

Calcium and Women

What is Calcium?

Calcium is an important mineral, which ensures the building of strong, healthy bones and teeth. It also helps prevent blood clots and assists the muscles and nerves to work properly. Almost 99% of Calcium is stored in bones and teeth and the remaining 1% travels in the blood and to other tissues.

What is the importance of Calcium in Women?

Calcium assists in the development of bone. Adolescent and young women need enough Calcium to achieve optimum bone density, which in turn will prevent Osteoporosis later in life. High intake of Calcium can:

- Prevent Osteoporosis*
- Prevent high weight gain
- Control blood pressure
- Reduce levels of cholesterol
- Protect against stroke
- Prevent malignant growth of cells in the colon
- Ensures healthy pregnancy outcomes
- Known to help prevent PMS.

What is Osteoporosis?

Osteoporosis is the condition in which bone becomes thin and brittle. Bone becomes more susceptible to breakage (1.5 million fractures a year) and leads to problems like hip fractures (300,000 cases a year) and curving of the spinal cord. High intake of calcium reduces the risk of this condition.

Healthy People 2010 have recorded a 20% improvement in this condition since 2000. Below is a chart, which indicates the percentage of adults with this condition.

RACE/ ETHNICITY	PERCENT
Mexican American	10%
African American	7%
White	10%
GENDER	
Female	16%
Male	3%

EDUCATION LEVEL	
Less than High School	11%
High School Graduate	11%
Some College	9%

Why are women higher at risk?

There are certain risk factors that increase the risk of calcium deficiency and women seem to fall under many of these factors. Some risk factors are:

- Smoking cigarettes
- Being underweight
- Lack of exercise
- Use of certain medications
- Low Carbohydrate and Calcium diets
- Menopause
- Hysterectomy or removal of ovary
- Hereditary
- Medical problems

How much Calcium does a woman need to maintain a healthy balance?

AGE	AMOUNT OF CALCIUM (MG)
0-6 mo.	210 mg/day (#1 source -breast feeding)
7-12 mo.	270 mg/day (#1 source -breast feeding)
1-3 yrs.	500 mg/day
4-8 yrs.	800 mg/day
9-18 yrs.	1,200-1,500 mg/day
19-50 yrs.	1,000 mg/day
50+ yrs.	1,000-1,500 mg/day (post menopausal)
65+ yrs.	1,500 mg/day
Pregnant/Nursing	1,200 -1,500 mg/day

What are some sources of Calcium and how much?

Immediately when you think of healthy bones, we think of *milk* as the main source of Calcium. Unfortunately, there are some women who are lactose intolerant, or just do not want the high fat content of milk products. Below is a chart of other food sources for maintaining your required calcium intake.

SOURCE	HOW MUCH	MG
Milk (whole, 2%, 1%, skim)	1 cup	420 mg
Yogurt (low fat, plain)	$\frac{3}{4}$ cup	300 mg
Cheese (processed slices)	2 slices	265 mg
Trail mix (nuts, seeds, etc)	1 cup	159 mg

Black eye peas	1 cup	211 mg
Broccoli	½ cup	36 mg
Orange	1 med	55 mg
Spinach (frozen, boiled)	1 cup	291 mg
Brown Sugar	1 cup	181 mg
Almonds, dry roast	¼ cup	95 mg
Canned Salmon w/ bones	3 oz	180 mg
Calcium Fortified Cereal	1 cup	200 mg
Calcium Enriched Orange Juice	1 cup	300 mg

What are some effects of prolonging the lack of Calcium in Body?

It is vital that a high intake of Calcium be part of one's life from birth. First of all, the prolonged lack of Calcium in children can lead to stunted growth and higher risk of bone fractures throughout adolescence. Then, later in life, this can lead to bone mineral loss in adults (Osteoporosis) and urinary stones.

What are some effects of over intake of Calcium?

Of course, like many minerals, it is very important that you only take the required amount of calcium supplement. Mega doses of Calcium can lead to many toxic effects. Some effects include:

- Calcium deposits in soft tissues
- Renal damage
- Acid in stomach
- Kidney stones
- Constipation.

What can we do to prevent calcium deficiency?

- Enforce the importance of calcium to our children
- More responsible for providing nutritional and calcium fortified foods to our diet
- Exercise regularly
- Eliminate risk factors like smoking, low carb-diets, etc.
- Maintain a healthy weight



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Calcium and Women
(Class Handout)



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What are some risk factors for calcium deficiency in women?

- smoking
- underweight
- lack of exercise
- low carbohydrate/calcium diets