



DEPARTMENT OF HEALTH AND HUMAN SERVICES

Public Health Service

National Institutes of Health  
National Institute of Child Health  
and Human Development  
Bethesda, Maryland 20892

Dear Parent/Guardian,

As Director of the National Institute of Child Health and Human Development of the National Institutes of Health, I am writing to provide you with information from our *Milk Matters* campaign about the importance of calcium for young people's bone health.

*Milk Matters* is a public health campaign which aims to increase awareness about the importance of calcium in the diets of tweens and teens, and to promote calcium consumption. It is especially important to educate 11-to-15-year-olds, since these are the prime years of bone growth. Studies show that most tweens and teens are not getting enough calcium in their diets. In fact, fewer than one in 10 girls ages 9 to 13 and only one in four boys in this age group are at or above their adequate intake of calcium.

*Milk Matters* recently developed teacher lesson resources to help teachers educate their students on the importance of calcium for bone health. Your child's teacher is using these materials in his or her classroom and wants to share them with you. Enclosed are materials based on these teacher resources that you can read and use in your home to reinforce the concepts your child is learning in school. These materials include:

- *Facts About Calcium*: This fact sheet explains the importance of calcium and physical activity for building strong bones and lists a wide variety of foods that provide calcium.
- *Facts About Lactose Intolerance*: This handout addresses lactose intolerance and how to minimize its symptoms while still getting enough calcium.
- *Easy Smoothie Recipes*: These recipes make calcium-rich smoothies that are healthy snack alternatives.

We hope these materials provide useful and easy ways to help ensure that your child gets enough calcium during the critical years of bone development. If you would like more information on calcium, please visit the *Milk Matters* Web site: <http://www.nichd.nih.gov/milk>.

Sincerely yours,

Duane Alexander, M.D.  
Director, National Institute of Child Health & Human Development

Calcium is a mineral that is essential for building strong bones. Unfortunately, most tweens (ages 9 to 12) and teens do not get enough calcium. In fact, fewer than one in 10 girls and only one in four boys ages 9 to 13 is at or above his or her adequate intake of calcium.

Tweens and teens need 1,300 milligrams (mg) of calcium a day to build strong bones for life. (Adults up to age 50 need about 1,000 mg a day.) Milk and milk products are excellent sources of calcium and other nutrients. Tweens and teens can get most of their daily calcium from 3 cups of low-fat or fat-free milk (approximately 900 mg), but they also need additional servings of foods that provide calcium to meet their calcium needs. Most milk is fortified with vitamin D, an important nutrient that helps the body absorb more calcium.

Calcium intake between the ages of 9 and 18 is critical for bone development because most **bone mass** (bone strength and density) accumulates during this time. Bones stop increasing in density after about age 30. But by getting the calcium they need now, tweens and teens will accomplish the following:

- *Strengthen bones now.* Our bodies continually remove and replace small amounts of calcium from our bones. If more calcium is removed than is replaced, bones will become weaker and have a greater chance of breaking. Some researchers suspect that the rise in forearm fractures in children is due to decreased bone mass because children are drinking less milk and more soda, and are getting less exercise.
- *Help prevent osteoporosis later in life.* Osteoporosis is a condition that makes bones weak so they break more easily. Bones rely on the calcium they store during the tween and teen years to stay strong throughout life. Although the effects of osteoporosis might not show up until adulthood, tweens and teens can help reduce the risk of osteoporosis by building strong bones when they are young.
- *Improve lifelong dental health.* The calcium in milk products also helps make teeth, gums, and jawbones healthy and strong. Calcium may also help protect teeth against decay.

## **Weight-Bearing Physical Activity**

Bones are living tissue. Weight-bearing physical activity causes new bone tissue to form, which makes bones stronger. Weight-bearing activities are those that keep you active and on your feet so that your legs carry your body weight.

Activities such as walking, running, dancing, climbing stairs, and playing team sports such as basketball, soccer, and volleyball help make bones stronger. Older teenagers can build even more bone strength through weight training, but they should check with a health care provider before starting weight training.

Some activities, such as swimming, do not provide weight-bearing benefits. But they are good for cardiovascular fitness and overall good health.

