Mighty Minerals: Silica - The Bone, Collagen & Aluminum Clearing Mineral Transcript

(Transcripts are generated by AI and may contain errors)

Introduction to Silica

There's also evidence that adequate dietary silica intake is associated with reduced absorption of aluminum from food in the first place, actually keeping it out of the body.

So it actually works on the intake of silice and getting the silicate out. Welcome to Vitality Radio, the podcast that helps you make sense of natural supplements and thrive without pharma drugs.

I'm Jared St. Clair. I grew up in a health food store and spent over 40 years now figuring out what works and what doesn't, so that you can make confident, informed decisions about nutrition, supplements and your health.

If someone told you there was a mineral that holds your connective tissues together, helps determine where calcium ends up in your body, and can actually help your system clear out one of the most toxic metals we're exposed to every single day, you'd probably want to know more about it.

And if the same mineral also turned out to be super important for your hair, your skin, nails, even your arteries, AND could potentially protect your brain, now hopefully you're really paying attention now i'm curious how many people listening have already guessed what this mineral is if you did congratulations we're going to talk about silica now I'm Jared St Clair of course this is Vitality Radio and this part of our Mighty Minerals series where I take individual minerals and talk the trace minerals, the ones we don't need a high dose of every day.

We're not talking so much calcium, magnesium, things like that. Silica kind of sits in the middle there. we'll talk about dosage. I would say it's one that we need to higher dose up than most of the other elements on the periodic table, at least the one's that are good for us.

But we're going to talk it in relationship to boron, in relation to calcium and magnesium. and vitamin D3 and K2. And if you caught the Boron episode that I just did of Mighty Minerals, then you'll understand that this one goes hand in hand with that.

Now, if didn't catch the boron episodes, you can listen to this or that one in either order, but I do recommend you listen both of them because they essentially are a team in really explaining this and explaining why I got so excited when I finally figured out that vitamin B3, vitamin K 2, borons and silica We're really a dream team for optimizing bone health, connective tissue health tooth health all that kind of stuff.

Now you will notice with silica that there are a bunch of different ways that it gets named. There's silico, there's silicone dioxide. There's orthosilic acid, there's a whole bunch of different ways that we can think about this.

And then we could also think of things like silicone valley and silicone implants and the silicone that you might caulk your tub with and even like silicon muffin tins and cookware and things that, spatulas.

Silica and Collagen Support

So this stuff's everywhere and it gets a little confusing for sure because there is even silica dust that is an industrial pollutant kind of in the working environment for some people that can actually, when inhaled, be very bad for the body.

So it's a confusing one, but I'm going to dial it all in and help you understand where it comes from in our food, where you can get it in your supplements if you feel like you need more, and why you might want to consider taking more than what you're getting in you food.

We'll get to all of that in just a moment. Now, as far as silica goes, When it come to human physiology, For a long time, it was basically dismissed as something inert.

Doesn't really matter. It goes in, It doesn't change anything, but that's changed a ton over the last several decades. And now we know that there are very specific tissues, including bone, teeth, connective tissue and skin.

and I'm going to talk about arteries too, cause that the big deal that makes silica actually something that has a very functional role in all of those areas.

Now, you may have heard episode 633 with Jody from Biosil and we talked about a specific type of silica there. I'm going to talk about silicas in more general terms here and that's another show that if this show fascinates you, probably would be worth giving a listen to give you a little bit more of the whole picture.

Now, I want to be careful when I talk about this because there are minerals that we don't want in our body, but they're still minerals. Aluminum is a perfect example, and fluoride would be another example or bromide.

And they'll store in very specific tissues in the body. The thyroid, for instance, is a great example when it comes to fluoride and bromine. And then when comes it to the brain, aluminum of course is of major concern and we'll talk a little bit more about that later in show as well.

So just because we find silica in concentrations in a bunch of these specific tissues doesn't necessarily mean that it's supposed to be there. But when we look at the evidence, it is very, very clear that silico plays a very supportive role in proper maintenance of soft tissue.

And when you look the fact that Silica is used in just about every human cell, we start to recognize that. It really is an element that we need to pay a lot of attention to.

Silica is called biologically an essential trace element. There is no RDA on it, much like what I said for boron and so many other minerals that are in this series.

That doesn't mean that we don't need it. It just means that the government for whatever reason has decided that there's not a deficiency disease that's a big enough deal that they should recommend it on a daily basis.

But it's pretty obvious to me that this is something that while the Government doesn' recognize it as a necessary mineral, It's a necessary mineral. We definitely need this stuff.

So what does silica actually do in the body? Well, let me break it down system by system, and we'll start with the one that I talked about with Jody. And it's the ones that most people are the most familiar with.

That's collagen and connective tissue and the role that it plays there. Like I say, if you want to check out that episode with jody, it is a really good one.

People loved it. Episode 633. The most studied and well-established role of silica is in collagen synthesis. Collagen is the most abundant protein in the body.

As you probably know, it's why a lot of us are supplementing collagen. It's, why, a, lot, of, us, are, supplement, bone, broth, to, get, alot, collagen, in, that, way, kind of thing.

it, s the, structural, scaffolding, your, skin, tendons, ligaments, cartilage, bones, matrix, and, even, arterial, walls. It's everywhere. And silica plays a direct role in how your body builds that collagen.

Now, the mechanism is fairly simple. Collagen isn't just assembled from protein amino acids. The process of weaving those amino acid into actual collagen fibers, that's called cross-linking, requires certain cofactors.

Silica is one of the key cofactors there that makes that whole thing stick together for lack of a more scientific term.

It's involved in the formation of the connective tissue matrix that gives collagen its structural integrity.

Research published in The Archives of Dermatological Research in 2005 demonstrated that orthosilicic acid directly stimulates collagen synthesis in skin cells and fibroblasts, the cells responsible for actually making connectative tissue.

This is why silica shows up in so many hair, skin, and nail products. It's not just marketing. The structural protein in your hair, primarily known as keratin, and the connective tissue underlying your skin, both depend on adequate silica to maintain their integrity.

Hair that snaps easily, nails that split or peel or crack, skin that loses elasticity faster than you'd like, these are all related to silico insufficiency.

Now, one of the things that I've always told people when people ask about silika, because you'll ask, I get a lot of questions about silica get, a lotta questions, about biotin get.

A lot. Of questions from women about hair, skin and nails. And they'll ask me, well, I've heard about this nutrient or that nutrient. You know, what should I do?

And I always say, if you're just looking at a single nutrient for your hair. It's probably bioten. We're not going to get into biotin here, but silica is very useful.

If you're looking for a single nutrient for your skin, then I'd probably would say silika is probably number one. Collagen would also be in that mix for sure, But silicate helps the body make collagen.

So it's kind of two different ways to accomplish the same thing. But if you're looking for a primary nutrient for your nails, it's always silica. Because for all the years that I've done this, I have had more people come in saying I started taking silika and oh my gosh, my nails are amazing now.

I hear that more than any other thing when it comes to silicas. So if got problem nails silico is definitely something to consider.

Bone Health and Calcium Placement

It's the most obvious I think. thing that silica improves because it's right there. You can see it. And the thing about your nails or the things that I hear with nails is that, I have to cut them way more often since I've been taking silika and they don't split, they, don' crack, They don''t peel, all that kind of stuff.

and for what it''s worth, i've be taking Silica for forever. So I don´t remember what is like without silico, but I will tell you that i feel like I had to trim my nails.

an awful lot. And I never have issues with my nails. So maybe it's because of the silica, I would say probably it is because the silicone but let's talk about bone health because I get that question way more than I Get the question about nail health.

And this is really, really interesting because we always talk about calcium. Of course, you've heard me talk About magnesium and the critical role that it plays.

I know you probably heard we talked about vitamin D3 and K2 and how that plays silica would not be ahead of those four things. If I'm like making a greatest hits list of nutrients for the bones.

but it is really close. It's right up there with Boron, probably at that number five or six spot for me. And there's a reason for that because your bones are not just calcium.

I cannot emphasize that enough. Unfortunately, oftentimes your doctor is telling you, just take more calcium and

you'll have healthier bones. The research does not back that up at all.

In fact, the research backs up, take calcium without all the other key elements that you need for your bone, And what you end up with is not stronger bones, but you ended up a weaker cardiovascular system.

So we don't want to just take calcium and isolation because we know that it does not rebuild the bone matrix or the protein matrix that makes up the bones in isolation at all.

Bone is not a rock. It is a living tissue made up of this protein matrix, which is primarily made of collagen. And of course, minerals, including calcium, are part of that.

Phosphorus is the other one that's deposited into that matrix. Think of it like a steel reinforced building. You know, all that rebar, the steel framework is the collagen matrix.

The concrete is calcium. So yes, there's way more calcium in there than there is anything else, but it's not the only component. Calcium and phosphorus are the big players.

They are concrete. But you can pour all the concrete you want without the solid steel structure. You don't get the strong building, you just get a pile of concrete and that's where silica really comes in because the protein matrix is largely collagen and silico is the primary player in collagen production.

Now, there was a study, the Epic Norfolk Cohort Study in Europe that was published in 2004 in the Journal of Bone and Mineral Research. They found that higher dietary silica intake was independently associated with greater bone mineral density.

Now this is dietary. This is observational. They were looking at people who lived in areas where there's a lot more silicate in the water or the soil or both versus areas were people were not getting as much silicone in their diet.

And there were thousands of people in this study. The relationship was particularly strong in younger men and in premenopausal women. But it's a very meaningful finding because what they found is that bone mineral density across the board was higher and especially higher in younger people where there was a lot of silica in the water or in food.

And here's something that directly connects to the Vital D3K2 formula that I talked about in Boron episode. When silica levels in the body are adequate, calcium tends to preferentially deposit in a bones.

Now that's different than what we talked about with K2, but it's very synergistic with what were talking about K-2 because K 2 plays a major role in production of the key elements that drive calcium into the bones that direct is probably a better word calcium in to the bone.

But calcium can still go other places and depending on how much K two is there and all these other factors with K2 and with silica, what we end up with is a preference for the calcium to go into the bones and to the teeth where it belongs.

And then K-2 unlocking the door essentially so that the Calcium can get in there. So they really do work in tandem. That was a profound finding for me when I started to understand that, because I spent a lot of time trying to figure this out and figure out, okay, how are we doing this?

How do we get to the point where we have the right combination with the D3 and K2? Because initially it was just going to be D 3 and k2. And I, and I've told this story when first introduced the product.

I don't know if you remember or if heard that episode, but I I think it's an important thing to reiterate. I'm always looking at how much space is actually in the capsule.

That matters a lot because something like magnesium takes up a ton of space. And so you need several capsules

to get the full dose of the magnesium that you're looking.

On the other hand, vitamin D3 and K2 are measured in micrograms. They don't take up hardly any room, so you can fill almost none of a capsule capacity and still get a full dose of D3 and K2 in the capsule, leaving a couple few hundred milligrams of space left behind.

Now, typically in manufacturing in this industry, people will use a filler to fill up the rest of the capsules. Nobody wants to buy a bottle of capsule that has a little bit of stuff in it and is like three quarters of way empty.

Cause then they wonder what the heck happened. So they put a filler in it just to fill the capsule. It makes it easier to blend the formula and all this stuff too.

There's a bunch of reasons for this, but that's going to be the least expensive way to deliver the product. And there's nothing really wrong with that.

enhanced the payload with more of an optimal dose of nutrition. At least that's the way I look at it. And so with the D3K2 formula, I had all this space.

There was just all kinds of room in the capsule leftover and I spent way too much time, like way to much looking at all kinds of different research trying to figure out, okay, so D3K2 people are taking for immune, they're taking from their cardiovascular wellness, their taking their bones and their teeth.

But I think for the most part, people taking it for one of those three things, and I would say bones, teeth, maybe at the top of that list, but I wasn't sure which direction to go.

I thought about putting some immune stuff in there. Thought about some cardiovascular stuff. And I just looked and looked, and I did what I often do. I get a little frozen sometimes when I'm formulating these products, because I want to make it just right for you.

And, I spent too long probably, but maybe not because there was this moment, actually, when i was preparing an episode of Vitality Radio on a completely different topic, that some research I came across having to do with silica popped in and i thought, oh my gosh.

This may be perfect because I'd already decided boron. Boron was going to be in there. That made sense, but that didn't take up much space either. There was still about a half a capsule left of room and I decided, okay, I'm going do silica.

And it was because. I discovered several different things. Couple of things here. I knew a lot of this about silica already. It just hadn't gotten to my brain when it comes to this particular formula.

But when I started digging in deeper, I learned a whole lot more. I certainly knew it had a role in soft tissue repair and, you know, bones and teeth and nails and hair and skin and all that kind of stuff.

But there was some interesting stuff that I hadn't thought of. And one of the biggest things that hadn t thought about was arterial health. Because as I said, many people, maybe you, are taking K2 specifically for prevention of calcification of arteries and the soft tissues.

We want our arteries to be flexible, pliable, elastic. We want those arteries to be young, essentially.

Arterial Health and Aluminum Detox

And the way to do that, one of the ways to that is to keep calcium out of arteries. But as I was digging into silica, I realized that silika plays a major role there as well.

Then it just was such a no-brainer because it was going to all the things we wanted it to in supporting bone and

teeth health. It was also going play a role in detoxification and it was going to play a role in arterial health.

And I just fell in love with that combination. That's how Vital D3 K2 finally came about. So let's talk about this arterio piece because I think it's really, really interesting.

What we know about the arteries is that significant amount of the material that is used to make the arteries and the veins are elastin and collagen. And the springiness of healthy arteries, their ability to flex and expand depends on the structural integrity of that connective tissue.

Silica is concentrated in arterial tissue and the research has suggested that as people age and silica levels decline, arterio tissue tends to become more rigid, less elastic, much like what we see with our skin as collagen levels declined.

See how that relates because silicas plays such a major role in the skin and collagen production as well. This is one of the mechanisms being studied in the context of age-related changes in cardiovascular structure.

Not making any kind of treatment claims here, but it seems to me that the structural support story is very, very strong and worth knowing about because when we talk about arterial health, we often talk You probably know that my take on cholesterol is not the same as your doctor's might be, and that's fine.

You can decide which way you want to go with that. But I think we can all agree that if we have healthy elastic arteries, there is a far lower chance of any kind of arterial blockage because the body isn't having to shuttle things in there, including cholesterol, to plug the gaps.

because we can have these little micro fractures that can happen in the arterial walls. And if we have a strong structure of the wall, then that's far, far less likely to happen.

Now I talked about the aluminum thing and I'm going to spend a decent amount of time on that because I think this is really, really critical. Aluminum is the third most abundant element in earth's crust.

It's in our environment, it's our water, in food supply, packaging, cookware, conventional deodorant and antiperspirant. It is used in the processing of tap water in most municipalities.

Its also used for pharmaceuticals like antacids and vaccines. And it is found in baking powder. We are exposed to aluminum every single day at levels our ancestors simply were not.

And in some cases it's being put directly into us in pharmaceuticals or directly on our skin in the form of an antiperspirant or even injected into it in a form a vaccine.

So aluminum. is one of the big public enemies here that we need to be very, very concerned about because unlike many minerals, aluminum has no known beneficial role in human biology.

Not one. It is not an essential nutrient. The body has some capacity to excrete it through the kidneys, but when we're overwhelmed with it or when our kidney function isn't optimal, Aluminum tends to accumulate and researchers have been paying a lot of attention to this Especially when it comes to brain health, because what they found is that Alzheimer's people often have elevated concentrations of aluminum in the brain tissue.

That doesn't mean that aluminum causes Alzheimer because there's correlation and causation. And there're still a lot of debate about that, but it seems safe to assume that if this is a mineral that has a specific toxicity and the tends to accumulate it, we probably don't want it there.

Whether it leads to Alzheimer's or not, my personal take on it is that it's probably not the thing that leads Alzheimer. But I bet it it one of the things, a part of that picture.

And again, We don' have full evidence of tha yet, but it seems to make sense. And then closer to home, my father

who passed away with Parkinson's disease.

There's a lot of evidence, including a study in 2019 that found aluminum present in the brain tissue of individuals with both familial Alzheimer's and Parkinson disease at higher levels than what is normal.

So we know. It's toxic. We know it's everywhere and we know what tends to hang out in the brain and that in and of itself is enough for me. Now, there's also research that's controversial, but I think significant and I want to share it with you if you haven't already heard it.

Professor Christopher Exley's group at Keeley University in UK who found unusually high concentrations of aluminum in brain tissue from individuals with autism spectrum disorder.

A 2018 paper in the Journal of Inorganic Biochemistry reported some of the highest aluminum levels ever measured in human brain tissue in that study population.

Now, that was a very, very small study, and there hasn't been another study like it that I'm aware of. But again, it is enough to be concerned, I think.

And so ultimately, It behooves all of us to research where aluminum is coming from and decide whether or not we want to avoid higher levels of it. I think it's pretty logical to assume we wanna get rid of as much of them as possible.

But also, because it is kinda ubiquitous out there in our society, just like we talk about with parasites and so many other things that we just have a hard time avoiding completely.

I think it's safe to say that something like silica that can help shuttle it out of the body makes all kinds of sense. And to me, when we look at these three things, Alzheimer's, Parkinson's and autism, we know these are all neurological conditions.

that all impact the brain. And in every case, we're finding elevated aluminum in the brains of people that have these issues. So you can't dismiss the possibility that aluminum may not be a significant factor in these things.

But beyond the brain, aluminum has also been associated with bone abnormalities and people with chronic kidney disease. And there's a well-documented condition called dialysis encephalopathy.

Essentially, Aluminum toxicity in the Brain that occurred historically when dialysus water wasn't properly filtered for aluminum. These aren't fringe concerns.

They're documented in the mainstream medical literature. And this is where silica becomes super awesome. Professor Exley's research has shown that silicas, specifically orthosilicic acid, which is the most bioavailable form, that's the form that is found in biosil, has a remarkable ability to bind with aluminum in gut and in bloodstream, forming inner compounds called hydroxy-alumino silicates.

Those compounds get excreted through the kidneys. When you have adequate silica on board, it literally grabs aluminum and escorts it out of the body. In 2013, his research group published work in the journal of Alzheimer's disease, looking at what happened when people with Alzheimer drink silico rich mineral water daily for 13 weeks.

Urinary aluminum excretion increased significantly, meaning the body was excreting more aluminum than it was before. And some participants actually showed improvement in cognitive function during that period.

It was a small study and it's not a surefire cure, but the mechanism is real and, it has been replicated. So we know that silica has the capacity to bind to aluminum and escort it out of the, and I think that's huge.

There's also evidence that adequate dietary silica intake is associated with reduced absorption of aluminum from food in the first place, actually keeping it out of the body.

So it actually works on the intake of silicea and getting the silicate out. Now think about most of us and where we're at. We're getting aluminum exposure from multiple different directions daily and most us are not eating the foods that are richest in silico and of course we have depleted soil, which is a major problem.

There's less silica available to us. Water is treated and a lot of the silico that would naturally be occurring in water is often removed. And so we're still getting tons of aluminum, but we are not getting adequate silicate in many cases to get rid of that aluminum.

So to me, it makes plenty of sense to have silica on board on a regular basis, because certainly aluminum is on-board on regular bases. And when I learned about that, and I learn about what it does for cardiovascular wellness and everything else, It just made perfect sense, to get it into the D3K2 formula.

Now, how do we know if we're getting enough silico? in our diets because that's really the big question mark. Ultimately, we want to get everything from our diet if we can, but there's a reason why we have dietary supplements and that is because our diets are so depleted.

So diet is still and should still be the number one place that we get our nutrients. Silica is concentrated. in plant foods, specifically fibrous intact parts of plant food, oats, whole grains, bamboo, cucumber skins, bell peppers, green peppers green beans, bananas, root vegetables, and especially if they're grown in mineral rich soil.

But here's the thing. So much of our food is heavily refined and that gets rid of most of it. So, much the soil is heavy depleted and a lot of us because of a variety of issues are avoiding things like oats and whole grains because we end up with autoimmune type flares or leaky gut creates issues for those or we have sensitivities that have been created by antibiotics and so many other things.

And so in the case of my wife and myself, we don't eat oats and we rarely eat much in a way of whole grains. And, so yeah, it's a little bit tough now, right?

And that's again, one of the reasons why I felt it made all kinds of sense to have it as a normal part of your supplement regimen. Because so many people now are supplementing D3 and K2, It made sense for me to sneak it in there so that we didn't have to add another supplement to the mix.

Well, let's talk about the other big issue with silica. And this is something I discovered when I was actually preparing this show. I didn't realize, and I should have because it just goes hand in hand.

It just didn' click in my brain until now. Aging is a major factor when it comes to silika because many of us eat less of the foods that contains silica as we age, but it seems that the body is utilizing silika less efficiently and possibly needing to burn through more of it as age.

Because what they're finding is that as they age we're getting less and less silico storage in the human body. We're not retaining it that much. And that, like I say, I should have put two and two together because we are also making a lot less collagen as the age and perhaps that lack of silicas is a big part of the reason why we make less of collagen.

I anticipate that those two things are at least related, if not in a significant way, but I wasn't able to find the research that directly correlates those things.

It just makes sense. Also people with chronic inflammation or high connective tissue turnover are a greater risk. You know, people that are working out a lot have physically demanding jobs or ongoing inflammatory conditions tend to burn through more silica than other people do.

And of course, anyone with high aluminum exposure risk, which is all of us, but some more than others. You know, Jen and I have spent a lot of time over the last seven, eight years when we weren't together.

And we're just friends in her home and my home. We were doing the same thing. I'd started ahead of her. And then

helped her sort of get caught up and then she became the one who was like, okay, we're not drinking out of this and we are not eating out that.

We are storing our food in that because she is hyper vigilant about that stuff. So it's all glass and it is all, you know, aluminum free cookware and all that kind of stuff and as you start to make those adjustments and detoxify your body through detoxifying your home, and certainly personal care products and choices that you make with pharmaceutical interventions and things like that, then your silica consumption may be able to keep up with your need.

But in many cases, I think our consumption is not keeping up their need just for the purpose of detoxifying the aluminum that we talked about. Now let's talk about bioavailability of silica.

Cause I think this is really important. One of the big things I try to bring to you on this show on a regular basis is, you know, how do you tell if you're getting a good supplement or a source of that particular supplement?

And we talked about the foods that are very high in silico and one of number one foods is oats.

Food Sources and Supplement Forms

But there's a couple of things that really critical here. I already mentioned the one, some of us are just sensitive to oats, neither Jen or I do well when we eat oats.

But if you don't have that issue, then just be very, very cautious. If you decide to consume oats always, always always 100% of the time organic, which means you've got to check your oat milk because almost all oatmilk is not organic.

There are very few that are, there's a company called Malk, M-A-L-K. It's one of only ones that I would recommend at all. And the reason for that is because glyphosate is sprayed heavily as a desiccant on oats Right before the harvest we're not talking about residual stuff that's been there for months while the oats are growing We're talking About spring it to dry the Oats before The Combine gets to them essentially to Dry out the oats meaning they have the highest concentration or one of the Highest concentrations of glyphosate that you can possibly eat and I can promise you that getting the silica from oats is not worth the trade-off for all the Glyphocytes so if you are going to eat oats always organic a hundred percent of The time Now, mineral water is another thing you can consider.

And this depends on what you're doing. I'm actually going to do a show very soon on water, because I get this question all the time. You know, reverse osmosis, spring water well water or is it distilled water?

And I'll give you a little sneak peek at that show. Jen and I are going distill. We've been doing a lot of research on it and we think it may be the very best way.

There are some caveats to that and i'll share them with you. If you are drinking bottled water and if you're making that choice to use botted water, I still do it in a crunch when I need some water.

I'll buy a plastic bottle of water we almost always will buy Fiji water Fijian water is from an organic source and it's very, very high in silica. It's one of the most silico rich waters.

There are the Hawaii volcanic. water, I think it's called, is another really excellent source of silica. And these ones are so proud of the silico content.

They actually listed on the label a lot of them. So that's another source you can consider. Then of course, like I said, supplemental forms. There's a couple of different ways you go with supplemental.

I've talked about orthosilicic acid. Orthosilsic Acid is the very most bioavailable kind of organic form of silica. There's a very specific form called C-H-O-S-A that's in BioSil.

And you'll notice on the Biosil label, if you're a BioSil user, there's only five milligrams per dose, and I'll recommend five to 10 milligrams a day.

You don't need a lot of that. It's highly bio-available, but it's also very expensive. That's an expensive process to make, And there is a patent on that process.

So it is also difficult to get as a formulator. And so what you will find when it comes to silica is basically three primary sources in a supplement form, the C-H-O-S-A, which if you want to use the very best silico on the market, I think it is BioSil.

I love that product. So none of this is to tell you not to. In fact, For years, Jen and I have been using it for years. However, now I'm not using the biosil anymore.

I just use the silica in the D3K2 formula because I believe that the next best form is bamboo silika. Now you have to take a higher dose from the bamboo Silica.

There's 150 milligrams of silico from bamboo in vital D 3K 2 low potency and high potancy form. The D3 and K2 are at different potencies, but the boron and silica remain the same because I believe that dosage should stay the.

Same in both formulas. So regardless of whether you're taking the ultimate vitality multi that already has D 3 and k2 in it, and then also taking a lower dose D three K two, which is what.

Jen and I do, or you're just taking the D3K2 from the Vital D 3K 2. You're still getting 150 milligrams of silica and it is still a highly bioavailable source.

There's really good evidence of that. Not as good as the stabilized CHOSA. but we're literally talking about taking like 15 times as much, knowing that some of it is going to wash through the system.

Based on the research that I've done, I'm pretty confident that 150 milligrams of a good quality bamboo silica is a excellent daily dose, which is why I chose to put it in there.

So those are your options. Basically you can go with, I forgot to mention one other one, horsetail is a very, very common source. Nothing wrong with that.

It's not as concentrated as bamboo, still a food source like bamboo is. I think the bamboo just because of concentration is, is superior option. You just get more milligrams for the money, essentially.

So that's. Pretty much what I wanted to share with you on silica other than just to know that it's got a extremely high safety profile. While the RDA does not recommend it at all, there is also no recommendation of an upper limit or tolerable toxicity level or anything like that in the literature.

The only real contraindication with silika is if you have kidney disease, as with every mineral, it needs to be processed through the kidneys. It's one that you may want to talk to your doctor about if your on dialysis, that kind of thing.

short of that, no concerns with silica at higher doses. And as I said, recommended higher. If you want to get all of these benefits that we've talked about.

So I already shared the story with the vital D three K two before I won't belabor that. But ultimately this is what I have to say. I really believe that once I settled on this combination of a high quality D3, a High quality MK7 K2 and then the bamboo silica and the boron chelate that we ended up with the best D 3 K 2 formula on the market.

I Really do believe. Whether you have the higher potency one or the lower potancy one really just depends on if you're getting D3 or K2 from other sources or possibly the time of the year and how much sunlight you are getting, that kind of thing.

The lower-potency makes a lot of sense for people that are. Getting out in the sun on a regular basis and just want to kind cover their bases. But the high-potency for the people living in climates like Utah where we're not getting much sun in winter time at all can make a whole lot sense.

And if are taking the Ultimate Vitality Multi, remember this, this is important. Three capsules of that, the full dose, has exactly the same amount of D3K2 as the regular potency Vital D 3K 2. And they were designed specifically to be utilized together for people that need a higher dose of B3 and K2 than just the 2,500 units of the D three and the 180 micrograms of K two.

So I knew lots of you were using this product, The Ultimate Vitality Multi. It is our number two bestselling product in the whole store. and so I wanted to make sure that you had an option and because I couldn't fit enough, silica in the Multi.

Now you've got it in The Vital D3 K2. So I hope this has been a helpful episode. I'd like to say if you didn't hear the Boron episode, go back and pair them together.

They pair beautifully as episodes and also as nutrients. And I'll keep bringing you these mineral episodes as we go. One little reminder, we are now on YouTube.

And so if you haven't checked this out on YouTube, even if your preferred to listen on your app, Spotify, Apple, iHeartRadio, whatever it is, I would love for you to check out the YouTube.

Give it a subscribe. We are running shorts over there every single day, so little snippets of good information that I think you may benefit from and enjoy.

and we'll be adding more content over there as well. And really what I'm asking for is a boost up. I am way late into the YouTube game, I realize it, but if you don't mind giving me a little bit of boost by sharing those videos, liking them, subscribing, commenting on them.

All of that stuff is extremely helpful and very, very much appreciated. If you have questions, call us 801-292-6662 or check us out. at vitalitynutrition.com or see us in person at Bountiful, 107 South 500 West, the original mothership location or our brand new location in South Ogden at 1735 Skyline Drive in south Ogdon.

Thank you so much. I'm Jared St. Clair and this has been Vitality Radio. Thanks for listening to the Vitality Radio podcast. If this episode helped you follow the show, share it with someone and explore trusted education and resources at vitalitynutrition.com.

See you next time. Hello, everyone. I hope you enjoyed this week's episode of Vitality Radio. Just a reminder that this podcast is for educational purposes only.

This podcast has not been evaluated by the FDA. Thank you.