

Lack of Vitamin D Made Worse in Winter

By LAURAN NEERGAARD

WASHINGTON -- Millions of Americans may not get enough vitamin D, a nutrient important for strong bones. It is a problem made worse in the winter, when the sun's rays are not intense enough in most of the country to help bodies make the sunshine vitamin.

Substituting food can be difficult because of a lack of vitamin D-rich options.

Already doctors are urging that breast-fed babies get vitamin D supplements to fend off a shocking return of rickets, a soft-bone disease, most often seen in children, that was thought eliminated decades ago. With increasing evidence that adults too may lack the nutrient, scientists are debating whether it is time to pump up everybody's level of vitamin D.

Vitamin D helps bones absorb calcium, and rickets marks just the worst deficiency, specialists told a recent National Institutes of Health meeting to assess the issue.

In adults, bone-weakening osteoporosis "cannot be prevented at currently recommended doses," said Dr. Robert Heaney of Creighton University, a specialist on bone health.

Government blood tests suggest a surprising number of Americans do not get currently recommended amounts, especially those with dark-pigmented skin that does not produce as much of the vitamin from sunlight.

Half of black women of childbearing age lack enough vitamin D in their blood during the winter and 30 percent in the summer, according to studies from the Centers for Disease Control and Prevention. That compares with 11 percent of white women in the winter and 2 percent in the summer. Levels among Hispanics fall in between.

The NIH is now facing two questions: What to do about people who do not meet today's allotment and whether it is time to raise everybody's recommended dose.

Both will require much more research, says Mary Frances Picciano of the NIH's Office of Dietary Supplements.

In England, researchers writing last week in the journal *Lancet* urged that children below the age of puberty and pregnant women receive vitamin D supplements as a "safety net."

While NIH considers what to recommend, people should make a special effort to eat foods fortified with vitamin D, advises CDC epidemiologist Kelley Scanlon. "We can't rely only on sunlight exposure."

The best natural sources are fatty fish such as salmon -- a serving provides 90 percent of today's recommended allotment.

Smaller amounts are in organ meats, egg yolks and mushrooms.

Some other foods are D-fortified. A cup of milk contains a fourth of the daily requirement; last spring, fortified orange juice began selling with just as much.

Contrary to public perceptions, few other dairy foods contain vitamin D. Only a few yogurt brands do, providing about 10 percent of the daily dose, says Mona Calvo of the Food and Drug Administration. Remaining options are fortified breakfast cereals and canned children's spaghetti.

"Is there a need for more fortified foods? I would argue there is," Calvo says. She adds, "We need to identify novel foods for D fortification that are tailored to vulnerable populations."

Standing outside 15 minutes a day three times a week lets the skin produce enough vitamin D most of the year, says Dr. Michael Holick of Boston University. But workaholicism and legitimate fear of skin cancer -- sunscreen blocks D production -- limit how much Americans produce even in summer. Winter sunlight is not intense enough at most U.S. latitudes to produce any, Holick says.

Without enough vitamin D in infancy, bones do not harden, which causes bowed legs, stunted growth and pain.

Though eradicated with milk fortification, rickets was found by the CDC to be on the comeback: 9 of every million babies age six months to 1 year were hospitalized for rickets in the 1990s; most were black.

Doctors began in April recommending D supplements for all breast-fed infants until they are switched to fortified milk or formula.

Beyond childhood, too little vitamin D can weaken bones and cause muscle pain. There is some evidence that the vitamin helps prevent colorectal cancer and some autoimmune diseases, but more proof is needed.

Vitamin D consumption is measured in IUs -- international units -- a standard measurement for vitamins. Today, adults are supposed to get 200 IUs a day until age 50. Because vitamin D production drops with age, people age 50 to 70 need 400 IUs a day, the elderly 600 IUs.

Yet studies show:

- * Even when black women reported taking vitamins, 12 percent remained D-deficient, the CDC found. That questions the adequacy of their dosages.

- * Heaney cited one study that men needed 1,000 IUs a day during Nebraska winters to keep their vitamin D levels from dropping.

- * A study of 2,600 healthy Britons given 800 IUs a day saw their risk of bone fractures drop 33 percent, he said, suggesting today's doses are insufficient to protect bones.