot of people that are using it on their lawn and lawn care, and it's getting into people's water systems, things like that. So it's kind of a ubiquitous exposure.

We can obviously make choices like having water filtration, not spraying her lawn, you know, with glyphosate and using organic foods to reduce our exposure.

But we're going to have some level of exposure. but we we really need to be conscious about reducing our exposure to things like glyphosate. And, and the thing about glyphosate, in 2014, they did a study in the US that showed 80% of adults had glyphosate in their urine.

That was 20, 14, ten years ago. And the use of it has gone up exponentially. So you cannot get away from exposure. The other thing is that most of the studies that say glyphosate isn't a problem are done with just glyphosate, but that's not what you're getting.

You're getting glyphosate mixed with other surfactants, which is what really creates a problem. So there's studies that, and friends of mine in the world of microbiome health, have been doing with extremely small amounts of, glyphosate exposure that show dysbiosis, meaning leaky gut created in the created just in three weeks of exposure.

So, this is a is so important. Yeah, it's a really it's a really big deal. And that glyphosate usage feeds into the first issue you were talking about where our soil is becoming depleted.

So the reason why that our food is depleted is because the soil it's being grown in, or if it's an animal product that what the animal is eating this they're eating plants that have been grown in depleted soil be partly because of the glyphosate.

Obviously there's overharvesting. You know, like I know in the Bible, it talks about letting the land rest and having a year of jubilee. And like there's a way of organic biodynamic farming that fortunately regenerative farming that is starting to pick up.

But, you know, it's not you're not going to find that kind of food at your typical grocery store, you know, going to specialized farmers markets, things like that.

It's going to be better, right? You're going to get more nutrient dense foods. But even your typical organic farms are not doing it in the regenerative way. They're doing it without chemicals, which is good, but they're not doing it with in a regenerative way to enrich, really enrich the soil and to get the niche, the full nutrient complexes into the plants.

Exactly, exactly. So we have a systemic issue. Now, the beautiful thing is that Mother Nature in her her amazingness, has provided natural tools both for replenishing soils with, mineral nutrients, with replenishing our bodies, and also for removing these toxicants such as glyphosate or nano plastics or, any other, environmental toxins that we, that get it into our food supply and into our bodies through even breathing, etc.

and that's these substances called Volvic and humic, which are plant based mineral substances. Yeah. Well, let's go into more detail about those phobic and humic complexes.

you know, some of my listeners have certainly heard of Volvic and humic acids in general or complexes. And, you know, they're they're a ever growing, interest supplement that that people have been utilizing.

And so let's talk about what they are and the many benefits they have. Well, let me I love to explain where they come from because it helps people get a feeling for like, what is this in humic?

Okay, so imagine back when the dinosaurs lived, the earth was covered in many, many places with really huge rain forests. This is when the, you know, the dinosaurs were just going crazy on the Earth and a meteor hit the Yucatan and just a few in a few hours, it killed 75% of all life on Earth.

And those rainforests decomposed into back into the minerals from whence they came. Now there are humic and Volvic substances. A it's actually we should just clarify.

So the the base substance is humic and Volvic is actually extracted out of humic. So when we talk about substances around the earth, we talk about humic.

First. So we have. Humic is like a larger complex right. It's large molecular solid. Yeah. It's a larger molecule. Yes. Exactly. So humic. There are substances around the Earth.

Sheela G in the Himalayas. It's a black, pasty substance. There's peat in the, British Isles. There's something called black soil in the, Amazon basin.

There's other materials, Leon. Right. Some others. In the case of our products, we use a crystalline substance called humic. Comes from about 10 to 12ft below the surface of the Earth.

It's not had any contact with modern pollutants. It's an extremely mineral rich substance, incredibly mineral rich. so we take that substance and we use a water based process to extract the humic and suspend it, molecularly, like bound with water.

So that means you have a bottle that never has to be shaken. It's not going to, fall out of suspension. there are other ways of, extracting humic and solvent from different humic substances using hydrochloric acid.

And this is well known in in agriculture, people are in the region farming world. They're starting in biodynamic farming. They're starting to use humic and full back a lot in agriculture.

And they use hydrochloric acid, which is make. That's where you get humic and phobic acid. they're not it's not bad. It's not. You can ingested it's not bad for you.

I don't recommend anybody using, agricultural substances for in for ingestion. Please do not do that. but, the, the humic involved cases are fine. They just taste bad.

So they, they're really hard to ingest. If you want to get that in your system every day. The beautiful thing about our is because of the way that we extract it.

They taste like water. So they're really easy, to take. So humic and formic are two incredible molecules. I'm going to talk about Volvic first. It's a very, very small molecule.

It's much smaller than a cell, much, much smaller and is called a flavonoid. And we've all heard that term like oh yeah, those are those superfoods that we're supposed to eat, you know.

Well, the humic I mean, the phobic molecule is the most powerful flavonoid. It can carry 60 times its weight through the cell wall, and then it drops off its content into the cell.

And then it gathers bio waste and toxins, and it carries them out of the cell. Now, the way this works is really interesting. So you're cell lining and I'm sure you well know this.

It's a place that is trying to keep non beneficial substances out. So it's every gate kind of that opens every channel that opens in that cell wall. It usually has a gate.

And if a magnesium molecule, say hits that gate the body says oh that's magnesium. Let's let it in. And the magnesium molecule goes through. Now the interesting thing about solving is that your body recognizes it as a beneficial substance.

So as soon as that phobic molecule hits, it's like, oh, that's so quick, bring it in. Now that phobic molecule is bringing 60 times its weight of. It could be minerals.

It could be amino acids, it could be phytonutrients, all sorts of different things. So. That so that the way that it does that it actually has this ability to change its polarity.

So imagine a magnet if you got like metal stuck to a magnet and then you were able to turn that magnet off, things would fall off. And that's really what happens with the phobic molecule.

All these things are clinging to it because it's extremely strong electrolyte carries through the cell, drops those things off. Now those things are available to the mitochondria in your cells.

Now the mitochondria in your cells generate almost all of the energy in your body. So it's literally like delivering fuel to the place where you need it the most.

Yeah. Then it travels around in your cell picking up things like bio waste, toxins like glyphosate, nano plastic free radicals, just cellular detritus from biosynthesis processes.

And it carries those out of the cell. And then it does that same thing again, changes polarity, drops them off in the bloodstream. So incredibly powerful intercellular transporter.

Yeah. So I've always heard I've always heard of it called bioactive carbons. These are these fullbacks and Hume and humic or bioactive carbons. All all human life is really you know the primary compound is carbon.

And these are bioactive forms. And like you said, I mean, they're able to slip in and out of the cell. And these are things that all of our ancestors were exposed to, eating from the ground, from the earth, you know, in a much less toxic environment.

they were exposed to these on a regular basis. And so therefore the body really understands them and understands the, the beneficial elements of them.

And so that's why they have permission, in a sense. I love that way of describing it. And I like that word. Bioactive compounds. Carbon's bioactive. Hydrocarbons. Yeah.

Someone someone coined that term. I'm going to steal it. Yeah, I love it, I love it. so now so this phobic and then phobic and humic work together in this synergistic way.

So once that, phobic has dropped off those, those, things into the bloodstream, now the humic molecule comes into play in the way I like to describe this molecule.

It's much larger than a cell. It's extremely sticky on the outside because it's one of the strongest electrolyte molecules known to man. It's got a huge number of receptor sites.

It I call it Mother Nature's janitor because it literally just travels through the bloodstream gathering bio waste toxins, senescent cells, free radicals, things like nano plastics and, glyphosate.

It does an interesting thing with glyphosate, where it actually builds a fill, it binds to the molecule, builds a film around it, and then, actually starts breaking it down.

The beautiful thing about that is when you have humic in your system, you are part of breaking the cycle of toxicity in our world, because otherwise you eat the glyphosate, you ultimately pee it out, or, you know, whatever.

It leaves your body and goes into the water table. So this is a great way to break that cycle. The other thing that humic does is it's incredibly effective at chelating, which means binding to and of removing, heavy metals from your system.

One of the one of the things people often ask me about is, about the heavy metal content of humic, because if you look at it as a of a certificate of analysis of the humic molecule, you'll see some heavy metal levels in there in parts per million, very, very small amounts.

But the interesting thing, because I've studied this in depth, because I wanted to be sure that I would be able to take these for the rest of my life and that they would be safe.

And what I learned is that the heavy metals that are part of the humic molecule are completely bound in the molecule.

How Humic and Fulvic Support Detox and Cellular Health

They do not come loose. So, heavy metals are bad in your body. When they're free roaming, they roam around, they create oxidative stress. They can cause all sorts of different, dysregulation of things in your body.

But when they are bound in that molecule, they do not have that affect there. They're sequestered is the word. So ultimately this humic molecule gets has all these things clinging to it.

It gets so heavy at a molecular weight. And and the humic molecule has an extremely heavy molecular weight relative to other other, carbon type molecules like that.

Ultimately it gets so heavy it falls out of solution, and it leaves your body through all the elimination channels, which is one of the things that's cool.

It it's an extremely effective, continual detoxification agent because it uses every channel like your tears, your sweat, your snot, your saliva, your breath, your earwax, your, just sloughing cells off your skin when you rub your hands together, the bottoms of your feet, and of course, the stand, more standard ones of urine and feces.

But it doesn't require that, like the liver chain will be open as an example, which when people are doing detoxification protocols, they're usually looking to make sure that certain detox channels are open.

But humic will use any one. So it's really good for continual detox, because even if you do a protocol today, when you finish that, you're going to start being exposed again to all of the toxins that we have in our environment.

So you want to continually remove that. Yeah. And that humic acid has kind of a black color to it. Yeah. you know, so if you're taking something a humic you might have a blackish kind of color.

And, you know, obviously it's from the soil. And, you know, years ago I wrote about, you know, the beneficial, the beneficial effects of dirt. And I was corrected.

People say, you know, dirt is kind of a waste product. Soil is alive, it's living. It's got these bioactive carbons right. So you got to get your your vernacular.

They told me you got to get your vernacular right. Exactly. That's I love that. In fact, somebody recently did a thing like that. And I was like, no, it's not dirt.

It should be really. Also, I want people also to understand that you can, you know, like you have your backyard compost pile and that is, that is things that are decomposing slowly back into their mineral, the minerals from whence they grew.

but I want to be really clear that humic and fullback take a long time to produce to to. It's a very specific process of a specific set of microbes out of the billions that that are just in a handful, you know, that are actually creating those humic and Volvic, molecules.

So it's you can't just figure, I mean, you can make a compost tea in there will definitely like if you're going to put it on your garden as an example.

but it's only going to have a it's, it's much better to use these concentrated ancient humic in solving substances. Yeah. And I've heard about, you know, experts like yourself talking about how to, in order to really get them, especially the really the most beneficial ones, you got to dig deep, right deep into the earth, right?

Yeah. and so why is it it's is it like the deeper you go, the, the the more bioactive the, the humic and fullbacks are? Well, what I really I mean, if that's an interesting thing to say, I guess what what I think of is again, the length of time that it takes for those substances to be created.

So these, the minerals, the human material that we're using, it's, you know, it's like 65 million years old, you know, so it's extremely concentrated.

So you can again, you'll find some humic in full back in your compost pile. There will definitely be that. And when you make the compost tea, the brown in the water is humic and full back.

And that's cool. But the concentration is going to be much less, yeah. Yeah, yeah. And so basically the you'll find it. But what you're saying is that the overall concentration.

So let's say you take like a pound of soil. Yeah. And if you're taking topsoil because, because in, in, you know, when it comes to planning and gardening, there's, there's a lot of talk about hey having really good topsoil.

Right. But you know what you're saying and you're not the only one obviously a lot of experts when it comes to they can humic are to go deep. Right. And actually like very very deep into the soil.

And that's where you get more of these bioactive full back in and humic. And so can you explain that just a little bit more. Yeah I was thinking so you know, just to create really good topsoil, in nature it takes like 150 years.

Okay. So that's because that's how long it actually takes for all those things to break down into bioavailable compounds that can be accessible to the roots of plants.

Now, underneath the soil we have what are called mycelium. And I'm sure you've heard of mycelium because you're very knowledgeable. Like mushroom fungal.

It's a. Functional growth. Yeah. It's a fungal growth. And it's like the nervous system of underneath of the earth. Some people call it that. but what it does is it delineates these very, very small channels, really, that deliver nutritional packets to the roots of plants.

Now, what are they delivering? Volvic and humic. Hmhm. That is so Volvic and humic underneath the earth. These are the nutritional packets that are being utilized and also the detoxification tools for if there's a concentration of sulfur somewhere because of, you know, a hot spring or something, there will be humic there that's actually working to around the edges of that to remove that, that and the mycelium are supporting that process.

So the cool thing about human control, because your body is an ecosystem, okay, we're actually humans are actually part of Earth's ecosystem. We think of ourselves as separate from the years, but we're actually like we have our bodies filled with microorganisms and bacteria.

I mean, there's actually cells to microorganisms and bacteria in your body. 10 to 1 ton microorganisms. And if you think you have 37 to 150 trillion cells, think how many microorganisms and and bacteria you have in your body ten times that.

Okay. So this we're actually an ecosystem. And these humic and phobic work well in an ecosystem format because they're formulated in the natural ratios of minerals that your body utilizes.

So you've got a they have a lot of magnesium potassium boron, calcium the macro minerals. But they have equally distributed. And I mean kind of perfect ratios of the minerals, all of the micronutrients that your body needs that are equally important, like things people don't haven't really heard of, like molybdenum, you know, did you know you need to be taking having vanadium or, you know, copper?

I mean, some people know about copper, but I mean, there's just so many minerals that your body needs, in small, very small amounts. So is it amazing that or not really surprising that it's been provided exactly what we need in these humic and Volvic substances.

Yeah. And these Volvic and humic substances, they are they help with. So if plants grow roots deep, you know, obviously deep into the soil. Right. To get more of these and they help with the overall communication process within the plant as well.

As far as you know, the plant growing and developing and kind of optimizing its expression to. Yeah. And when you think about minerals, you minerals are all about electrical capacity in your body.

I mean, your whole nervous system, everything. If you took if when you're really mineral depleted, one of the reasons you feel so bad is because of the electrical system.

It's like the lights in this room. If we turn them down to about 40%, that's how most people are operating. Their bodies are operating in about 40% of the electrical energy generation capacity that they could.

So imagine, even if you add 10 or 15%, how much more light, how much more energy, how much more electrical

capacity you're going to have in your body for all of the cellular communications, all of the biosynthesis processes, all of the brain to, you know, movement or thought or speech, all of that cognition, it's it can be an exponential difference with a small amount of, of bioavailable mineral supplementation.

Yeah. Yeah. So these bioactive carbon so you take in the four beats in the human and they have mineral complexes around them. So they are basically like carrier molecules.

And they will have the magnesium, the chromium, the mini ADM, the all the different trace minerals, the zinc, all of that kind of stuff in, you know, proper ratios that they're then basically bringing through the gut wall in the bloodstream, through the cells, through the cell membrane, and into the deeper parts of the cell where they're needed.

So they're kind of like a bus or a carrier molecule that's bringing them in. Is that correct? Excellent. Oh, so well said. And one of it here I want to mention one thing about Volvic that's so cool.

Using Beam Minerals Products in Daily Life

And one of the nice things about having the full Vic separated from the humic is you have this amazing tool, particularly for people who who have a lot of gut inflammation and maybe their absorption capacity.

They've got what we call malabsorption, you know, difficulty of getting nutrients through their gut wall. Either they've got really leaky gut or they've got Crohn's or Sibo or IBS.

And and so many people today have this. Yeah, partly because of glyphosate, but also because of our diet and all sorts of things. Right. So the beautiful thing about Volvic is think how small that molecule is.

It's much smaller than a cell. So when I drink a small cup of Volvic, it starts absorbing through the lining of my mouth, my esophagus, my throat, my, you know, by the time it hits my stomach, my body has already started.

It has already absorbed and assimilated. So there's two stages absorbing into the bloodstream and then assimilated into the cells. So and that's where that the minerals actually have to get.

So as an example we go to bike races and you know they're riding 100 miles and they come to the aid station. They're extremely depleted. They're cramping.

They're like they don't want to use the salt based ELECTROLYZE. They're going to that are offered because they know it's going to mess up their stomachs.

and maybe give them diarrhea and stuff. So they don't want to do that. So instead they come and try ours. And literally within a minute they're like, whoa, what just happened?

Because they have no flavor and they're just minerals and water. They don't require any digestion. So what what an amazing thing to have a tool that can replenish so easily.

It's the body, especially with people who are struggling with replenishment of nutrients in general. Yeah. So full weights really impact the cells. So because they're so small, they get into the cell where they deliver the minerals and they also grab different toxins that could be impacting cellular function.

Shoo mates are larger. And so they do. They stay in the gut and just bind to, toxins. More of like a GI kind of detox binder. Correct. And so and some of them, and and just so we're work here, it's full Vic and humic fumigate is the is the powdered substance.

And then Volvic and humic are the molecules that exist in this powder. in or in or in Sheila G or wherever. Okay. So, the thing about so humic, I'm sorry, what we I wanted to make sure that we got that clear.

Really differentiating between the full Vic and the humic and what's happening there. We talk about the phobic getting into the cell because it's such a small particle size, whereas the humic is larger.

Is that's its main impact going to be cleaning up the gut. Yes. However it's interesting. So not all humic substances can be absorbed into the bloodstream.

The beautiful thing about the particular deposit where we get ours, is that the molecule is small enough to be absorbed through the gut lining, and it does get into the bloodstream.

So that is a really cool thing. Not all humic humic substances, are small enough to do that. and you'll read different things when you get down into the deep science of it.

and some people say, well, humic only stays in the gut, but actually that's not the case. And there are many studies that show that it can be absorbed through the gut lining into the bloodstream.

So it does both. One of the beautiful things in the gut microbiome that humic and Volvic do is they create an inhospitable. First of all, they create a hospitable environment for beneficial micro organisms and microflora in the gut.

They also create an inhospitable environment for things like viruses, which is really important both in the bloodstream and the gut and in, inside the cell.

So the phobic, because viruses, they replicate inside the cells and humic when it's inside your cells, creates a really inhospitable environment. It's it's, very the pH is, is not correct.

And, so it makes it hard for those, viruses to replicate. Yeah. That's good. And the other. Thing. Yeah. Go ahead. Yeah. Piece about humic relative to virus is kind of important for Covid or people who who've had the, vaccine is that it's also effective at binding with and removing spike proteins, which is kind of this the viral detritus that's left.

Yeah. And there's yeah super key as a as a powerful binder. And like you said can get into the bloodstream. So that's key. Now let's talk about talk about your products.

And you've mentioned a couple of, you know, things. How do people like what is the right dosage. That's a question people have given me is like do we have like standards for proper dosage or phobic and humic and talk about B minerals and what you guys are doing with your products and how people should best use them.

Well, first of all, I never used the word dosage purposely, because I want people to understand that plant based minerals are not medicines. They are not really supplements.

They're replenished sugars. And they work again on this on this ecosystem model. The reason we have dosages and and this also relates to the whole concept of, what I call on the supplement facts, panel of your supplements.

You'll see all this has X amount of the recommended daily allowance or minimum daily requirement or different things. Now what I want people to understand is that those numbers are they really they're they're really ludicrous.

Okay. Because the amount of magnesium that you need relative to how much I need relative to the, you know, a person who sits on the couch all day or, you know, it's it's different for everyone based on it's not personalized.

Right, exactly. All of those things. So so it's it's not a really good way to identify the quantity of a particular mineral. I'm not talking about other things. I'm a mineral person.

Okay. It's not a good way to understand how much minerals you need in your body. So what I want people do is walk around the circle and look at mineral replenishment from a different perspective.

And the perspective is rather than trying to hack your body and determine how much of any particular mineral or

electrolyte your body needs, whether you're an athlete or not.

Instead, look at providing the full spectrum of minerals in these naturally balanced meaning formulated by nature amounts. So when I take an extra shot of ELECTROLYZE our Volvic product, I'm providing more, but I'm providing it in the balanced forms.

The reason we have this concept of dosages is because we want to monitor. So we can say, oh, you shouldn't take more than this, but that's because you're creating an imbalance in the gut when you take that amount.

If you think about your gut, you think about it. Let's think about it like a forest. It's this incredibly complex natural system with all these microflora and microorganisms and beneficial bacteria and fungi, etc.

like a forest is. Got it? And when it's healthy, it's got enough light, enough water and nutrients. You know, things are growing and everything's in balance.

And now go take a wheelbarrow of magnesium and throw it on the forest floor. And in that area it's a concentration. C ecosystems don't work well in concentrations, but if you poured a full glass of our full work on that area, the plants would go crazy.

I give them 24 hours and they would be like much bigger in that area than anywhere else. You can try it with your house plants. It's really fun. We've actually done it with micro Green Growers, because they have really quick return.

So you put we would put our minerals on some and not the others. And the, the bounty of what they were, what they were able to grow in a short period of time was exponential different.

So what you're saying is there's no real upper limit here. when you're taking these now, how should people take these? And let's go through just a couple of your products and kind of the, the differences.

Yeah. So we have kind of our two flagship products are, are called ELECTROLYZE. And this is our full mix product. We actually call it next generation hydration because it's an incredible tool for electrolyte replenishment, as well as just providing the full spectrum of minerals.

then this is our is micro Boost and Micro Boost is our humic supplement. So these two together provide the full spectrum of minerals that you need on a daily basis.

Just one half capful of each for I kind of say between 100 and 180 pounds. If you're larger than that, you might want to take a little more. And if you're smaller, we have a chart for for kids, as an example, you just scan the QR code on the back and it takes you to a usage.

But I need you. Increase the dose for like people. Maybe that are dealing with chronic inflammatory conditions. Is that kind of like the maintenance dose for for maintenance for overall health?

Or would you are there ever times where you would purposely try to increase the dosage? Yes. So there absolutely could be. So what I say is you got two tools.

This is your water mineralized tool. This is your electrolyte replenish. Or instead of using salt based ELECTROLYZE you could just try I say give me one month instead of the salt based.

Just use these and this. And that's the ELECTROLYZE I know. electrolyze so you can see it. Yeah. the green bottle. And you can also see, like when I pour a glass of my filtered water from my, tap, I have a water filtration system.

I just add a splash of this and I go, if I'm going to the gym and I have my water bottle, I just add an extra splash beyond the the, you know, that half cupful that I take every day.

Some days I wake up and my body says I want more, so I take more. I'm really recommending people consider their body as a if you have a relationship with your body, you literally could say, how much do I want every day?

And you would you would find that out as a, as a doctor. in a practitioner, you certainly can help people to use this as a tool in their life. You really can't. You really can't get too much.

No one ever has any kind of reaction with ELECTROLYZE with the full back.

Final Advice on Minerals and Health

Now, humic is a different animal because it's a detoxification agent. so first of all, if you are sensitive and those are people with limbs, autoimmune people have had long Covid or mold exposure.

They tend to have very, very sensitive systems. I'm actually one of those. I never had any reaction to humic before I had, Covid, but since I had Covid, my system has been much more sensitive.

And I just put it you can't really see it in my glass now, but you can see it's brown because I just put it in my glass of water every day, and I drink it that way.

Then I never have any, detox symptoms. We have a great article we could put in the show notes that includes, a description of what these kind of what we call herxheimer symptoms might be detox symptoms.

It demystifies. It helps you understand what they might be and what to look for. And it also has some slow introduction methods. You just start with one quarter teaspoon in a glass of water, do that for a few days, and then slowly titrate it up with, you know, a quarter of I mean, excuse me. And depending on how sensitive you are, you could even start with an eighth of a teaspoon.

Whatever. very, very small amount. but over time, once you get acclimated, your body recognizes it and use it begins to remove some of that toxic load and you're less sensitive then you can use this also for, let's say you go out for a couple of drinks of wine with some friends for a celebration.

You come home, you have an extra half capsule of this in a glass of water. You wake up with no hangover, or maybe you go out for a very rich meal. Same thing.

Or maybe you got something bad and you're having some, food. you know, like, stomach problems. maybe ate some bad shellfish. You could use this to quickly remove those toxins from your system, or you feel a tickle in the back of your throat, or that funny feeling in your stomach feel like you're getting. You're fighting a virus or cold.

This is a great way to kill it off quickly. Yeah, that's good to know now. And people can find out more information on those on beamminerals.com. It's the the two product.

She was really talking about where the ELECTROLYZE and the MICRO-BOOST. Right. And that's the detox humic formula. So really good stuff. These are great products.

I look forward to trying them out myself, for sure. this is definitely cutting edge stuff is a stuff that, you know, it's in a sense, it's ancient medicine, but, yeah, but, you know, it's been revolutionized now because we have more and more science backing up these bioactive carbons, these plant based mineral complexes.

And so really, you know, just want to commend you for all the great work you guys have done with getting these, these products out there and all the great results that you guys are seeing.

Any last words of inspiration here for our audience? I think the main thing I want people to think about is minerals are foundational to your health. If you can do nothing else with your health, you know you're not going to change your diet or go to the gym.

If you just start taking minerals, you might find yourself making different food choices. You might find that you have the energy to get up and go for a walk.

so sometimes you don't have to go through the big trouble of turning over a new leaf. You just have to support your body at a foundational level. Yeah. So good.

Well, thanks so much, Caroline, for your time and your expertise, guys. Check her out at beamminerals.com. You can also check out her Mineral Geek website.

Just mineralgeek.com. Thanks again and everybody be blessed. We'll see you in a future interview.