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In The NEWS

Men's Waist Size Linked with Urinary Symptoms

The bigger the waistline, the poorer an older man's voiding and sexual function, new research indicates.* Larger waist circumference is a characteristic of metabolic syndrome, which is linked with a higher risk of heart disease and diabetes.

Dr. Steven A. Kaplan of Weill Cornell Medical College in New York studied whether waist size is a useful predictor of prostate volume and the severity of pelvic dysfunction in older men. Examining 88 men of average age 62 years with moderate-to-severe untreated urinary symptoms who were grouped according to their waist circumference, Dr. Kaplan and his colleagues found that prostate volume, prostate specific antigen level (a marker for prostate enlargement or disease), voiding symptoms, erectile dysfunction, and ejaculatory dysfunction all increased as the waistline did.

The scientists concluded that obese men are at increased risk of pelvic dysfunction and can be "easily diagnosed" by measuring waist circumference.

—Cathy Burke

Reference

* Available at: http://www.cnn.com/2007/HEALTH conditions/06/14/men.obese.urinary.reut/. Accessed July 9, 2007.

Magnesium May Protect Against Diabetes

Eating more magnesium-rich foods, like green leafy vegetables and nuts, may reduce the risk of diabetes, according to a recent meta-analysis.*

Seven studies involving more than 280,000 participants revealed that for every 100 mg increase in magnesium intake, the risk of developing type 2 diabetes decreased by 15%, according to the reviewers in Sweden who called the results "compelling."

Dietary sources of magnesium include green leafy vegetables, grains, nuts, and milk. The RDA for magnesium is 320 mg per day for women and 420 mg per day for men, yet many adults fail to achieve these modest amounts of the mineral. The protective role of magnesium intake against diabetes may be due to improvement in insulin sensitivity.

Given the devastating consequences of diabetes, increased consumption of magnesium-rich foods and supplements seems prudent.

—Cathy Burke

Reference

* Available at: http://www.blackwellpublishing.com/journal.asp?ref=0954-6820&site=1. Accessed July 10, 2007.

Estrogen Therapy Associated with Less Coronary Plaque

Women worried about the link between estrogen and cardiovascular disease can take heart in new information from a Women's Health Initiative study suggesting a potential cardioprotective role for the hormone.*

The ancillary study of 1,064 women between 50 and 59 years compared those taking estrogen with those taking a placebo. After treatment ended, researchers measured the level of calcium-containing plaque, a marker for future cardiovascular disease, in the women's coronary arteries. Their conclusion: Those who'd taken estrogen had less coronary artery calcium compared with those taking placebo.

"Although our findings lend support to the theory that estrogen may slow early stages of plaque build-up in the coronary arteries, estrogen has complex effects and other noted health risks," noted the study's lead author, Dr. JoAnn Manson.

—Cathy Burke

Reference

* Manson JE, Allison MA, Rossouw JE, et al. Estrogen therapy and coronary-artery calcification. N Engl J Med. 2007 Jun 21;356(25):2591-602.

Novel Cancer Drug Shows Promise

Geron Corporation announced recently that its experimental anti-cancer drug, currently dubbed GRN163L, has exhibited good tolerability in Phase I/II trials in patients suffering from chronic lymphocytic leukemia (CLL).* Although far from reaching the market, the drug has demonstrated good tolerability and the ability to reach desirable concentrations in patients' bloodstreams in a predictable, linear manner. These properties simplify dosing and reduce the chance of overdose, should the drug gain eventual FDA approval.

The drug is the world's first to target telomerase that has reached the clinical trial stage. Telomerase is an enzyme enlisted by many tumors and cancer cells to fuel runaway growth. According to Geron, it appears to be "unique in its observed effects on tumor stem cells." Such cells are rare, chemotherapy-resistant cells responsible for cancer recurrence. Future trials will focus on treating multiple myeloma and non-small cell lung carcinoma.

—Dale Kiefer

Reference

* Available at: http://www.geron.com/pressview.asp?id=805. Accessed July 10, 2007.

Low Vitamin D Levels May Increase Cardiovascular Risk

Low blood levels of vitamin D are linked with increased cardiovascular risk factors in American adults, according to a recent study.*

Scientists measured serum levels of 25-hydroxyvitamin D in more than 15,000 men and women aged 20 years and older. Those with the lowest vitamin D levels had a significantly higher prevalence of hypertension, diabetes, and elevated serum triglyceride levels—all of which increase cardiovascular disease risk.

Low vitamin D levels were found in women, the elderly, and obese individuals.

These study findings suggest that low serum vitamin D could represent a novel cardiovascular risk factor, and that current recommendations for vitamin D intake may be far too low for optimal health. Prospective studies are needed to assess vitamin D's effects on various cardiovascular risk factors.

—Cathy Burke

Reference

* Martins D, Wolf M, Pan D, et al. Prevalence of cardiovascular risk factors and the serum levels of 25-hydroxyvitamin D in the United States: data from the Third National Health and Nutrition Examination Survey. Arch Intern Med. 2007 Jun 11;167(11):1159-65.

Cinnamon Prevents Blood Sugar Spikes

Cinnamon helps diminish the blood glucose spike that typically follows a meal, in part by delaying stomach emptying, according to new research from Sweden.[1] Scientists have previously reported that cinnamon lowers fasting blood sugar, low-density lipoprotein (LDL), and total cholesterol in patients with type 2 diabetes.

The Swedish study examined the effects of 6 g of cinnamon added to approximately 10 ounces of rice pudding consumed by 14 non-diabetic subjects. “The addition of cinnamon to the rice pudding significantly delayed gastric emptying and lowered the [after-meal] glucose response,” wrote the researchers.

Cinnamon’s water-soluble polyphenols may be responsible for its beneficial metabolic effects.[2]

—Dale Kiefer

Reference

1. Hlebowicz J, Darwiche G, Bjorgell O, Almer LO. Effect of cinnamon on postprandial blood glucose, gastric emptying, and satiety in healthy subjects. Am J Clin Nutr. 2007 Jun;85(6):1552-6.
2. Anderson RA, Broadhurst CL, Polansky MM, et al. Isolation and characterization of polyphenol type-A polymers from cinnamon with insulin-like biological activity. J Agric Food Chem. 2004 Jan 14;52(1):65-70.

Omega-3 Fatty Acids May Protect Against Prostate Cancer

A diet higher in omega-3 fatty acids may improve the prognosis in those who are genetically prone to developing prostate cancer, according to a recent report.[1]

To study the effect of fatty acids on prostate cancer, scientists utilized mice with a genetically determined susceptibility to the disease. Omega-3 fatty acids reduced prostate tumor growth, slowed progression, and increased survival, while omega-6 fatty acids had opposite effects.

“Diet can tip the balance toward a good or a bad outcome,” noted one of the scientists. “Our data imply a beneficial effect of omega-3 [fatty acids] on delaying the onset of human prostate cancer.”

Omega-3s, such as eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA), are found in cold water fish and fish oil supplements. The present study adds to a growing body of evidence that omega-3s are protective against cancer.[2]

—Dale Kiefer

Reference

1. Berquin IM, Min Y, Wu R, et al. Modulation of prostate cancer genetic risk by omega-3 and omega-6 fatty acids. J Clin Invest. 2007 Jul 2;117(7):1866-75.
2. Theodoratou E, McNeill G, Cetnarskyj R, et al. Dietary fatty acids and colorectal cancer: a case-control study. Am J Epidemiol. 2007 Jul 15;166(2):181-95.

Flavonoid Consumption Slows Cognitive Decline

Abundant intake of dietary flavonoids helps protect against cognitive decline, according to a newly published study from France.* Present in a wide variety of fruits and vegetables, flavonoids are naturally occurring antioxidants.

Scientists enrolled more than 1,600 men and women aged 65 years or older who were initially dementia-free, and assessed their dietary intake of flavonoids. Subjects' cognitive performance levels were assessed at baseline and several times thereafter for one decade.

Higher flavonoid intake at baseline was associated with better cognitive performance, after adjustment for other factors. By the end of the 10-year study period, subjects with the lowest flavonoid intake experienced nearly twice the rate of cognitive decline as subjects in the highest-intake groups.

"This study raises the possibility that dietary flavonoid intake is associated with better cognitive evolution," concluded the scientists.

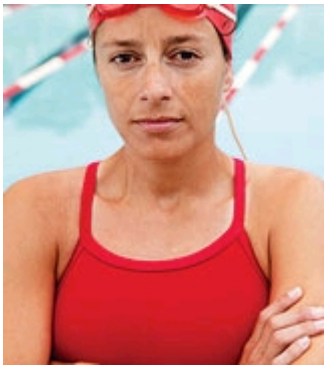
—Dale Kiefer

Reference

* Letenneur L, Proust-Lima C, Le Gouge A, Dartigues JF, Barberger-Gateau P. Flavonoid intake and cognitive decline over a 10-year period. Am J Epidemiol. 2007 Jun15;165(2):1364-71.

In The NEWS

Low Folate Linked with Depression



Low levels of folate, a member of the B vitamin family, are associated with a greater risk of depression, according to a recent research review.* Although the relationship had been previously observed, the association was not considered conclusive.

The current research review involved 11 studies comprising 15,315 participants, 1,769 of whom were diagnosed with depression. Adjusted analysis found that low folate status—as determined by low dietary intake or low serum or blood folate levels—was associated with a 42% greater risk of depression.

The lead author commented, “Although the research does not prove that low folate causes depression, we can now be sure that the two are linked. Interestingly, there is also some trial evidence that suggests folic acid supplements can benefit people with depression. We recommend that large trials should be carried out to further test this suggestion.”

—Dayna Dye

Reference

* Gilbody S, Lightfoot T, Sheldon T. Is low folate a risk factor for depression? A meta-analysis and exploration of heterogeneity. J Epidemiol Community Health. 2007 Jul;61(7):631-7.

Pomegranate Hinders Lung Tumors

Already known for its role in fighting prostate cancer, pomegranate shows promise in averting lung cancer, according to researchers at the University of Wisconsin in Madison.*

Researchers used experimental carcinogens to induce lung tumor growth in mice, supplementing some of the animals with pomegranate fruit extract.

Pomegranate fruit extract provided significant protection against experimentally induced lung cancer. Mice given one tumor-inducing agent had 62% fewer lung tumors after five months of pomegranate supplementation, compared with animals that did not receive pomegranate. Eight months of pomegranate supplementation reduced lung tumors by nearly 66% in mice exposed to another carcinogen.

Pomegranate fruit extract merits further investigation as a chemopreventive agent for human lung cancer.

—Cathy Burke

Reference

* Khan N, Afaq F, Kweon MH, Kim K, Mukhtar H. Oral consumption of pomegranate fruit extract inhibits growth and progression of primary lung tumors in mice. Cancer Res. 2007 Apr 1;67(7):3475-82.

X-rays May Be Dangerously Overused

While modern medical imaging has transformed the art of diagnosis, Americans are being exposed to record amounts of potentially dangerous ionizing radiation, according to a soon-to-be-released, government-sponsored study.*

The average per capita exposure to ionizing radiation from imaging exams increased by nearly 600% from 1980 to 2006 in the US, according to Dr. Fred A. Mettler, Jr., of the National Council on Radiation Protection.

From mammograms to CT scans, doctors use X-rays to peer deep within the body. But this marvelous technology is not without risk: X-rays are a form of ionizing radiation, the most potentially hazardous form of radiation. The World Health Organization and the federal Centers for Disease Control and Prevention have classified X-rays as carcinogenic.

While many imaging procedures are necessary, doctors and patients may need to re-evaluate their overall use of X-rays.

—Dale Kiefer

Reference

* Rabin RC. With rise in radiation exposure, experts urge caution on tests. New York Times. June 19, 2007.

Genistein Boosts Bone Mineral Density

The soy phytoestrogen genistein improves bone mineral density and decreases markers of bone loss in women with osteopenia (low bone mass), according to a recent report.* Osteopenia commonly occurs in women following menopause, and though it is less severe than osteoporosis, it is associated with increased fracture risk.

The trial enrolled 389 postmenopausal women with diminished bone mineral density of the femoral head (hip). After a four-week washout period, the participants were divided to receive 54 mg genistein per day or placebo.

After two years, women who received genistein had an increase in lumbar spine and femoral neck bone density, while those who did not experienced a decline. Treatment with genistein decreased serum and urinary markers of bone loss.

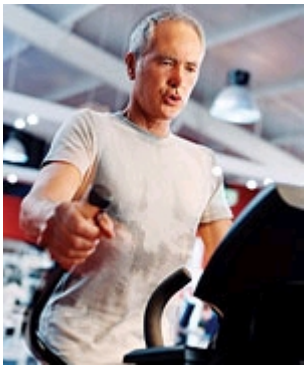
“Twenty-four months of treatment with genistein has positive effects on bone mineral density in osteopenic postmenopausal women,” the authors concluded.

—Dayna Dye

Reference

* Marini H, Minutoli L, Polito F, et al. Effects of the phytoestrogen genistein on bone metabolism in osteopenic postmenopausal women: a randomized trial. Ann Intern Med. 2007 Jun 19;146(12):839-47.

Vitamin B6 May Protect Men from Colorectal Cancer



Vitamin B6 (pyridoxine) may help protect men against colorectal cancer, according to a study released by the Journal of Nutrition.*

Scientists evaluated dietary intake of more than 81,000 Japanese adults in relation to their five-year risk of developing colorectal cancer. Men with the highest levels of vitamin B6 intake had a 31% lower risk of colorectal cancer than men with the lowest intake levels. Drinking more than 150 g (5 ounces) of alcohol per week doubled the risk of colorectal cancer in men who consumed little vitamin B6.

Vitamin B6 may be important for colorectal cancer prevention in men, particularly in those who consume alcohol.

—Dayna Dye

Reference

* Ishihara J, Otani T, Inoue M, et al. Low Intake of Vitamin B-6 Is Associated with Increased Risk of Colorectal Cancer in Japanese Men. J Nutr. 2007 Jul;137(7):1808-14.

Lifestyle Changes in Middle Age Still Beneficial

Adopting healthy lifestyle changes relatively late in life is still an effective means to lower cardiovascular disease risk and lengthen life, according to a recent report.*

More than 1,300 men and women aged 45 to 64 years adopted four healthy behaviors: consuming five or more fruits and vegetables daily, exercising a minimum of 2.5 hours per week, maintaining a body mass index (BMI) between 18.5 and 29.9 kg/m2, and not smoking. Over the course of four years, they experienced a 35% decreased incidence of cardiovascular events and a 40% reduction in mortality, compared with adults who did not adopt the healthful behaviors.

The authors noted, “The findings emphasize that making the necessary changes to adhere to a healthy lifestyle is extremely worthwhile, and that middle-age is not too late to act.”

—Dayna Dye

Reference

* King DE, Mainous AG, Geesey ME. Turning back the clock: adopting a healthy lifestyle in middle age. Am J Med. 2007 Jul;120(7):598-603.

Omega-3s Relieve Depression, Agitation in Alzheimer’s Disease Patients

Omega-3 fatty acids may help relieve depression and agitation in men and women with Alzheimer’s disease, report scientists from Stockholm.* Along with cognitive dysfunction and brain changes, patients with Alzheimer’s disease frequently exhibit such psychiatric symptoms. Epidemiologic studies have noted neuroprotective effects of fatty fish rich in omega-3s.

In this study, 204 patients with mild Alzheimer’s disease received 0.6 g eicosapentaenoic acid (EPA) and 1.7 g docsahexaenoic acid (DHA) or placebo each day for six months, followed by another six-month period in which all participants received the omega-3 fatty acids.

In the actively treated group, agitation diminished in carriers of a specific gene common in those with Alzheimer’s disease, whereas depressive symptoms improved in non-carriers of the gene.

—Dayna Dye

Reference

* Freund-Levi Y, Basun H, Cederholm T, et al. Omega-3 supplementation in mild to moderate Alzheimer's disease: effects on neuropsychiatric symptoms. Int J Geriatr Psychiatry. 2007 Jun 21; [Epub ahead of print].