## **BEH PODCAST - EPISODE 5**

## USING BEH BASIC PROTOCOL - MINERAL SUPPLEMENTS

Dr. Miller: Today we're going to talk about the liquid minerals: the humic minerals and fulvic minerals. The words humic and fulvic come from the same source. They come from ancient peat sources or ancient vegetable sources that are mined. The sources are from hundreds of thousands, if not millions of years ago. Your body extracts organic material from water, and this water is very rich in chelated nutrients, especially minerals and amino acids. Some of these compounds, believe it or not, assist with the health of your gut, and I'll come back to that in a bit.

There are two fractions when you do the water extraction. There is a fraction that is called a colloidal fraction, and there are basically two versions of this. There's Vitality Boost HA, which is not the first bottle we send you, but I encourage people to get a sample of that and try it. It's a little more robust, it has more in it, it costs the same, but some people find it a little off putting because it's quite dark, and it looks like hummus. So you get this colloidal, which means tiny little particles that are so fine that they go into suspension, but they don't settle out with gravity. And there's also the part that is actually soluble that goes into a real true solution. And if you filter out the colloidal particles and just have the stuff that's in a true solution, are the fulvic minerals, and that's called energy boost. And that's what we send in the first bottle with the home study program.

The minerals are really one of the more critical things in the program. The reason I say that is while I don't do a lot of testing with a lot of people who come into the office, I used to do a lot more. We can have that discussion in another talk why I don't do as much laboratory testing as I used to. But when I did do more laboratory testing, the one thing that almost everybody was off on was their levels of healthy minerals. Our foods are devoid of a lot of vitamins and minerals, especially minerals. Our water used to have a high mineral content when it came from Artesian wells or flowing water. Water that comes from reservoirs, or worse, is very devoid of minerals. So all of the places where we used to get minerals in our diet, our food and our water, don't have many minerals anymore and that has a lot of consequences.

One thing that was learned 50 years ago was that people with eye disease are low in minerals, especially Zinc. There's a real benefit to slowing the process of these diseases. It's interesting because in the ARED Study, the Age Related Eye Disease Study, which is quoted a lot about showing that people with degenerative eye diseases need vitamins, it didn't study minerals at all. And if they looked into it, they would find a lot of benefits of minerals, but doctors just don't pay much attention to minerals, I'm a doctor, that's how I know that. You're never taught much about mineral testing. Most doctors don't even know how to test minerals really. And so, the minerals are important; we're all quite low on

them, we need them.

One of the ways to know that you're low on minerals, really low on minerals is if you have problems with muscle cramps. If you get cramps during the middle of the night, after exercise, or even during the day for no reason,. that means, among other things, that you're very low on minerals. If you're having a lot of trouble with constipation, you're probably low on minerals. If you have a heart Arrhythmia, you're probably low on minerals. If you're having any kind of peripheral neuropathy, you might be low in minerals. The converse is also true, when you take a good quality mineral supplement for some period of time, you refill your tank of minerals. That may help all of the problems I just named.

It's important to remember that you can't correct a significant mineral deficiency overnight. You can only get minerals into your body so fast and it's important that you take the minerals regularly. We also recommend that you take them separately from all other food or supplements. One way to do the mineral supplement is to take it at bed time because you're not usually having any other food then. You can also take your ounce of minerals with some water first thing in the morning when you first stumble into the kitchen after you've gotten up. By the time you get around to making a cup of tea or making breakfast or anything like that, it will be well on its way and kept separate from the other things you're eating or drinking.

I said there were some things in the minerals that are actually in both the fulvic and the humic minerals in both the energy boost and the vitality boost. There are living and ancient substances in soil that regulate the bacterial populations of the soil. So, living soil bacteria are very critical because plants don't grow in dead soil, and the same is true in your gut. Your gut and soil are very similar and these substances that come from the soil that were there to regulate the genome or the living population of things that are in the soil, can also regulate the living population of things that are in your gut and they do that quite effectively.

When I say regulate, they actually do more than that. We are exposed to antibiotics from many sources from industrial agriculture, the overuse of antibiotics in medicine and even the antibiotic residues that come through the tap because our public water supplies don't filter those out. Just the antibiotics alone really upset the biome, the population of living biological things in our gut. We have 10 trillion bugs living in our gut. The bugs living in our gut outnumber our living cells by 10 to 1 easily. The consequence of these antibiotics is that a healthy gut, somebody who's not taking antibiotics, not exposed to antibiotic residues or pollution, somebody with a healthy biome may have 20,000 different kinds of bugs living in their gut. If you've had a lot of antibiotics in your life or if you're eating food that's contaminated with antibiotic residues, you may have just 1,000 or 2,000. The energy boost and the vitality boost, contain minerals which help increase the number and the variety of things living in your gut if you take

them on a regular basis for months. Increasing the diversity in your gut is a good and a desirable thing, but that's not why we use these products. This effect is something that we've discovered later on, after we'd been using them for years, but it is a very useful thing and that's why we will probably never change these products, but continue to use them.

The other thing you will find on a liquid vitamin bottle, are vitamins and minerals. There are a few minerals in there, but those minerals are of very little use to you or anybody else. Manufacturers mix in vitamin and mineral supplements, whether liquid or capsule or pills, because people like an all in one product. It looks good, it's very appealing that all I have to do is open this one bottle every day and that will give me everything I need. But there's something called best manufacturing practices which say don't mix vitamins and minerals in the same product. The reason for that practice is minerals are quite reactive and so in the liquid vitamins, the minerals react with the fat-soluble vitamins, which are the vitamin A, the vitamin D, the vitamin E, the vitamin K, by a spontaneous process called saponification, which forms these insoluble complexes that you can't absorb.

So yes, there are minerals in those liquid vitamins, but almost all of them end up in the toilet, because you can't absorb any of them. It looks good on paper, but it doesn't work well in practice. That's why we insist that you take a separate mineral supplement on top of the vitamin supplement, even though the vitamin supplement does say it has some minerals in it.

If you travel a lot and you don't want to carry a lot of bulky liquids with you, there is a freeze dried version of the minerals, called Immune Boost. That's something we can supply for you, but there aren't really many good separate mineral products on the market. A lot of the mineral products on the market are actually extracted from the beds of old seas and oceans, which is one place to get minerals. The problem with minerals from the beds of od seas and oceans is that there is a much higher concentration of heavy metals. Those things tend to get concentrated in bodies of water and they don't get concentrated in these ancient plant sources, which are much cheaper too. The mineral products that are derived from Shale or from the bottoms of ancient seas, have far too much lead, mercury, cadmium, tin, on and on. That's why I don't like those and why we don't use them.

So if you have questions about the minerals, email us, and we can include that in one of our question sessions in coming talks or you can just ask a question today during the Q & A, the question and answer period.