

LE Magazine February 2006

In The NEWS

Soy Reduces Bone Fracture Risk in Women



Regular soy consumption reduces bone fracture risk in postmenopausal women, according to recent findings published in the *Archives of Internal Medicine*.*

Starting in midlife, adults rapidly lose bone. This can lead to a condition of diminished bone mass called osteoporosis, which is associated with an increased risk of bone fracture. Women experience a greater risk of osteoporosis-related bone fractures, particularly after menopause.

Researchers at the Vanderbilt University School of Medicine in Nashville and the Shanghai Cancer Institute in Shanghai, China, examined the relationship between soy food consumption and fracture incidence in nearly 25,000 postmenopausal women as part of the Shanghai Women's Health Study. Women who consumed the most soy had an approximately 35% decreased risk of fractures compared to women who consumed the least soy. The benefit was greatest for women within 10 years of menopause, as high soy food consumption in that group was related to an approximately 50% reduction in bone fracture risk. Consumption of five grams or more of soy daily was associated

with protection against fracture. Those who consumed more than 13 grams of soy daily—providing more than 60 milligrams of soy isoflavones—saw the most benefit for bone health.

“Soy, a rich source of plant estrogens, has been shown to modulate bone turnover and increase bone mineral density in postmenopausal women,” researcher Xiao-Ou Shu, MD, PhD, told *Life Extension*. Although this study examined only dietary soy consumption, Dr. Shu noted that “it is likely that soy supplementation and soy foods have a similar beneficial effect in preventing bone fracture.”

—Marc Ellman, MD

Reference

* Zhang X, Shu XO, Li H, et al. Prospective cohort study of soy food consumption and risk of bone fracture among postmenopausal women. *Arch Intern Med*. 2005 Sep 12;165(16):1890-5.

MSM Improves Pain, Function in Arthritis Patients



Methylsulfonylmethane (MSM) improves pain and physical function in adults with knee osteoarthritis pain, according to scientists at the Southwest College of Naturopathic Medicine and the Arthritis Health Center in Arizona.¹⁻²

MSM supplementation not only was well tolerated with no adverse effects, but also was associated with improvements in markers of cardiovascular risk and oxidative stress.

This double-blind, placebo-controlled clinical trial tracked 50 adults over the age of 40 who had been diagnosed with knee osteoarthritis. The participants were randomly assigned to take either three grams of MSM twice daily or a placebo for 12 weeks. At the study's end, they were evaluated for osteoarthritis pain, stiffness, physical function, and overall symptoms. Additionally, the investigators evaluated several laboratory markers in the patients.

The individuals who used MSM experienced significantly decreased arthritis pain and impaired physical function. Supplementing with MSM also markedly improved their ability to perform daily activities. Moreover, the MSM group saw reductions in both serum homocysteine, a cardiovascular disease risk factor, and urine malondialdehyde, a marker of oxidative stress.

MSM thus appears to be a safe, effective remedy for osteoarthritis of the knee, and may also support cardiovascular health. These findings offer hope for the one in three Americans who experience daily joint pain due to arthritis, and are especially timely as several prescription arthritis drugs have recently been taken off the market because they may raise cardiovascular risk.

Although its precise mechanism of action is unknown, MSM is rich in sulfur, a crucial component of the body's connective tissues. Scientists believe MSM may promote joint and connective tissue health by providing beneficial sulfur.

—Elizabeth Wagner, ND

Reference

1. Available at: http://home.businesswire.com/portal/site/google/index.jsp?ndmViewId=news_view&newsId=20050926005389&newsLang=en. Accessed October 3, 2005.
2. Available at: <http://www.nutraingredients-usa.com/news/news-ng.asp?n=62222-msm-arthritis-sulfur>. Accessed October 3, 2005.

Antioxidants Cut Stomach Cancer Risk



High dietary intake of antioxidants decreases the risk of gastric (stomach) cancer, even in people with an active *Helicobacter pylori* (*H. pylori*) infection, according to a recent report from South Korea.¹

The *H. pylori* bacteria, one of the most common pathogens afflicting humans, is often associated with gastric cancer.² Additionally, *H. pylori* can cause chronic active gastritis and peptic ulcer.² Other risk factors for gastric cancer include high dietary salt intake, cigarette smoking, and family history of the disease.

The study enrolled 136 subjects with histologic evidence of gastric cancer and 136 healthy controls. The subjects completed a retrospective food-frequency questionnaire that covered a 12-month period. Using a multivariate model, the study authors assessed the effects of dietary factors and *H. pylori* infection on gastric cancer risk.

High dietary intake of vitamins A, C, and E, as well as beta-carotene, was associated with a decreased risk of gastric cancer. In individuals with *H. pylori* infection, high dietary intake of vitamins C and E was associated with protection against gastric cancer. Specifically, subjects in the highest tertiles of vitamin C and E intake had 90% and 84% reduced risks of gastric cancer, respectively. By contrast, participants in the lowest tertile of combined vitamin C and E intake had a greater than fourfold increased risk of gastric cancer.¹

The authors concluded that high antioxidant intake may protect against gastric cancer. The antimicrobial eradication of *H. pylori*, combined with supplemental use of vitamins C and E, may thus provide a two-pronged strategy for preventing gastric cancer.

—Linda M. Smith, RN

Reference

1. Kim HJ, Kim MK, Chang WK, Choi HS, Choi BY, Lee SS. Effect of nutrient intake and *Helicobacter pylori* infection on gastric cancer in Korea: a case-control study. *Nutr Cancer*. 2005;52(2):138-46.
2. Penta R, De Falco M, Iaquinto G, De Luca A. *Helicobacter pylori* and gastric epithelial cells: from gastritis to cancer. *J Exp Clin Cancer Res*. 2005 Sep;24(3):337-45.

Omega-3s May Avert Depression in Diabetics



Omega-3 polyunsaturated fatty acids may help to prevent and treat depression in individuals with type II diabetes, according to a recent review conducted by researchers at Vrije Universiteit Medical Centre in Amsterdam, Holland.* While depression often accompanies type II diabetes, antidepressant drugs effectively resolve depression in only 50-60% of patients.

The Danish investigators analyzed data from studies examining the relationship of omega-3 fatty acids and depression, as well as studies on the use of omega-3 supplements in type II diabetes. A review of 17 published studies on depression collectively demonstrated that those with lower dietary intakes of omega-3 fatty acids experienced higher rates of depression. Furthermore, four studies showed that an additive therapeutic effect occurred when depressed patients were treated

with both conventional antidepressants and omega-3 fatty acids.

The investigators noted that certain evidence suggests that low dietary intake of omega-3 fatty acids is associated with an increased risk of developing type II diabetes, though these findings were less conclusive. Omega-3 fatty acids may indirectly decrease the incidence of depression in diabetes patients by reducing the risk of cardiovascular disease and its complications, which may contribute to depression.

The authors concluded that omega-3 fatty acids, particularly eicosapentaenoic acid (EPA), may be safe and effective in reducing the incidence of depression and in treating depression in type II diabetics. Further studies are indicated to formally assess the effects of omega-3 fatty acids in preventing and managing depression in diabetics.

—Linda M. Smith, RN

Reference

* Pouwer F, Nijpels G, Beekman AT, et al. Fat food for a bad mood. Could we treat and prevent depression in Type 2 diabetes by means of omega-3 polyunsaturated fatty acids? A review of the evidence. *Diabet Med.* 2005 Nov; 22(11):1465-75.

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.