

# Vitamin E for extra-good health

This article originally appeared on Dr. Teitelbaum's website, *Vitality 101*.

Optimizing your nutrition is a must for good health. And this week I want to discuss the importance of optimizing your intake of another powerful antioxidant: vitamin E.

Vitamin E protects the outer layer of cells (the membrane) from free radicals. And because it protects every cell in the body, it's a major key to overall health. It also boosts immunity by guarding the thymus gland, which manufactures the infection-fighting white blood cells called lymphocytes.

## A Little Vitamin E Goes a Long Way

Research shows that intakes of more than 100 International Units (IU) a day can be counterproductive, because too much of one type of this antioxidant can stop the action of the others (each type of vitamin E is a member of a much larger family). That's why my daily recommendation for vitamin E – what I call the RDH, or "Requirement for Daily Healing" – is 100 IU daily to help maintain optimal health. (This is the amount I include in the **Energy Revitalization System vitamin powder**.) If you take a higher level of this to treat a specific problem, be sure to take it in the form of mixed natural tocopherols (a type of organic compound) rather than a synthetic. This type of supplement delivers all the subtypes of vitamin E, including alpha (the most abundant and active form), beta, gamma, and delta-tocopherols. Each subtype has a slightly different mode of action, and all are important.

Along with a supplement, make sure to include good dietary sources, such as vegetable oils, seeds, nuts and whole grains.

In the rest of this blog post, I'll discuss recent scientific research which shows just how healthful and healing vitamin E can be.

## The Healing Power of Vitamin E

There are so many, science-proven ways that vitamin E can help you both optimize health and reverse ill health.

### Alzheimer's: Slow the Decline, Spare the Caregiver

In a recent study in the *Journal of the American Medical Association*, people with mild to moderate Alzheimer's disease who took the drug Namenda (memantine) and 2,000 IU of vitamin E slowed their rate of "functional decline" by 19%, and caregivers were less stressed.[1] Vitamin E may help prevent the disease, too: In another study, taking vitamin E for two years reduced the number of lesions in the white matter of the brain.[2]

### Asthma: Stronger Lungs and Immune System

In a study in *Alternative Medicine Review*, 60 adults with asthma were divided into two groups, with one group taking an antioxidant supplement (vitamin E, vitamin C, beta-carotene, selenium, zinc). After two months, those taking the antioxidant had stronger lungs, lower levels of allergy-related antibodies, a stronger immune system, less oxidant damage, and better "health-related quality of life." [3] A

recent study of children with asthma produced similar results.[4]

## Bones: Fewer Fractures in Older Women and Men

In a 19-year study of nearly 15,000 older women, those with the highest intake of vitamin E (alpha tocopherol) had a 14% lower risk of a hip fracture, and those who took a vitamin E supplement had a 22% lower risk. And in an analysis of more than 1,000 older men, those with the lowest intake of vitamin E had *three times* the risk of fracturing a hip.[5]

## Cancer: Prevention, Treatment Protection, and Survival

In a 14-year study of more than 16,000 people by researchers from Columbia University, those who had a higher intake of vitamin E were less likely to die from cancer.[6] In other studies, supplementing with vitamin E protected cancer patients against the side effects of radiation (breast fibrosis in breast cancer, and dysfunctional salivary glands in thyroid cancer).[7,8] And vitamin E may help you stay alive after you've had cancer: In a 16-year study of postmenopausal women with cancer, those who took vitamin E supplements and a multivitamin were 39% less likely to die from the disease.[9]

## Diabetic Neuropathy: Ease the Pain

People with diabetes who took vitamin E for three months had less nerve pain, lower blood sugar levels, and better overall physical health.[10]

## Fatty Liver Disease: Vitamin E Is Strong Medicine!

If you're overweight, fat also accumulates in your liver—a problem that can cause liver disease and even liver cancer. But taking a vitamin E supplement can *reverse* the liver dysfunction seen in fatty liver disease, according to a study from the Liver Disease Research Branch of the National Institutes of Health.[11]

## Gum Disease: Heal Faster

Taking 300 IU of vitamin E every other day helped speed healing after treatment for chronic periodontal disease (scaling and root planing), according to a study in the *Journal of Periodontology*. [12]

## Heart Disease: Healthier Arteries, Fewer Heart Attacks

The health of your arteries is measured by the health of your *endothelium*—the arterial lining, where plaque builds and clots form. A flexible, widened, plaque-free endothelium is healthy; a rigid, narrow, plaque-infested endothelium is a setup for a heart attack or stroke. In study after study of healthy people, and people with risk factors for heart disease, of people in their 20s and people in their 70s, taking vitamin E improves endothelial health. Bottom line: a study in the *International Journal of Cardiology* shows that people with low blood levels of vitamin E are 23% more likely to have a “cardiovascular event”—angina, heart attack, bypass surgery, heart failure, stroke, or death from heart disease.[13]

## Heartburn: E Protects the Esophagus

Heartburn happens when stomach acid leaks into the esophagus—and that chronic leakage can also cause severe inflammation of the esophagus (Barrett's esophagitis) and even esophageal cancer. The good news: People who consume more antioxidants through diet and supplements are less likely to have heartburn, Barrett's

esophagitis and esophageal cancer, according to a recent study.[14]

## Herpes and HPV: Fewer Outbreaks

People who took an antioxidant supplement containing vitamin E had fewer outbreaks of cold sores, genital herpes or genital warts, according to scientists at the Dermatology Research Institute in Rome.[15]

## Kidney Disease: Fewer Complications

Chronic kidney disease can cause all kinds of health problems, including circulatory problems, restless legs syndrome, and kidney injury after being exposed to contrast during medical procedures. Studies show that vitamin E can protect against *all* these difficulties.[16-19]

## Lou Gehrig's Disease (ALS): Cut Your Risk Nearly in Half

Ice bucket challenges aside, no one wants to get Lou Gehrig's Disease—the slow, painful paralysis of all the muscles in the body. Well, if you get plenty of vitamin E, you're less at risk. A study by researchers at the National Institutes of Health of nearly 30,000 men showed that those with the highest blood levels of the nutrient were 44% less likely to get the disease.[20]

## Peyronie's Disease: Natural Relief for Below-the-Belt Pain

In this disease, fibrous tissue inside the penis causes curved, painful erections. But six months of treatment with vitamin E eases the problem in 97% of cases, according to a study by Italian researchers. "Vitamin E can help prevent the progression of Peyronie's disease," they conclude in the medical journal *Andrology*. [21]

## Pollution: Protect Your Lungs

Runners who took 100 IU of vitamin E and 500 mg of vitamin C daily had less lung injury after exercising in a polluted environment, according to a study by Brazilian researchers.[22] In a similar study, taking vitamin E and C helped decrease cellular damage in workers exposed to lead.[23]

## Women's Health: Reproductive Relief

Recent studies show that vitamin E can reduce pelvic pain during menstruation, relieve pelvic pain in endometriosis, lower high blood pressure during pregnancy, and even treat infertility.[24-27]

## References

[1] Dysken MW, et al. Effect of vitamin E and memantine on functional decline in Alzheimer disease: the TEAM-AD VA cooperative randomized trial. *Journal of the American Medical Association*, 2014 Jan 1;311(1):33-44.

[2] Gopalan Y, et al. Clinical investigation of the protective effects of palm vitamin E tocotrienols on brain white matter. *Stroke*, 2014 May;45(5):1422-8.

[3] Guo CH, et al. Nutritional supplement therapy improves oxidative stress, immune response, pulmonary function, and quality of life in allergic asthma patients: an open-label pilot study. *Alternative Medicine Review*, 2012 Mar;17(1):42-56.

- [4] Ghaffari J, et al. Vitamin E supplementation, lung functions, clinical manifestations in children with moderate asthma: a randomized double blind placebo-controlled trial. *Iranian Journal of Allergy, Asthma and Immunology*, 2014 Apr;13(2):98-103.
- [5] Michaelsson K, et al. Intake and serum concentrations of alpha-tocopherol in relation to fractures in elderly women and men: 2 cohort studies. *American Journal of Clinical Nutrition*, 2014 Jan;99(1):107-14.
- [6] Goyal A, et al. Serum antioxidant nutrients, vitamin A, and mortality in U.S. Adults. *Cancer Epidemiology, Biomarkers & Prevention*, 2013 Dec;22(12):2202.
- [7] Jacobson G, et al. Randomized trial of pentoxifylline and vitamin E vs standard follow-up after breast irradiation to prevent breast fibrosis, evaluated by tissue compliance meter. *International Journal of Radiation Oncology*, 2013 Mar 1;85(3):604-8.
- [8] Fallahi B, et al. Does vitamin E protect salivary glands from I-131 radiation damage in patients with thyroid cancer? *Nuclear Medicine Communications*, 2013 Aug;34(8):777-86.
- [9] Inoue-Choi M, et al. The association between postdiagnosis dietary supplement use and total mortality differs by diet quality among older female cancer survivors. *Cancer Epidemiology, Biomarkers & Prevention*, 2014 May;23(5):865-75.
- [10] Rajanandh MG, et al. Assessment of antioxidant supplementation on the neuropathic pain score and quality of life in diabetic neuropathy patients—a randomized controlled study. *Pharmacological Reports*, 2014 Feb;66(1):44-8.
- [11] Hoofnagle JH, et al. Vitamin E and changes in serum alanine aminotransferase levels in patients with non-alcoholic steatohepatitis. *Alimentary Pharmacology & Therapeutics*, 2013 Jul;38(2):134-43.
- [12] Singh N, et al. Vitamin E supplementation, superoxide dismutase status, and outcome of scaling and root planing in patients with chronic periodontitis: a randomized clinical trial. *Journal of Periodontology*, 2014 Feb;85(2):249-2.
- [13] Cangemi R, et al. Cholesterol-adjusted vitamin E serum levels are associated with cardiovascular events in patients with non-valvular atrial fibrillation. *International Journal of Cardiology*, 2013 Oct 9;168(4):3241-7.
- [14] Lukic M, et al. The impact of vitamins A, C and E in the prevention of gastroesophageal reflux disease, Barrett's oesophagus and oesophageal adenocarcinoma. *Collegium Antropologicum*, 2012 Sep;36(3):867-72.
- [15] De Luca C, et al. Coenzyme Q(10), vitamin E, selenium, and methionine in the treatment of chronic recurrent viral mucocutaneous infections. *Nutrition*, 2012 May;28(5):509-14.
- [16] Veringa SJ, et al. Effect of a treatment strategy consisting of pravastatin, vitamin E and homocysteine lowering on arterial compliance and distensibility in patients with mild-to-moderate chronic kidney disease. *Clinical Nephrology*, 2012 Oct;78(4):263-72.
- [17] Baldi S, et al. Effects of hemodialysis and vitamin E supplementation on low-density lipoprotein oxidizability in end-stage renal failure. *Journal of Nephrology*,

2013 May-Jun;26(3):549-55.

[18] Sagheb MM, et al. Efficacy of vitamins C, E and their combination for treatment of restless legs syndrome in hemodialysis patients: a randomized, double-blind, placebo-controlled trial. *Sleep Medicine*, 2012 May;13(5):542-5.

[19] Tasanarong A, et al. New strategy of alpha- and gamma-tocopherol to prevent contrast-induced acute kidney injury in chronic kidney disease patients undergoing elective coronary procedures. *Nephrology Dialysis Transplantation*, 2013 Feb;28(2):337-44.

[20] Michal Freedman D, et al. Vitamin E serum levels and controlled supplementation and risk of amyotrophic lateral sclerosis. *Amyotrophic Lateral Sclerosis and Frontotemporal Degeneration*, 2013 May;14(4):246-51.

[21] Paulis G, et al. Efficacy of vitamin E in the conservative treatment of Peyronie's disease: legend or reality? A controlled study of 70 cases. *Andrology*, 2013 Jan;1(1):120-8.

[22] Gomes EC, et al. Effect of vitamin supplementation on lung injury and running performance in a hot, humid, and ozone-polluted environment. *Scandinavian Journal of Medicine & Science in Sports*, 2011 Dec;21(6):e452-60.

[23] Rendon-Ramirez AL, et al. Effect of vitamin E and C supplementation on oxidative damage and total antioxidant capacity in lead-exposed workers. *Environmental Toxicology and Pharmacology*, 2014 Jan;37(1):45-54.

[24] Kashanian M, et al. Evaluation of the effect of vitamin E on pelvic pain reduction in women suffering from primary dysmenorrhea. *Journal of Reproductive Medicine*, 2013 Jan-Feb;58(1-2):34-8.

[25] Santanam M, et al. Antioxidant supplementation reduces endometriosis-related pelvic pain in humans. *Translational Research*, 2013 Mar;161(3):189-95.

[26] Mahdy ZA, et al. Does palm oil vitamin E reduce the risk of pregnancy induced hypertension? *Acta Medica*, 2013;56(3):104-9.

[27] Ruder EH, et al. Female dietary antioxidant intake and time to pregnancy among couples treated for unexplained fertility. *Fertility and Sterility*, 2014 Mar;101(3):759-66.