

Calcium and Bone Health

- Bones keep us upright so we don't flop around like Jell-O; they protect our internal organs (i.e. the ribcage protects the heart and lungs and the skull protects our brain). The interior bone marrow makes red blood cells. Thirty percent of bone is living tissue (cells/blood vessels); 45 percent is mostly calcium; and 25 percent is water.
- At birth humans have 300 bones, but that number lessens to 206 by adulthood because some bones fuse together as we grow.
- Half your bones are located in your hands and feet.
- Bone has three layers: calcified (compact) bone on the outside, then spongy bone and marrow inside. The jelly-like marrow inside some bones produces red blood cells.
- Good nutrition is important for good health and can help protect against many diseases now and later in life. One important nutrient lacking in the diet of many children and teens is **calcium**. This mineral is found mainly in milk and dairy products. Calcium is a nutrient that helps make bones and teeth strong and healthy. It is used in building bone mass and also helps reduce the risk of bone fracture due to osteoporosis, a condition where bones become fragile and can break easily.
- Our bodies continually remove and replace small amounts of calcium from our bones. If your body removes more calcium than it replaces, your bones will become weaker and have a greater chance of breaking. By getting the recommended amount of calcium, you can help your bones stay strong.
- Calcium needs are very high during the childhood and teen years, when bones are growing rapidly and calcium must be added into bones to make them strong. Peak bone mass occurs by the end of the teen years. By eating and drinking foods that are good sources of calcium, children and teens can help store this important nutrient in their bones for later in life. As adults, we lose calcium. The more calcium that is in the bones when loss begins, the less likely it is that bones will become fragile and fracture easily.
- Lowfat and fat-free milk and dairy products, such as cheese and yogurt, are excellent sources of calcium. In addition to having lots of calcium, milk and dairy products provide other essential nutrients, all necessary for good bone health and development. These include phosphorus, magnesium, potassium, protein, B-complex vitamins, and added vitamin D and A in milk. Other sources of calcium include dark green, leafy vegetables, broccoli, soybeans, tofu processed with calcium, some nuts and beans, canned sardines and salmon, orange juice with calcium added, and other calcium-fortified foods.

- Nutrition guidelines recommend that children ages 4-8 consume 800 milligrams (mg) of calcium per day, and children ages 9-13 should consume 1300 mg per day, or at least 3 servings of Milk Group foods daily. One 8-ounce glass of milk has about 300 mg of calcium.
- What is **3-A-Day** of Dairy? **3-A-Day** of Dairy was created as a simple reminder for families to get 3 daily servings of milk, cheese or yogurt for stronger bones and healthier bodies.
- Weight bearing exercise is important to maintain our bone mass. Activities like running, soccer, basketball, lifting weights, and many others help keep our bones strong.