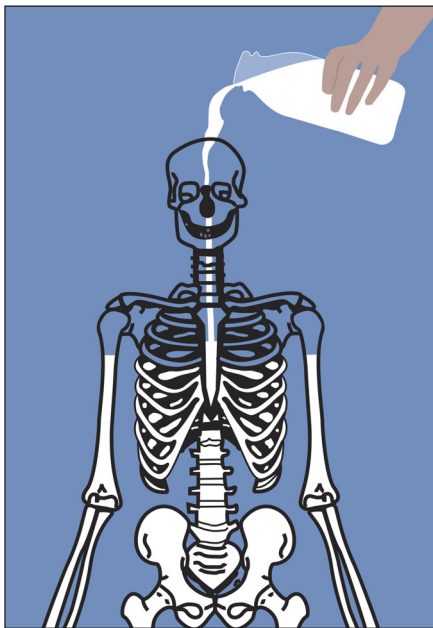


Bones with Calcium

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Calcium is a mineral our bodies need to build and maintain strong bones and teeth.

Introduction

Many Americans do not get the recommended amount of calcium. Adults should consume three cups of milk or milk products a day, but typically consume only three-fourths the recommended amount of calcium-rich foods each day. Low calcium intake over a period of time increases the risk for osteoporosis.

What is Calcium?

Calcium is a mineral our bodies need to build and maintain strong bones and teeth. Almost all of the calcium in our body is stored in our bones and teeth. About 1 percent is in our blood and body tissues. Vitamin D is needed for our bodies to absorb the calcium from the food we eat.

Calcium:

- Helps blood clot
- Assists in sending and receiving nerve signals
- Helps the heart beat regularly
- Is necessary for muscle contraction
- Strengthens bones and teeth

Calcium and Osteoporosis

Bones need continuous maintenance over a lifetime in order to stay strong and healthy. When

you lack adequate amounts of dietary calcium, your body removes calcium from the bones to keep your blood calcium levels normal. This leaching causes your bones to become weak and brittle and increases your risk of bone fractures and osteoporosis, a weakening of the bones. This weakening is caused by an imbalance between bone building and bone destruction and is a natural part of aging. But by getting the right amount of calcium throughout our lives, we can slow this process.

Physical Activity Strengthens Bones

When we are physically active, we increase the strength of our bones. Taking part in weight-bearing exercises, such as walking, running, climbing stairs, and weight training are good ways to keep your bones strong.

Recommendations

The calcium requirement is the same for men and women. Calcium recommendations are higher for adolescents. (Table 1) During this stage of life, the greatest amount of calcium is absorbed in the bones. It is also

the time when the majority of bone growth occurs. By the age of 20, most of the skeletal mass has been deposited. The loss of skeletal mass happens in older adults. Poor intake of calcium during the adolescent years increases the chance of having bone loss and an increased risk for osteoporosis in the future.

Table 1: Calcium recommendations by age groups

| Age Group | Calcium Recommendation |
|---------------|------------------------|
| Months | Daily Dose |
| 0-6 | 210 mg |
| 7 - 12 | 270 mg |
| Years | mg |
| 1-3 | 500 mg |
| 4-8 | 800 mg |
| 9-18 | 1300 mg |
| 19-50 | 1000 mg |
| >51 | 1200 mg |

Calcium-rich Food

The absorption of calcium is greatest when calcium sources are spread out throughout the day.

Food sources of calcium include:

- Cow's milk
- Fortified soy milk or rice milk
- Leafy green vegetables
- Broccoli
- Beans
- Almonds and almond butter
- Calcium-fortified juices
- Sesame seeds and sesame butter
- Soy nuts
- Figs



Lactose Intolerance

If you cannot eat dairy products because you are lactose intolerant, don't worry! You have plenty of other ways to get calcium, including dark green leafy vegetables, some types of legumes, soy and almond milk products, almonds, and foods that have been fortified with calcium.

Tips to Increase Calcium Intake

- Drink an 8-ounce glass of low-fat or fat-free milk with meals.
- Add milk to coffee or tea.
- Make oatmeal with milk instead of water.
- Avoid products high in sodium. High sodium causes our bodies to get rid of calcium faster.
- Eat yogurt with fruit for breakfast or a snack.
- Make smoothies by blending milk and fruit for breakfast or snack.

- Add cheese to a tossed salad.
- Melt cheese on toast or an English muffin for breakfast or a snack.

Calcium Supplements

While many people can get adequate amounts of calcium from a balanced diet, it may be necessary for some to take a supplement. Tips for using calcium supplements:

- Choose a form of calcium that can be absorbed easily, such as calcium carbonate or calcium citrates. Calcium carbonate is available more often and is inexpensive, but calcium citrate is better absorbed in the body. Large doses of calcium (400 mg or more) do not absorb well. It is best to take a lower dose supplement (200 mg) twice a day.
- Avoid calcium preparations, such as bone meal, powdered bone, and oyster shell. These products may contain high amounts of lead and may be dangerous if used routinely.

- Take calcium supplements with meals or spread them out throughout the day to prevent bloating, gas, or constipation.
- Check with your doctor before starting supplement use.

Summary

- We need adequate calcium intake over a lifetime to reduce our risk of osteoporosis.
- Weight-bearing exercises along with proper calcium and vitamin D intake keep your bones strong.
- Beyond bone health, calcium also helps with lowering risk of high blood pressure and colon cancer, aiding in nerve transmissions, and helps to clot blood when we get a wound.
- Calcium does a lot for our bodies, so make sure to eat three servings a day.
- When choosing to take calcium supplements, check the label to make sure you are choosing the best way to meet your calcium needs.

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