

Mealtime Memo

for Child Care

Strong Bones

Have you wondered how the body builds strong bones, or what foods an individual can intake to ensure strong bones? It is the intake of a calcium-rich diet, accompanied with physical activity that allows the body to build and keep strong bones. Milk is a great source of calcium, along with protein. The acceptable feeding options for infants include breast milk, iron-fortified formula, or both. For children one year and older, milk is required at breakfast and lunch and is optional at snack. In the Child and Adult Care Food Program (CACFP), one-year-olds are served whole milk, and children two years to five years are served skim or 1% milk, all of which are unflavored. These milk requirements are important because there is a need for young children to consume the appropriate amounts of nutrients, like calcium and vitamin D, which are found in milk. These nutrients help build strong bones and teeth.



Nutrient Benefits

For infants, the *National Library of Medicine* lists the benefits of breastfeeding as it is natural and provides carbohydrates, protein, fat, digestive proteins, minerals, vitamins, hormones, and antibodies that help keep babies from getting sick. According to *KidsHealth from Nemours* (2018), breastfeeding includes the following benefits: a wonderful bonding experience, fewer infections and hospitalizations, transfer of antibodies and other germ-fighting factors, and a strengthened immune system. Iron fortified formula provides iron, vitamins, minerals and many other nutrients as well. Infants may go from breast milk or iron fortified formula to whole milk at approximately one-year-old. This transition may vary with each infant as some parents may choose to breastfeed for longer than one year. Nutrients that infants and children receive helps the body to grow and mature properly.

Remember, milk that is fortified with vitamin D helps the body to absorb calcium, one of the main building blocks for strong bones (MedlinePlus). As mentioned, through the CACFP one-year-olds are required to be served whole milk; meanwhile, two to five-year-olds can be served unflavored skim or 1% milk. "Children who eat calcium-rich foods build up stores of calcium in their bones that help them maintain strong bones for life" (NIH).



Promoting Healthy, Strong Bones

Babies are born with 300 soft bones that slowly become harder as the infant matures, some of which fuse together to make 206 bones. According to the Academy of Nutrition and Dietetics (2017), at about 18 years of age for females and 20 years of age for males, an individual has 90 percent of their peak bone mass. By the time a person is 25 years old, the process of bones growing is complete. What can be done to promote healthy, strong bones? Research shows that movement, milk, and more movement helps to form strong bones. As a CACFP provider, serving items that are good sources of calcium, like milk, and providing opportunities for physical activity would be a great start to building stronger bones.

Staying Physically Active

Regular exercise helps promote healthy, strong bones. According to *KidsHealth from Nemours* (2018), weight-bearing activities such as walking, running, jumping, and climbing are especially good for building bone mass. A way to incorporate physical activity into the day is to offer playtime daily (indoor and/or outdoor). A great way to ensure the children get enough exercise is to make a schedule and plan fun, age-appropriate activities. It is recommended that toddlers get at least 30 minutes of structured physical activity, and 60 minutes of unstructured (free play) physical activity (KidsHealth, 2018). By offering a number of physical activities, it will make the day more exciting and fun for the children in your care.

Points to talk about with parents:

- Talk to parents and give them information on how to combine the intake of calcium and regular exercise together.
- Physical activity helps maintain strong bones.
- Milk is a great source of calcium.
- Milk has vitamin D.
 - Milk has been fortified with vitamin D and helps the body to absorb calcium.
 - Vitamin D helps the body have a healthy immune system.
- Eight ounces of milk has eight grams of high-quality protein (8 & 8).
- Milk has naturally occurring sugar (no added sugar).
- Make good deposits for bones by eating and drinking calcium-rich food.

Vitamin/Mineral	Sources
Calcium	Milk, Cheese, Yogurt
Vitamin D	Fortified milk



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