

Physica Radio Field Notes

Dr. Stephen H. Atkins

Well, Good afternoon everyone! It's Wednesday, it's lunchtime and that means it's time for 'Field Notes'. My name is Dr. Stephen Atkins and I am your host for this weekly recurring lunchtime segment. As always I want to thank you for tuning in, it's great to be here and I'm glad you're all here too!

You know before I get started on today's topic which came across through an email, I want to address another email I got and I've gotten this from quite a few practitioners, so I thought it would be a good idea to discuss it during the series. The question is basically, "when it comes to all the tinctures, can you mix them altogether and take them all simultaneously and if not, how do you do it?" It is a great question and here is how to deal with that.... All of the *Intrinsic's* may be mixed together, so if you have 1, 2 or 5 it doesn't matter they can all be mixed together. I mix them together in about an ounce or two of warm spring water. Likewise all of the homeopathics can be also mixed together in warm spring water, however, not in the same glass as the *Intrinsic's*. This is very important! Otherwise, you run the risk of what the alchemists of old described as "War in Heaven".

You might remember Dr. Cass speaking about the fact that the old alchemists described *the Earth* of a substance as the material aspect (the ingredients) and *the Heaven* of a substance as the place of gestation or the vibrational or energetic aspect of the substance. You don't want to mix up the energetic fields! This is where precision formulating comes into play. Just putting ingredients together doesn't make a *sovereign remedy* as Paracelsus called it. So what does? It's the recipe! Thank goodness we have truly sovereign remedies available to us today through the Physica Energetics line. I'm grateful, my patients are grateful and I know you are as well!

Now, ideally the spacing between the time you dose the botanicals and the homeopathics should be at least 5 minutes and for optimal absorption. So if you can put 5 minutes between the dosing the homeopathics and the botanicals this will far exceed the benefits than if you take them quickly one after the other. Also, NOT taking them directly into the mouth through the dropper substantially reduces the risk of contamination. So that's the deal with that!

Today's topic is going to be on calcium. I have gotten a lot of calls from practitioners about calcium, so I thought this would be a

great topic for today as there are tons of calcium supplements on the market today.

When it comes to minerals human bodies do not produce their own minerals. We must obtain them through our food and water.

Interestingly enough the same is true for Vitamin C. Humans are one of three mammals on the planet that do not produce their own Vitamin C. So if you are a human, guinea pig or fruit bat you need to get your Vitamin C through your food. Minerals are what remain from the ash of vegetables, fruits or animals tissue when they are burnt. It has been said that minerals come from the earth and they eventually return to the earth albeit transformed - inorganic to organic, non assimilable for to assimilable.

Out of 103 known minerals at least 18 of those are called essential for good health. Now when it comes to minerals, there are a lot of factors that are involved in the myriad roles of minerals, for example: they act as co-factors for many enzymatic reactions; they maintain the pH of our body; they facilitate the transfer of nutrients across the cell membrane; and if you refer to what Dr. Cass always talks about regarding the sodium/potassium pump or left spin you will remember that sodium is negative outside the cell and potassium is positive on the inside – negative is always drawn to positive, so the sodium/potassium pump plays its part in bringing nutrients in and out of the cell.

Minerals are really important to maintain proper nerve conduction and also helps to contract and relax all of our muscles (and I'm going to talk about that in a little while as a test for minerals); they help regulate our tissue growth and they also help provide structure and functional support to the body....think of bone and the bone matrix.

You know minerals are broken down into 2 basic classifications; macro minerals and our micro minerals. Macro minerals are the most abundant in the body for example calcium and phosphorous, potassium, magnesium, sulphur, sodium and chloride. Micro minerals may also be referred to as trace minerals, so that is kind of the difference there.

You've got to remember when it comes to the absorption of minerals, calcium for instance, that it's really a game of co-factors for the many different processes involved in metabolizing and utilizing calcium. You just don't take calcium and now your body is balanced. It doesn't work that way. Calcium is a game of co-factors, so the things that are dependant on calcium absorption would be things like source, for one; the systemic pH of the body; hormonal function; the body's hydration level (water AND electrolytes); other complementary minerals; also vitamins, fatty acids and of course, the digestive system.

You know, at a stretch, basically everybody gets enough calcium through their diet. What they are missing are the co-factors

that allow the body to absorb it. So when it comes to co-factors, one of the most important factors is the digestive system. Remember, the body cannot synthesize minerals, it must ingest them and calcium is only absorbed in an acidic environment which requires sufficient hydrochloric acid for uptake. And because of this factor, this is why I always reach for the Hypo Zymase.

You know I have talked about that in the past. Dr. Cass's, Physica Energetics' digestive enzyme has just the right amount of hydrochloric acid and glutamic acid in a base of digestive enzymes. Since you need hydrochloric acid to cleave minerals off of food, this is the one I always reach for. Now there are plenty of HCl products on the market today. Hypo Zymase not only significantly addresses the gut, it simultaneously addresses the small intestine. You can't address one without the other! Hypo Zymase covers both areas exceptionally well clinically and economically. I know from your emails that you're using tons of it like I do!

When it comes to fatty acids as the co-factor, you've got to remember fatty acids are necessary for the transport of calcium across the cell membrane and into the cell. Fatty acids also help to increase calcium levels in all of our tissues. Here is where BioOmega-3 or Omega GOLD does the job.

When it comes to systemic pH as a co-factor, bone is a major buffer of calcium and calcium is a major buffer for blood, so when the blood becomes too acidic what

happens? Calcium is pulled out of our tissues. Remember bone is tissue, so when the body is too acidic it is going to pull calcium out of the bones to alkalize itself. And you have to remember also that when the blood becomes too alkaline calcium separates out of solution, so if there is any excess calcium that gets separated out of solution it will be deposited inappropriately in certain tissues and this can cause a major, major storm of problems.

Hormones are co-factors as is the parathyroid hormone, which is the primary hormone that regulates blood calcium levels. It also promotes oestoclastic activity and if we remember from our knowledge of bone remodelling, osteoclasts, are the bone destroying cells. You know they function on bone resorption and then the bone building cells will be things like osteocytes and osteoblasts.

Then we have the parathyroid hormone, calcitonin, that inhibits osteoclastic activity and helps to increase blood calcium levels.

In the range of adrenal hormones, mineralcorticoid steroids control sodium/potassium homeostasis also related to calcium.

And finally the sex hormones. Estrogen inhibits bone resorption, while progesterone promotes bone building and as we all know, testosterone is a pre-cursor to both estrogen and progesterone.

Other vitamins involved in calcium absorption would be Vitamin D and Physica

Energetics has a great product in the Solray-D Liposome Spray. Vitamin D works with the parathyroid to increase the level of calcium in the blood serum. It usually increases absorption through the GI tract and it pulls calcium from bones and tissues and helps to decrease the loss of calcium in the urine and the feces. Now the great thing about the Solray-D is that it's not actually dependant on absorption through the gastrointestinal tract, as it is in a nano-liposome base and as such, it bypasses the GI tract and you get 100% absorption! Actually remember this; anything in the Physica Energetics line that is in a nano-liposome base multiply it by 3.5 and that is actually the effective dose of what you are getting. This isn't true with most liposomes for your information. It costs more to use this specific nano-liposomal technology process but at the end of the day, we as practitioners and our patients end up with a very highly effective and assimilable liposomal product.

For example, when Solray-D says 1,000 IU's on the bottle, you really are getting the absorption of 3,500 IU's of highly assimilable cholecalciferol which gets to the liver and then to the kidneys where it is converted into calcitriol, arguably one of the most potent human steroids. Calcitriol features highly in certain cancers and deep viral and other pathogen challenges. And of course (as we all know) the Solray-D Liposome Spray also contains Vitamin K2, MK-7 and a small amount of non-synthesized MK-4 which actually helps push calcium out of the arteries and back into your bones.

You may know that I am a big fan of functional tests. There is a really, really easy way to measure for mineral absorption in the body and you don't need any kind of fancy equipment. You can do it in your office and it takes about 15 seconds and it is called the *Lowenburg Mineral Challenge Test*.

One of the strongest indicators of calcium deficiency is a muscle cramp at rest. So we are going to use this test to check for calcium stores in various forms of calcium and its co-factors and this is very easy to do. It just uses a simple blood pressure cuff to create an artificial cramp and assess the resulting patient response.

I should say before I tell you the procedure that there are a couple of precautions for this test. People who should NOT get this test are patients who are very old or frail and also for anybody who has any kind of phlebitis, edema or any thromboembolic disease. You know if any of these exist in your patient please DO NOT perform the test.

Here is how you do it. Have the patient sit on the edge of a table. Ideally it is best to conduct this test on a bare leg or over thin clothing and if the patient usually gets cramps in one of their legs, use that leg first for the test.

Now, place a standard blood pressure cuff around the largest portion of the patient's calf muscle. Slowly pump up the blood pressure cuff and instruct the patient to let you know when he or she feels the onset of

a cramp. Inflate the cuff and when they feel the cramp, deflate immediately when that threshold is reached.

And here's how you score it. If the patient gets a cramp with a BP (blood pressure) less than 150, the person is very, *very deficient*; if a patient gets a cramp at less than 200 they are *deficient*; if a patient gets a cramp at 200 they are *sufficient* and if a patient can get a cramp at 240 its *optimal*.

So that's how you score it. It should be repeated on the other leg to see if you have an equal reading. It's a simple way of assessing calcium in somebody without a lot of elaborate testing equipment.

So let's look at some of the minerals and co-factors that Physica Energetics provides.

The first one is SpectraLyte and I really love this! This is an ionic trace mineral solution. It's right spinning. It helps the sodium/potassium pump and it's an alkaline solution of minerals (it is actually the same concentration as blood plasma, so they are very, very readily absorbed in the body).

I also love the Phyto Cal-Mag with Boron, this is in a ratio of (5:1). You know you don't have to have an equal balance of calcium into magnesium, I don't even know where that came from, but it is actually incorrect. And this also has Boron in it which helps push calcium back into the bone. Wonderfully the minerals are in a base of organic botanicals, buchu leaf, horsetail, oat straw extract, stinging nettle, a little valerian and white willow. The

botanicals are loaded with macro and micro trace minerals and a multitude of co-factors. I recommend and sell a ton of this stuff in my practice.

I also use a lot of Buffered Magnesium BisGlycinate with L-Taurine. You know, taurine helps keep magnesium working longer in the cell and also assists in appropriately extracting the correct levels of calcium out of the bone - and not so incidentally, it also works to destroy biofilms. It's really a great product. I love this buffered 300 mg elemental magnesium from chelated from almost 1800 mg of magnesium glycinate. The beauty of this chelated form is that the digestive system sees this as an amino acid and not as a mineral so it shunts it directly to the binding sites. As a Bis-Glycinate it is cleaved to both sides of the magnesium molecule making it so much more powerful. Research shows that 300 mg of this particular elemental magnesium equates to 1500 mg or 5 times greater than other elemental magnesium (Schuette S.A. et al. (1994) *Bioavailability of magnesium diglycinate vs magnesium oxide in patients with ileal resection. J Parenter Enteral Nutr.* 18(5):430) and because it's buffered you typically don't have the loose bowels often associated with high magnesium. I usually dose this at 3 caps 2-3 times a day and the Phyto Cal-Mag with Boron I usually give 4 caps daily of that. I didn't talk about the dosing of the SpectraLyte, I generally have the patient take 15 drops in a ounce of distilled water and take that 3 times daily. Sometimes when you initially take the SpectraLyte it tastes very, very salty, even a little bitter;

that's actually an indicator that the mineral reserves in the body are very low, so as the mineral reserves come up to normal it will taste less and less bitter. Regardless, it is still going to have a slight salty taste being that it is in a bed of chloride.

So that is a little bit about minerals and a little bit about calcium!

Anyways, that is about all the time we have right now.... *in a New York minute!*

Hopefully this will get you started or at least remind you of what you may have already known, but forgotten.

I'm Dr. Stephen Atkins and this has been Field Notes and I'll see you next week.

Dr. Atkins asked Physica Energetics to include the Mineralization Strategy Chart and a mineral order form (attached) for your review.