



# CORNERSTONE MEDICAL CLINIC

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## The Case for Calcium

Exactly how much calcium do you need to help maintain healthy bones? The National Osteoporosis Foundation (NOF) says that postmenopausal women who take estrogen replacement therapy (ERT) should consume 1,000 mg of calcium per day. Unfortunately, most American women consume less than 600 mg of calcium daily. About half of what they need to help lower osteoporosis risk.

If you and your doctor decide that you should take calcium supplements to help maintain health bones, don't just grab any bottle off the nearest store shelf. To get the most from your supplements keep these tips in mind:

- ❖ Look for supplements that contain starch, which help the pills disintegrate quickly from the stomach.
- ❖ Avoid supplements made from dolomite or bone meal, which sometimes contain lead.
- ❖ Don't pay more for calcium made from oyster shell because the synthetic form is chemically identical and equally effective.
- ❖ Don't pay more for "chelated" calcium it is not absorbed any better than any other supplement.
- ❖ Consider several daily doses. More calcium may get into your system if you take several 250 mg. pills a day rather than a single 1,000 mg. pill.
- ❖ Unless your doctor advises otherwise, take your supplements with meals, because the body may be better able to absorb the pills when they are taken with food.
- ❖ Consider taking calcium tablets that also contain vitamin D, which enhances calcium absorption.

While calcium supplements can be very helpful, they shouldn't be thought of as a substitute for food. Compared with supplements, calcium rich dairy foods such as milk, cheese and yogurt are better absorbed by the body because they also contain lactose, vitamin D, protein and magnesium, which are important to bone health. Although experts caution that calcium supplements won't be as effective if your diet is poor, they acknowledge that pills may be necessary for many women, especially those who don't like dairy foods, or who fall into one of the following groups:

- ❖ Women with lactose intolerance, which results in unpleasant side effects such as bloating, gas and diarrhea after eating dairy products.
- ❖ Women who are unable to absorb calcium adequately.

- ❖ Women who use laxatives or aluminum containing antacids on a regular basis. Laxatives can interfere with calcium absorption, and aluminum containing antacids increase the amount of calcium excreted in the urine.
- ❖ It is important not to take excessive amounts of any calcium supplement because the mineral can cause constipation and may interfere with the body's ability to absorb iron and zinc.

While calcium tablets can help slow post menopausal bone loss, they can't do the job alone. If you are at risk for osteoporosis, you also need weight bearing exercise such as walking, low-impact aerobics and strength training, and estrogen replacement therapy (ERT). Taking ERT is the single most effective way to prevent osteoporosis. ERT has been shown to reduce the risk of hip and forearm fractures by 60%. Half the bone mass women lose is lost in the first 3 to 6 years after menopause begins. While safe for most post-menopausal women, ERT is not for everyone. Ask your physician about the risk factors associated with osteoporosis and ERT.

## **EAT UP!**

Eating foods that contain plenty of calcium is one of the best ways to protect yourself from the bone loss of osteoporosis. These foods will best help meet the 1,000 mg. recommended daily.

<b>Food</b>	<b>Serving size</b>	<b>Elemental Calcium</b>
Calcium fortified orange juice	6 ounces	200 mg.
Calcium fortified cereals	1 cup	300 mg.
Broccoli	1 cup	100-150 mg.
Kale, boiled	1/2 cup	47 mg.
Collards, frozen	1 cup	357 mg.
Figs, dried	10 figs	269 mg.
Sardines, unboned	2 fish	92 mg.
Canned salmon with bones	3 ounces	167 mg.
Skim milk	1 cup	302 mg.
Frozen yogurt	8 ounces	200-300 mg.
Ricotta cheese, part skim	1/2 cup	337 mg.
Whole milk	1 cup	291 mg.
Buttermilk	1 cup	285 mg.
Plain yogurt, nonfat	8 ounces	400 mg.
Flavored yogurt, nonfat	8 ounces	330-380 mg.
Creamed cottage cheese	1 ounce	126 mg.
American processed cheese	1 ounce	124 mg.
Cheddar cheese (American)	1 ounce	211 mg.
Gruyere cheese	1 ounce	287 mg.
Parmesan cheese, grated	1 ounce	390 mg.
Swiss cheese	1 ounce	272 mg.
Provolone	1 ounce	214 mg.
Mozzarella, part skim	1 ounce	207 mg.
Blackstrap molasses	1 tablespoon	172 mg.
Tofu, raw, firm	1/2 cup	258 mg.

## Shopper's Guide

All calcium supplements are not created equal. For example, calcium carbonate may not dissolve as easily in the stomach as calcium lactate or calcium gluconate. However, calcium lactate and calcium gluconate are less concentrated than calcium carbonate. As the chart shows, this means that you may have to take more of some types of calcium supplements than others to get an equivalent amount.

<b>Product</b>	<b>Calcium source</b>	<b>mg. of calcium</b>	<b>Tablets per day*</b>	<b>Cost**</b>
Calcium generic	carbonate	600 mg.	2	\$ 2.12
Caltrate 600	carbonate	600 mg	2	\$ 6.03
Caltrate 600+ D	carbonate	600 mg.	2	
Os-Cal 500	carbonate (oystershell)	500 mg.	2	\$ 7.11
Os-Cal 500+ D	carbonate (oystershell)	500 mg.	2	
Tums	carbonate (limestone)	200 mg.	5	
Tums E-X	carbonate (limestone)	300 mg.	3 1/2	
Tums 500	carbonate (limestone)	500 mg.	2	\$ 3.97
Posture	phosphate	600 mg.	1 1/2	
Posture+ D	phosphate	600 mg.	1 1/2	
Calcium Generic	citrate	200 mg.	5	\$ 7.04
Citracal	citrate	200 mg	5	
Citracal+ D	citrate	315 mg.	3	
Solgar + D	citrate	250 mg.	4	
Solgar +Magnesium	citrate	200 mg.	5	
Calcium generic	lactate	84 mg.	12	\$11.30
Solgar Calcium	lactate	84 mg.	12	
Calcium generic	gluconate	60 mg.	17	\$13.77
Solgar Calcium	gluconate	60 mg.	17	

\* Tablets needed per day to supply 1,000 to 2,000mg. elemental calcium daily.

\*\* Cost to pharmacist for a 30 day supply, according to wholesale price listings in *Drug Topics Red Book*, 1996 and November *Update*.