

This TelAbility handout will discuss why calcium is such an important mineral children with special needs, and will list some of the better sources of calcium in our diet.

Why does my child need calcium?

- ✓ Helps make our bones and teeth strong
- ✓ Prevents osteoporosis later in life
- ✓ Needed for the heart and our muscles to function
- ✓ Certain medicines can pull calcium out of the bones (steroids, for example) and make them weaker
- ✓ Calcium and Vitamin D work as a team-Vitamin D regulates how much calcium is in the body. Many anticonvulsant medicines used to control seizures can cause poor absorption of Vitamin D, so this could affect calcium levels
- ✓ Kids who do not walk or put pressure on their arms or legs are at higher risk for calcium deficiencies-this can lead to more “porous” bones and can affect growth. In severe cases, this can lead to a condition called *osteopenia*, which can lead to fractures

How much calcium does my child need each day?

Ages 1-3 years	500 milligrams
4-8 years	800 milligrams
9-18 years	1300 milligrams

What if they don't like milk or can't digest dairy products well?

Some people may get stomach cramps or diarrhea when they eat too many dairy products. Others may have difficulty digesting the milk protein, although this happens much less often. As the list on the next page will show, there are some good sources of calcium that are not dairy products. Many products are now calcium-fortified, such as juices, cereal bars, waffles and cereals. There are also tablets that can be taken before a child eats dairy products that can help with absorption so they don't feel the discomfort.

My daughter is tube-fed. How can I be sure she is getting enough calcium in her diet?

Just about all nutrition supplements made for children contain calcium. Formulas such as Pediasure, Kindercal or Peptamen Jr contain about 200-250 milligrams of calcium in each 8- ounce can. One important note to remember is that some children may have very low calorie needs (especially if they are not moving much). This may mean a lower amount of formula is given and enough calcium may not be provided to meet the child's needs for the day. It is important to check this with your health-care provider, and if needed, give these children a calcium supplement as well.

References

- Ward E. **Healthy Food, Healthy Kids**. Avon MA, Adams Media Corp. 2002.
- Why Milk Matters Now (brochure). National Institute of Health/US Dept of Health and Human Services. 2001.
- Henderson R et al. *Bone-mineral density in children and adolescents who have spastic cerebral palsy*. Journal of Bone and Joint Surgery. 1995; 77-A(11);1671-1680.
- Duncan B et al. *Dietary Considerations in Osteopenia in Tube-fed, non-ambulatory children with cerebral palsy*. Clinical Pediatrics. 1999; 38: 133-137.

Good Sources of Calcium in the Diet

Milk	8 ounces	300 milligrams
Yogurt	1 cup	315 milligrams
Macaroni and Cheese	½ cup	180 milligrams
Soy Beverage, calcium fortified	1 cup	250-300 milligrams
Orange juice with added calcium	1 cup	300 milligrams
White beans, boiled	1 cup	160 milligrams
Corn tortillas (lime treated)	3 tortillas	130 milligrams
Broccoli	1 cup	90 milligrams
Blackstrap Molasses (can add to cooked items)	2 Tbsp	274 milligrams
Tofu (with added calcium)	2 ounces	125-380 milligrams

For questions regarding calcium in your child's diet, contact Sharon Wallace, RD, CSP,CNSD at sharonwallace@nc.rr.com or your local pediatric nutritionist.

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