

September 16, 2006

Printer Friendly

In this issue

Life Extension Update Exclusive

Higher plasma vitamin C levels associated with reduced coronary artery disease risk

Health Concern

Coronary artery disease and atherosclerosis

Featured Products

Durk Pearson & Sandy Shaw's® Dual-C Capsules®

Super K with K2

Life Extension

Fourth Annual Conference for Health Freedom Advocacy

Life Extension Update Exclusive

Higher plasma vitamin C levels associated with reduced coronary artery disease risk

A report published in the September, 2006 issue of the *British Journal of Nutrition* revealed another promising finding derived from the EPIC-Norfolk cohort study, a prospective population study of 25,663 men and women aged 45 to 79 residing in Norfolk, England. S. Matthijs Boekholdt of Academic Medical Center in Amsterdam and colleagues at Cambridge University in England found that having higher plasma vitamin C (ascorbic acid) levels is associated with a lower risk of developing coronary artery disease independent of traditional risk factors and C-reactive protein (CRP) levels. C-reactive protein is a marker of inflammation whose serum levels were confirmed as predictor of death from coronary artery disease in earlier research led by Dr Boekholdt.

EPIC-Norfolk participants completed health and lifestyle questionnaires between 1993 and 1997, and were followed up to January of 2003. Blood samples obtained during the subjects' initial clinic visit were analyzed for total, LDL, and HDL cholesterol, C-reactive protein, vitamin C and other factors. Nine-hundred seventy-nine individuals who were without history of heart attack or stroke at the time of their initial clinic visit developed fatal or nonfatal coronary artery disease during the follow-up period. These participants were age and gender matched by the researchers with 1,794 control subjects.

Increasing plasma levels of ascorbic acid were found to be associated with younger age, lower body mass index, lower systolic and diastolic blood pressure, reduced CRP, and higher HDL levels. Participants whose vitamin C levels were in the top one-fourth of participants had a 33 percent lower risk of future coronary artery disease compared with those in the lowest fourth. The association was found to be independent of such traditional risk factors as age, diabetes, smoking, LDL or HDL cholesterol, systolic blood pressure, and CRP level.

The authors explain that the free radical scavenging effect of ascorbic acid may help protect the arteries from developing atherosclerotic lesions. Additionally, the vitamin helps reduce the oxidation of LDL particles. However, inflammation caused by atherosclerosis produces reactive oxygen species that reduce blood antioxidants which include vitamin C, leading to uncertainty concerning whether diminished ascorbic acid levels are a cause or an effect of the disease.

Although an inverse relationship has previously been observed between ascorbic acid and CRP levels, the authors conclude "that the risk reduction [in coronary artery disease] associated with higher ascorbic acid plasma concentrations, a marker of fruit and vegetable intake, is independent of classical risk factors and also independent of CRP concentration."

Health Concern

Coronary artery disease and atherosclerosis

By the time surgery or angioplasty is recommended for atherosclerosis, preventive medicine has already failed. Because

atherosclerosis is such a slow process, there is ample time for intervention before symptoms develop. Dozens of clinical studies have shown that reduction of individual risk factors can help slow or even reverse the damage caused by atherosclerosis, and reversing or slowing endothelial dysfunction should be a cornerstone of therapy.

Vitamin C inhibits damage caused by oxidative stress. In cigarette smokers, daily supplementation with 500 mg vitamin C significantly decreased the appearance of oxidative stress markers (Dietrich M et al 2002). Another study showed that supplementation with 500 mg vitamin C and 400 IU vitamin E daily significantly reduced the development of accelerated coronary arteriosclerosis following cardiac transplantation (Fang JC et al 2002). Vitamin C's benefits seem especially profound in people who suffer from both diabetes and coronary artery disease. One study demonstrated that, in this group, vitamin C significantly improved vasodilation (Antoniades C et al 2004).

Vitamin K is steadily gaining attention for its ability to reduce calcification and help prevent cardiovascular disease (Jie KSG et al 1996). Evidence for the ability of vitamin K to prevent calcification can also be found in an animal study in which researchers administered the anticoagulant warfarin to rats. Warfarin is known to deplete vitamin K. At the end of the study, all the animals had extensive calcification, suggesting they had lost the protective effect of vitamin K (Howe AM 2000).

http://www.lef.org/protocols/heart_circulatory/coronary_artery_disease_atherosclerosis_01.htm

Featured Products

Durk Pearson & Sandy Shaw's® Dual-C Capsules®

Fat-soluble vitamin C (ascorbyl palmitate) may be as important as water-soluble vitamin C, yet most vitamin consumers have not even heard of ascorbyl palmitate. If you take Life Extension Mix™, you are receiving an ample dose of fat-soluble ascorbyl palmitate. Each capsule of Dual-C contains 677 mg of fully reacted calcium ascorbate (gentle on the stomach and supplies calcium) and ascorbyl palmitate (to protect fat tissues from oxidation).

<http://www.lef.org/newshop/items/item00240.html>



Super K with K2

Vitamin K is found in green leafy vegetables as well as fermented foods. Vitamin K 1, found naturally is called phylloquinone, and vitamin K2, found naturally is called menaquinone 7, which can be synthesized by bacteria in the gut and absorbed in the intestines. Man-made forms of K1 and K2 are phytoandione and menatetranone (menaquinone 4) respectively. Vitamin K seems to play a unique role in maintaining arterial health and promoting healthy bones.

<http://www.lef.org/newshop/items/item00604.html>



Fourth Annual Conference for Health Freedom Advocacy

2006 World Health Freedom Assembly will be an historic gathering of health freedom leaders from around the world. National Health Freedom Coalition (NHFC), as host of the Assembly, will invite health freedom non-profit organizations participate in a formal Round. This Assembly will create and endorse a "Declaration of Health Freedom" that reflects the right of all people to access the information, products, and practitioners that they desire when bringing themselves into a state of wellness. The Assembly will also create public policy resolutions endorsed by the entire body, setting forth the common principles of health freedom to be used in the promotion of health freedom worldwide.

<http://www.lef.org/event.html>

If you have questions or comments concerning this issue or past issues of *Life Extension Update*, send them to ddye@lifeextension.com or call 954 202 7716.

For longer life,



Dayna Dye
Editor, Life Extension Update
ddye@lifeextension.com
954 766 8433 extension 7716
www.lef.org

Sign up for Life Extension Update at <http://mycart.lef.org/subscribe.asp>

Help spread the good news about living longer and healthier. Forward this email to a friend!

View previous issues of Life Extension Update in the Newsletter Archive.

All Contents Copyright © 1995-2009 Life Extension Foundation All rights reserved.

LifeExtension®

These statements have not been evaluated by the FDA. These products are not intended to diagnose, treat, cure or prevent any disease. The information provided on this site is for informational purposes only and is not intended as a substitute for advice from your physician or other health care professional or any information contained on or in any product label or packaging. You should not use the information on this site for diagnosis or treatment of any health problem or for prescription of any medication or other treatment. You should consult with a healthcare professional before starting any diet, exercise or supplementation program, before taking any medication, or if you have or suspect you might have a health problem. You should not stop taking any medication without first consulting your physician.