## HEALTHFUL ELEMENTS



## **Bone Up on Bone Health**

Written by Jill Grunewald and published in Present Magazine, April 2007



Recent estimates claim that 44 million people are threatened with osteoporosis. Ten million are estimated to already have the disease, 80% of them women. If our recent ancestors had sturdy, healthy bones that carried them upright for a lifetime, then we have to ask ourselves, what are we currently doing wrong? Why are we destroying our vital internal foundations?

The term osteoporosis, derived from Latin, literally means "porous bones." Osteoporosis is a progressive disease characterized by structural deterioration of bone tissue. Bones become weaker and more brittle, making the individual extremely prone to fractures and causing marked changes in posture. The hips and spine are the areas of most concern due to the fact that hip fractures take a long time to heal, especially in older folks. Osteoporosis in the spine typically causes curvature and loss of height.

### **Age Matters**

Due to the hormonal and physiological dissimilarities and the differing nutritional needs of men and women, osteoporosis affects many more women than men. Unfortunately, half of all women between the ages of 45-75 show signs of osteopenia (low bone mass). Women tend to suffer from bone loss due to the standard American diet, poor nutrition, estrogen loss, and some prescription medications. Men tend to suffer because of medications such as thyroid hormone, corticosteroids, and chemotherapy drugs.

Bone mass is strongest around age 30 and then begins to weaken. For women, the onset of menopause causes bone loss to hasten due to decreased estrogen. If we have neglected to accumulate adequate bone mass during our formative years, including childhood, adolescence and early adulthood, we are at a much-increased risk of full-fledged osteoporosis. Many women wrongly believe that this condition is something they only need to be worried with post-menopause. This couldn't be further from the truth. Recent evidence indicates that osteoporosis begins early in life and this is yet another reason to feed our children well, with lots of bone-strengthening, whole foods that will lay a foundation for a lifetime of bone health.

#### **Bone of Contention**

The standard American diet contains many "foods" that are culprits in contributing to bone loss. Some of these calcium-leaching offenders are soda (one of the worst), sugar, highly processed and refined foods, coffee, alcohol, excess salt, and some prescription medications, especially thyroid hormones, statin drugs, blood thinners, and chemotherapy drugs. Excess protein consumption has also been associated with leaching calcium from the bones.

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Contrary to what the media and the American Dairy Association would like consumers to believe, increased dairy is not the silver bullet for bone health. Osteoporosis is not a health concern in cultures that consume little to no dairy. Calcium supplements are not a panacea.

Firstly, calcium supplementation alone is precarious and ineffective at best. According to Andrea Beaman, Holistic Health Counselor and author of *The Whole Truth*, "Excessive use of calcium supplementation has been implicated with extreme lethargy, impaired absorption of iron, zinc and manganese, calcium deposits in tissues throughout the body, mimicking cancer on x-rays, calcification of the arteries, and kidney stones."

Secondly, some doctors know little about the importance of magnesium and bone health. If calcium is not mobilized into the bone with the aid of magnesium, it may collect in soft tissues and cause calcium deposits and arthritis. This is truly a double whammy; rather than strengthening bones, you are possibly contributing to another disease.

According to Paul Pitchford, author of *Healing with Whole Foods*, "For many years, magnesium also has been recognized as valuable in calcium absorption, but it's absolute necessity has been underscored in several recent human experiments. In one, calcium and vitamin D were abundantly supplied while magnesium was withheld; all subjects in the experiment except one became calcium-deficient. When magnesium was reintroduced in the diet, calcium levels rose dramatically."

Thirdly, we store calcium more efficiently than magnesium, so we don't have to consume nearly as much as the dairy industry has conditioned us to think we do. Because magnesium hasn't gotten the media attention that calcium has, and because we have a lot of ill-informed doctors out there, we aren't eating enough magnesium-rich foods. Those nasty culprits I mentioned above also contribute to magnesium depletion. Do you need another reason to set down that Diet Coke? (Contact me and I'll give you five.)

#### What To Do

Currently, osteoporosis is not a curable disease. But take heart! You can beef up your foundation and ward off brittle bones in many ways. I am not anti-supplementation, but believe that we should be getting the majority of our vitamins, minerals, and nutrients from whole foods instead of pills substituting as foods. If you have osteoporosis in your family or are concerned about bone health, however, there's nothing wrong with taking a calcium-magnesium supplement. Get a good-quality supplement, where the magnesium content is half that of the calcium, from your local health food store.

The chart below specifies lifestyle modifications and calcium- and magnesium-rich foods. With some awareness and forethought, you won't have to fall prey to delicate bones, poor posture, and being fracture-prone. Eat these nutrient-rich foods and leave the "porous" to the pumice stone.

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