

## Radical Remedy Podcast - Caroline Alan Transcript

0:00:01 - Chloe

Hey guys, it's Dr Chloe and this is the Radical Remedy Podcast.

So today is the third episode of our three-part mini series on glyphosate, environmental toxins, its impact on our food, our bodies and our health, and today's episode is really about solutions.

So I'm going to be talking with Caroline Allen of Beam Minerals and we're going to explore the vital role of minerals in our health, in our ability to detoxify, to create essential energy for our bodies and maintain gut health. So I'm really blown away by all of the research she brings to this conversation and I'm really excited to share it with you, because it's a simple, simple supplement that I incorporate into my day and into Remy's day every single day in order to optimize our health, and I think that this is going to help you guys feel much more comfortable with living in this toxic world after all of the scary things that we've shared through the last couple of episodes. So stay tuned, get excited and let me know what you guys think. All right, hi everybody. Today I'm here joined by Caroline Allen from Beam Minerals, and I'm super excited to learn more about minerals and the products that she's created. Thank you so much for joining me, Caroline.

0:01:15 - Caroline

Oh, it's so great to be here, Chloe. I'm super excited to have this conversation with you.

0:01:20 - Chloe

Awesome. So why don't you give me a little bit of a backstory on how you got into this? I know this wasn't a field that you started in, so what was that winding path for you?

0:01:32 - Caroline

You know, I think, as you know from your own path, life is what happens while you're making other plans. That's a little bit so. What happened with me is that I was in the corporate world in a tech career, kind of a top gun for hire in the project management world, and I burned out of that and I was in really ill health. I had flat-lined adrenals, I had really bad inflammation in my gut. I had really bad inflammation in my mouth with super receding gums, bone loss in my teeth my teeth were not hard. I had sinus infections continually, just every time a season would change and I had really like continual headaches. I would say in a week I would have four to five headaches every week. That would really take Advil. Take something for it, of course, and also that's not great for the gut. So I was really in a really bad state and I met my now business partner, Dan Howard, and he had a small company selling essential oils and minerals these minerals and he suggested that I try these minerals and I started taking them and after you know, they're really easy to take because they're liquid and they taste like water. So I'm like cool, I'm not really great at taking supplements, like to take a lot of pills. They don't swallow well, so I tend to. I'm not good at that, but these were real easy. So after a few months like two months about I went back. I went to my dentist and my teeth cleaned and at that time I usually had to have my teeth cleaned because I had such sensitivity. And I went and she started working and I was like I think it's okay and she cleaned my teeth and then the dentist came in to do the exam and she looked at my teeth and she exclaimed. She was like wow, what's different? The pH in your mouth has completely changed. The tissues don't look red and inflamed, they're healthy and pink. You had your teeth cleaned. There was very little bleeding. What has changed? And I started thinking about it and I, you know, first I really didn't know and then I was like I think it's these minerals that I'm taking. She was like okay, keep taking them.

So then, about four months in, I went to my naturopath and before I went I had my adrenal test using the saliva test. And when I got to the appointment she opened up the book and I remember her looking and kind of being surprised and turning the book around and she showed me that my adrenals, which had literally been below flat line on the chart for two and a half years and we had tried so many things with absolutely no effect, they were one third up the way on the chart with their natural sawtooth pattern, and she was literally over the moon excited by this and she was like what has changed? What are you doing? And I said you know, I think it's these minerals.

So over a period of eight or nine months, you know all of the inflammation in my gut, my elimination issues completely resolved, my mouth completely went back to great health. Although the recession doesn't go away, I now have only like ones and twos in terms of the depth of you know, when they test the depth of the pockets in your gums and I never, I just don't knock on wood, of course. I don't get sick. I don't get colds and flus. I haven't had a sinus infection since I can remember and also things like allergies. I feel like my system has more bandwidth. So, as an example, I was gluten free for eight years, even before I started taking the minerals, but what's happened now is that I can actually even eat a little bit of gluten once in a while without having the impact. It's like my system has a level of bandwidth to deal with the, you know, inflammation that occur from environmental toxins or different things that my system struggles with. So that's what's happened.

0:06:05 - Chloe

That is amazing. It's always so incredible when you hear stories like that and you're like it's something so simple, and sometimes it's a combination of things right, but a lot of times, especially when it comes to minerals, I find that it can be really just that simple, because they're so essential for day-to-day functioning on so many different levels, and it's something that, as a society, we're just really really deficient in. So I think that the work that you're doing is beautiful. I love, love, love the products and I use them with me and Remy daily and I'm excited to keep exploring them and learn more. So why do you think that the minerals had such a profound impact on you and, like, why don't we talk a little bit about how we are deficient in minerals as a society?

0:06:52 - Caroline

Yeah, Well, you know, because I had such an incredible impact after that first year I went, I really started getting curious. I was like how could these little cups of liquid that tastes like water have such an incredible impact? And even people in my family they were like, wow, what's going on? You look so good, you look like you feel so good, and so I was getting a lot of reflection of that as well. And I started doing research and I first started studying humic and fulvic substances which are these plant-based mineral substances and where they come from and how they work. And then I started getting into well, why was I depleted? And I started studying mineral depletion and how it happens in the body. And then I started studying mineral replenishment, which led me into cellular biology, molecular biology and how minerals operate in the body and why they're so important and what was going on in my body at that time that was causing so many various chronic symptoms.

And the thing that I learned is I mean, I had so many ahas, chloe, who was literally I would literally go to my business partner. I'd be like, oh my gosh, you should, can you believe this? People know this. And slowly, by doing that, that's why I basically said to him forget essential oils. They're very nice, but it's the minerals. People need the minerals and we need to bring this information to people. So there are several ahas, and the first is we are all mineral depleted and there are some reasons for that, which are that, when you think about it, when we were kids, did we drink filtered and bottled water? No, we drank out of the tap and we drank from streams. And all of that mineral, all of that water has, of course, potentially environmental toxins, but it also has a lot of minerals. That alone is greatly decreasing the mineral intake that

we get every day. The next thing is that our food supply is mineral deficient and most people already understand that, and that's, for many reasons, associated with production farming.

And one of the things I want people to understand is it's not that production farming is terrible and they're evil. It's that anytime you grow plants in soil, do you know how a plant grows? It sucks the minerals out of the soil and that's how all those enzymatic processes happen that create proteins that you know, et cetera, and carbohydrates that build that plant. So, even in your backyard or a garden that you're growing, when you're growing plants in that soil. Year after year after year, you're depleting the minerals in that soil. So this is a systemic issue, of course, because in a production farming mode we're doing it so intensely sometimes more than one crop in a season even we're really depleting the soil.

Then you add on to that the use of glyphosate, which is the herbicide that's used in production farming to kill the weeds, and the plants have been genetically modified to live. When they spray this herbicide on the plants, directly on the food that you eat, the weeds die and the plants live. And then when you ingest the plants, you get this glyphosate molecule into your system and one of its negative impacts is that it actually chelates out beneficial minerals from your system, probably copper, iron, molybdenum. There's some others as well, some that I mean even molybdenum. Most people haven't heard of that, but it's actually very, very important mineral in your system for certain enzymatic processes. So we said a lot.

0:11:08 - Chloe

Well, just to go back to touch on glyphosate, anybody who has listened to probably any of the podcasts that I've recorded so far, I've brought it up, at least in every episode most likely.

It is truly the thing that I consider to be the greatest health threat that we have in the most insidious toxin that we are dealing with as a society, and I just I can't underscore how essential it is that we reduce our exposure to it and work to eliminate it from our system in various different ways. And, as you said, glyphosate was released in the 70s as a non-specific herbicide, and so it was very well controlled because it was killing everything. But then, once in the 90s it came out the Lanzando, came out with roundup ready plants, and now they're just spraying it indiscriminately without any sort of concern about arming their harvest. In fact, they get more yield the more glyphosate that they spray. So I just think it's so essential for people to start looking at organic foods and finding ways to reduce those. I've been so fascinated by the ways in which minerals are able to support our bodies ability to manage those toxins as well.

0:12:34 - Caroline

Yeah, and that is the exciting news and we can get into how plant-based minerals, and specifically the humic molecule, can remediate the effects of glyphosate while it's in your body and also remove it from your body. So it's incredibly important. We are experiencing systemic glyphosate exposure and, in some cases, toxicity in areas where it's used a lot. For people who are interested, we're going to be doing a talk actually with several people about this particular issue, about glyphosate, and also about remediating it how to remediate it in your body and remove it At the biohacking conference. It's going to be in Orlando at the end of June and I think it's going to be a really great session That'll be also available for people to look at. But the big thing is about depletion in the body and why we're all depleted. So then, the next piece that I got into when I was looking into this was how do we replenish minerals and why are we all depleted? When there's all those bottles of pills, calcium I mean, everybody's taking all this stuff, they're taking LM&T, they're taking all these powders, pills and electrolyte drinks and things why are we still depleted? That's I tell you. It blew my mind when I really started learning about the replenishment system in the human body.

The paradigm shift is this we tend to think about our body the way we think about our car. I need gas put in gas. I need oil put in oil. Maybe some brake fluid once in a while. Whatever, I

need potassium put in potassium. I need magnesium put in magnesium. And some scientists somewhere along the line created these minimum daily requirements and said you need 320 milligrams of potassium and 240 milligrams of magnesium every day. You and I need the same amounts, and it's absolutely ludicrous because every one of us is different, our bodies work different, our guts work differently, we do different things in our lives. So just the idea that there are minimum daily requirements is quite ludicrous. So then you get into the whole concept. When you're talking about minerals, rather than thinking about your body like a car, you have to think about it completely differently and you have to think about it through the lens of bioavailability.

So when we think about minerals that we most, most minerals that we take in pill powder, even electrolyte drinks, anything that's flavoured most of the mineral content in those comes from rocks, shells and bones, and some of it, a lot of it also for electrolyte stuff, comes from salts and we'll talk separately about that. But how well does your digestive tract, your human digestive tract, break down rocks, shells and bones? Not very well. You're really not well evolved to digest those things. Plants, your gut is very well evolved to digest plant-based material. So, right, there is the first kind of divergence between regular, what I call mega dosed mineral supplements that are measured in milligrams.

Okay, so you have to ask the first thing you have to ask is what's the source of the mineral content of this supplement that I'm taking? That's the first thing, because what you have to realize is that everything that you eat, everything that you take into your mouth, has to be digested down to its molecular components, its ionized components, before it can be absorbed. And most of what we eat does not, and particularly rock, shells and bones. So when you take a megadose formatted supplement, you actually only digest down to their ionized components, maybe 10 to 12%, maybe a little more if you have an incredibly healthy digestive system with lots of enzymes, etc. Okay, so 10 to 12%. So you've taken your 240 milligrams of magnesium and now you've digested 10 or 12%. Now let's think about.

So that's called digestion, first stage of bioavailability. The second stage is absorption, meaning getting it through your gut wall into your bloodstream. And the way that happens is it blew my mind when I learned about it because, again, we think like anything I throw in there is going to, if it gets small enough, it's going to get in. But that's actually not the case either, because your gut is lined with these. You know this, these finger-like structures there called V-Li, and those V-Li are lined with these cells called epithelial cells, and those epithelial cells are completely lined with these receptor sites. And the thing that's amazing is those receptor sites are specific to specific elements. So you have a huge amount of magnesium receptors because you utilize a lot of magnesium, a lot of potassium, a lot of calcium, but you have a much lower, smaller number of very important receptor sites for phosphorus and copper and chromium and zinc and all of these. So actual specific receptor sites. So when you flood your system with all this magnesium, this 320 milligrams, 10 or 12% of it gets broken down but a much smaller percent actually gets absorbed into the, into the bloodstream through your gut. Of course, this all is related to the health of your gut lining because the glyphosate is in our. We're experiencing glyphosate exposure. So many of us are experiencing gut dysbiosis or leaky gut. Where those the receptor, you have fewer active and healthy receptor sites, so your absorption capacity is already limited. But let's say that some smaller portion of 10 to 12% to actually get absorbed into your bloodstream.

You're only through the two out of three stages of bioavailability. And this is the most exciting part, okay, because the interesting thing I learned that completely blew my mind is that most minerals do very little or nothing for you unless they get into the inside of your cells. Inside of your cells. So you've got like 37 trillion cells in your body. Every single cell requires minerals. It's not nice to have an.

Inside your cell is the are the mitochondria, and these are the energy generating units of your entire body, and they run off two things they they're fueled by amino acids and minerals, and your body makes a lot of amino acids but it makes no minerals. You have to ingest them. So all the minerals that you take in have to go through these three stages of bioavailability. So the challenge is that you might get, let's say, 10 or 12% of this magnesium into your bloodstream, but most of us don't have very effective assimilation processes in our body and that's because we don't have very many flavonoids and flavonoids are transporters that help transport things across the cell wall. The way I like to describe it it's just because it's a funny image and people can remember it is you take somebody with a backpack and you fill their backpack with minerals and they go on into the cell and they empty out their backpack in the cell.

Okay, and that's what fulvic does, so fold. The fulvic molecule is much smaller than a cell and it can carry 60 times its molecular weight of minerals and nutritional content through the cell wall. And it not only that, when it goes through the cell wall it gets a free pass through the cell wall. So in the same way that things absorb to the into the bloodstream with kind of receptor sites, when things go through the cell wall they also require it's not just anything can go through the cell wall, yet the fulvic molecule can. Anywhere there's an opening, the fulvic molecule goes straight through. So this is what I mean when I say you're evolved to utilize these plant based substances. All plants and animals across the earth that are made of cells are evolved to utilize these substances. It's so fascinating, isn't it?

0:22:16 - Chloe

I mean and it's one of the things I love so much about talking to you about all of this is the pure curiosity and excitement of like learning these things. You know it's just. It is so fun, so simple and so beautiful. Once you start diving into it, you're like yes, this is actually essential and this is something we've clearly evolved with throughout time and that we need to find ways to bring back into our data Today lives, and here's exactly why it's so incredibly powerful. I love it. So please continue, sorry.

0:22:49 - Caroline

So the cool thing about that fulvic molecule again, it's so small, carry 60 times its weight of nutrients and minerals through the cell wall, gets a free pass, and then it does something that no other molecule on earth can do it changes its polarity and when it does, all those things drop off inside the cell and now they're available to the mitochondria as cofactors for its, its, its energy, its all sorts of processes that it goes through in its life cycle.

So then what it does because now it has a different polarity is things cling to it, and what clings to it by a waste toxins, heavy metals so now it becomes a detoxification agent and it carries those things out of the cell. And it does this through something called the concentration gradient. The way I think it's easiest to describe that for somebody who doesn't understand, hasn't had any cellular biology in high school or grade school it's if you put a pinch of water in your salt, in a salt, in a water glass, you'll see those salt particles at the bottom and you come back an hour later and they're completely gone and you taste the water and it's completely evenly salty because the concentration gradient tries to totally create an exact like it wants to have a balance of salt throughout the whole water. So in any liquid substance which you are inside of you, you're completely an aqueous liquid solution in there. It's constantly doing that, so it will try it.

If you have more heavy metals inside than outside, it's going to take them out. You see, yeah, this, this tool, this, this fulvic tool is, is removing Bio waste, heavy metals, toxins from and from your cell and it's bringing nutrients and and Met and minerals into the cell. What your transporter?

0:24:55 - Chloe

Yeah, which again is another massive issue that's impacting our mitochondrial health and our health overall, and I think you know, you'd probably agree, that mitochondrial health is at the heart, or mitochondrial dysregulation is at the heart of a lot of health challenges autoimmune disorders and you know a particular interest to me Pediatric developmental disorders. You know, my son Remy has his rare genetic disorder and most of the kids have some level of Mitochondrial dysfunction, arguably a lot more than many of the tests are picking up, as I've learned into the world. But you know the, the dual action of Providing that fuel and that energy and then also being able to detoxify some of these things that are impeding the health of our cells and the functioning of ourselves is just such a beautiful Symbiosis there.

0:25:48 - Caroline

It's amazing you know, and particularly with kids, because you know, kids bodies are smaller and so the glycosate Exposure issue is quite a big thing. In fact, I was just speaking with Kieran Christian, who is Owns microbiome labs, or he did, and they just finished some a study With three year olds and they, they exposed them and I asked him if he, if I, could talk about it. And it has been published and they exposed him to a very, very minute amount of glyphosate much, much Magnitudes, less than the FDA says is fine. And in three weeks, three weeks those children experienced the beginnings of gut dysbiosis and Some SIBO like effects. Okay, and then they, they also turned them around using their products. So that's they. They supported the gut and helped it come back, but so I didn't leave the like that and the kids are likely being exposed to it either way.

0:27:00 - Chloe

I mean, what is it? Cheerios has 400 micrograms per milligram or something like that. Like I mean the rates that are on our foods and the commonly eaten foods by children, even foods that are considered very healthy. I remember I've been a psycho about Remus diet since he was born and then, as he's had more challenges, I've modified here and there, but he was on a keto diet and he was probably like two or three and I had him at my parents. So I come over and they're feeding him Cheerios and my mom's like they're gluten-free, though I'm like that, basically glyphosate pops. Like what are you doing to my channel?

0:27:38 - Caroline

Something for people to really understand is one of the reasons Cheerios are glyphosate pops, even though they're gluten-free, is that? And this is? This is really disturbing to know? But One of the ways that they get oats to dry more quickly is they put Glyphosate on it. So they they harvest the oats, they lay it out and then they spray glyphosate on it because it dries it more quickly, so they call it a desiccant. It makes it dry more quickly. So Particularly oats is it's really an issue. You do not want to eat non-organic oats.

0:28:15 - Chloe

Yeah, it's, it's riskier. I know garbanzo beans also are another big one, but yeah, it's. Um, there's the miss. Yeah, I. I mean like I've never met a child with special needs of any Level who did not have a gut issue, and I know that that's the main thing I still struggle with with Remi, but it is. They're completely intertwined. I see it every single time and this is one of the main things that I'm really focused on in terms of building health in our families is Really looking at the things that are gonna move the bar in a dramatic way, and I really do think that minerals is one of those Foundational supplements that are essential, and I'm not big on taking like a ton of supplements or even giving kids a ton of supplements again Because of the absorption issues, because a lot of times they're not even absorbing them. I know I've probably wasted thousands of dollars on supplements for Remi that his gut wasn't able to absorb.

0:29:16 - Caroline

And and you know, one of the things that I really want to help people and this is I'm really on a mission to change the paradigm, particularly about mineral supplementation. But I think when

you really start really realizing the way this bioavailability works, it starts making you look at every supplement you take through that lens how bioavailable is this really? Because what you're doing when you put a mega dose formatted mineral into your gut and I know you use elementy, but I don't I think you should use electrolyze instead, just use electrolyze. You don't need elementy, because what it does and I hope I'm not gonna get in trouble Someone some days gonna from the company's their ass, send me a cease and desistors loves it. But the problem with mega dose formatted electrolytes is that you're creating imbalance in your gut and you know this. What the body does? The body is a homeostasis engine. It's an end. It's constantly cleaning, healing, trying to create balance, using that concentration gradient. It's it is constantly doing this work. And when you create more work for it, actually by adding a huge amount of huge relative to what is necessary, of this non bioavailable or very low bioavailability Substance into your gut, you're creating a lack, you're creating imbalance and and now. Your gut is hot now, having to work to eliminate excess so that it can get back to homeostasis, and you're keeping it from other activities that it could be working on. So I, I really want, I really want people to think about Trying, take three months and instead of using mega dose, any mega dose formatted electrolytes or minerals, just use plant-based humic and phobic substances and then see. See what the effects are. You know, and relative to kids in particular, and kids particularly with special needs, I think it's useful to mention just because it gives you a specific story about this.

We we've been working with a group called a bright minds, newer development in Salt Lake and they work with kids with autism, other all sorts of different developmental issues, behavioural issues, and they started they want to try our minerals with their clients. So they started with some twins to six year old girls, both autistic. One was much higher performing than the other, she could speak, she could eat by herself and she's just much higher performing, and the other one really struggled to make any words, she could not eat by herself, she had lots of outbursts because she's struggling to communicate, etc. And they start and they they were new to the program and they have a specific protocol that they use with everybody. They started the protocol but with the one lower performing child. They gave her our minerals and within four days Four days that child started to speak. In two weeks her outbursts were gone. She hurl. She also has had some elimination issues. Those were gone. She was able to eat by herself and she actually exceeded the other child in terms of performance In like a month.

So this, in art of all, it's incredible. So this is I'm trying to help people to understand how much Minerals fuel the mitochondrial function which supports development, which supports the nervous system, and development and nervous system are very affected. I mean are very connected. We know, you know fear affects, you know how the body works, you know, et cetera, et cetera. So now this is your area.

0:33:43 - Chloe

Well, yeah, well, I was just going to say it's back to me. Just it's tying into Chinese medicine. To me actually, more so is fear. Is I keep thinking, as you talk about minerals, how that's really what we would consider kidney chi in Chinese medicine? It's sort of that essential essence of our bodies that you know is sort of challenging to replenish but like really essential in everything that we're doing, that foundational chi. And so when you said fear, fear is the emotion of the kidneys, so that's what taxes it the most. So it's just sort of tied in there when I'm thinking about sort of how our nervous systems are working, how when we're in fight or flight, we're not able to get into that rest and relax, rest and digest and like process things you know, both emotionally and physically in a way where we're able to absorb them. And that sort of ties into the spleen in Chinese medicine and overthinking and over worrying. But the spleen in Chinese medicine is also digestion. So that spleen kidney connection is always really interesting and often very underdeveloped in children with special needs and things that we're trying to boost.

But it is just fascinating to see the ways in which they connect and it's terrifying to think also, you know the dramatic rise in chronic health disorders in children.

I think last, I think four years ago, there was a study which was before the pandemic, so I'm sure it's higher now actually that 54% of children had a chronic health disorder. So it's not even looking at just the children with special needs, which I could run those stats also because they're pretty disturbing. But it's really, you know, 54% of kids, if not 100% of kids, who are likely running deficiencies in minerals because they're just not getting it day to day. And this is really I wouldn't say the first generation that's being brought up on glyphosate, but sort of the second generation. You know, like if it became really prevalent in the 90s. A lot of those moms and dads who were exposed to glyphosate throughout their life are now having children and I think that that is further impacting the health of the kids, as they're, you know, having babies now and it's kind of terrifying to see the trajectory and to think about. You know there are, there are a few ways that make such an impact, like what your minerals do.

0:36:11 - Caroline

Yeah, and so let's actually talk about the humic molecule, because now we've. You know, I always what I say is there's so many people in the world and who are running around, you know, crying, ah, you know something's wrong here. But I really want to bring solutions. I and and that's what's why, why I'm so inspired about what I'm doing and I literally I feel like the minerals wake me up every morning and they're like get going, get going. We got to get this in more minerals in people. You know so, um, because you know, just beyond the fact that we're all mineral depleted because of the foods and the water we're drinking, right, so you take a mother who's gestating, and now she's gestating with low mineral content and glyphosate exposure and and that's where we end up with and other environmental talks and exposures, so that's where we end up with an increase of um. You know children with chronic issues already, like young children with chronic issues, so that's that's. And then you look at a child who's developing and they're drinking. You know, we hear it all the time. You know, when I was a kid, I never heard of kids coming off the soccer field, you know, with cramps. I mean, we all played soccer as kids we never got any ramping and all the kids get cramps now because they're drinking Gatorade and they're drinking, you know, and they're drinking um uh water filtered and bottled water and they're eating foods and their glyphosate exposed.

So let's talk about the humic molecule, because this is really cool and it has two. It has, uh, really incredible capacity. So the humic molecule is completely different than the phobic. The phobic, again, is really small, much smaller than a cell, and it's that intercellular transporter. The humic molecule is much larger than a cell and it hangs out in the bloodstream. It's a strong electrolyte, actually a that's a technical term. As part of its molecule it includes uh like 70, plus minerals also, and it's it has a huge amount of surface area on the outside. I like to describe it, even though this isn't what shape it is like a Velcro ball.

It's very sticky because of its electrolyte charge, has a huge amount of surface area and things stick to it like heavy metals, like free radicals, those things that cause oxidative stress, which are really problematic in your system. It gathers those like it's exponentially the best antioxidant that you can have in your system. It also uh binds with other just environmental toxins and bio waste in your body and it also adsorbs glyphosate, and that's a specific um process. So what it does is it binds with it and then it creates a biofilm around the glyphosate molecule and once it puts that biofilm around it, it starts breaking it down. And as soon as it starts breaking that molecule down, it no longer can have its negative effects in your system, which include, you know, inhibiting a certain set of enzymes that are really important for keeping environmental toxins out of your body. They're what keep your gut from having leaky gut and also the glyphosate chelating out minerals from your system.



So once it starts breaking that molecule down, it can no longer have those effects and then ultimately, that humic molecule gets so heavy at a molecular weight that it falls out of suspension and it leaves your body through all of the elimination channels. And that's really important to note relative to detoxification protocols, because people who are involved have done detox there. They know that they talk about having certain channels open before you say, do a liver detox or whatever. The beautiful thing about the humic molecule is it uses every single detoxification channel in your body breath, tears, saliva, sweat, skin when you rub your hands together, of course, urine and feces. So it uses all of your skin as a detoxification channel. So the beautiful thing is that when your system is full of this, is really well saturated with humic, you have. I call it mother nature's janitor. Doesn't constantly gathers, cleans, picks up and removes all of these things heavy metals, the free radicals, the bio-waste and toxins and the glyphosate.

0:41:17 - Chloe

Well, and I think that that's so I was just going to say I think that's so essential to have that daily sort of regulation and uptake, as opposed to sure you can do an intensive cleanse, you can sauna or do whatever you're going to do here and there, but it's the day-to-day changes and choices that we make and the way that we live our lives that's really going to have the greatest impact on our health and particularly even if you're doing detoxification protocols or let's say you're doing red light sauna every day, and what does red light do?

0:41:50 - Caroline

it does make your cells detox, so you want to get those out of your bloodstream and that's the humic. It's actually a really true, a cool true story. There was a scientist who was tasked by NASA to determine how to keep astronauts in space longer, because they get a lot of radiation exposure up there, and he determined that it was humic. Keeping their systems infused with humic minerals was the best tool. He actually ended up creating some interesting products that are no longer available. But there is really interesting. It's called the Frost Protocol and if anyone's interested I can provide. I have the report available.

So the other thing that the humic molecule does it's also important for this hydration piece, because you talked about rimming and making sure you feel like he doesn't drink enough. So one of the cool things about the humic molecules it hangs out in the bloodstream and what it does is it interacts with the cell walls and when it does that with the proteins in the cell wall, it opens more channels. So if you're in a room right now and you've got so many windows and doors, imagine there's double the amount of windows and doors. Now you have more channels for that fulvic molecule to carry nutrients in and bio wastes and toxins out. So you've actually taken your system and upgraded it. You've made, created more cell wall permeability so things can move in and out more easily and you've created the vehicle for the minerals to go in and the toxins out. And you've also provided all the mineral, the mineral content that you need, that the mitochondria need. Do you see how amazing it is? It's incredible.

0:43:40 - Chloe

It's just so beautiful when we go back. As I was saying before, I keep falling away from the Western studies because it's like if we just look to nature, there's an answer that's so much more simple and so much more nuanced and beautiful. That just works so synergistically with our bodies, because we're created to work that way.

0:44:03 - Caroline

Exactly so many great things. First piece that might be useful for people and I'm happy to tell a little bit about our products. But just because we were talking about the glyphosate, there are some ways you can get tested for glyphosate and you can also test your food, you can test your water, you can test the soil in your backyard garden and we can work together to provide

those links to people if you want to. That is all. So our products. There are other humic and fulvic products which are any humic and fulvic you can get. I recommend it.

Some of the things about our products that are really beautiful is that you've heard of humic and fulvic acid and our products are not acids. The main great thing about that is that acid molecules, just a little larger. It requires some digestion first, and products that we call them complexes to differentiate them from acids. The molecules are completely ionized. They require no digestion. So when we talked about those three stages of bioavailability digestion being the first, the absorption is the second and assimilation into the cell as the third our products well, excuse me, our liquid products completely skip the digestion process. They are immediately when you drink them. They are immediately available for absorption. So our fulvic product is called electrolyse. When you drink it, by the time it hits your stomach, your body is already utilizing some of the mineral content. It absorbs directly through the tissue in your mouth, your esophagus, your throat, and then it's immediately available for assimilation into the cells. And the humic also is very available, but again it does require getting into the digestive tract before it actually starts absorbing.

0:46:21 - Chloe

So how do you? I have pretty much all of your products. I believe I truly do use them and I get quite a kick out of spraying Remi in the face with some of them also. I'm also curious and some horrible about taking care of my face, like is that helpful for your skin?

But how would you recommend that people take the products optimally and for anybody listening, if you do have kids, seriously, this is the easiest product to incorporate into your children's lives. They will not even notice it whatsoever. Just put it in their water ideally water not like soda, but like throw it in their water, you know, like they won't even notice it. So I really can't stress enough how easy and essential these products are. So I'd love to hear how you recommend that people use them. I also, just as a side note, if anybody's considering getting pregnant, I'm sure we can't recommend that you use these during pregnancy. I don't know if there have been tests. I don't know. If I was pregnant, I would certainly be taking these for months before getting pregnant and throughout my entire pregnancy and be supplementing while nurse feeding, nursing and all of the jazz. So just throwing that out there, since I'm not sure whether you can.

0:47:36 - Caroline

In particular if you're having fertility issues. You know like they'd actually is. One of its correlations is infertility issues. So very important. So the electrolytes being that electrolyte replenishment tool that you can use in your kids water when they're going to play soccer, you can also just give them half a, half a or not half a cabinet. You would adjust by weight. We have some direction about that on our website.

And then the Schumich product that's called MicroBoost and you know the standard amount that someone, an adult, would take is half an ounce of each per day. It's the basic, fundamental or foundational support. It's all the minerals you need. Like, imagine, if you're taking any other mineral supplementation, you do not need to take it, unless you've determined that you have a deep depletion in a particular mineral. Then you might want to bring that one particular mineral up by finding a very bioavailable source of that specific mineral. Otherwise foundational support. And I'll even say that we've worked with many people who have some deep depletions and only by taking our minerals have they brought those depletions up. And there are some reasons for that, having to do with the way that minerals work in balanced pairs. So when you create, when you provide the minerals in a balanced format. It actually supports homeostasis and balance of all of the minerals in your body. It's a longer conversation that we could geek out on another time, but the two products electrolyse and micro boost.

Again, the beauty about them is they have no flavour. They're super easy to use with kids, kids like them, I mean. We have little kids who come out and say I want my minerals. You know, with the smoke Families that line up the cups, you know, in the morning and the kids just pop their shots and go out the door. And I guess, if my kids are grown, the other thing I say is you know, if you're 20-year-old, 20-something boys will take your minerals. You know they're good, that's true. You know what I mean, because and they both my younger son has had a lot of sleep issues and the thing that has solved his sleep issues is taking our minerals regularly. So he even went off to Spain. He lives in Spain and he's like Mom, what am I going to do? I've got to have my minerals, you know. So we arranged for him to have his have the minerals when he was there.

0:50:11 - Chloe

It's always funny traveling with different things and you're like, is this? Well, especially with CBD, I would take Remy to a clinic down in Ecuador and I would always bring like a ton of the seizure formula or Remy's revenge formula that I had to give to all the families down there because there was a lot of children on the spectrum and with the severe epilepsy. And I would get down there and I'd be like I might get a rusty like and I'm down here by myself in Ecuador with Remy. I'm like I don't know if this is legal at all. I'm pretty sure it wasn't legal, but we made it. But I was like I'm not gonna shy away from giving these kids. It's something that could help them.

0:50:52 - Caroline

My sister-in-law goes to Thailand every year and she does the same thing. She buys a ton of minerals and takes it over to people over there. So, yeah, so I did. So I do want to mention about the spray, because you were talking about the spray. So we have the. They're really, they're revolutionary and they're the full Vic. So remember how small that molecule is. It absorbs right through the skin in three seconds. It recharges the electrical system in the area. If you spray it into the face and you breathe it in, it absorbs. You get electrolyte replenishment right through the tissue, particularly in your sinuses. It's very porous but it's incredible for your skin.

We have different sprays that are for different uses, particularly for families. We have one called Bubulites and it's literally for any scrape. It works incredibly well for diaper rash, any kind of little skin irritation. It works on hives and you just spray it on and it smells little lavender-ish. It's actually a blend of essential oils. We also have one called Happy Lights. That's incredible for kids. If you have any kids who have special needs and maybe have outbursts or have anxiety or get upset easily, we don't recommend spraying it on them. We recommend you giving it to them as a tool to use. And yet the way we've designed the bottle, it has a certain look that's attractive to kids. It has a little smiley face on it. They gravitate to it.

It's incredible for young teen girls who are going through puberty and dealing with hormonal imbalance. We have mothers who we suggest they bring it in, set it on the counter, say nothing, and then when their daughter is around they just spray themselves. And then it has bergamot in it and bergamot they call it Nature's Prozac. So when bergamot goes through your olfactory system hits your brainstem. With most people it releases endorphins and when you think about your body, anxiety, depression, upset. These are washes of neurotransmitters in your body. So when those endorphins are released, which are also neurotransmitters, you just break the cycle of that.

So they're incredible for people with panic attacks. You just spray it about 18 inches from your face, like six, like a fair amount, and you breathe it in. That's all you do. And with the mother sprays it, the daughter kind of smells. It says what's that? And the mother kind of doesn't give him much. She says, oh, I don't know, it's something I got, somebody gave it to me and pretty soon it will disappear. And then the daughter comes back a week later and says do you have

any more of that stuff? Because my friend wants one. And then it becomes a thing at school where all the kids are like who has the happy lights I'm having? You know they're using it.

0:53:55 - Chloe

Well, and it's so important to give kids those sorts of tools to be able to say you know, I always say like if a kid can learn just the belly breathe or just be aware of their body, you know, in our society we're so tapped out from our body how we're feeling. I've said this before on the podcast. It'll be like I'll ask patients when the last time they got their period was. They'll be like oh, three months ago or something. Or you know how often do you poop? And they're like I have no idea. And you're like do you really have no idea? Like I'm so confused. But you know, we have a TV show. I didn't know I was pregnant. So there's there's a lot of disconnect. So, empowering children with the skills of being like okay, this is how I'm feeling. Here's something I can do to try and intercept that and shift my mood and shift you know what's going on and take control of you know my day is super, duper powerful and that, you know, moves forward into their life in profound ways.

0:54:50 - Caroline

Yeah, so you struggle with like heat stroke, because they don't. Some kids do, I did. As a kid my mother used to give me saltwater, you know, and they they're asked for the. They're like I need to electrolyze because they can feel it coming on. Yeah, because I so quickly.

0:55:09 - Chloe

Yeah, it's amazing I I always think of, in Chinese medicine, water watermelon is a summer heat herb, so that would probably pair well with it. I'm curious. So I can't think of pretty much any health condition that would not benefit from mineral supplementation, particularly because really what we're doing is we're helping, you know, support gut health, we're helping reduce toxins, we're up regulating the mitochondria and helping them function more optimally, so we're helping with energy digestion, immune support. Are there any like? I'm curious just in terms of what you've seen with people who have been using it. Are there? You know it's auto, I would imagine autoimmune diseases are dramatically impacted by the supplementation of high quality minerals.

0:56:02 - Caroline

Yeah, so so you know, there's a statement that it's attributed to a guy named Linus Pauling. I don't know if some people say he didn't say it but it says that if you follow any chronic disease down, you always end at a mineral depletion or deficiency, and so what I say is minerals don't heal things, but they absolutely provide the body with the tools to heal itself, which is what your body knows how to do, much better than we do in most cases, and your body is constantly doing it. So I can't think of an instance where mineral replenishment would not be a good idea. I will say that people who have autoimmune, people who have had the, have had COVID or have had the vaccine and are dealing with spike proteins in their system we're having a lot more people who get Herxheimer, and Herxheimer is basically just a histamine response in your body. It's not a bad thing. It's basically your body going yay, I can get rid of all this now, and it tries to do it right now, and it gets you a rash or it creates some.

There's a huge number of symptoms, and I also do. I have a great article on our website that I could provide to people a link to if anyone wants to learn and read about it. It really helps kind of demystify it and help you understand it. But if you tend to be a person who is very sensitive to anything, I always recommend starting with a micro boost slowly, which just means taking half the amount and putting it in a glass of water and just drinking that over five to 10 minutes and then see how you feel, see if you have anything, and then do that again. And if you do get any kind of Herxheimer symptoms again they're all listed in that article then you just drop back and you just slowly introduce the and you'll easily. I haven't worked with a single person who hasn't been able to slowly titrate up to the full amount the recommended daily amount.

0:58:16 - Chloe

Yeah, it is amazing, the wisdom of our bodies. And it all comes back to the wisdom of our bodies and the wisdom of nature and finding the ways that we can use them together to build health. And that is really what your products do. I know in terms of my products we do. The Stigeric Extraction and hemp is such a mineral-rich plant that everybody kept talking about the entourage effect, and the entourage effect and all the different phytochemical of the plant work so much better together than just a single isolate of CBD. And so we found this extraction method and I was like well, this makes the most sense, like the minerals need to be in the final product, and I know for myself, I think that the products are much more effective because we have the mineral cofactors in with the herbs there. But it just, it really is such a fascinating topic and I'm really really grateful that you shared your time and knowledge with us today. This is so much fun.

0:59:16 - Caroline

This is so great and I really appreciate the collaboration with you, just in knowing you and what you're doing in the world, and particularly helping kids like Remi and other people who are adults who are struggling with all sorts of different chronic issues. So thank you for your work.

0:59:39 - Chloe

Oh, thank you. It's an honor and a privilege to get to practice the medicine I have I do and be Remi's mom and do what I can to share a little bit of the wisdom, the hard earned wisdom, that I've learned on this, this wild path that I've been on these past couple of years. But yeah, I would love to, I'm gonna. So, Remy, and I just started your supplements a couple couple of weeks ago. I'm curious to see how Rem does over the next couple of months. So we'll definitely check back in and I think we might have to dive a little deeper and get nerdy or next fall or something sometime in the future.

But I love talking with you. I really it's clearly just such a passion and I think it's you know again, it really I don't take many supplements beyond the herbs that I make, because I'm quite the supplement snob and I just don't think that it's essential to take that many. But this is something that is in our stack and will be there forever as far as I'm concerned. So thank you again for the products and I will talk to you soon.

1:00:46 - Caroline

Thank you so much for having me, Chloe. It's absolute pleasure.