

# Dispelling the Myths About Milk and Osteoporosis

by KRYSTINA OSTERMEYER

## Milk and Osteoporosis

How many of you remember those "Got Milk?" ads that began in the mid-1990s? It showcased various celebrities and athletes with a milk mustache, holding a tall glass of milk. The likely purpose, of course, was to increase the revenue of the milk industry. However, it was smart marketing — we also probably thought a lot about what milk did for our bodies when we saw those ads.

If you've got osteoporosis, you may have really looked at those ads and wondered, "should I be drinking more?"

Let's take a look!

#### The Importance of Calcium

It all really boils down to calcium and vitamin D.

We all need calcium and vitamin D, especially as children. Appropriate amounts of calcium and vitamin D help us build strong, dense bones. Consuming adequate amounts of calcium and vitamin D will keep the bones strong and dense as we age.

**Calcium** is necessary for life. Not only does it help to build bone, but it also assists the blood with clotting, helps the muscles with contracting and it helps the heart to beat. And guess where most of the calcium is stored? 99% of calcium is stored in the bones and teeth.

Our bodies cannot make calcium; we must take in calcium through the foods that we eat. We lose calcium through sweating and urination, as well as through our feces, skin and nails. When we lose too much calcium, the calcium is lost from the bones, meaning that eventually our bones will weaken.

**Vitamin D** is also necessary for life. Vitamin D helps to protect the bones; the body requires vitamin D in order to absorb calcium. Vitamin D also helps the muscles maintain their strength — without it, we would fall! Without proper vitamin D, our bones would become porous and we're more prone to breaks as we age.

Our bodies also cannot make vitamin D; we must take it in through food sources, sunlight or supplementation.

### Does Milk Help if You Have Osteoporosis?

Chances are good that if you've been diagnosed with osteoporosis, your healthcare provider told you to drink more milk.

Is it as simple as that?

Maybe — but maybe not.

Research indicates that calcium is extremely important in the building of strong bones, as well as the maintenance of strong bones. However, calcium metabolism can be extremely complicated. According to *Healthline*, "Your body maintains blood levels of calcium within a narrow range. If you're not getting calcium from the diet, your body pulls it from your bones to sustain other functions that are more important for immediate survival. Some amount of calcium is continually excreted in the urine. If your dietary intake doesn't compensate for what is lost, your bones will lose calcium over time, making them less dense and more likely to break."

This is when a diagnosis of osteoporosis is likely to occur — and that prescription for calcium (and a blanket statement for milk may happen).

The jury is still out as to whether milk (and dairy in general) is helpful in treating osteoporosis. It was thought for many years that dairy was the be-all treatment for osteoporosis, but several studies may show otherwise.

Several observational studies indicate that upping dairy intake may have no effect on bone health or may even be harmful. A 2014 study reported that women who drank 3 glasses of milk per day may have a doubled risk of cardiac death and a 44% greater risk of cancer compared to women who drank less than one glass per day.

### How Does Milk Help (or Hurt) Osteoporosis?

It is important to read research with a grain of salt. Most studies still have the same conclusion — that calcium in the dairy form, such as milk, is beneficial to the treatment of osteoporosis.

According to most studies, calcium in the form of milk or supplements is believed to:

- Childhood: increase bone growth
- · Adulthood: improve bone density and reduce the rate of bone loss
- Elderly: supplements are believed to improve bone density and reduce the risk of fractures

Caution should be exercised when consuming calcium supplements; several large-scale studies have linked calcium supplements with an increased risk of heart attacks. Pros and cons of calcium supplements should be discussed with your healthcare provider.

#### **Myths of Osteoporosis**

There are several myths that people believe about osteoporosis. Let's try to dispel them now:

- Protein in dairy foods can reduce bone health. Many people believe that the calcium in dairy products negates the benefit from the food due to the protein it contains. Protein tends to increase the acidity of blood, requiring calcium to help with neutralizing the blood. This is why many people believe that protein from calcium may "use up" the calcium. However, research has not proven this theory.
- Calcium supplements are just as good as consuming calcium-rich foods. Foods that are calcium-rich will likely be better absorbed by your body than a supplement.
- If you have osteoporosis, it is too late to protect bones. Studies indicate that even after an osteoporosis diagnosis, starting a routine of weight-bearing exercise can reduce the risk of fracture because it improves balance and strengthens bone. In addition, several medications are available that can reduce the risk of fracture by up to 68%.