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The full report is titled “Brief Communication: The Prevalence of High Intake of Vitamin E from the Use of Supplements among U.S. Adults.” It is in the 19 July 2005 issue of *Annals of Internal Medicine* (volume 143, pages 116-120). The authors are E.S. Ford, U.A. Ajani, and A.H. Mokdad.

High Vitamin E Intake among U.S. Adults

What is the problem and what is known about it so far?

Vitamin E is in many foods, including nuts, oils, and vegetables. People in western countries usually consume small amounts of this vitamin in their diets. People also can buy multivitamins and supplements that contain vitamin E. Each multivitamin often contains about 30 international units (IU) of vitamin E. Many experts recommend this daily amount for adults. Supplements often contain much larger amounts, such as 200, 400, or 1,000 IU.

Preliminary research suggested that taking vitamin E supplements might boost immune systems and help prevent or treat some diseases. Recent large research studies have not confirmed that vitamin E supplements help prevent or treat disease. In fact, a recent review of several randomized trials suggested that consuming high amounts of vitamin E (400 IU or more daily) for a year or longer is associated with a small increase in risk for death.

Why did the researchers do this particular study?

To find out the number of U.S. adults taking vitamin E supplements and how much they take.

Who was studied?

4,609 community-dwelling adults in the United States.

How was the study done?

The researchers examined results from an existing survey (the National Health and Nutrition Examination Survey). The survey had been given to a random sample of civilian, noninstitutionalized adults living in the United States during 1999 to 2000. The survey included questions about a variety of medical conditions and health behaviors, a 24-hour dietary recall, and blood tests. People who said they had taken vitamins, minerals, or other dietary supplements in the past month were asked details about the dose, frequency, and duration of use.

What did the researchers find?

About 11% of the adults reported that they took vitamin E supplements that contained amounts of 400 IU or more daily. About 25% took supplements that contained lower amounts of vitamin E. Use was higher among white persons than African-American or Mexican-American persons, was about equal for men and women, and increased with age. People who took vitamin E commonly took other supplements, such as vitamin C or beta-carotene.

What were the limitations of the study?

Recall about supplement use might be inaccurate. Also, we do not know what form of vitamin E people took, although alpha-tocopherol is the most common form found in supplements.

What are the implications of the study?

Many adults in the United States are taking vitamin E supplements that have no proven clinical benefits and that might be harmful.

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