

July 6, 2007

Printer Friendly

In this issue

Life Extension Update Exclusive

Cocoa polyphenols reduce blood pressure

Health Concern

High blood pressure

Featured Products

Grapeseed Extract with Resveratrol

Natural BP Management

Life Extension magazine

Ask the pharmacist, by James S. Scozzari, RPh

Life Extension Update Exclusive

Cocoa polyphenols reduce blood pressure

The July 4, 2007 issue of the *Journal of the American Medical Association* reported the results of a randomized clinical trial which found that consuming small amounts of dark chocolate is associated with a reduction in systolic and diastolic blood pressure (BP). The findings of previous research suggest that polyphenols, a group of plant compounds including flavanols that have been associated with a number of health benefits, may be responsible for a blood pressure-lowering effect associated with eating chocolate.

Dirk Taubert, MD, PhD, of University Hospital in Cologne, Germany, and his associates gave 20 men and 24 women 6.3 grams per day dark chocolate, providing 30 milligrams polyphenols, or an equal amount of white chocolate, which does not contain polyphenols, for 18 weeks. Participants were 56 to 73 years of age with untreated upper-range prehypertension or stage 1 hypertension. Blood pressure, weight, and blood values of cholesterol, triglycerides, glucose, and S-nitrosoglutathione (vasodilative nitric oxide--which increases the dilation of blood vessels resulting in lower blood pressure), were measured at the beginning of the study and at 6, 12 and 18 weeks.

At the trial's conclusion, those who received dark chocolate experienced an average reduction of 2.9 mm Hg systolic and 1.9 mm Hg diastolic blood pressure. Systolic and diastolic blood pressure remained the same in the white chocolate group throughout the treatment period. A concern regarding increased chocolate intake has been that health benefits could be offset by increased weight gain, serum lipids, or blood glucose, however, these remained essentially unchanged. Hypertension prevalence decreased from 86 percent to 68 percent in the dark chocolate group, and S-nitrosoglutathione was elevated in plasma, while not changing among those who received white chocolate.

"Although the magnitude of the BP reduction was small, the effects are clinically noteworthy," the authors observe. "On a population basis, it has been estimated that a 3 mm Hg reduction in systolic BP would reduce the relative risk of stroke mortality by 8 percent, of coronary artery disease mortality by 5 percent, and of all-cause mortality by 4 percent."

"The most intriguing finding of this study is that small amounts of commercial cocoa confectionary convey a similar BP-lowering potential compared with comprehensive dietary modifications that have proven efficacy to reduce cardiovascular event rate," they note. "Whereas long-term adherence to complex behavioral changes is often low and requires continuous counseling, adoption of small amounts of flavanol-rich cocoa into the habitual diet is a dietary modification that is easy to adhere to and therefore may be a promising behavioral approach to lower blood pressure in individuals with above-optimal blood pressure," the authors conclude.

Health Concern

High blood pressure

Nutrients that may help lower blood pressure include:

- **C12 casein peptide**—200 to 400 milligrams (mg)/day
- **Grape seed extract**—150 to 300 mg/day
- **Pomegranate extract**—50 to 100 mg/day
- **Arjuna bark extract**—250 to 500 mg twice a day
- **Calcium**—1200 to 1500 mg/day
- **CoQ10**—100 to 300 mg/day
- **Garlic**—1200 mg/day
- **Hawthorn berry extract**—240 mg twice a day between meals
- **L-arginine**—2000 mg three times a day between meals
- **Magnesium**—500 mg/day (or more), based on maximum bowel tolerance and hypotensive effect; take the most at night before bed
- **Olive leaf extract**—500 mg/day
- **Eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA)**—1400 mg/day of EPA and 1000 mg/day of DHA
- **Potassium**—99 mg/day (or more) when instructed to do so by a health care professional, based on blood test results
- **Soy protein**—17 to 34 grams (g)/day
- **Taurine**—1000 to 6000 mg/day
- **Vitamin C**—1 to 3 g/day
- **Vitamin E (alpha-tocopherol succinate)**—400 International Units (IU)/day with about 200 mg of gamma-tocopherol.

http://www.lef.org/protocols/heart_circulatory/high_blood_pressure_01.htm

Featured Products

Grapeseed Extract with Resveratrol

Life Extension's Grapeseed Extract with Resveratrol formula provides a concentrated blend of standardized proanthocyanidins found in grape seed and skins. The proanthocyanidins and flavonoids in this new formula are rapidly absorbed and distributed throughout the body, helping to eliminate free radicals while promoting healthy collagen formation.

<http://www.lef.org/newshop/items/item00816.html>



Natural BP Management

Groundbreaking nutritional research has identified natural agents that can help to maintain normal blood pressure levels already within normal range. Combining these nutrients with lifestyle modifications, pharmaceuticals, and regular self-monitoring provides a powerful strategy.

<http://www.lef.org/newshop/items/item00904.html>



Life Extension magazine

Ask the pharmacist: Integrating B vitamins with calcium channel blockers, by James S. Scozzari, RPh

Clinical trials show higher mortality in patients taking calcium channel blockers for hypertension compared to patients using other types of drugs such as beta-blockers, diuretics, and angiotensin-converting enzyme (ACE) inhibitors. Because calcium channel

blockers are associated with gingival overgrowth, and because other drugs known to cause gingival overgrowth (such as phenytoin) are associated with elevated levels of homocysteine, it follows that patients treated with calcium channel blockers might be at risk for increased homocysteine levels. Such an association might explain the excess mortality risk observed in patients treated with calcium channel blockers relative to those treated with other hypertension medications, since homocysteine may contribute to atherosclerotic heart disease. Strategies to achieve and maintain optimal blood levels of homocysteine—such as ensuring optimal intake of B vitamins—are thus important for individuals using calcium channel blockers such as nifedipine.

http://www.lef.org/magazine/mag2007/jul2007_atp_01.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/Memberships/NewsSubscription.aspx>

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.