

CALCIUM – THE ESSENTIAL MINERAL (By Jayne Rosenbaum and Nadine Tanis)

We all have heard that Vitamins are essential, but without minerals they do us little good. Since minerals cannot be produced in our bodies, the best way to obtain them is from foods. Minerals are necessary in greater quantities than vitamins. Calcium is the main structural mineral in the body and essential to our health. It is called a macro-mineral because it is needed in amounts greater than 100 mg per day. It builds bones and teeth but is not deposited on them permanently. The bones and teeth serve as storage areas that the body can withdraw from whenever it needs calcium to aid in muscle contraction, blood clotting, regulation of heartbeat and basically to regulate mineral usage through out the body. Calcium also helps to protect against colon cancer. Pregnant and lactating women have higher than normal calcium needs. The growing fetus needs more calcium in the last trimester. It is even called a baby booster because it is not only indispensable for the baby's teeth and bones but also for muscle action (including heart) blood clotting, nervous system, proper cell functioning, and optimum blood sugar levels. Calcium is a highly versatile nutrient that also helps counteract high blood pressure in mothers as well as helps reduce muscle cramps. Calcium may also help to prevent varicose veins and hemorrhoids. Furthermore, it plays the role of a natural tranquilizer to combat insomnia. If taken before bedtime it aids sleep. .

Calcium works with phosphorus to build and maintain strong bones and teeth. To do this it requires the help of other vitamins and minerals like vitamin A, C, D to improve the absorption process. Proper acid balance in the digestive system is essential in order for it to be absorbed. If acid is lacking, calcium does not dissolve and deposits in the joints bringing extreme pain and stiffness or deposits in the circulatory system and can cause atherosclerosis or a heart attack.

Drugs such as aspirin and corticosteroid drugs hinder calcium absorption. Also lack of movement, stress, tension, excessive saturated fats, oxalic acid (spinach) and phosphorus to excess (colas and other fizzy drinks are high in phosphorus) will destroy calcium.

A deficiency in calcium can cause osteoporosis in middle-aged and elderly women and men. Osteoporosis happens when calcium demands are greater than the supply and no storage is left. Then, the bones become as porous as a spider web and are easily broken. They snap at the slightest movement. Extra calcium intake helps to prevent bone loss. Periodontal disease (gingivitis) from inflammation and bleeding, is another manifestation of calcium deficiency. Extra calcium helps to reduce pockets at the gum line and tighten wobbly teeth in their sockets.

Richest sources of Calcium, include: milk and milk products (preferably raw), beans, nuts, molasses and fruits. Calcium is also present in most leafy green vegetables. Phosphorus, magnesium and vitamin D are essential for calcium absorption. Phosphorus is available in pasture-raised and dry-aged meats, pasture-raised poultry, egg (from pasture-raised animals) and seeds. However, the calcium in spinach, Swiss chard, and beet greens may not be available because of the presence of oxalic acid, which

interferes with calcium absorption. Broccoli, kale, mustard greens, and turnip greens are high in calcium and are good sources of this mineral. Magnesium is found in nuts, seeds and whole grains. Vitamin D comes from the action of the sun on the skin. A milk shake with a banana and one egg is an excellent source of calcium. Other sources of calcium are nutritional supplements. The suggested daily intake is 800 to 1,200 mg for the average individual and 1,200 to 1,600 mg for pregnant and lactating women. We prefer nutritional supplements from natural sources not chemical or man-made ingredients. We should avoid buying them at local supermarket or commercial drugstore and keep unopened containers under refrigeration. Opened containers can be kept tightly closed in a cool, dark, dry place such as a cabinet or closet.

The recipe below contains Kale and is a good source of calcium:

Raw Kale Toss

Lacinato Kale, strip leaf from inner stem and rip into bite size pieces
Braggs Liquid Aminos
1-2 cloves of organic garlic, smashed in mortar and pestle
Organic Olive Oil
Juice of ½ of lemon or lime

Wash and blot the kale. Place in a large mixing bowl. Smash the garlic. Add to the kale. Give a liberal squirt of the Braggs. Repeat with a liberal drizzle of olive oil. Squeeze the lemon directly into the bowl. Toss together and let sit for 10 minutes to marinate.

Note the hardest part of this yummy recipe is waiting the 10 minutes to marinate! I promise this will make a raw kale lover out of you!
Enjoy the Bounty!

The veggies and more used to make this yummy recipe are available through the Organic Produce Buying Club of South Florida. Visit us at www.OrganicBuyingClubSoFla.com or call Jayne Rosenbaum at 305-868-2136

BIBLIOGRAPHY

Blate, M. (1982), *The G-Jo Institute Manual of Vitamins and Minerals*.
Florida: Falkynor Books.

Gerson, R. F. (1987), *Vitamins & Minerals for a Healthy Pregnancy*.
Chicago: Contemporary Books.

Prevention Magazine (1984), *Understanding Vitamins and Minerals*.
Pennsylvania: Rodale Press.

Scott-Moncrieff, C. (1999), *The Vitamin Alphabet: Your Guide to Vitamins,
Minerals and Food Supplements*. London: Collins & Brown Ltd.