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IN THE NEWS**Proposed EU Law Threatens US Health Freedoms**

ANH barristers (trial lawyers)
Michael Patchett-Joyce and
Paul Lasok, QC

On January 25, 2005, Paul Lasok, QC, one of the world's leading experts on European Union (EU) law, presented the case for preserving consumers' freedom of access to dietary supplements in the European Court of Justice in Luxembourg. Lasok argued on behalf of the UK-based Alliance for Natural Health.

At issue is the draconian EU Food Supplement Directive's so-called "positive list" of ingredients allowed in the manufacture of dietary supplements. Unless the court issues a favorable verdict in June, the ban posed by the positive list would eliminate 75% of the forms of vitamins and minerals currently used in the EU market.

This ban should be of grave concern to Americans. The United Nations' Codex Alimentarius Commission, assisted by the US FDA, views the EU Food Supplement Directive as a template for developing a global trade standard for dietary supplements. The FDA is preparing the US for "harmonization" of its dietary supplement laws to an absurdly restrictive international standard—

aided and abetted by drug company-dominated vitamin trade associations worldwide.

The offices of US Sens. Orrin Hatch (R-UT) and Tom Harkin (D-IA), the US Trade Representative's Office, and especially the US Codex Office (led by Dr. Ed Scarbrough at the USDA) have been misleading the public on the Codex issue for years. In 1996, the Life Extension Foundation was the first to call global attention to this looming threat to health freedom. International Advocates for Health Freedom (IAHF) was created to raise awareness of the issue, and more information on our recent emergency meeting is available at www.glycommunity.com/iahf.

—John C. Hammell, President, IAHF

To defend your access to dietary supplements, access updates via the websites of IAHF (www.iahf.com), Life Extension (www.lef.org), and the Alliance for Natural Health (www.alliance-natural-health.org). You can make an emergency donation to IAHF at 556 Boundary Bay Rd., Point Roberts, WA 98281 USA or via PayPal® at www.iahf.com. Your contribution will fund efforts to counter misleading propaganda from drug company-dominated vitamin trade associations.

Selenium May Lessen Colorectal Cancer Risk

Elevated blood levels of selenium help protect against the recurrence of colorectal adenomas, the precursors of colorectal cancer, according to research recently published in the *Journal of the National Cancer Institute*.*

Scientists analyzed data derived from three randomized trials, each examining the ability of nutritional therapies to prevent colorectal adenoma recurrence. Serum selenium levels were measured using blood samples provided by 1,763 participants upon enrollment in the studies. The reoccurrence of adenomas was determined by colonoscopies conducted during the studies' follow-up periods.

In all trials, participants with the highest selenium levels had the lowest risk of developing a new colorectal adenoma. Subjects whose blood selenium levels were in the top one fourth of participants had a 34% lower risk of a new adenoma than those whose selenium levels were in the lowest quarter. These subjects also had fewer advanced adenomas.

According to study authors Scott M. Lippman, MD, and Imad Shureiqi of the University of Texas MD Anderson Cancer Center, and Anna J. Duffield-Lillico of Memorial Sloan-Kettering Cancer Center, oxidative metabolism of arachidonic and linoleic acids contributes to the formation of colon tumors. Selenium and selenium-containing compounds exhibit strong antioxidant activity.



The researchers believe that the inhibition of cell growth observed in selenium-treated cultured cells may be accomplished in part by a reduction in mechanisms dependent on the cyclooxygenase-2 (COX-2) enzyme.

—Dayna Dye

Reference

*Duffield-Lillico AJ, Shureiqi I, Lippman SM. Can selenium prevent colorectal cancer? A signpost from epidemiology. *J Natl Cancer Inst.* 2004 Nov 17;96(22):1645-47.

Folic Acid Lowers Blood Pressure in Women



Folic acid helps prevent high blood pressure in women, and particularly in young women, according to researchers at Harvard University.* While small studies have suggested that high-dose folic acid might lower blood pressure, no large, forward-looking studies have examined the issue until recently.

The Harvard researchers analyzed information from nearly 94,000 women aged 27-44 who participated in the Nurses' Health Study II. The women did not have high blood pressure at the study's onset, and during eight years of follow-up, 7,373 women developed high blood pressure.

The researchers assessed folic acid intake based on questionnaires about food and supplement intake. After adjusting for factors such as family history, weight, and exercise habits, the

researchers noted that women who consumed at least 1000 mcg of folic acid daily had a 46% lower risk of developing hypertension compared to women who consumed less than 200 mcg daily.

The research team also examined data from a group of more than 62,000 women aged 43-70. In this group, women consuming the highest amount of daily folic acid had an 18% reduced risk of developing high blood pressure compared to those consuming the least amount of folic acid.

In both groups of women, the researchers noted that the benefit seen from folic acid came primarily from supplementary rather than dietary folic acid.

—Elizabeth Wagner, ND

Reference

*Forman JP, Rimm EB, Stampfer MJ, Curhan GC. Folate intake and the risk of incident hypertension among US women. *JAMA.* 2005 Jan 19;293(3):320-9.

Sesame Lignans Enhance Effects of Vitamin E



Sesame lignans exhibit synergistic antioxidant activity when combined with vitamin E, according to a recent report from investigators at the National Institute of Nutrition in Hyderabad, India.*

The researchers first evaluated the antioxidant effects of the sesame lignans sesamol, sesamin, and sesamolin compared to alpha tocopherol, gamma tocopherol, alpha tocotrienol, and butylated hydroxytoluene (BHT), using two in-vitro lipid peroxidation systems. Sesamol inhibited lipid peroxidation in the in-vitro systems, rat liver microsomes, and rat liver mitochondria, while sesamin and sesamolin were effective only in the microsomal system. Because detoxifying enzymes are present in the microsomes, the inhibitory effects of sesamin and sesamolin may be due to their metabolites.

All three of the sesame lignans were less potent at inhibiting peroxidation than were alpha tocopherol, gamma tocopherol, alpha tocotrienol, and BHT. However, when individual lignans were combined with alpha tocopherol, gamma tocopherol, or alpha tocotrienol, a synergistic effect occurred, and lipid peroxidation was inhibited at a greater rate than the sum of the individual agents.

Additionally, the time course of lipid peroxidation showed a lag time and decreased rate of reactive product formation when alpha tocopherol was combined with individual lignans, suggesting that sesame lignans help to recycle alpha tocopherol. Sesame

lignans thus appear to be a powerful adjunct to the antioxidant power of the vitamin E family of nutrients.

—Elizabeth Wagner, ND

Reference

* Ghafoorunissa N, Hemalatha S, Rao MV. Sesame lignans enhance antioxidant activity of vitamin E in lipid peroxidation systems. *Mol Cell Biochem.* 2004 Jul;262(1-2):195-202.

IN THE NEWS

PSA Tests Are Less Accurate in Overweight Men

The prostate-specific antigen (PSA) test, a widely used screening tool for detecting enlarged prostate and prostate cancer, may be less accurate in overweight men, report researchers from the University of Texas Health Science Center.¹ The study warns that doctors could miss this dangerous cancer in obese men.

PSA is made by normal prostate cells and is measured in the blood, with levels of 4.0 or lower usually indicating that no cancer is present. Heavier men have a 33% higher risk of prostate cancer, tend to be diagnosed when their cancer is more advanced, and thus are at higher risk of dying from it.



In a study examining nearly 3,000 men with no prostate cancer over three years, researchers found that more obese men had lower PSA levels. Morbidly obese men had PSA levels that were about 30% lower than men of normal weight.¹ Doctors believe that obese men produce more estrogen, which drives down testosterone levels and could affect the cells that produce PSA. Although estrogens historically have been used to treat prostate cancer, more recent findings suggest that estrogens may induce aberrant growth and neoplastic transformation in the prostate.²

PSA screening is far from foolproof. The New England Journal of Medicine last year reported that men with normal PSA values actually had cancer 15% of the time, and that two thirds of those men with cancer had aggressive cases.³

Prostate cancer detection may therefore be delayed in overweight or obese men, the investigators noted, and doctors may need to be especially vigilant when evaluating these patients. Digital rectal exams may provide an additional screening tool for prostate cancer.

—Elizabeth Wagner, ND

References

1. Baillargeon J, Pollock BH, Kristal AR, et al. The association of body mass index and prostate-specific antigen in a population-based study. *Cancer*. 2005 Jan 24.
2. Ho SM. Estrogens and anti-estrogens: key mediators of prostate carcinogenesis and new therapeutic candidates. *J Cell Biochem*. 2004 Feb 15;91(3):491-503.
3. Thompson IM, Pauler DK, Goodman PJ, et al. Prevalence of prostate cancer among men with a prostate-specific antigen level \leq 4.0 ng per milliliter. *N Engl J Med*. 2004 May 27;350(22):2239-46.

Chromium Found to Benefit Blood Sugar, Lipids



Chromium, a trace mineral that is often deficient in adults, may help to prevent or treat metabolic problems, including obesity, glucose intolerance, and unhealthy lipid profiles, according to Georgetown University researchers. The investigators report that supplementation with niacin-bound chromium, or ChromeMate®, improved blood sugar and lipid measures in volunteers.*

Although chromium is easily obtained through diet and supplements, a significant number of adults are unknowingly deficient, and no test exists to make the diagnosis. The appearance of metabolic syndrome may be the first sign of chromium deficiency. In the body, chromium improves the sensitivity of insulin receptors, helping to promote optimal metabolism of sugars.

In this double-blind study, volunteers received 300 mcg per day of niacin-bound chromium or placebo for three months. At the trial's end, the supplemented group had lower fasting glucose and triglyceride levels than the control group, and also had lower levels of glycosylated hemoglobin, or hemoglobin A1c, a measure of long-term blood sugar control. The niacin-bound chromium supplement was well tolerated, with no adverse effects reported.

Niacin-bound chromium supplementation may thus reduce the risk for glucose intolerance, prevent the progression of glucose intolerance to frank diabetes, improve glucose control in diabetics, and assist in managing elevated triglyceride levels.

—Linda M. Smith, RN

Reference

* Yasmin T, Shara M, Bagchi M, Preuss HG, Bagchi D. Toxicological assessment of a novel niacin-bound chromium, known to ameliorate the symptoms of metabolic syndromes. *Journal of the American College of Nutrition*, 45th Annual Meeting, abs 77, October;76(2):272-5.

Low Testosterone Linked to Multiple Sclerosis



Abnormal hormone levels may play a role in the development of multiple sclerosis, report researchers at University La Sapienza in Italy.* The investigators measured hormone levels in 35 women and 25 men with multiple sclerosis, and in 36 people without the disease.

Women with low testosterone levels were found to have more brain tissue damage, as determined using magnetic resonance imaging. The women with multiple sclerosis had lower levels of testosterone throughout their monthly cycle compared to women who did not have the condition. Testosterone levels did not vary between men with multiple sclerosis and unaffected men. However, men with multiple sclerosis who had the highest levels of the female hormone estradiol were found to have the greatest degree of brain tissue damage.

Multiple sclerosis is an inflammatory disease causing symptoms such as fatigue, numbness, and difficulties in movement, speech, and memory. Its course is marked by remissions and relapses. Multiple sclerosis affects twice as many women as men, and is significantly less active during pregnancy, suggesting that hormones influence its development. The Italian study further supports the hypothesis that sex hormones play a role in the inflammation, damage, and pathology of multiple sclerosis.

—Elizabeth Wagner, ND

Reference

* Tomassini V, Onesti E, Mainero C, et al. Sex hormones modulate brain damage in multiple sclerosis: MRI evidence. *J Neurol Neurosurg Psychiatry*. 2005 Feb; 76(2):272-5.

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