

Getting Enough Calcium **Preventing Osteoporosis**

"Is osteoporosis a real problem, or is this something that is just being made into an issue by the media?"

"I drink about 2 to 3 glasses of milk a day. Does that mean I won't get osteoporosis?"

Osteoporosis is a very real problem. **Osteoporosis** is a bone-weakening disease that develops gradually over many years. Scientists estimate that osteoporosis causes 1.3 million fractures yearly in people over age 45. One out of every two women and one in eight men over 50 years old will have an osteoporosis-related fracture in their lifetime.

Osteoporosis is a disease in which bone density gradually decreases, causing weak bones that break or fracture easily. Osteoporosis has been called a "silent" disease because it usually does not cause any pain or symptoms until a bone actually breaks. The hip, spine and wrist are the most common places that develop fractures due to osteoporosis.

First of all, good for you! Drinking milk is definitely a great way to meet your calcium needs and build strong bones.

But you need to consider additional factors that play a role in the development of osteoporosis. These "risk factors" are related to a greater chance of developing osteoporosis. The more risk factors you have, the greater your chance for osteoporosis. Some of these risk factors are out of your control, others are not.

Risk factors you cannot control:

Being a woman: Women are four times more likely than men to have brittle bones because they have less bone mass to start with, lose more, and lose it faster.

Increasing age: When they hit middle age, most people start losing bone.

Having low body weight: Small, thin-boned women are at a greater risk.

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**Risk factors you cannot control,
continued:**

Being of Caucasian or Asian descent: The bone mass of Caucasians and Asians is not generally as dense as that of African Americans.

Having a family history of osteoporosis: The tendency to develop osteoporosis passes from generation to generation.

Experiencing early menopause: Menopause occurs when women's menstrual periods stop, usually between the ages of 45 and 55. This is caused by the loss of estrogen, a hormone that helps prevent bone loss. Earlier menopause — before age 45 — means earlier bone loss.

The amount of bone decreases as men and women age.

Women have less bone mass, lose more of it, and lose it faster than men.

Source: Bone Mineral Laboratory, University of Wisconsin-Madison

Risk factors you can control:

Extreme dieting or excessive exercise: When dieting and exercise are so severe they change or stop menstrual periods, women's estrogen hormone levels decrease and bones become weaker.

Not getting enough calcium and vitamin D: Low levels of calcium, vitamin D, and several other nutrients can result in weaker bones. *

Using steroid drugs: Long-term use of steroid medications tends to prevent bone tissue from building and repairing itself. Over time, this can lead to weak and brittle bones.

Being inactive: Lack of weight-bearing activity — such as walking, jogging or aerobic dancing — can result in increased bone loss.

Smoking and excessive use of alcohol: Smoking cigarettes is not only bad for your lungs, it is also bad for your bones. Excessive alcohol consumption can also be damaging to bones.

* Calcium, vitamin D, fluoride and vitamin K are important nutrients for building and maintaining strong bones. If you use vitamin D, fluoride or vitamin K supplements, discuss the recommended dosage with your doctor or a dietitian — excessive amounts can be toxic.

"I am going through the beginning stages of menopause. Is there anything I can do about osteoporosis at this age?"

"What if I take lots of extra calcium and exercise a lot, can I make my bones stronger?"

"I've been hearing a lot about 'phytoestrogens' and osteoporosis. What are they talking about?"

Women lose bone rapidly after menopause. This loss of bone density occurs because of hormonal changes, particularly the loss of estrogen.

To slow down bone loss after menopause, some physicians advise women to take estrogen, either with or without additional calcium, vitamin D, fluoride or vitamin K. Such hormone replacement therapies appear to be more effective when begun at or near the beginning of menopause. If your bone loss is severe, there are new prescription drugs that can help rebuild bone in some people. Discuss these issues with your doctor.



Calcium is very important, but you won't make your bones any stronger by taking more calcium than your body needs. In fact, scientists warn that side effects can occur when supplemental calcium is excessive. Taking 2,500 milligrams (mg) of calcium per day is too much.

Similarly, moderate exercise is recommended to prevent bone loss. Accumulating 30 minutes a day or more of moderate physical activity, 5 to 7 days a week, should keep your bones and the rest of your body in good health. Walking, jogging and aerobic dancing are great weight-bearing activities that work against gravity to strengthen your bones.



Phytoestrogens are plant chemicals found in soybeans and some other plant foods. They act somewhat like our body's estrogen hormone. Researchers are just starting to understand certain beneficial effects of phytoestrogens for preventing heart disease and cancer, reducing menopausal side effects, and reducing the risk of osteoporosis.

At this point, we have more questions than answers. For example, at this early stage, it appears 1 to 3 servings of soy foods — tofu, tempeh, or soymilk — each day might be beneficial. But high doses of phytoestrogens in pill form may be dangerous to some people. Be sure to ask your doctor or a dietitian before using phytoestrogen supplements.

Other fact sheets in this series:

Bone Up on Calcium!

What Is Lactose Intolerance?

Ways to reduce your risk for osteoporosis:

Eat a balanced diet. Include 2 to 3 servings a day of calcium-rich foods such as milk, yogurt, cheese, broccoli, collard greens, and some tofu products (check the label for calcium content). For practical information on determining your intake of calcium, see the fact sheet in this series *Bone Up on Calcium!* B3707-1, available from your county UW-Extension office or the address on the bottom of this page.

Exercise regularly. Weight-bearing activities such as walking are better for strengthening bones than those you do off your feet, such as swimming or biking.

Talk to your doctor about preventing bone loss. For women nearing menopause, discuss estrogen replacement therapy with your doctor. If you take steroid medications over a long period of time, talk to your doctor about calcium and vitamin D supplements.

This information is not intended to substitute for medical advice, nor does it cover all issues. For your specific needs, check with a medical professional.



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