



CALCIUM—Are You Getting Enough?

Calcium is an essential nutrient, which is important for building and maintaining strong bones and teeth, regulating heartbeat and muscle contractions, and for blood clotting. Calcium also plays a critical role in preventing osteoporosis.

Bones attain their maximum strength...called “peak bone mass” when people reach their early thirties. During childhood and young adulthood, bones grow at a rapid rate and the need for calcium is high. Eating calcium-rich food from childhood through the early thirties is important to ensure that peak bone mass is reached. More bone mass means stronger bones.

We constantly lose calcium from our blood stream through urine, sweat, and feces, and it is renewed with calcium from bone. In this process, bones continuously lose calcium that must be replaced from food.

What is Osteoporosis?

Osteoporosis is a bone-weakening disease that develops gradually and makes bones so fragile that they fracture under normal use. Because it progresses slowly, people often don’t realize that they have osteoporosis until after middle age (1/3 of women develop by the time they go through menopause).

What are the Risk Factors for Osteoporosis?

- Diet low in calcium
- Lack of weight-bearing exercises
- Heavy alcohol use
- Smoking
- Small bone frame and lean build
- Caucasian or Asian race
- Gender...Women are about 4x greater risk than men
- Family history of osteoporosis
- Menopause before age 45

Factors with Affect Calcium Loss from the Body:

- Diets high in animal protein, versus plant protein, cause more calcium to be lost through the urine (vegetarians lose less calcium in their urine, thus may need less dietary calcium than meat eaters).
- Alcohol inhibits calcium absorption.
- Caffeine increases the rate at which calcium is lost through urine.
- High phosphorus intake may inhibit calcium absorption (2-3 cans of soda a day may be bone-threatening).
- Exercise slows bone loss and is one of the most important factors in maintaining bone health.
- Sufficient Vitamin D is needed for the body to absorb calcium.

How Much Calcium Do You Need?

<u>Age</u>	<u>Calcium Recommendations</u>
11-24 years	1,200-1,500 mg.
25-50 years (women)	1,000 mg.
25+ years (men)	800 mg.
Postmenopausal women	1,000-1,500 mg.
Pregnant or breastfeeding	1,200 -1,500 mg

Which Foods Provide Calcium?

Including milk products in your diet is the easiest way to get calcium since they are high-calcium foods. But many foods...dried beans, broccoli and leafy greens...contain calcium as well.

Calcium Content in Common Foods:	<u>Dairy Group</u>	<u>Portion</u>	<u>Mg of Calcium</u>
	Yogurt, Plain & fruited(skim and low fat)	1 cup	345-415
	Milk, Skim and low fat	1 cup	300-305
	Cheddar cheese	1 ounce	204
	<u>Vegetables</u>		
	Broccoli, steamed	1 cup	178
	Cabbage, white, steamed	1 cup	158
	Collards, steamed	1 cup	148
	Kale, steamed	1 cup	94
	Butternut squash	1 cup	84
	Sweet potato (baked)	small	32
	<u>Legumes, Nuts, Seeds, Meat</u>		
	Sesame seeds, roasted, whole	1 ounce	281
	Salmon	3 ounces	160-280
	Tofu raw, firm	1/2 cup	258
	White beans, boiled	1 cup	161
	almonds	1/2 cup	153
	Navy beans, boiled	1 cup	128
	Great Northern beans, boiled	1 cup	121
	Pinto beans, boiled	1 cup	82
	<u>Fruits</u>		
	Figs, dried	1 cup	286
	Apricots, dried	1 cup	59
	Orange, all varieties	medium	52
	Calcium-fortified orange juice	1 cup	300
	<u>Grains</u>		
	Instant oatmeal, enriched	packet	163
	Flour tortilla	1 item	46
	Most breads, enriched	1 slice	25-30

Calcium Supplementation:

It is recommended that healthy individuals meet their nutrient needs by consuming a nutritionally adequate diet made up of a variety of foods in moderation, thus nutrient supplements should not be considered a substitute for a balanced diet. Foods, unlike supplements, contain a number of essential nutrients and do not have side effects. Yet for some individuals (lactose intolerant, vegan diets), calcium supplements may be the preferred way to obtain optimal calcium intake.

There are a wide variety of calcium supplements on the market. Most calcium supplements dissolve well with the exception of calcium-magnesium. To find a calcium supplement that easily breaks down, look for “USP” on the label (which indicates the supplement has been well made). Supplements also differ in the quantity of elemental calcium they provide. Pills containing calcium carbonate contain 40% calcium, thus a 500 mg tablet actually provides 200 mg of elemental calcium. Read the product label to find out how much elemental calcium is provided in a particular supplement.

Calcium supplements appear to be very safe, but check with your health care provider before taking them if you have a personal or family history of urinary tract stones, anemia (calcium can interfere with iron absorption), or problems with dietary intake of phosphates.

Calcium Supplements:	<u>Form</u>	<u>% Calcium</u>	
	Calcium Carbonate	40	If you find that one type of supplement causes you to experience side effects (such as gas) try another.
	Calcium Citrate	21	
	Calcium Lactate	13	
	Calcium Gluconate	9	

Clinic Forms: Calcium - Are You Getting Enough?: Rev.7/22/04: kmb

UNIVERSITY HEALTH CENTER · Appointments & After Hours Nurse: 346-2770

Web: <http://healthcenter.uoregon.edu>

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