



Calcium Is Complex *by Rebecca Morley*

Calcium is the most common mineral in the body, 99% of which is found in **bones and teeth**. The remaining 1% of s found in the blood and soft tissues. Calcium is so vital to muscles including the heart, that the body de-mineralizes bone to maintain normal blood levels if intake is low.

This is why both intake and absorption are important. Bone is a dynamic tissue that is remodeled (broken down and rebuilt) throughout life. During growth, bone formation exceeds bone break down. **Osteoporosis** may result when bone breakdown exceeds formation. The dietary intake of calcium needs to be adjusted according to age, and gender, as well as pregnancy or breastfeeding. (*see table cover letter*)

Important Functions of Calcium

- Helps muscles contract normally.
- Mediates the constriction and relaxation of blood vessels
- Integral to nerve impulse transmission
- Regulates secretion of hormones like insulin.
- Stabilizes proteins and enzymes, optimizing their activities.
- Calcium is needed to activate vitamin K-clotting factors for blood coagulation.

Calcium is absorbed in the small intestine. Not all calcium we consume is absorbed because it's dependent on the acidic condition in our intestines, vitamin D and estrogen levels and the type of calcium consumed. Parathyroid Stimulating Hormone (PTH) helps convert vitamin D to calcitriol which allows calcium to be absorbed. Magnesium is needed for cells to make PTH. If all ingredients are not in place, calcium is taken from the bones to keep blood calcium levels normal.



Upcoming in October
Eat Smart Volume:
"Calcium's Nutritional Friends"

- Vitamin D
- Vitamin K
- Magnesium

Some Ways Calcium is Compromised

- Low intake of calcium, vitamin D, magnesium.
- Alcoholism
- High sodium intake
which increases loss of calcium in the urine
- Excess protein intake
which increases calcium excretion
- Excess soft drink consumption

Read More : www.healthcastle.com/calciumpill.shtml
www.ohioline.osu.edu/hyg-fact/5000/
www.oregonstate.edu/infocenter/minerals/calcium/

Sources of Calcium



Milk, yogurt, & cheese
Canned fish with bones
Fortified tofu and soy milk
Fortified orange juice
Green leafy vegetables

Almonds, dried beans and peas
Calcium pills (with vitamin D & magnesium)

Citric Acid, Vinager and Tomatoes Promote Absorption!