Calcium Supplements: What to Look for

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Calcium is essential for many functions in the body, including:

- regulating the heartbeat
- conducting nerve impulses
- stimulating hormone secretions
- clotting of blood
- building and maintaining healthy bones.

Calcium is a mineral found in many foods. Getting enough of this nutrient is important because the human body cannot make it. Even after you are fully grown, adequate calcium intake is important because the body loses calcium every day through the skin, nails, hair, and sweat, as well as through urine and feces. This lost calcium must be replaced daily through the diet. Otherwise, the body takes calcium out of the bones to perform other functions, which makes the bones weaker and more likely to break over time.

Experts recommend that adults get 1,000 to 1,200 mg (milligrams) of calcium each day. Although food is the best source of calcium, most Americans do not get enough of it from food sources. Calcium-fortified foods (like orange juice, bread, cereals, and many others on your grocer's shelves) and calcium supplements can fill the gap by ensuring that you meet your daily calcium requirement.

What to Look for in a Calcium Supplement

Calcium exists in nature only in combination with other substances. These substances are called *compounds*. Several different calcium compounds are used in supplements, including:

- calcium carbonate
- calcium phosphate
- calcium citrate.

These compounds contain different amounts of *elemental calcium*, which is the actual amount of calcium in the supplement. It is important to read the label carefully to determine how much elemental calcium is in the supplement and how many doses or pills to take.

Calcium supplements are available without a prescription in a wide range of preparations and strengths, which can make selecting one a confusing experience. Many people ask which calcium supplement they should take. The "best" supplement is the one that meets your needs. Ask yourself these questions:

- How well does my body *tolerate* this kind of supplement? Does it cause any side effects (like gas or constipation)? If so, you may want to try another kind or a different brand.
- Is this kind of supplement *convenient*? Can I remember to take it as often as recommended each day?
- Is the *cost* of this supplement within my budget?
- Is it widely *available*? Can I buy it at a store near me?

Other Important Things to Consider

Purity: Choose calcium supplements with familiar brand names. Look for labels that state "purified" or have the USP (United States Pharmacopeia) symbol. Avoid calcium from unrefined oyster shell, bone meal, or dolomite without the USP symbol, because it may contain high levels of lead or other toxic metals.

Absorbability: Most brand-name calcium products are absorbed easily in the body. If you are not sure about your product, you can find out how well it dissolves by placing it in a small amount of warm water for 30 minutes and stirring it occasionally. If it hasn't dissolved within this time, it probably will not dissolve in your stomach. Chewable and liquid calcium supplements dissolve well because they are broken down before they enter the stomach.

Calcium, whether from food or supplements, is absorbed best by the body when it is taken several times a day in amounts of 500 mg or less, but taking it all at once is better than not taking it at all. Calcium carbonate is absorbed best when taken with food. Calcium citrate can be taken anytime.

Tolerance: For certain people, some calcium supplements may cause side effects such as gas or constipation. If simple measures (such as increasing your intake of fluids and high-fiber foods) do not solve the problem, you should try another form of calcium. Also, it is important to increase the dose of your supplement gradually: take just 500 mg a day for a week, then slowly add more calcium. Do not take more than the recommended amount of calcium without your doctor's approval.

Calcium Interactions: It is important to talk with a doctor or pharmacist about possible interactions between your over-the-counter and prescription medications, and calcium supplements. For example, calcium supplements may reduce the absorption of the antibiotic tetracycline. Calcium also interferes with iron absorption. So you should not take a calcium supplement at the same time as an iron supplement – unless the calcium supplement is calcium citrate, or unless the iron supplement is taken with vitamin C. Any medication that you need to take on an empty stomach should not be taken with calcium supplements.

Combination Products

Calcium supplements are available in a bewildering array of combinations with vitamins and other minerals. Calcium supplements often come in combination with vitamin D, which is necessary for the absorption of calcium. However, calcium and vitamin D do not need to be taken together and/or in the same preparation in order to be absorbed by the body. Minerals such as magnesium and phosphorus also are important but usually are obtained through food or multivitamins. Most experts recommend that nutrients come from a balanced diet, with multivitamins used to supplement dietary deficiencies.

Getting enough calcium – whether through your diet or with the help of supplements – will help to protect the health of your bones. However, this is only one of the steps you need to take for bone health. Exercise, a healthy lifestyle, and, for some people, medication, are also important.

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For Your Information

For updates and for any questions about any medications you are taking, please contact the U.S. Food and Drug Administration at 1-888-INFO-FDA (1-888-463-6332, a toll-free call) or visit their Web site at www.fda.gov.