

Albany Acupuncture Health and Wellness Newsletter

Protect Your Bones for Better Health

Build Stronger Bones for Life

First of all, I want to make it clear that the topic of protecting our bones is complicated which causes lots of differing opinions. If the jury was in agreement, we wouldn't be so confused. So what do we know?

We grow our bones into our early 20's and then our bones start to slowly deteriorate as we age. A nutrient dense, low sugar diet can protect our bones. Exercise that builds muscle strengthens our bones.

The best defense is weight bearing exercise. However excessive weight bearing will contribute to osteoarthritis which is the wear and tear on the joints and causes pain and therefore cause us to stop weight bearing exercise. What is excessive? It is very individual but the latest findings are that short bursts of aerobic activities are more joint and bone protective and just as beneficial for the heart and lungs as long periods of aerobic exercise. Strength training also called lifting weights is important as well. It builds muscles which strengthens the bones.

Our bones need minerals and protein in order to be safeguarded. Our diets can help feed and protect our bones. Vegetables, good protein and bone broths are the place to start.

A diet high in sugars, grains and other carbohydrates weaken the bones. Sugar acidifies the body forcing calcium out of the bones and into the blood to alkalize the body. The biggest acid forming foods are sugar, coffee, alcohol and grains, dairy and

processed meats.

The biggest alkalizing foods are vegetables especially dark green ones and those of the cabbage family. Those vegetables are Arugula, Bok Choy, Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Collards, Horseradish, Kale, Mustard Greens, Radishes, Rutabagas, and Watercress. We need adequate vitamin D and K2 in order for the minerals, especially Calcium to work.

Our digestion needs to be working well in order for the nutrients to be digested and available for building bones. That means we need adequate stomach acid and digestive enzymes to break down the nutrients into usable form.

Essential nutrients that promote bone health

Calcium. Now calcium is a rock so it's not that easy to digest. We need stomach acid in the form of hydrochloric acid, HCL in order for it to be digested. If we are taking any kind of antacid or acid blocking medication then we cannot utilize our minerals. This is a big issue. The forms of calcium that are easier to assimilate are the citrate, malate, hydroxyapatite and glycinate forms. We can only digest about 500-600 mg per serving so taking more in one serving is not useful.

Magnesium. For every 600 mg of Calcium we need to balance it with Magnesium. We need at least 250 mg up to 500 mg. There are a lot of differing opinions on this ratio of Calcium to Magnesium. Some say 2 to 1 others 1 to 1. I look at several physical symptoms. If someone is constipated, has muscle pain or spasms, insomnia or anxiety I will suggest a higher amount of Magnesium. Magnesium helps alkalize the body. When the body is too acidic it leaches calcium from the bones in order to alkalize the body.

Vitamin D. Get your levels tested with a blood test. Try to be tested at the same time each year as our levels fluctuated with the seasons. It costs about \$40. In the fall. if you have spent

any time outdoors your levels will be the highest and in the spring the lowest. The normal range for Vitamin D3 is between 30 and 100. Many people agree that the level should be between 50 and 70. Vitamin D is important because it escorts Calcium into the bones where it builds bone strength. Vitamin D is a fat soluble Vitamin and we can make it by getting sun exposure to the skin as long as there is enough cholesterol in the body, the sun is at a good angle and our skin is not dark or old. The easiest way to get Vitamin D is to get it from Fish Oils or supplements. If you are depending on milk for vitamin D then the milk needs to have fat. Low fat and fat free milk are higher in a carbohydrate which means it is acidifying the body.

Vitamin K. There are 2 types of Vitamin K. K1 is in dark leafy greens and K2 is in fermented foods and can be made in your gut if you have a balance of good bacteria and are eating plenty of leafy greens. Vitamin K2 works with Vitamin D to escort the Calcium into the bones. If this is not happening then the Calcium can be wandering around in the arteries where it may form plaque. Plaque can lodge in the arteries and is a precursor to heart disease.

There are many other nutrients that affect the bones Manganese, Zinc, Copper, Boron, Silicon, Vitamin C and Folic Acid and will need to be discussed in another newsletter along with joint pain and arthritis.

I want to emphasize that you can get minerals from food but that food has to be grown on mineral rich soil. It's never easy to find out this information unless you are growing your own food and amending the soil with minerals or see soil tests from a farm that you are getting your food from. Barring that, eating a wide variety of organic plant foods and grass fed, pastured and wild animals we need to modestly supplement. This is our insurance.

Best foods to ensure good bone health

Calcium and Magnesium are in dark leafy greens like broccoli, kale, green beans, spinach and bok choy, quinoa, legumes.

chia seeds, sesame seeds, almonds and Brazil nuts, fish with edible soft bones like sardines, canned salmon and anchovies. Bone broth is rich in minerals. Bone broth needs to be cooked a long time at very low heat.

A special note about seaweed, it has 10-20 times the amount of calcium as milk products. Use a piece of Kombu in soups and stews. Try dulse or nori sprinkled over foods. Develop a taste for seaweed and start using it in your diet. Look for sources from Maine, Canada, and Iceland. wakame, hijiki, nori and kombu are a few species to try.

Books on bone health

[Strong Women Stay Young by Miriam Nelson Miriam.](#)

Nelson is a research scientist studying women and bone loss, how developing muscles strengthens bones.

[The Burst Workout by Sean Foy.](#) Describes why short bursts of aerobic exercise are great for preserving overall health and is beneficial to the bones.

In Health,

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