



### WHAT YOU SHOULD KNOW:

*Your body contains more calcium than any other mineral. Most of the calcium in your body (99 percent) is found in your bones. The remaining one percent is in the fluid that surrounds and fills your cells. Calcium is essential to the formation of bone, and the calcium in your bones is used to keep the calcium in your blood constant. Blood calcium is important because it has many essential roles, including regulating the heartbeat, blood clotting and maintaining normal blood pressure.*

*Getting the calcium you need may not be as hard as you think. Although dairy products are thought to be the best source of calcium, there are alternatives, like fortified juices and cereals, and calcium supplements, to help you meet your needs. This handout gives you information about what foods to eat or what supplements to take to get the calcium you need to keep your bones strong and your body working.*

### YOUR CALCIUM NEEDS:

*While most people know calcium is needed for strong bones and teeth, national nutrition surveys have shown that many people eat less than half the amount of calcium recommended to build and maintain healthy bones. Your calcium requirements change over the course of your life, and are greatest during childhood and adolescence and during pregnancy and breastfeeding.*

*Postmenopausal women and older men also need more calcium. As you age, your body becomes less efficient at absorbing calcium and other nutrients. Older adults are more likely to have chronic medical conditions that require the use of medications that may impair calcium absorption.*

#### **Recommended daily calcium intake**

Birth–6 months .....	400 mg
6 months–1 year .....	600 mg
1–10 years .....	800–1200 mg
11–24 years .....	1200–1500 mg
25–50 years .....	1000 mg
51–70 years .....	1200 mg
71+ years .....	1500 mg
Pregnant or breastfeeding .....	1000–1300 mg

*Women who have been diagnosed with osteoporosis or are taking oral corticosteroid medications such as prednisone and cortisone need 1500 mg of calcium daily.*



**VITAMIN D AND CALCIUM:**

Vitamin D helps you absorb calcium. Your body produces vitamin D after sunlight hits your skin. For adequate vitamin D production, you need approximately 20 to 30 minutes of sunlight on your hands and face three times per week. Although many people are able to get adequate vitamin D naturally, you may not get enough if you are housebound or live in a climate that keeps you indoors in the winter. As you get older, your body is not able to make as much vitamin D from sunlight.

The recommended daily intake of vitamin D is 400 to 800 IU (International Units). Vitamin D is added to most milk and it may be added to other foods. If you don't drink milk and are not exposed to the sun, you may need to take a supplement. Older adults and those with osteoporosis often need 800 to 1000 IU daily. Amounts of up to 2000 IU are considered safe, but larger doses can be harmful unless prescribed by your doctor.

**DIETARY SOURCES OF CALCIUM:**

Dairy foods are the main source of dietary calcium in the American food supply. In addition to providing dietary calcium, dairy products are good sources of vitamin D, protein and phosphorus. Skim milk and low fat yogurt are the best calcium bargains. They provide calcium without adding excess fat and calories. One serving equals eight ounces of milk or yogurt. Aim for at least three servings of dairy products a day.

Processed foods that have been fortified with calcium, such as orange juice and soy milk, can provide calcium to individuals who can't tolerate dairy products or don't like them.

Other foods, like green leafy vegetables and some grains, provide some dietary calcium. However, there are certain substances in these foods that may interfere with how your body absorbs the calcium, so you can't count on them to provide all the calcium you need.

Caffeine can cause a small amount of calcium to be lost in your urine, but not much. You lose the amount of calcium found in one teaspoon of milk for every cup of coffee you drink.

**Dietary sources of calcium**

Food	Serving	Calcium (mg)
Yogurt (nonfat, plain)	1 cup	487
Yogurt (low fat, flavored)	1 cup	283
Milk, skim	1 cup	300
Milk, 2%	1 cup	297
Milk, whole	1 cup	290
Chocolate milk	1 cup	285
Cheddar cheese	1 ounce	205
Cottage cheese	½ cup	78
Mozzarella cheese	1 ounce	183
Swiss cheese	1 ounce	272
Ice cream	½ cup	92

**Dietary sources of calcium (Continued)**

Food	Serving	Calcium (mg)
Canned salmon with bones	3 ounces	203
Frozen broccoli, cooked	½ cup	47
Calcium fortified orange juice	1 cup	350
Caffe latte	12 ounces	350
Caffe mocha	12 ounces	250
Cappuccino	12 ounces	200
Total® cereal	¾ cup	1000

**How to determine calcium content of foods using the food label**

1. Find the percentage of calcium in the food (listed toward the bottom of the food label).
2. Add a "0" to this percentage to get the milligrams of calcium found in one serving.

**Example**

1. Calcium = 40%
2. 40% = 400 mg

**CALCIUM SUPPLEMENTS:**

There are many types of calcium supplements available over-the-counter. The most common are calcium carbonate and calcium citrate. Both types provide calcium that can be absorbed and used by your body. Most supplements are well tolerated, but they can sometimes cause gas, bloating and constipation. If you experience constipation or have a concern about kidney stones, try calcium citrate.

Use the following information when taking a calcium supplement.

- Read the label to find out how much calcium you are getting. It is usually listed as calcium or elemental calcium.
- If you use an antacid as a calcium supplement, read the label carefully. If the label lists the amount of calcium carbonate found in the supplement, only 40% of this amount is actually calcium.

If the label reads		The product contains
<b>Calcium carbonate</b>		<b>Calcium</b>
750 mg	=	300 mg
500 mg	=	200 mg

- Avoid calcium supplements with dolomite bone meal. These can contain lead and other harmful metals.
- Take calcium supplements with meals to enhance absorption.
- Your body can absorb only a certain amount of calcium, so don't take more than 500 to 600 mg of



supplemental calcium at a time.

- Check with your doctor or pharmacist to make sure your calcium supplement won't interfere with other prescription and over-the-counter medications you are taking.
- Drink plenty of fluids to avoid constipation.
- Do not take more than 2500 milligrams of elemental calcium unless advised by your doctor.

Listed below are some of the most popular calcium supplements. Many brand-name calcium supplements have less expensive generic equivalents. Ask your pharmacist for advice.

Milligrams of elemental calcium per tablet

Calcium Carbonate

Os-Cal® 500.....	500 mg
Caltrate® 600 mg.....	600 mg
Nature Made® Oyster Shell.....	625 mg
TUMS® (regular).....	200 mg
TUMS® E-X.....	300 mg
TUMS® Ultra.....	400 mg
Viactiv® Chews.....	500 mg

Remember calcium supplements are only providing calcium and possibly vitamin D. They are not a substitute for a healthy diet, which provides protein, phosphorus and other important nutrients for building strong bones. Use the following information when taking a calcium supplement.

This handout is based on guidelines developed by a team of health care experts at Park Nicollet Clinic and Methodist Hospital. It will be reviewed and updated regularly as scientific evidence changes. This material is for informational purposes only and is not intended to be a substitute for professional medical advice, diagnosis or treatment. Information courtesy of Park Nicollet Institute.

