

Nutrition News

Department of Human Nutrition



November 2008

Kids Need Double the Vitamin D

Children from newborns to teens need double the previously recommended amount of vitamin D, according to the American Academy of Pediatrics (AAP). New research points to growing evidence that the nutrient once called “sunshine vitamin” is needed in increased amounts to prevent serious diseases, in addition to strengthening bones.

The new recommendation of 400 units daily replaces a 2003 AAP recommendation of 200 units daily. To meet the new vitamin D recommendation, millions of children will need to take daily vitamin supplements. This includes breastfed infants and many children and teens. The new recommendations include:

- Breastfed and partially breastfed infants should be supplemented with 400 IU a day of vitamin D beginning in the first few days of life.
- All non-breastfed infants, as well as older children, who are consuming less than a quart per day of vitamin D-fortified formula

or milk, should receive a vitamin D supplement of 400 IU a day.

- Adolescents who do not obtain 400 IU of vitamin D per day through foods should take a supplement containing that amount.
- Children with increased risk of vitamin D deficiency, such as those taking certain medications, may need higher doses of vitamin D.

While baby formula contains vitamin D, breast milk is sometimes deficient in the nutrient, which is known to prevent rickets. Breastfeeding advocates acknowledge the need for supplementation, due to deficiencies in the maternal diet.

If a mother’s diet is low in vitamin D, this affects the amount of vitamin D in the mother’s milk. “It is important that breastfed infants receive supplements of vitamin D,” said Carol Wagner, MD, FAAP, member of the AAP Section on Breastfeeding Executive Committee and co-author of the AAP report.

Dietary supplements of vitamin D are typically recommended because dietary sources of the fat-soluble vitamin are few. Natural sources include fish liver oils, such as cod liver oil, and fatty fish such as herring, catfish, salmon, mackerel, sardines and tuna. A whole egg contains 20 IU of vitamin D – about 1/20th of the recommended amount needed each day.

In the U.S., fortified milk typically provides 100 IU per glass. Breakfast cereals, breads, crackers, cereal grain bars and other foods may be fortified with 10% to 15% of the recommendation for vitamin D.

Some researchers believe that vitamin D deficiency is actually sunlight deficiency, since humans manufacture their own vitamin D via exposure to ultraviolet light. A 10 to 15 minute exposure to the sun without sunscreen a few times weekly has been believed to be sufficient for many, but those with dark skin and persons living in less sunny climates need

more. Since too much sunlight is a skin cancer concern, the AAP states that “vitamin D supplements during infancy, childhood and adolescence are necessary.”

Recent research views vitamin D’s role as wider than just bone health. Dr. Frank Greer, MD, FAAP, a University of Wisconsin pediatrician and co-author of the new AAP report, stated that “the evidence has shown this (increase) could have life-long health benefits.”

Ongoing research continues to determine the optimal levels of vitamin D needed by humans to fight a variety of diseases. The 2010 U.S. Dietary Guidelines Advisory Committee has recently been named and begins its work to update that nutritional guidance, which will address nutrient levels needed by all age groups.

For a general overview of Vitamin D research, see http://www.oznet.ksu.edu/humannutrition/nutritionnews/Vitd_More_Important_Than_We_Thought.htm

Please check back to this site <http://www.oznet.ksu.edu/humannutrition/nutritionnews> for new information on this research.

Source: News release, 2008 National Conference and Exhibit of the American Academy of Pediatrics, 10/13/2008. Accessed 11/4/08 at <http://www.aap.org/pressroom/nce/nce08vitamind.htm>

For more information about healthy eating, contact your local extension office. The Food Assistance Program can help people of all ages with low income buy nutritious foods for a better diet. To find out more, call toll-free 1-888-369-4777.

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