

Daily Union Article

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Title: *Osteoporosis*

According to the Centers for Disease Control and Prevention (CDC), although more women than men are diagnosed with osteoporosis, it is important to consider your family's health history with this disease before you rule it out as a health concern, regardless of your gender. The percent of men 65 years of age and over with osteoporosis of the femur neck or lumbar spine: 5.1%. The percent of women 65 years of age and over with osteoporosis of the femur neck or lumbar spine: 24.5%. Osteoporosis is commonly under-diagnosed and underreported in men. About two million men living in the United States have osteoporosis with another 12 million who are at risk.

Osteoporosis, or porous bone, results when the "bone making" capacity of the body can't keep up with the "bone breakdown" process that is a natural part of aging. During our teenage years, new bone is added faster than old bone is removed. This results in larger, heavier, and denser bones. This continues until we are about the age of 30. After that time, the process slowly begins to reverse. When the bone breakdown process out paces the rebuilding of bone, eventually this can lead to osteoporosis. The picture insert demonstrates what a healthy bone looks like compared to that of a bone with osteoporosis:



Normal bone



Osteoporosis

If you look closely at the two examples you can see how the structure of the bone with osteoporosis is significantly weaker and has larger pores with thinner walls. This makes the bones more brittle and susceptible to fractures.

If one or both of your parents has had a broken bone, especially a broken hip, you should consider getting screened for osteoporosis earlier rather than later.

The National Institute of Health provides a summary of the risk factors associated with the disease:

- Gender. Your chances of developing osteoporosis are greater if you are a woman. Women have less bone tissue and lose bone faster than men because of the changes that happen with menopause.
- Age. The older you are, the greater your risk of osteoporosis. Your bones become thinner and weaker as you age.
- Body size. Small, thin-boned women are at greater risk.
- Ethnicity. Caucasian and Asian women are at highest risk. African American and Hispanic women have a lower but significant risk.
- Family history. Fracture risk may be due, in part, to heredity. People whose parents have a history of fractures also seem to have reduced bone mass and may be at risk for fractures.

Some of these risk factors are out of your control, while others are ones you can change. For example, if you have a hormone imbalance (low estrogen or low testosterone), you can get treatment to bring that balance back into normal parameters. Reducing alcohol consumption is another area where you can make a change. Excessive alcohol consumption increases the risk of bone loss and fractures. Increasing your physical activity is another way you can be proactive against osteoporosis. Diets low in calcium and Vitamin D contribute to premature bone loss, so ensuring that your daily intake of these two nutrients meets the recommended amount for your age and gender is important. The chart provided identifies the recommended amount of dietary calcium needed each day based on your age (only adult amounts, and those for pregnant/lactating females, are provided here.)

<b>Recommended Calcium Intakes</b>	
<b>Life-stage group</b>	<b>Mg/day</b>
19-30 years old	1,000
31-50 years old	1,000
51 – 70 year old males	1,000
51 -70 year old females	1,200
14 to 18 year old pregnant/lactating	1,300
19 to 50 year old pregnant/lactating	1,200

*Source: Food and Nutrition Board, Institute of Medicine, National Academy of Sciences, 2010.*

Why do pregnant/lactating and middle-aged females need more calcium? Women who are pregnant or lactating are providing calcium through their body to their offspring. This puts a significant drain on the calcium stored for the mom. Postmenopausal women experience greater bone loss and do not absorb calcium as well. Sufficient calcium intake from food, and supplements if needed, can slow the rate of bone loss in both cases.

Again, men get overlooked in the diagnosis of osteoporosis. How can a man keep his bones strong?

- Regularly do weight-bearing physical activities, such as walking, jogging, climbing stairs and weight lifting or resistance training. (Swimming, for instance, is not weight bearing.)
- Get vitamin D, either by spending 10-15 minutes a day outside in the sunshine or by getting between 400 to 1,000 (but no more than 2,000) international units, or IUs, of vitamin D in foods or supplements. (Another good reason to go fishing or play golf.)
- Get enough calcium. Men up to 50 years of age should get 1,000 mg of calcium a day, while men over age 51 should get 1,200 mg. Good calcium sources include most dairy products, calcium-fortified foods and beverages, such as certain brands of fruit juices and cereals, and calcium supplements.
- Improve other lifestyle behaviors to reduce bone loss. For example, quit smoking and don't use alcohol to excess.

Whether you are male or female, being aware of your body's need for calcium to maintain good bone health is important. Through proper nutrition, exercise and the elimination of lifestyle habits that drain your body of calcium, you can better protect your body from bone injuries as you age.

For more information about health and wellness topics, contact me at the Geary County K-State Research & Extension office at 785-238-4161. Until next time, keep living resourcefully!