



Hello, I'm Lara Pizzorno the author of "Your Bones" and I'm here today to share information with you that I hope will be helpful to you and help you to have healthier bones.

Today our topic is the slightly embarrassing one of constipation. And the question is, could your calcium supplement be causing constipation? I recently heard from a woman who wrote me to ask if a calcium supplement she had just begun taking, which by the way was not AlgaeCal but another supplement whose name I will not mention, might be causing the stomach problems of excessive bloating, stomach churning, gas and constipation that she had developed after taking it for just one week. Was it possible this supplement was affecting her stomach? And my reply to her was, absolutely.

Calcium, when taken in *excessive amounts and not properly balanced with its key partner nutrients* can definitely cause digestion system distress and constipation.

The supplement she was taking was delivering 1000 mg of calcium every day and given that our diets typically contain numerous foods rich in calcium even if our consumption of cow's milk that's found in our morning latte or cappuccino, getting an additional 1000 mg from a calcium supplement is very likely to be too much calcium. If you eat foods containing calcium, and I sure hope you do because the leafy greens that are rich in calcium like spinach, swiss chard, kale and collards are also loaded with many other bone building minerals, you may be consuming more calcium than the upper limit of 1500 mg per day that is recommended.

For example,

- One cup of low-fat yogurt will give you 447 mg of calcium
- An ounce of part-skim mozzarella cheese provides 183 mg
- An ounce of swiss cheese rings in at 265 mg
- Just two ounces of canned sardines, which typically includes their tiny soft bones, contains 240 mg and who eats two ounces of fish!
- A cup of steamed spinach will add 245 mg of calcium to your daily intake
- Even a cup of steamed broccoli will provide 75 mg of calcium and if you have that broccoli with some tofu in a stir fry, you can add another 100 mg of calcium for the tofu. If you top your stir fry with a handful of almonds, add another 75 mg of calcium.

I could go on and on, but you get the idea here, quite a few foods contain some calcium.

And it is well known in research circles that taking a calcium supplement that provides too large a dose of elemental calcium cause upset stomach and constipation.



This was the primary reason why 18% of the 1471 postmenopausal women dropped out of a recent randomized controlled trial that assessed the effects of calcium citrate on bone density and fracture incidence over a 5-year period. And it's also why the women who did complete the trial only were taking about half (55-58% of the women were taking their calcium supplement every day) so only about half the women took it. And the researchers thought that the constipation issue was the reason why. And this did happen despite the benefits that the calcium all by itself provided. Calcium significantly slowed the rate of bone loss and the risk for fractures for the women that completed the study. Unlike AlgaeCal however even 1000 mg a day of calcium citrate did not reverse bone loss. It did not cause the rate of new bone formation to exceed the rate at which bone was being lost, it just slowed it down.

AlgaeCal is the only calcium supplement I know that actually reverses bone loss and result in more new bone produced than is being lost.

I've discussed this and the reason why this is so in a number of other videos and I won't repeat all that information here.

The researchers who wrote up the results of this study, noted that because constipation became much more common in the women who stuck it out and completed the study, that long term compliance, in other words taking the 1000 mg of calcium citrate everyday was not likely to happen in the general population. In other words, in most of us.

Ok so what are some of the reasons why a calcium supplement might cause constipation?

Perhaps the most common reason for constipation is not getting adequate [magnesium](#) and here's why. Calcium and magnesium work together in many cellular activities and they have to be in balance for many things to work properly, including in our digestive tract. Calcium in general, constricts tissues like our blood vessels and intestines while magnesium relaxes them. In the heart for example, calcium is responsible for make our heart contract and magnesium in its relaxation and release and in our intestines, the same principle applies. For this reason, insufficient magnesium, think blockage causing constriction, in relation to calcium can promote constipation. But when you take calcium especially when you take vitamin D, which you really need which AlgaeCal Plus also supplies, you will be much better at absorbing the calcium you consume. This means you will also need to be really consuming and absorbing enough magnesium and taking them in proper balance.

Typically, the ratio of calcium to magnesium is recommended is 2 calcium to 1 magnesium and this is the ration that is provided by AlgaeCal Plus. But it is not unusually to need more magnesium than what is half as much as calcium that you're ingesting. Particularly if your diet is not high in magnesium. For example, do you really eat lots of leafy greens? Or if you're stressed because stress causes us to lose magnesium more quickly. So does



heavy exercise, when you sweat you lose magnesium. In premenopausal women right before the time of their monthly menses estrogen levels rise and estrogen pulls magnesium into bone, which is one of the reasons why estrogen is so great for our bones but is also one of the reasons for menstrual cramps and it's one of the reasons why women crave chocolate around their period. Chocolate is very high in magnesium, as if you needed another reason to have a little chocolate.

I'm postmenopausal but given our fast paced lives in this day and age and the stress that we all experience, and the fact that I exercise actually quite a bit to relieve stress and to send my bones a strong signal that they should remain strong, I certainly need supplemental magnesium. And to get the full benefit of the magnesium that you consume, you like me, and about 30% of the population may need to take your magnesium alone with the activated form of B-6, which is called pyridoxal 5 phosphate or P5P.

So why P5P? Well the genetic inheritance of about 30% of us includes a single nucleotide polymorphism for low version of the enzyme that converts vitamin B-6 into its active form, P5P. P5P is the form in which B-6 gets magnesium inside our cells where it can do its many jobs for us. So if you are among the 30% of us, as am I, who have a slow enzyme for the version of B-6 to P5P, you may not be absorbing your magnesium as well as your calcium and this could cause you to become constipated. Fortunately, it's easy to fix, just take some additional magnesium citrate, about 150 mg twice daily along with P5P 25 mg twice daily, both supplements are inexpensive and you should be able to find them at any health food store or on the internet.

Now you know why [milk of magnesia](#) is used to relieve constipation! So if you haven't followed all of this or it went by too quickly, I discuss it all in detail on the section of magnesium in the 2nd Edition of "Your Bones."

The Solution

The practical takeaway here is that if you are experiencing constipation, *don't give up on your calcium supplement, you need it for healthy bones*. The constipation can be easily remedied, just choose a calcium supplement that provides a reasonable daily total of around 700 mg of calcium per day, not an excessive 1000 mg. Also, be sure you are getting sufficient magnesium to maintain the 2: 1 ratio of calcium to magnesium that is required to keep a healthy balance between these two bone essential minerals. I hope this information was useful to you and that you will tune in next time!