

Diets Rich in Fruits and Vegetables Reduce Risk of Most Common Stroke

Eating a lot of fruits and vegetables—roughly a total of six or more servings daily—can reduce the risk of ischemic stroke by 31 percent, compared with diets containing three or fewer servings, report researchers from Harvard University.

Kaumudi J. Joshipura, ScD, and his colleagues studied more than 75,000 women and 38,000 men participating in the ongoing Nurses' Health Study and the Health Professionals' Follow-up Study. Tracking the health and diets of the women for 14 years and the men for eight years, Joshipura found that people eating the most fruits and vegetables were almost one-third less likely to suffer an ischemic stroke, the most common type of stroke.

The most beneficial foods were cruciferous vegetables, green leafy vegetables, citrus fruit, and citrus juice.

Women eating the most fruit and vegetables consumed about 10 servings daily, and the men consumed about nine servings daily. However, Joshipura and his colleagues noted that the greatest protection from stroke was achieved with the consumption of six servings of fruits and vegetables daily and that there was little additional benefit from eating more.

In general, each daily serving of fruits or vegetables was associated with a 7 percent lower risk of stroke

Hawthorn Extract Helpful in Treating Heart Failure, German Study Shows

The herb hawthorn (*Crataegus spp.*) has a long history of use as a heart medication. A study by German researchers has demonstrated that the herb works remarkably well.

The researchers treated 1,011 patients with stage II cardiac insufficiency with a daily tablet containing hawthorn extract for 24 weeks. During the study, they noted improved exercise performance, less fatigue, and a decrease in labored breathing after exercise. Ankle edema and excessive nighttime urination were reduced by 83 percent.

In addition, the patients benefited from an improved "ejection fraction" (an indicator of heart function), lower blood pressure, a slower pulse rate, and fewer arrhythmias.

Reference: Tauchert R, Gildor A, Lipinski. High-dose crataegus (hawthorn) extract WS 1442 for the treatment of NYHA II heart failure patients. *Herz*, 1999;24:465-474. □

among women and a 4 percent lower risk among men.

Although the researchers accounted for confounding variables, they did note that fruit and vegetable eaters had other factors in their favor. "Persons who consumed more fruit and vegetables were older and generally had healthier lifestyles as indicated by lower rates of smoking and higher levels of physical activity," Joshipura wrote in the *Journal of the American Medical Association*.

In addition, people who took vitamin supplements ate more fruits and vegetables than did nonsupplementers, and nonsmokers consumed more fruit and vegetables than did smokers. "The inverse associations between consumption of fruits, citrus fruit, and cruciferous vegetables and risk of ischemic stroke were somewhat stronger in the nonsupplement group compared with the supplement user group," the researchers noted.

Reference: Joshipura KJ, Ascherio A, Manson JE, et al. Fruit and vegetable intake in relation to risk of ischemic stroke. *JAMA*, 1999;282:1233-1239. □

Gluten-Free Diet Improves Bone Density, Prevents Osteoporosis

Gluten sensitivity, often manifested in the form of celiac disease, affects an estimated 1 million Americans, most of these cases undiagnosed. The condition is a permanent allergy-like intolerance of gliadin and related proteins found in wheat, rye, barley, and oats, which damages the intestine.

One of the common consequences of celiac disease is osteoporosis, which greatly increases the risk of fractures and disability. A recent study found that patients adhering to a gluten-free diet quickly develop stronger bones.

Tarja Kempainen, PhD, and her colleagues at the University of Kuopio, asked 28 men and women with recently diagnosed celiac disease to follow a gluten-free diet – essentially a diet that avoids nearly all grains and derivatives of grains. Compliance with the restrictive diet was high, with 96 percent of the patients following it for one year and 82 percent following it after five years.

Bone mineral density – in essence, thickness of the bones – increased or remained the same in the majority of patients after one year. After five years, bone mineral density increased from 1-6 percent,

Continues on next page

depending on the site, and overall body mass increased by 8 percent.

At the beginning of the study, six of the patients had elevated levels of parathyroid hormone, which shifts calcium from the bones to other tissues. After being on the gluten-free diet for one year, five of the patients had normal parathyroid hormone levels.

Reference: Kempainen T, Kroger H, Janatuinen E, et al. Bone recovery after a gluten-free diet: a 5-year follow-up study. *Bone*, 1999;25:355-360. □

Diuretic Drug Rapidly Depletes Large Amounts of Vitamin B1

The drug furosemide, a "loop" diuretic, is commonly used to treat heart failure. However, researchers have known for more than 20 years that the drug quickly depletes vitamin B1 (thiamine), which can induce or aggravate heart failure.

In a recent study, Hillel Halkin, MD, of the Sheba Medical Center, Israel, and her colleagues gave furosemide intravenously to six healthy patients to determine the effect of the drug on vitamin B1. Halkin found that furosemide resulted in a doubling of the normal urinary excretion of vitamin B1.

"Consequently, under conditions of no supplementation, continued high rates of diuresis (increased urination resulting from the use of diuretics) may be associated with negative thiamine balance and clinically significant deficiency," she and her colleagues wrote. "Accordingly, thiamine supplements should be considered in all patients expected to undergo a period of sustained diuresis when inadequate dietary intake is possible."

Reference: Rieck J, Halkin H, Almog S, et al. Urinary loss of thiamine is increased by low doses of furosemide in healthy volunteers. *Journal of Laboratory and Clinical Medicine*, 1999;134:238-243. □

Green Tea Antioxidant May Offer Protection Against Arthritis

Green tea, increasingly recognized as an antioxidant-rich beverage capable of lowering the risk of heart disease and cancer, may also help prevent rheumatoid arthritis.

Tariq M. Haqqi, PhD, a researcher at Case Western Reserve University, Cleveland, Ohio, injected laboratory mice with collagen, which made them prone to a form of arthritis similar to rheumatoid arthritis in people. They were also given either water or an extract of green tea.

Only 44 percent of the 18 mice given green tea developed arthritis, and the other animals in the green-tea group developed only a moderate form of the disease. In contrast, 94 percent (17 out of 18) of the

mice receiving plain water developed arthritis.

The green tea blocked the activity of various inflammatory compounds, including cyclooxygenase and tumor necrosis factor alpha.

The green tea extract given to the mice was comparable to the amount found in four cups of green tea consumed by a human.

Reference: Haqqi TM, Anthony DD, Gupta S, et al. Prevention of collagen-induced arthritis in mice by a polyphenolic fraction from green tea. *Proceedings of the National Academy of Sciences*, 1999;96:4524-4529. □

Briefly Noted...

• Vegetables reduce risk of prostate cancer

In a combined analysis of three Canadian studies, researchers found that diets high in green vegetables, tomatoes, legumes and nuts, or cruciferous vegetables significantly reduced the risk of prostate cancer. Inexplicably, refined breads were protective, whereas whole-grain breakfast cereals were associated with a greater risk of disease.

Jain MG, et al. *Nutrition and Cancer*, 1999;34:173-184.

• N-acetylcysteine (NAC) helps control blood sugar

In a study with laboratory rats, researchers found that NAC helped prevent insulin resistance, a condition that affects glucose metabolism and sets the stage for diabetes and coronary artery disease.

Cho C, et al. *Diabetes*, 1999;48 (Suppl 1):A257, abstr 1126.

• Resveratrol may protect against leukemia

In a cell-culture study, researchers found that resveratrol, an antioxidant found in grapes and wine, increased the breakdown of genetic material in promyelocytic leukemia cells, resulting in their death.

Surh Y-J, et al. *Cancer Letters*, 1999;140:1-10.

• Diabetics low in vitamin B1

Vitamin B1 plays a key role in glucose metabolism and the function of insulin-producing beta cells. A study of children found that those with diabetes had very low levels of vitamin B1.

Valerio G, et al. *Acta Diabetologica*, 1999;36:73-76.

THE NUTRITION REPORTER™ (ISSN 1079-8609) is published monthly except for August and December. This issue, Vol 10 No 12, © December 1999 by Jack Challem. All rights reserved. Reproduction without written permission is prohibited. Email addresses: Nutreport@aol.com or Jchallam@aol.com. This newsletter is strictly educational and not intended as medical advice. For diagnosis and treatment, consult your physician. Subscriptions are \$25 per year in the U.S.; either \$32 U.S. or \$48 CND for Canada; and \$38 for other countries, payable in U.S. funds through a U.S. bank. The Nutrition Reporter is a trademark(TM) of Jack Challem.

THE NUTRITION REPORTER™

Post Office Box 30246
Tucson AZ 85751-0246 USA

Editor and Publisher: **Jack Challem**

Medical Advisors:

London H. Smith, MD Portland, Oregon • Richard P. Huemer, MD Lancaster, California
Ralph K. Campbell, MD Polson, Montana • Peter Langsjoen, MD Tyler, Texas
G. Edward Desaulniers, MD The Shute Institute Medical Clinic London, Ontario
Marcus Laux, ND Pacific Palisades, California