

Vitamin E

Vitamin E is a fat-soluble vitamin often used for its antioxidant properties. It exists naturally in eight different forms, each with varying levels of activity. Alpha-tocopherol is the most active form in the human body and is preferred for use in dietary supplements. In our diet, the best sources of alpha-tocopherol come from nuts, seeds, and vegetable oils.

Vitamin E supplementation is effective for treating symptoms of vitamin E deficiency, which is rare in the United States, but is more likely to occur in people with fat-malabsorption disorders or premature infants of very low birth weight. Vitamin E may also be effective in slowing the progression of moderate to severe Alzheimer's disease. Taken alone or in combination with some other medications (selegiline and donepezil), may slow the rate of cognitive decline. However, in people with only mild cognitive impairment or taken in combination with memantine (Namenda), vitamin E supplements do not appear to have any significant benefit. Vitamin E is commonly used in combination with other supplements for preventing age-related macular degeneration (AMD) and has shown some benefit. People diagnosed with early-stage Huntington's disease may also find significant symptom improvement with vitamin E supplementation.

The antioxidant effects of vitamin E may provide some benefit in preventing or delaying heart disease, lowering bad cholesterol, and preventing formation of dangerous blood clots. However, current evidence is mixed, therefore routine use of vitamin E to prevent cardiovascular disease and its complications is not recommended. There is likely more protective benefit for younger, healthy people at no immediate risk for heart disease. In older or "non-healthy" patients (currently diagnosed heart disease, heart failure, history of blood clots or heart attack, or other chronic conditions), vitamin E supplements >400 IU per day is associated with increased adverse effects including increased risk of bleeding and death.

Healthy adults can safely tolerate up to 1500 IU (1000 mg) per day of vitamin E supplementation for short durations of therapy. Long term use of high doses can increase the risk of prostate cancer in otherwise healthy males, increase risk of bleeding and death as mentioned above. Vitamin E obtained from our diet is not associated with these risks. Do not take extra vitamin E supplements when taking blood thinners (such as Coumadin) or while on cancer chemotherapy. You should always speak with your doctor before starting a new supplement.

For more information please speak with our friendly pharmacists or visit:

<https://ods.od.nih.gov/factsheets/VitaminE-Consumer/> (last access 01/01/2017)

Sources:

NIH fact sheet: <https://ods.od.nih.gov/factsheets/VitaminE-HealthProfessional/> (last access 01/01/2017)

Natural Medicines database: <https://naturalmedicines-therapeuticresearch-com.proxy.lib.umich.edu/databases/food,-herbs-supplements/professional.aspx?productid=954#adverseEvents> (requires login)