

11 Dairy-Free Calcium Sources No Dairy? No Problem!

-- By Liza Barnes, Health Educator

When I was a wee tot, I frequently had stomach pains that were once bad enough to warrant a trip to the emergency room. Everything looked fine according to the doctor, but my pains continued. Finally, an allergist diagnosed me with a milk allergy, and as soon as I stopped eating dairy, my symptoms disappeared. They said I might outgrow my allergy someday, but for the time-being I had a new problem. How would I get enough calcium if I wasn't drinking any milk? Many people face a similar dilemma, whether they are forced to give up dairy because of an allergy, or because they choose to for other reasons.

There's no doubt that calcium is essential. According to the National Institutes of Health (NIH), the body maintains a constant level of calcium in the body fluid to support the many body functions for which calcium is necessary, including muscle contraction, blood vessel contraction and expansion, the secretion of hormones and enzymes, and sending messages through the nervous system. That means it's needed to keep your heart beating and your muscles functioning, among other things. But the calcium in body fluids and muscles accounts for only about 1% of the total calcium in your body. The rest of it is stored in the bones and teeth, where it provides structural support and acts as a sort of "savings account" from which calcium is repeatedly withdrawn and deposited.

Although calcium intake is important throughout the life, the most important time for building up this savings account balance is during childhood, when there is a higher amount of bone formation and less breakdown. During adulthood, these processes are more equal, and then during later years, the breakdown takes over as the predominate process, which leads to weakening of the bones.

So what's a kid (or anyone) who doesn't drink milk to do? Get calcium from any of the many other places it can be found. You can find calcium in many plant-based foods, from almonds to tofu. Here is a list of some calcium-containing foods that are dairy-free, with the amount of calcium you'll find in a single serving.

Here's how much calcium you'll find in a single serving of each of the foods above.

| Food | Serving Size | Calcium |
|--|---------------|---------|
| Collard greens | 1 cup, boiled | 357 mg |
| Fortified soymilk | 1 cup | 368 mg |
| Black-eyed peas | 1 cup, boiled | 211 mg |
| Firm tofu (made with calcium sulfate) | 1/2 cup | 204 mg |
| Calcium-fort orange juice | 6 oz | 200 mg |
| Blackstrap molasses | 1 Tbsp | 172 mg |
| Baked beans | 1 cup, canned | 154 mg |
| Kale | 1 cup, cooked | 94 mg |
| Chinese cabbage | 1 cup, raw | 74 mg |
| Oranges | 1 cup | 72 mg |
| Almonds | 1 oz | 70 mg |

Here are some tips on how to incorporate many of these foods into your diet to increase your calcium intake:

- Cook a vegetable stir-fry and toss in diced tofu made with calcium sulfate.
- Add steamed and minced greens like collards and kale to casseroles, soups and stews.
- Use calcium-fortified non-dairy milk (like soy or rice milk) instead of water in recipes such as pancakes, mashed potatoes, pudding and oatmeal.
- Stir a drizzle of blackstrap molasses into your oatmeal.
- Use almond butter instead of peanut butter.
- Add calcium-rich beans like black-eyed peas to soups, pasta sauces, salads and burritos.
- Enjoy canned baked beans as a side dish, or mix them into your favorite recipes.

If you're not regularly eating enough of these foods to meet your calcium needs, you may want to consider a calcium supplement. After you consult your doctor to make sure this is right for you, your next step is choosing a supplement. Here are some guidelines that will help you:

- Choose a brand you trust. Generic supplements might be a lower quality and might not be absorbed as well.
- When comparing the potency of two different types, compare them by the amount of elemental calcium they contain, which should be listed on the label.
- Choose one with the abbreviation "USP", which means that the supplement has met the standards of the U.S. Pharmacopeia (USP) for quality, purity and tablet disintegration or dissolution.
- Do not use calcium supplements made with unrefined oyster shell, bone meal or dolomite as they may also contain toxic substances like lead, mercury and arsenic.

In addition to eating the right foods and/or supplementing, there are a few other tips everyone should follow, whether eating dairy or not, to keep their bones strong.

- Reduce your sodium intake. Increased sodium in the blood can cause your body to compensate by pulling more calcium from your bones to maintain balance. Cut back on your salt intake and your bones will stay strong.
- Eat your veggies. In addition to their calcium content, many vegetables and fruits are good sources of potassium. According to the NIH, this mineral may help decrease calcium excretion in people who eat high sodium diets— particularly in postmenopausal women.
- Don't overdo the protein. As with sodium, the body's reaction to excess protein can weaken bones. If you're on a high-protein diet, be doubly sure you're getting the recommended amount of calcium daily—at least 1,000 mg.
- Exercise. Weight bearing exercise, like walking, step-aerobics, running, and hiking put stress on your bones, causing your body to respond by making them stronger.
- Get ample amounts of Vitamin D. Vitamin D helps improve calcium absorption. Food and sunlight are your two sources for vitamin D. According to the Harvard School of Public Health, "for bone health, an adequate intake of vitamin D is no less important than calcium." Food sources of vitamin D include cod liver oil, salmon, mackerel, tuna, and fortified breakfast cereals. According to the NIH, ten to fifteen minutes of sun exposure at least two times per week to the face, arms, hands, or back (without sunscreen) is usually sufficient to provide adequate vitamin D.

Turns out there are lots of good (and tasty) ways to get calcium and to grow and support your bones without dairy, which is good news for me, because I never did outgrow that dairy allergy.

This article has been reviewed and approved by SparkPeople healthy eating expert, Tanya Jolliffe.

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