

Getting the Most from Calcium Supplements

Although a well-balanced diet is the best way to consume vitamins and minerals, some people prefer to take out an "insurance policy" or two in the form of supplements. One thing is for sure; there is no shortage of calcium supplements on the market! Here are some helpful consumer hints to narrow down your selection.

TYPES OF CALCIUM SUPPLEMENTS

- Calcium Carbonate is the most inexpensive and readily available option. It contains the highest level of elemental calcium (40%), therefore fewer pills may be required in order to reach your desired daily intake. This big amount of calcium is typically accompanied by a big pill. A chewable or liquid version may be preferred for those who find the tablets too big to swallow. Calcium carbonate should be taken with meals or with an acidic beverage such as orange juice. It is alkaline based and requires extra stomach acid for maximum absorption. For some, intestinal distress in the form of gas or constipation. If this happens to you, try upping your dietary fiber intake, and drink more water. If this doesn't help, switch to calcium citrate.
- Calcium Citrate usually costs just a bit more than calcium carbonate, and is not quite as easy to find, but on the whole it is an excellent option. Calcium citrate has less elemental calcium (21%), but it is better absorbed than calcium carbonate. It is acidic based, and may be taken at any time in the day, even on an empty stomach! If you are taking acid blockers for indigestion, acid reflux or other intestinal conditions, calcium citrate may be your best option from an absorption point of view.
- Calcium Phosphate is rarely recommended. Although some types of calcium phosphate contain high levels of elemental calcium, the average diet already contains too much phosphorous from processed foods.
- Calcium Lactate and Calcium Gluconate are both usually well absorbed, but they have a very low rate of elemental calcium (13% and 9% respectively). Calcium Lactate is derived from lactic acid and should not be a problem for milk allergies or lactose intolerance.
- Coral & Chelated Calcium are overpriced and over-hyped calcium supplements. They supply no known advantages over any of the calcium compounds noted above. It is best to avoid supplements that contain Dolomite, Bone Meal, or Oyster Shell. These products may be contaminated with lead, mercury, and/or arsenic.

SO WHAT IS THIS ELEMENTAL CALCIUM?

Several different calcium compounds are utilized in supplements, such as calcium carbonate, calcium phosphate and calcium citrate. The elemental calcium represents the actual amount or percentage of calcium in the compound. It is important that you read the labels of calcium supplements to verify the amount of elemental calcium available. How does one do this? Simple! On the nutrition/supplement facts label a % of daily value is listed. This is based upon a 1000mg recommended daily value for calcium. Thus a supplement with a 25% daily value for calcium has 250mg of elemental calcium. Also, be sure to note the serving size, that is the number of tablets, pills, etc. you must take in order to obtain that level of elemental calcium. If you choose to supplement, do not consume more than 2500mg of elemental calcium daily (diet and supplements combined)! ISN'T THIS STUFF REGULATED?

Although calcium supplements are not currently regulated by the FDA, you can check the label for the initials USP. This is a guarantee that the product meets with the U.S. Pharmacopeia's voluntary standards for quality, purity (lead content), and tablet disintegration. Nature Made® manufacturers USP Verified Calcium Supplements, and luckily, they are one of the more competitively priced brands. Nature Made Calcium 500mg with Vitamin D, Tablets is an excellent, yet inexpensive, calcium carbonate option. For that extra boost, Nature Made Advanced Calcium High Absorption, Tablets combines calcium carbonate, calcium citrate and Vitamin D all in one neat package.

Since the USP system is completely voluntary, it does omit some top brands. For a broader selection of reputable vitamins and minerals, sign up with Consumer Lab. They test, and report on, various brands and types of supplements, utilizing the same basic markers as the USP (quality, purity, and disintegration / absorption). Citracal Calcium Citrate + D, Coated Caplets and Enzymatic Therapy OsteoPrime each received the Consumer Lab seal of approval. Citricol obtains all of its calcium from calcium citrate, making it a very high absorption choice. For those who like the one pill approach, OsteoPrime's label reads like a multivitamin for bone health.

In Canada, specific standards have been created for lead content, quality, and tablet disintegration. Products with a DIN (Drug Identification Number) or GP (General Product) number have met with these standards.

ABSORPTION INSURANCE

The body will easily absorb most brand name calcium products. However, if in doubt check for the USP symbol, select an approved product from Consumer Lab, or try a simple test on a sample tablet. Place it into a glass of warm water or clear vinegar. Stir occasionally. If the tablet dissolves within 30 minutes, then the supplement will most likely dissolve in your stomach as well. Chewable and liquid calcium supplements are a good alternative to ensure proper absorption. As a rule of thumb, calcium, whether from diet or supplements, is best absorbed when consumed throughout the day in increments of less than 500mg.

BEWARE OF INTERACTIONS

If you are taking any medications, prescription or over-the-counter, check with your doctor or pharmacist before adding

calcium supplements into the mix. Calcium has been shown to interfere with the absorption of iron supplements, Synthroid for hypothyroidism, bisphosphonate medication for osteoporosis (i.e. Fosamax or Didrocal), and certain antibiotics such as tetracycline. A window of 2 hours or more between the medication and calcium supplementation should prevent an interaction. **OTHER BONE BUILDERS**

Calcium supplements are found in varying combinations, often with added vitamins and minerals such as magnesium and Vitamin D. For most healthy individuals, additional supplements of magnesium are not required. Magnesium is abundant in vegetables and nuts, and our daily requirements can be met with that good old "5 servings of fruits and vegetables." Those who believe they may have a magnesium deficiency due to illness should consult a physician. On a different note, sunscreen, age, and increasing indoor activities are depleting the levels of Vitamin D we as humans are producing. This is prompting more recommendations for Vitamin D supplementation. You may opt to take Calcium supplements with Vitamin D, which is great, but not an absolute must. Although Vitamin D enhances calcium absorption, it is taken in and stored in a unique way and at a different rate than calcium. **WILL A MULTIVITAMIN COVER MY CALCIUM NEEDS?**

The multivitamin has become a convenient, one-stop vitamin & mineral insurance policy for today's hectic lifestyles. Not all multivitamins are created equal though. Multivitamins possess numerous vitamins and minerals; therefore quality is at greater risk. Be sure to select a USP or Consumer Lab verified product. We have identified two quality-approved multivitamins that could double as calcium supplements. One is OsteoPrime, as mentioned above, and the other is USP verified Nature Made Essential Daily, Multivitamin/Mineral, Tablets. For those of you who are just looking for a small calcium insurance policy (say 100 to 200mg), try one of the following Consumer Labs approved multivitamins:

Women

- Rainbow Light Just Once Women's One Multivitamin, Tablets

Prenatal

- Rainbow Light Just Once Prenatal One Multivitamin, Tablets

Men

- Rainbow Light Just Once Men's One Multivitamin, Tablets

Seniors

- Rainbow Light Just Once Active One Senior Multivitamin, Tablets
- Centrum Silver Multivitamin and Mineral for Adults 50+, Tablets

Kids

- Sundown Spiderman Complete Children's Multiple Vitamin, Chewable Tablets **THE BOTTOM LINE**

Ignore the sales pitches and consumer hype when purchasing calcium supplements. The least expensive and most basic brands of calcium carbonate or calcium citrate will typically do the trick!