Facts about calcium supplements

Susan Ott, MD, 11/30/07

- Total amount of calcium a day should be 1000 mg for adults, 1200 - 1500 mg for women with low estrogen. This includes calcium from food and supplements combined.
- Extra calcium does not increase bone strength, it just makes the kidneys work harder to get rid of the excess. Do not exceed 2,000 mg a day!
- The bones do not care whether calcium comes from supplements or foods.
- Calcium citrate and calcium carbonate are both absorbed from the intestines, and calcium citrate is better only in some patients with intestinal diseases. Calcium carbonate is less expensive and thus the recommended choice. However, it should be taken with food for two reasons: it is absorbed better with food and it will be better for the stomach acid content if taken with food.
- It is best to take calcium at least twice a day because the intestines do not absorb calcium as well when more than 600 mg are taken at once. Calcium in the evening might help prevent night-time bone loss.
- Calcium should not be taken at the same time as iron or thyroid. People who need these medications should take them at a different time of day.
- Vitamin D is important for bones and people need 400 to 1000 units a day (depending on sunshine exposure). But the vitamin D does not need to be taken at the same time as the calcium. In fact, it does not work until the liver and kidneys have changed it into activated vitamin D. The vitamin D will be stored in the cells of the body and lasts a long time.
- Magnesium is also important for bone health, but it is a minor component of the bones. Nuts and green vegetables are good sources of magnesium. Some people with diseases, or patients on certain medications need supplements. Otherwise, they might be harmful; we really do not know. The Women's Health Initiative found that women who took magnesium had more wrist fractures.
- TUMS does not contain aluminum. There is a small amount of sugar and tiny amount of salt, but these cause no medical problems. TUMS are chewable and dissolve easily, they are also inexpensive, and they are well absorbed when taken with food. Therefore they are my first choice. The labels on TUMS are confusing because they include both the elemental calcium and carbonate. Regular TUMS contains 200 mg calcium and 300 mg carbonate per pill; TUMS EX-750 contains 300 mg calcium, and TUMS ULTRA 1000 contains 400 mg calcium per pill.
- Some people feel calcium causes constipation. Eating more fruits and drinking extra water should help to prevent this.
- Calcium supplements are not considered medications by the FDA so they are not regulated. Many statements about calcium are really advertisements.
- There are hundreds of calcium preparations available on the market. Many of them are not well absorbed, and it is impossible to keep track of which brands actually work. Therefore I recommend only brands that I know can get absorbed: TUMS, chewable calcium carbonate, OsCal, Caltrate, Citrical, Viactive. Other brands might be OK but I can't be sure.