

## **Calcium Intake Tools**

Bone Health and Osteoporosis: A Report of the Surgeon General highlighted calcium's major contributions to bone health regardless of an individual's age. Yet most Americans do not get the recommended amounts of calcium they need every day to promote strong bones. The following tools were excerpted from the Surgeon General's report in an effort to help individuals achieve their daily calcium goals:

- "Your Body Needs Calcium" an age-based chart that reminds us of how much calcium we and our family members need each day.
- "Calcium Calculator" a list of common foods and the amount of calcium they
  contain. This tool also includes a scoring system to help keep track of your daily
  calcium intake.
- "A Guide to Calculate Calcium Intake" a guide on how to compare your daily calcium intake to the recommended amounts.
- "How to Use the Nutrition Facts Panel on Food Labels for Calcium" a tool to help you read a nutrition label and identify foods that are high in calcium.

March 2005

# National Institutes of Health Osteoporosis and Related Bone Diseases ~ National Resource Center

2 AMS Circle
Bethesda, MD 20892-3676
Tel: (800) 624-BONE or (202) 223-0344
Fax: (202) 293-2356 TTY: (202) 466-4315

Internet: www.niams.nih.gov/bone E-mail: NIAMSBoneInfo@mail.nih.gov

The NIH Osteoporosis and Related Bone Diseases ~ National Resource Center is supported by the National Institute of Arthritis and Musculoskeletal and Skin Diseases with contributions from the National Institute of Child Health and Human Development, National Institute of Dental and Craniofacial Research, National Institute of Diabetes and Digestive and Kidney Diseases, NIH Office of Research on Women's Health, DHHS Office on Women's Health, and the National Institute on Aging.

The National Institutes of Health (NIH) is a component of the U.S. Department of Health and Human Services (DHHS).

## **Bone Up On Your Diet**

#### Calcium

To keep your bones strong, eat foods rich in calcium. Some people have trouble digesting the lactose found in milk and other dairy foods, including cheese and yogurt. Most supermarkets sell lactose-reduced dairy foods. Many nondairy foods are also calcium-rich.

Your body needs calcium.		
If this is your age,	then you need this much calcium each day (mg).	
0 to 6 months	210	
6 to 12 months	270	
1 to 3 years	500	
4 to 8 years	800	
9 to 18 years	1,300	
18 to 50 years	1,000	
Over 50 years	1,200	
(A cup of milk or fortified orange juice has about 300 mg of calcium.)		

### **Calcium Calculator**

Help your bones. Choose foods that are high in calcium. Here are some examples.

Food	Calcium (mg)	Points
Fortified oatmeal, 1 packet	350	3
Sardines, canned in oil, with edible bones, 3 oz.	324	3
Cheddar cheese, 1 1/2 oz. shredded	306	3
Milk, nonfat, 1 cup	302	3
Milkshake, 1 cup	300	3
Yogurt, plain, low-fat, 1 cup	300	3
Soybeans, cooked, 1 cup	261	3
Tofu, firm, with calcium, 1/2 cup	204	2
Orange juice, fortified with calcium, 6 oz.	200-260 (varies)	2-3
Salmon, canned, with edible bones, 3 oz.	181	2
Pudding, instant, (chocolate, banana, etc.) made with 2% milk, 1/2 cup	153	2
Baked beans, 1 cup	142	1
Cottage cheese, 1% milk fat, 1 cup	138	1
Spaghetti, lasagna, 1 cup	125	1
Frozen yogurt, vanilla, soft-serve, 1/2 cup	103	1
Ready-to-eat cereal, fortified with calcium, 1 cup	100-1000 (varies)	1-10
Cheese pizza, 1 slice	100	1
Fortified waffles, 2	100	1
Turnip greens, boiled, 1/2 cup	99	1
Broccoli, raw, 1 cup	90	1
Ice cream, vanilla, 1/2 cup	85	1
Soy or rice milk, fortified with calcium, 1 cup	80-500 (varies)	1-5
Points Needed: babies/toddlers (ages 0-3) need2-5 children (ages 4-8) need8		Your total

babies/toddlers (ages 0-3) need	.2-5
children (ages 4-8) need	8
teens need	13
adults under 50 need	

adults over 50 need .....

total today



Lack of calcium has been singled out as a major public health concern because it is critically important to bone health. The average American consumes far less than the amount recommended.

#### A Guide to Calculate Calcium Intake

As shown in Figure 6-4 of Chapter 6, most Americans above age 9 on average do not consume recommended levels of calcium. The following guide allows an adult to compare a rough estimate of his or her intake of calcium to the recommended amounts:

- Start by writing down the following amount:
  - ~ 290 if you are a female, regardless of age, or male age 60 or older
  - ~ 370 if you a male under age 60

This is the average amount of calcium that most people eat from non-calcium rich food sources (Cook and Friday 2003, Wright et al. 2003, Weinberg et al. 2004).

- Add 300 mg for each 8-ounce serving of milk or the equivalent serving of other calcium-rich foods (e.g., yogurt, cheese).
- For those taking a calcium supplement or a multi-vitamin containing calcium, add the amount of calcium from that source:
  - Check the supplement label for the amount of calcium per supplement dose.
  - Multiply the amount per supplement dose times the number of doses taken each day.
  - ~ Add the amount from supplements to the base amount and the amount from calcium-rich foods.
- Compare this rough estimate of total calcium intake to the recommended levels shown in Table 7-1. Individuals should try to meet their recommended level of calcium on most days.
- A useful calcium calculator for children can be found at: http://www.cdc.gov/powerfulbones/parents/toolbox/calculator.html.

Figure 7–1. How To Use the Nutrition Facts Panel on Food Labels for Calcium

	Nutrition Facts Serving Size 1 cup (236 ml) Servings Per Container 1
	Amount Per Serving <b>Calories</b> 80 Calories from Fat 0
	% Daily Value*
	Total Fat 0g 0% Saturated Fat 0g 0%
ŀ	Trans Fat 0g  Cholesterol Less than 5mg 0%
	Sodium 120mg 5% Total Carbohydrate 11g 4%
	Dietary Fiber 0g 0%
ł	Sugars 11g Protein 9g 17%
	Vitamin A 10% " Vitamin C 4%
	Calcium 30% " Iron 0% " Vitamin D 25% Percent Daily Values are based on a 2,000
	calorie diet. Your daily values may be higher or lower depending on your calorie needs.
0% =	300 mg

Note: The Nutrition Facts panel on food labels can help individuals choose foods high in calcium. To convert the % Daily Value (DV) for calcium into milligrams (mg) multiply by 10 or add a 0. As an example, a container of yogurt might list 30% DV for calcium. To convert this to milligrams, multiply by 10 or add a 0, which equals 300 mg of calcium for the serving size of 1 cup of yogurt. A food with 20% DV or more contributes a lot of calcium to the daily total, while one with 5% DV or less contributes a little.

Source: FDA 2003.

Excerpted from U.S. Department of Health and Human Services. Bone Health and Osteoporosis: A Report of the Surgeon General. Rockville, MD: U.S. Department of Health and Human Services, Office of the Surgeon General, 2004, page 163.