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Health Options
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Vitamin D can protect against diseases

Vitamin D is one of the hottest "vitamins of this decade." Tremendous growth in research on vitamin D has led to increased understanding of vitamin D's importance to health. Research is finding that many health problems are linked to low levels of this nutrient which functions more like a hormone than a vitamin.

Question: What health problems are associated with poor vitamin D status?

Answer: We usually think of the consequence of low vitamin D as a loss of calcium from bones, resulting in weak bones. However, many more diseases are now known to be related to limited vitamin D supply. Poor vitamin D status is linked to increased risk of several types of cancer, including colon, pancreatic, prostate and breast cancers. Similarly, a deficiency of vitamin D appears to increase the risk of high blood pressure and cardiovascular disease in general. Even the risk for diabetes rises in those with limited vitamin D.

Q: How does vitamin D function in the body?

A: Vitamin D can be produced in the skin from a form of cholesterol when ultraviolet light from the sun triggers a chemical change. Alternatively, the vitamin can be obtained from some foods or dietary supplements. Vitamin D from either source undergoes further chemical changes, primarily in the liver and kidneys, to become active vitamin D, a chemical that affects many types of cells throughout the body. The vitamin affects cells at the basic level of regulating the expression of specific genes.

Q: How common is poor vitamin D status?

A: Testing vitamin D status by measuring a storage form called 25-hydroxyvitamin D is becoming more common in medical clinics. Physicians are finding that vitamin D deficiency is more widespread than previously thought. Even a study conducted a few years ago in Hawaii found that about half of a group of well-tanned "sun lovers" had low vitamin D status. Similar results were later reported in a study conducted in Arizona. It remains unclear why this is the case in some people with abundant sun exposure. It certainly challenges "textbook" nutrition science.

The use of sunscreens greatly reduces vitamin D production in the skin. So, those following the advice of most dermatologists need to obtain vitamin D from foods and supplements.

Q: How much vitamin D is best for good health?

A: The answer to this question is currently under hot debate among vitamin D researchers. The current adult "100 percent Daily Value" used on foods and supplements is 400 international units (IUs), and some vitamin D experts recommend 10 times this amount for adults who have little sun exposure.

Q: How much vitamin D is too much?

A: The current U.S. safe-level recommendation for adults is 2,000 IU per day. However, key vitamin D researchers are suggesting that this should be raised to 10,000 IU per day. Stay tuned.

Q: What foods are good sources of vitamin D?

A: Oily fish like salmon and sardines provide about 300 to 400 IU per 4-ounce serving. Milk, some soy milks and even some juices are fortified with about 100 IU per cup. With the exception of milk, you need to check labels to see whether your product is fortified with vitamin D.

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http://www.nutritionatc.hawaii.edu/Articles/2009/421.pdf