

Health Mart Pharmacist Column— February 2008

Calcium

Taking calcium—either through diet or supplements—is a little like making deposits into a bone bank account. If you keep a healthy balance of this mineral, your body is able to build and maintain bone, which is a living, ever-changing tissue. Not only does calcium keep bones and teeth healthy, it also helps with clotting blood, sending signals between nerves, and regulating heart rhythms.

But if you fail to make calcium “deposits,” your body starts to pull calcium out of your bones and “overdraws your account.” Worse than a painful overdraft fee, however, this calcium imbalance can cause porous, weakened bones. This condition is called osteoporosis. In the U.S., it affects 8 million women and 2 million men, resulting in 1.5 million fractures each year.

How much calcium do you need? It varies, depending on your age. Your preteen or teen needs more. Banking calcium at this stage is really like making an early investment in “retirement.”

The National Academy of Sciences recommends:

- 1,300 mg/day for children ages 9–18
- 1,000 mg/day for men and women ages 19–50
- 1,200 mg/day for men and women ages 50 or older

Some guidelines suggest 1,500 mg for postmenopausal women who don’t take estrogen. That’s because—due to a loss of estrogen at menopause—women start to have bone loss earlier than men.

If you take calcium supplements, it’s best to divide the dose. Take half in the morning and half at night. Let me know if you have questions about different types of calcium. I can also discuss any medications that might interfere with calcium absorption. And I can give you tips on how to handle any calcium side effects, such as constipation or indigestion. To limit side effects, be sure to take no more than 2,000 mg daily.

Foods rich in calcium include dairy products, dark leafy greens, dried beans, nuts, and calcium-fortified foods, which may include orange juice, cereal, and bread. Some recent studies suggest that food sources of calcium may be better than supplements. Last year, a study reported on in the *American Journal of Clinical Nutrition* showed that participants who got most of their calcium from diet had better bone density than those who got most it from supplements. It’s too soon to know why, but it might have to do with better absorption or other food compounds that enhance bone health.

What else can you do to prevent bone loss as you age? Try weight-bearing exercise, such as walking or running, and get enough vitamin D. This vitamin helps your body absorb calcium. To get enough of it, you can spend at least 15 minutes in the sun several times a week. You can also take supplements or get food sources of vitamin D—in salmon, tuna, or fortified milk, margarine, or cereal. Try to get 800 International Units (IU) daily, but no more than 2,000 IU, which can be toxic.