Hi Alice,

I drink about three cups of coffee and one cup of milk a day. I was wondering if one cup of milk contains enough calcium to keep my bones strong. I am 23 years old.

Answer

Dear Reader,

Regardless of your age, one cup (8 ounces) of dairy milk a day, which provides about 300 mg of calcium, is not enough to keep your bones strong and healthy. It's recommended that people in their 20s get at least 1,000 mg of calcium each day. That equates to about 3-1/3 cups of dairy milk but, if downing more dairy isn't up your alley, there are a number of other sources of calcium out there to choose from (read on for more options). And, since you bring up the notion of adequate calcium intake, you might be asking yourself why people need so much calcium. The short and sweet answer is: to maintain strong, healthy bones and good general nutrition, as well as to prevent osteoporosis (other parts of your body, such as your heart, muscles, and nerves, also need calcium to function). To know for sure whether or not you're getting enough of that bone-building stuff, it's a good idea to check in with your health care provider.

Calcium is an essential component in the life-long process of laying down new bone. Before you reach 30 years of age, more bone is made than lost; after 30, this trend reverses, and calcium can help our bodies maintain bone mass. While everyone needs calcium, it's crucial to point out that the female of the species needs to be especially vigilant about this mineral (see Women, calcium, and osteoporosis? in the Go Ask Alice! Nutrition and Physical Activity archives). On average, women make less bone and lose it at a greater rate than men. Additionally, a woman's calcium stores are drawn from during pregnancy and lactation. Women also generally live longer than men, giving their bones more time to become brittle, less dense, and prone to fracture (i.e., to develop osteoporosis). The two best things you can do now to prevent future osteoporosis are: (1) include enough calcium in your diet; and, (2) get in regular physical activity and include weight-bearing activities into your routine.

So how much is enough? The Recommended Daily Allowances (RDAs) for calcium intake are:

Women:
- 9 to 18 years old ? 1,300 mg/day
If this amount of lactose seems daunting, don't worry - there are many high calcium foods besides milk that you can consume to increase your calcium intake. The Linus Pauling Institute at Oregon State University [4] provides a table of common foods (some dairy, some not) and their relatively high calcium content. Some of these foods include yogurt, red beans, tofu, and spinach.

A few other pointers on how to maximize the calcium in your diet:

- Calcium is absorbed better in the presence of vitamin D and in smaller doses throughout the day. Vitamin D is a nutrient that can be found naturally or fortified in some foods; it's also produced by the skin when exposed to sunlight of a certain intensity.
- It's also good to point out that the body can only absorb about 500 mg of calcium at a time, so spreading out your calcium intake over the course of the day is recommended.
- If you're concerned that you're not getting enough, taking a calcium supplement might seem like a quick fix for meeting your RDA. While there are many calcium supplements available to help you meet your intake goals, getting calcium through foods is preferable to supplementation because of a better absorption rate. Speaking with your health care provider will help you determine whether or not a supplement may be appropriate for you.

Lastly, it's worth mentioning that if you are hoping to make up for lost time, it is possible to overdo it with your calcium intake. Extra calcium doesn't necessarily mean you are going to have stronger bones. In fact, too much calcium can lead to constipation, hypercalcemia (calcium in the blood), hypercalciuria (high levels of calcium in urine), and kidney stones.

It's great that you're keeping tabs on your calcium consumption as a young person. With an awareness of what you need and how you can get it, you're sure to keep your bones healthy and strong.

Alice!
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