What's New in Children's Vitamin D and Calcium Requirements

The American Academy of Pediatrics has increased the recommended daily requirement for Vitamin D in children and adolescents to 400 IU (international units), based on studies of decreasing bone density in kids. This is equivalent to 32 ounces of milk per day. This is TOO MUCH milk for anyone other than an older formula-fed baby who has not yet started solids foods. All breastfed babies, babies on formula AND solid foods, and all other children and teens should be given a vitamin D supplement such as Tri-Vi-Sol or a chewable children's vitamin. Read the labels: look for "Vitamin D–400 IU." The goal is to prevent rickets (a bone disease that results in brittle bones) and to make sure growing bones reach their maximum potential for strength. Vitamin D is also important for other body systems such as the immune system.

Interestingly, 15 to 30 minutes of direct sunlight per week is all kids need to absorb enough vitamin D through skin. However, concern for increased risk of skin cancer from cumulative sun exposure means that kids are absorbing less vitamin D from sunlight because we parents are so good at applying sunscreen. Also, especially in winter months, children spend more time playing inside than playing outside.

Calcium requirements vary somewhat by age but generally can be met with 16 to 24 ounces (2-3 cups) of milk, or less if kids consume other calcium containing foods such as cheese, yogurt, broccoli, sweet potatoes, fortified cereals, or a supplement. The milligram (mg) requirements are around 500mg for toddlers, 800mg for children and 1200-1500mg for kids 11-18 years. To give you an idea of how to visualize this amount, one cup of milk contains 300mg of calcium. When you read food labels that report calcium as a percent of daily requirement, know that the "standard" for food labels is set as 1000mg. So if a yogurt container reports "25% of daily calcium requirement" you assume that the yogurt contains 250mg of calcium (25% of 1000mg).

So continue to have your kids Drink Milk! But remember to give them a Vitamin D supplement as well.

For more interesting tidbits about milk, please refer to our blog post: "Got Milk? Dispelling Myths About Milk"

Julie Kardos, MD and Naline Lai, MD ©2009 Two Peds in a Pod®