

## **Bone Health: Foods That Affect Calcium Absorption**

We have all heard the recommendations about Calcium for bone health and preventing osteoporosis. However, do you know that certain foods and beverages we consume may interfere with the absorption of the calcium we are trying to get? Here are some things to consider when adding up your calcium intake.

**Beans (legumes):** While beans contain calcium, magnesium, fiber and other nutrients, they are also high in substances called phytates. Phytates interfere with your body's ability to absorb the calcium that is contained in beans. You can reduce the phytate level up to 70% by soaking beans in water for several hours and then cooking them in fresh water.

**Wheat bran:** Like beans, wheat bran contains high levels of phytates which can prevent your body from absorbing calcium. However, unlike beans, 100% wheat bran is the only food that appears to reduce the absorption of calcium in other foods eaten at the same time. For example, when you have milk and 100% wheat bran cereal together, your body can absorb some, but not all, of the calcium from the milk. (The wheat bran in other foods like breads is much less concentrated and not likely to have a noticeable impact on calcium absorption). If you take calcium supplements, you may want to take them two or more hours before or after eating 100% wheat bran.

**Oxalic acid** - Spinach is naturally high in calcium, but also high in a compound called oxalic acid, which binds calcium, therefore the body is unable to process the calcium it provides. Other foods that contain oxalic acid include Swiss chard, beet greens, rhubarb, almonds and some soy products. These foods still contain plenty of healthy nutrients, therefore they shouldn't be avoided - they just shouldn't be counted as sources of calcium.

**Salt** - Eating foods high in sodium can cause your body to lose calcium. Limiting processed foods, canned foods and not adding salt to foods can limit these losses. To see if a food is high in sodium, look at the Nutrition Facts label. If it lists 20% or more for the Daily Value, it is high in sodium. Aim for no more than 2,300 milligrams of sodium per day.

**Caffeine** - Coffee, tea and sodas contain caffeine, which may decrease calcium absorption and contribute to bone loss. Choose these drinks in moderation and try to limit coffee to no more than three cups per day.

### **Calcium Tips**

- Calcium needs for women over age 51 is 1200mg per day. Men over age 71 need 1200mg per day and men under 70 need 1000mg per day.
- Calcium absorption is as high as 60% in infants and young children who need substantial amounts to build bone. Absorption decreased to 15-20% in adulthood and continues to decrease as people age. This is why recommended intakes are higher for older individuals.
- Our bodies can only absorb 500-600 milligrams of calcium at a time. Be sure to space your calcium containing foods or supplements out throughout the day for better absorption.
- Many non-dairy beverages are now fortified with calcium (think soy and nut milks, orange juice etc.). Be sure to shake the container well before pouring since added calcium can settle at the bottom.
- A simple way to add calcium to many foods is to add a single tablespoon of nonfat powdered milk, which contains about 50mg of calcium. It is easy to add a few tablespoons to almost any recipe.

Reference: American Dietetic Association, [www.eatright.org](http://www.eatright.org)

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