

INTERNATIONAL HEALTH NEWS

Your Gateway to Better Health!

NUMBER 122

FEBRUARY 2002

11th YEAR



Editorial

Most men are very aware of the threat of prostate cancer – and with good reason. It is estimated that over 180,000 new cases, 32,000 of them fatal, will have been diagnosed in American men in the year 2000. Fortunately, there is increasing evidence that as many as 80% of all prostate cancers can be prevented just by supplementing with 200 micrograms/day of selenium. Even if you are diagnosed with a high PSA level or early-stage prostate cancer there is still hope. Researchers at the University of Chicago have confirmed that frequent consumption of tomato products cannot only lower the risk of developing prostate cancer, but can actually help reverse it. Other researchers have attributed the protective power of tomatoes to their lycopene content and have found that 15 mg/day of a lycopene supplement can help reverse existing prostate cancer.

So while selenium and lycopene – or lots of tomato products – should clearly be part of every man's preventive program there is increasing doubt whether a daily aspirin should be. Researchers at Oxford University have confirmed that a daily aspirin is of benefit to patients who have suffered a previous stroke or heart attack. However, they also point out that regular aspirin use doubles the risk of gastrointestinal bleeding and conclude that the daily aspirin may well be inappropriate for healthy people.

Also in this issue, a protein and grain-rich diet increases the risk of osteoporosis, folic acid helps prevent pneumonia, and miscarriages may be linked to exposure to electromagnetic fields.

*Yours in health,
Hans Larsen, Editor*

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salmon is as good a source of fish oils as wild ones?

JB, Canada

Editor: *Most reputable fish oil suppliers now use molecular distillation when they produce the oil. This process brings the mercury content well below generally accepted safe levels. You can find a safe oil at <http://www.consumerlab.com/results/omega3.asp>. According to the USDA Food Composition Data the amount of eicosapentaenoic acid and docosahexaenoic acid (the principal omega-3 oils in fish) found in wild and farmed salmon is pretty well the same.*

I have been suffering from gingivitis (gum disease) and recently started taking coenzyme

LETTERS TO THE EDITOR

I am worried about the mercury content of fish oil supplements and was also wondering if farmed

Q10. My gingivitis has now almost completely gone. Do you know if CoQ10 is accepted by mainstream physicians and dentists as a treatment for gingivitis?

CW, USA

Editor: *The research which established coenzyme Q10 as a powerful remedy for gingivitis was first reported in 1974. Unfortunately, this does not mean that it is accepted by mainstream medical and dental practitioners. However, it does work – and very well indeed! Please see http://www.yourhealthbase.com/coenzyme_Q10.htm for more details.*

Can you possibly tell me what you can take for excessive sweating? It's not all menopause as I have been going through this for 30 years now.

LP, UK

Editor: *Hypoglycemia (episodes of low blood sugar), hyperthyroidism (overactive thyroid gland) and hormonal disturbances such as those occurring during menopause are perhaps the most common causes of excessive sweating. Wearing synthetic materials such as nylon, acrylic and polyester can also contribute. The herb sage is quite effective in alleviating excessive sweating. If the sweating is due to anxiety, a tea of peppermint, lemon balm and fennel seeds may help. There are also several homeopathic remedies that may help, but you would need to see a homeopath about those.*

ABSTRACTS

Selenium prevents prostate cancer

STANFORD, CALIFORNIA. Several large studies have shown that men with low blood (plasma) levels of selenium have a significantly increased risk of prostate cancer. Now medical researchers at Stanford University and the Johns Hopkins University School of Medicine weigh in with another report that clearly shows the protective effect of selenium. Their study involved 52 men diagnosed with prostate cancer and 96 age-matched controls with no detectable prostate disease. The men had an average age of 69 years and were all enrolled in the Baltimore Longitudinal Study of Aging. Plasma levels of selenium measured in blood samples taken four to five years prior to the diagnosis of prostate cancer were compared for cancer patients and controls. The researchers found that men with selenium levels below 10.7 micrograms/dL had a four to five times higher incidence of prostate

cancer than did men with levels above 10.7 micrograms/dL. They also noted a significant decline in selenium levels with age.

The researchers believe that much of the beneficial effect of selenium is due to its vital role in maintaining adequate levels of the body's main antioxidant, glutathione peroxidase. They conclude that selenium supplementation may reduce the risk of prostate cancer and that supplementation may be particularly important for older men. NOTE: The recommended daily intake of selenium is 55 micrograms with an upper safe limit of 400 micrograms/day. However, most supplementation studies have used 200 micrograms/day.

Brooks, James D., et al. Plasma selenium level before diagnosis and the risk of prostate cancer development. Journal of Urology, Vol. 166, December 2001, pp. 2034-38

Folic acid helps prevent pneumonia

SENDAI, JAPAN. Older people often have difficulty swallowing and this problem in turn may lead to the development of aspiration pneumonia. Researchers at the Tohoku University School of Medicine now report that supplementation with

folic acid is highly effective in preventing pneumonia. Their clinical trial involved 15 institutionalized patients who had been diagnosed with aspiration pneumonia on at least two separate occasions during the preceding two

years. The patients, with an average age of 71 years, were matched with a control group of 12 healthy 72-years-olds with no history of pneumonia.

The researchers measured baseline levels of folic acid, vitamin B12, vitamin B6, and homocysteine in the two groups. Thirteen of the 15 in the pneumonia group were found to be deficient in folic acid (average plasma level of 2.4 ng/mL versus 8.3 ng/mL in the controls). The patients also had excessively high homocysteine levels (18.2 micromol/L versus 6.4 micromol/L for the controls). There were no significant differences in vitamin B6 or vitamin B12 levels. However, the patients took significantly longer to swallow –

average of 6 seconds versus 1.8 seconds for the controls.

The patients then received a 5-mg folic acid tablet twice a day for eight weeks. At the end of this period their homocysteine and folate (folic acid) levels were normal and their swallowing reflex had improved to 1.7 seconds (equivalent to the controls). The supplementation was continued for two years during which time not a single case of pneumonia was observed. The researchers conclude that folic acid supplementation may prevent the incidence of pneumonia and improve swallowing function in older people.

Sato, Emi, et al. Folate deficiency and risk of pneumonia in older people. Journal of the American Geriatrics Society, Vol. 49, December 2001, pp. 1739-40 (letter to the editor)

Melatonin and tardive dyskinesia

TEL AVIV, ISRAEL. Tardive dyskinesia is a common side effect of treatment with antipsychotic drugs such as haloperidol (Haldol) and chlorpromazine (Largatil). The disorder manifests itself through involuntary muscle movements especially in the face and limbs. Schizophrenia patients are often treated with antipsychotics and it is estimated that about 50 per cent of all hospitalized schizophrenics suffer from tardive dyskinesia (TD).

Israeli researchers now report that supplementation with melatonin markedly reduces TD symptoms. Their double-blind, placebo-controlled, crossover study involved 22 patients (aged 22 to 82 years) who had suffered from schizophrenia for an average of 23.5 years. Most of the patients (60 per cent) were being treated with haloperidol and all had symptoms of TD. The patients were given 10 mg of melatonin

(controlled release) or placebo at 8 p.m. every night for six weeks. After a four-week wash-out period the placebo patients received melatonin and vice versa for another six weeks. The melatonin supplementation resulted in an average 24 per cent improvement in TD score in the melatonin group versus 8 per cent in the control group. Improvements of 30 per cent or more were noted in nine of the 22 patients treated with melatonin. The researchers believe that the benefits of melatonin are related to its potent antioxidant activity and its ability to reduce dopaminergic activity in the brain.

Shamir, Eyal, et al. Melatonin treatment for tardive dyskinesia. Archives of General Psychiatry, Vol. 58, November 2001, pp. 1049-52

Glazer, William M., et al. Should Sisyphus have taken melatonin? Archives of General Psychiatry, Vol. 58, November 2001, pp. 1054-55 (commentary)

Herb conquers hay fever

LANDQUART, SWITZERLAND. Swiss researchers report that a carbon dioxide extract of the herb butterbur (*Petasites hybridus*) is as effective as an antihistamine in relieving the symptoms of hay fever (seasonal allergic rhinitis). Their double-blind clinical trial involved 125 hay fever sufferers who were randomized to receive either butterbur tablets four times daily (each tablet providing 8 mg of total petasine) or one 10-mg tablet of the antihistamine cetirizine (Zyrtec) plus three identical looking placebo tablets daily.

The patients underwent a thorough medical examination and evaluation of the severity of their hay fever symptoms at the beginning of the trial and after two weeks of taking the medications.

The researchers found the butterbur extract just as effective as the cetirizine in alleviating symptoms. They also noted that butterbur was far less likely to cause drowsiness and fatigue. They conclude that butterbur should be considered for hay fever relief when the sedating effects of antihistamines must be avoided.

Editor's Note: The Swiss experiment was done with a carbon dioxide extract of butterbur. Using the herb by itself for hay fever relief may not be advisable as there is some indication that certain parts of the plant can cause liver damage.

Schapowal, Andreas, et al. Randomised controlled trial of butterbur and cetirizine for treating seasonal allergic rhinitis. British Medical Journal, Vol. 324, January 19, 2002, pp. 1-4

Parkinson's disease linked to personality

TURKU, FINLAND. For nearly a century it has been suggested that people who develop Parkinson's disease tend to be morally rigid, punctual, serious, compulsive, industrious, introverted, and quiet – in other words, not exactly "laid-back". More recent research has found a correlation between a lack of novelty-seeking behaviour and Parkinson's disease in patients taking l-dopa. People who score low on novelty seeking tend to be rigid, loyal, stoic, frugal, orderly, and persistent.

Finnish researchers now report the results of an experiment designed to test the personality/Parkinson's association. The trial involved 61 un-medicated Parkinson's disease patients and 45 healthy controls. All participants filled out personality questionnaires and 47 of the patients also underwent a PET scan to evaluate dopaminergic activity in the brain. The

researchers found no correlation between the incidence of Parkinson's disease and novelty seeking. They speculate that the lower novelty seeking found in previous studies were caused by the patients' medication (l-dopa). However, they did find a clear correlation between harm-avoidance and Parkinson's. People with the disease were more likely to describe themselves as fearful, pessimistic, shy, and easily fatigued (high harm-avoidance score) rather than as optimistic, outgoing risk takers. The researchers also found a clear association between l-dopa uptake in the brain (right caudate nucleus) and a high harm-avoidance score.

Kaasinen, Valteri, et al. Personality traits and brain dopaminergic function in Parkinson's disease. Proceedings of the National Academy of Sciences, Vol. 98, November 6, 2001, pp. 13272-77

Vitamin E supplementation: Are we taking the right one?

BERNE, SWITZERLAND. Vitamin E occurs in eight different forms of which the two most important are alpha-tocopherol and gamma-tocopherol. Alpha-tocopherol is the predominant form found in human tissues and blood plasma and the primary form used in vitamin supplements. It is a powerful antioxidant, which is incorporated into very low-density cholesterol and helps protect against atherosclerosis. Gamma-tocopherol is the most abundant vitamin E form in the diet and tends to accumulate primarily in the skin, muscles, veins and fat tissue.

A team of American and Swiss researchers now suggests that gamma-tocopherol may be equally important for human health. They point out that a large portion of the gamma-tocopherol obtained from the diet (walnuts, pecans, peanuts, and sesame seeds are good sources) is metabolized into gamma-CEHC, which in itself has diuretic and anti-inflammatory properties. Gamma-tocopherol is an excellent inhibitor of reactive

nitrogen oxide species that are associated with inflammation. There is also substantial evidence that gamma-tocopherol helps prevent heart disease and prostate cancer. Unfortunately, there is also substantial evidence that supplementing with alpha-tocopherol "crowds out" the gamma-tocopherol in tissues and blood plasma. Thus people who supplement solely with alpha-tocopherol may deprive themselves of the benefits of gamma-tocopherol. In contrast, supplementation with gamma-tocopherol increases blood and tissue concentrations of both alpha- and gamma-tocopherol. The researchers conclude that controlled intervention studies in humans are clearly required in order to establish the relative merits of supplementation with these two forms of vitamin E.

Jiang, Qing, et al. Gamma-tocopherol, the major form of vitamin E in the US diet, deserves more attention. American Journal of Clinical Nutrition, Vol. 74, December 2001, pp. 714-22

Tomato sauce and prostate cancer

CHICAGO, ILLINOIS. Several studies have observed that tomatoes and tomato products, especially tomato sauce, have a protective effect against prostate cancer. Researchers at the University of Illinois now report that tomato sauce is also effective in slowing down and perhaps even reversing existing prostate cancer. Their study involved 32 patients with prostate cancer who were scheduled to undergo a radical prostatectomy. The participants underwent a baseline examination to determine their lycopene levels, their PSA (prostate specific antigen) level, and the level of oxidative damage to their DNA (in leukocytes). They were then fed a pasta dish with tomato sauce (3/4 of a cup of commercial spaghetti sauce) once a day for three weeks. The additional daily lycopene intake from the sauce was 30 mg.

At the end of the three-week period lycopene levels in the blood plasma had doubled and lycopene levels in prostate tissue had tripled. The average PSA level had declined from 10.9 ng/mL to 8.7 ng/mL – a drop of 17.5 per cent. The DNA damage indicator in leukocytes dropped by 21.4 per cent after the intervention. The DNA damage level in actual prostate tissue (removed during surgery) was found to be 28.3 per cent lower in the tomato sauce group than in a reference group of seven prostate cancer patients who had not consumed the tomato sauce diet. The researchers conclude that their study “suggests a role for tomato sauce and possibly for lycopene in the prevention and treatment of prostate cancer.” *Chen, Longwen, et al. Oxidative DNA damage in prostate cancer patients consuming tomato sauce-based entrees as a whole-food intervention. Journal of the National Cancer Institute, Vol. 93, December 19, 2001, pp. 1872-79*

Diabetes and vitamin D

TAMPERE, FINLAND. It is well known that vitamin D supplementation can reduce the risk of developing type 1 diabetes in animals. There is also increasing evidence that the destruction of beta-cells in the pancreas, the cause of type 1 diabetes, involves a dysfunction of the immune system and that vitamin D acts as an immunosuppressive agent.

Researchers at the Imperial College School of Medicine in London and Tampere University have just released the results of a major study which clearly shows that regular vitamin D supplementation in infancy markedly reduces the risk of developing type 1 diabetes later in life. The study involved over 10,000 Finnish children who were born in 1966. The children were all from northern Finland where the sun shines as little as two hours during the winter months. The researchers found that infants who had received the then recommended daily dosage of vitamin D

(2000 IU/day) had an 80 per cent lower risk of developing type 1 diabetes than had children who had received less. They also noted that a low vitamin D intake was associated with an increased risk of rickets. It is interesting that the recommended daily intake of vitamin D in 1964 was 4000-5000 IU/day; this was reduced to only 400 IU/day in 1992.

Dr. Jill Norris of the University of Colorado, in an accompanying editorial, warns that breastfeeding, keeping babies out of the sun, and the increased use of sunscreens for infants and toddlers all conspire to reduce vitamin D intake and thus could increase the risk of type 1 diabetes.

Hypponen, Elina, et al. Intake of vitamin D and risk of type 1 diabetes: a birth-cohort study. The Lancet, Vol. 358, November 3, 2001, pp. 1500-03

Norris, Jill M. Can the sunshine vitamin shed light on type 1 diabetes? The Lancet, Vol. 358, November 3, 2001, pp. 1476-78 (commentary)

Benefits of a daily aspirin

OXFORD, UNITED KINGDOM. Numerous studies have shown that antiplatelet therapy with aspirin is of benefit for people who have suffered a previous heart attack, stroke or other cardiovascular event. Researchers at the

Radcliffe Infirmary have just completed a review of 287 studies, which compared aspirin therapy versus control in 135,000 patients. They conclude that a daily aspirin reduces the risk of a serious cardiovascular event by about 25 per

cent. Specifically, the risk of non-fatal stroke was reduced by 25 per cent and the risk of a non-fatal heart attack was reduced by 33 per cent in high-risk individuals.

The researchers found that low doses (75-150 mg/day) of aspirin are just as effective as higher doses for long-term therapy and that low doses are less likely to cause internal bleeding. At least 150 mg may be required though to get an immediate effect. A recent European trial observed that patients with atrial fibrillation who had had a previous stroke reduced their risk of a serious cardiovascular event from 18.4 to 15.3

per cent by taking a daily aspirin. The researchers do point out that regular use of aspirin is associated with a doubling of the risk of upper gastrointestinal bleeding. They conclude that, "for most healthy individuals, for whom the risk of a vascular event is likely to be substantially less than one per cent a year, daily aspirin may well be inappropriate".

Collaborative meta-analysis of randomised trials of antiplatelet therapy for prevention of death, myocardial infarction, and stroke in high risk patients. British Medical Journal, Vol. 324, January 12, 2002, pp. 71-86 [64 references]

Movies and smoking

LEBANON, NEW HAMPSHIRE. Researchers at Dartmouth Medical School believe that movies have a powerful effect on the smoking behaviour of adolescents. The researchers screened 50 movies and found that most of them depicted actors smoking at one time or another (five times on average during the movie). They then questioned 4900 adolescent school children (ages 9 to 15 years) as to which of the movies they had seen. The typical adolescent had seen 17 of the 50 and watched an average of three movies a week. The researchers found a strong correlation between exposure to smoking scenes in movies and having had a go at smoking. Adolescents who had seen more than 150 "smoking scenes" were three times more likely to

have tried smoking than were children who had only witnessed 0 to 50 such scenes. This ratio held true even after adjusting for other variables such as having a parent or sibling who already smoked. Overall, 4.9 per cent of adolescents who had seen 0 to 50 smoking scenes had tried smoking as compared to 31.3 per cent among those who had seen more than 150 scenes. The researchers conclude that exposure to tobacco use in films is pervasive and plays a crucial role in inducing youngsters to take "that first puff".

Sargent, James D., et al. Effect of seeing tobacco use in films on trying smoking among adolescents: cross sectional study. British Medical Journal, Vol. 323, December 15, 2001, pp. 1394-97

Diet and osteoporosis

LONDON, UNITED KINGDOM. The incidence of osteoporosis and hip fractures has more than doubled in many European countries over the last 50 years. Many scientists believe that the problem is caused by a lack of calcium and vitamin D. Researchers at the University of California now challenge this assumption. They believe that the growth in osteoporosis is caused by an over-acidic diet. They point out that the modern western diet contains lots of grains, cheese, bread, and meat which all produce acid in the body. In order to neutralize this acid overload the body, if necessary, pulls carbonates, phosphates, and ammonia out of the bones, eventually leaving them fragile and porous. The researchers point out that countries with a diet high in meat, cheese, and fish have 40 times as

many hip fractures as some Asian countries where fruits and vegetables are the mainstay and cheese and meat are seldom eaten. A recent study involving American women found that those who ate the most acid-producing diet had four times as many hip fractures as those on the least acid-producing diets. Another study found that potassium bicarbonate is very effective in neutralizing the effects of high-acid diets. The researchers recommend that people go easy on cheese (very acid forming), meat and grains and instead increase their intake of fruits and vegetables. They also suggest that avoiding an acid-forming diet may actually be more important than ensuring an adequate calcium intake.

Fox, Douglas. Hard cheese. New Scientist, December 15, 2001, pp. 42-45

Miscarriages linked to EMFs

OAKLAND, CALIFORNIA. The debate over whether or not exposure to electromagnetic fields (EMFs) is detrimental to health has raged for years. Now researchers at the California-based Kaiser Foundation weigh in with a study that shows a clear association between peak EMF exposure and the risk of miscarriage. Their study involved 1063 women who were in their first 10 weeks of pregnancy. The women went about their regular chores for a day whilst wearing an EMF meter around their waist. The meter recorded their exposure to EMFs every ten seconds.

The researchers found that women who had been exposed to peak radiation levels of 1.6 microtesla or more were twice as likely to have a miscarriage

than were women who had not been exposed to such strong fields. Dr. De-Kun Li, the lead researcher, believes that the reason why many previous studies have found no detrimental effects of EMFs is because all studies to date have measured average levels rather than peak levels. He speculates that spikes in EMF could cause miscarriages by disrupting cell-to-cell communications. NOTE: A peak exposure of 1.6 microtesla can easily occur by ordinary use of a hair dryer, vacuum cleaner, blender or electric pencil sharpener.

Li, De-Kun, et al. A population-based prospective cohort study of personal exposure to magnetic fields during pregnancy and the risk of miscarriage. Epidemiology, Vol. 13, January 2002, pp. 9-20

NEWSBRIEFS

New car smell may make you sick. Australian researchers have found that the interior of new cars emit vast quantities of toxic chemicals for up to six months after manufacture. The researchers found that the level of volatile organic compounds measured inside three test cars were as much as 128 times higher than the recommended Australian exposure limit. These levels are much higher than those encountered in buildings where people get sick (sick building syndrome).

New Scientist, January 12, 2002, p. 11

Goggles prevent epileptic seizures. Flashing lights on TV can trigger epileptic seizures in susceptible children. Japanese researchers have now discovered that the culprit is unusually bright, long-wavelength, red light. They have developed goggles and plastic filters used to cover television screens that will filter out the offending wavelengths. Preliminary experiments show that it may be possible to prevent 95 per cent of all seizures caused by flashing lights on the TV by using the new filter.

New Scientist, December 8, 2001, p. 21

Can the number four influence mortality? The number four evokes discomfort and apprehension in some Chinese and Japanese people. Part of the reason is that the words "four" and "death" are pronounced almost identically. Does this have any practical significance? Researchers at the University of California believe it does. They examined computerized death certificates for over

200,000 Japanese and Chinese Americans and for over 47 million white Americans. They found that mortality from chronic heart disease peaked on the fourth of the month among the Chinese and Japanese population. No date-related peak was observed for whites. The phenomenon was particularly pronounced in California where the number of cardiac deaths on the fourth of the month was found to be 27 per cent higher than expected. The researchers conclude that cardiac mortality increases on psychologically stressful occasions.

British Medical Journal, December 22-29, 2001, pp. 1443-46

A nice boss is better for your health. British researchers report that having a boss you don't like can markedly increase your blood pressure. Their experiment involved 25 healthcare workers who had two different supervisors on alternate days of the week. On the days they worked for the supervisor they liked their average blood pressure was 113/75. When they worked for the supervisor they dreaded their average blood pressure rose to 126/81. The researchers point out that this increase is high enough to constitute a significant health risk over time.

New Scientist, January 5, 2002, p. 11

Beans are good for you. Researchers at the National Institutes of Health report that consumption of legumes (beans, peas, peanuts and peanut butter) four times or more per week

reduces the risk of coronary heart disease by 22 per cent compared to eating legumes less than once a week. The study involved 9600 men and women who were followed for 19 years. The researchers conclude that increased legume consumption may be an important strategy in reducing coronary heart disease.

Archives of Internal Medicine, Vol. 161, November 26, 2001, pp. 2573-78

Your grandmother was right! "Feed a cold, starve a fever" has long been part of folk medicine. Researchers at the Academic Medical Center in Amsterdam now provide convincing proof that this saying isn't just an old wives' tale

after all. They found that the level of gamma interferon quadrupled in six volunteers after having a meal. Gamma interferon is the body's main defense against viral infections such as the common cold. Conversely, they also found that when the volunteers only drank water, the gamma interferon level fell slightly, but the level of interleukin-4 nearly quadrupled. Interleukin-4 is one of the body's main defenses against bacterial infections such as the flu and respiratory infections accompanied by fever. So bring on the chicken soup for a cold, but go easy on food and heavy on water when you have the flu.

New Scientist, January 19, 2002, p. 15

INTERNATIONAL HEALTH NEWS is published monthly by:
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E-mail: health@pinc.com World Wide Web: <http://www.yourhealthbase.com>
ISSN 1203-1933 Copyright 2002 by Hans R. Larsen

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