Osteoporosis Awareness and Prevention

When you think about staying healthy, you most likely think about making lifestyle changes to prevent cancer, heart disease and diabetes. But keeping your bones healthy is just as important. May is National Osteoporosis Awareness and Prevention Month, and now is the time to think about keeping your 206 or so bones strong by getting enough calcium, vitamin D and weight-bearing as well as muscle-strengthening activity. There are many reasons people get osteoporosis, including family history, smoking, not getting enough physical activity, unhealthy eating habits, drinking too much alcohol, taking certain medicines and having certain medical conditions.

Calcium

What you should know: Calcium is a mineral that is necessary for life; however, many Americans do not get the amount of calcium they require each day. Calcium is important to build stronger, denser bones early in life and to keep bones healthy later in life. About 99 percent of the calcium in our bodies is in our bones and teeth. In addition to building bones and keeping them healthy, calcium helps blood clot, nerves send messages, muscles contract and serves in other functions of the body. Each day, you lose calcium through your skin, nails, hair, sweat, urine and feces. Our bodies cannot produce calcium. That’s why we need to try to get enough calcium through the foods we eat. When we don’t get enough calcium for our body’s needs, calcium is taken from our bones.

Reading food labels

What you should know: Food labels list calcium as a percentage of the daily value (DV). This amount is based on 1000 mg of calcium per day. For example:

- 30 percent DV of calcium = 300 mg calcium
- 20 percent DV of calcium = 200 mg calcium
- 15 percent DV of calcium = 150 mg calcium

Sources of calcium

What you should know: Food is the best source of calcium. Dairy products, such as low-fat and non-fat milk, yogurt and cheese are high in calcium. For people who have trouble digesting dairy products because of lactose intolerance, lactose-free dairy products and lactase enzyme pills are also available. Certain green vegetables (collard greens, turnip greens, kale, okra, Chinese cabbage and broccoli) are sources of calcium, although in smaller amounts. Spinach is a source of calcium, however, the oxalates (oxalic acid) present interfere with calcium absorption. Canned salmon and sardines (with bones) as well as canned shrimp are also good ways to get calcium. Calcium-fortified foods and calcium supplements are helpful for people who are unable to get enough calcium in their diets. Some juices, soymilk, cereals, snacks, breads and bottled water have calcium added. If you drink soymilk or another liquid that is fortified with calcium, be sure to shake the container well as calcium can settle on the bottom.

A simple way to add calcium to many foods is by adding 2–4 tablespoons of non-fat dry milk to your favorite recipe. Each tablespoon contains about 50 mg of calcium.
Calcium-rich broccoli salad

- 3-1/2 cups broccoli
- 1/4 cup onion
- 2 Tbsp raisins
- 2 Tbsp sunflower seeds
- 1 cup plain non-fat yogurt
- 1 Tbsp orange juice
- 2 Tbsp fat free mayonnaise
- 1/4 cup 2% shredded cheddar cheese

Instructions: Chop broccoli and onion into bite size pieces. Combine broccoli, onion, raisins and sunflower seeds in a medium bowl. In small bowl, whisk together yogurt, orange juice, and mayonnaise. Add to vegetable mixture. Add cheese. Cover and refrigerate at least five hours or overnight.

Yield: 6 servings

Nutrition information per serving: calories: 80; fat: 2.5g; sat fat: 1g; carb: 11g; fiber: 2g; sodium: 140mg; calcium: 125mg

Osteoporosis

So how much is recommended?

Women

- < age 50: 1,000 mg (milligrams) of calcium and 400-800 IU (international units) of Vitamin D per day.
- > age 50: 1200 mg of calcium and 800-1,000 IU of Vitamin D per day.

Men

- < age 50: 1,000 mg of calcium and 400-800 IU of Vitamin D per day.
- age 50-71: 1,000 mg of calcium and 800-1,000 IU of Vitamin D per day.
- > age 71: 1,200 mg of calcium and 800-1,000 IU of Vitamin D per day.

These are the total amounts of calcium you get from both food and supplements.

Calcium in foods

What you should know: The recommended amount of 1,000-1,200 mg of calcium is roughly three to four servings of dairy daily. One cup of milk contains 300 mg calcium. Other food sources equal to 300 mg of calcium:

- 8 oz. yogurt
- 1-1/2 oz. natural cheese
- 2 oz. processed cheese
- 1 cup pudding
- 2 cups cottage cheese
- 1-1/2 cups frozen yogurt or ice cream
- 1 cup macaroni and cheese

Calcium supplements

The body easily absorbs most brand-name calcium products. Calcium supplements need to dissolve in the stomach for calcium to be absorbed.

Check the label for the USP (US Pharmacopoeia) Standard to be sure it dissolves. Chewable and liquid supplements dissolve well because they break down before entering the stomach. Calcium is best absorbed when taken in amounts of 500-600 mg or less. Try to get your calcium-rich foods and/or supplements in smaller amounts throughout the day, preferably with a meal. You should take most calcium supplements with food. Eating food produces stomach acid that helps your body absorb the calcium. To avoid gas and/or constipation side effects, you may want to increase your water intake and take smaller amounts of the supplement more frequently throughout the day.

The amount of calcium needed from a supplement depends on the amount of calcium you take in your diet. If you get enough calcium from the foods you eat, then you don’t need a supplement. Taking more calcium than you need in supplements does not have added benefits and can even have some risks.

Beverages and bone health

Alcohol – Drinking heavily can lead to bone loss. Alcohol in smaller amounts, however, does not seem to harm bone health. This usually means having no more than two to three drinks a day.

Coffee/tea – These drinks naturally contain caffeine. Caffeine appears to decrease calcium absorption by a small amount. Drinking more than three cups of coffee every day may be harmful to bone health. If you enjoy drinking coffee and tea, you can help to make up for any calcium loss by getting enough calcium to meet your body’s needs.

Soft drinks – More research is necessary to fully understand the link between soft drinks and bone health. Here is what is known thus far: The carbonation in soft drinks does not cause any harm to bone. The caffeine and phosphorus commonly found in colas may contribute to bone loss. Oftentimes, however, harm to bone may be caused when people choose soft drinks over milk and calcium-fortified beverages.

Exercise for your bone health

Like muscle, bone is living tissue that responds to exercise by becoming stronger. Women and men older than age 20 can help prevent bone loss with regular physical activity. The best exercise for your bones is the weight-bearing type, which forces you to work against gravity. Some examples of weight-bearing exercises include walking, hiking, jogging, climbing stairs, tennis and dancing. Aim for an optimal goal of at least 30 minutes of physical activity on most days, preferably daily. If you have health problems such as heart trouble, high blood pressure, diabetes or obesity or if you are age 40 or older, check with your doctor before you begin a regular exercise program.

For more information on calcium and bone health:

- www.nof.org
- www.niams.nih.gov/Health_Info/Bone/Bone_Health
- www.nationaldairycouncil.org

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