

Beautiful Skin

Nutrients eased common skin problems in kids and signs of aging in adults

Beta-carotene, vitamin E, folic acid, and iron reduced eczema, aloe vera eased psoriasis, coenzyme Q10 reduced inflammation and wrinkles, and B and E vitamins lightened hyperpigmentation, in several new studies.

In a nutrition study, doctors said that the itchy, red, scaly skin of eczema in newborns and young children is an early sign of allergy. Researchers measured the diets of 180 five-year-olds with eczema and 242 without eczema and found that those who got the most beta-carotene, vitamin E, folic acid, or iron were about 60 percent less likely to have eczema compared to kids who got the least of these nutrients.

In a psoriasis study, 80 people with mild to moderate plaque psoriasis used a 70% aloe vera cream or a 0.1% triamcinolone acetonide steroid cream. After eight weeks, the aloe vera group had 66 percent less severe symptoms compared to 60 percent for the steroid group.

In the first of two skin studies, researchers took inflamed, sun-damaged cells from the inner and outer skin layers (dermis and epidermis) and exposed the cells to coenzyme Q10 in a lab. CoQ10 reduced inflammatory chemicals in both types of cell. In the second study, people with sun-damaged skin applied a 1% CoQ10 cream. After five months, wrinkles were less visible. Researchers concluded that CoQ10 may protect the skin and prevent wrinkles by reducing inflammation.

Doctors in another skin study explained that in hyperpigmentation, dark patches form to create uneven skin tone. Over 200 women with facial hyperpigmentation, aged 30 to 60, used a vitamin-enriched lotion or a placebo every day for 10 weeks. The vitamins in the enriched lotion were niacinamide, panthenol, and tocopherol. While there was no change for placebo, the vitamin-enriched lotion group had lighter pigmentation and better skin tone and texture.

Reference: European Journal of Clinical Nutrition; 2010, Vol. 64, No. 3, 245-52

Hibiscus Tea Lowered Blood Pressure

In a blood pressure study, doctors said that earlier research suggests hibiscus tea lowers blood pressure by relaxing the blood vessels. Researchers gave 65 adults, aged 30 to 70, with mildly elevated blood pressure, three 8-ounce cups of brewed hibiscus tea per day, or a placebo. After six weeks, the hibiscus tea group had lowered systolic blood pressure by 7.2 mmHg compared to 1.3 for placebo. Systolic blood pressure measures the maximum pressure in the arteries as the heart contracts to pump blood to the body. The doctors believe that hibiscus may also lower cholesterol and they encourage more studies.

Reference: Journal of Nutrition; 2010, Vol. 140, No. 2, 298-303

Healthy Fats

Nutrients help lower cholesterol and protect the heart

Omega-3 protects the heart, soy plus probiotics lowered LDL cholesterol, and red yeast rice cut LDL as well as statin drugs, in several new studies.

Doctors in an omega-3 study gave 12 healthy men, aged 53 to 65, increasing doses of docosahexaenoic acid (DHA) over eight weeks. In two-week cycles, the men took 200 mg of DHA per day, 400 mg, 800 mg, and finally 1,600 mg per day. With the three lower doses, blood levels of vitamin E increased, and signs of oxidative cell damage decreased. Doctors concluded that DHA in doses of 200 mg to 800 mg per day may have antioxidant effects and help prevent cardiovascular disease in healthy people.

In a cholesterol study, 23 men and women, average age 58, with borderline high LDL cholesterol, ate soy or probiotics alone, or combined, as part of a low fat dairy- or soy-based diet. After four weeks, while none of the other groups changed significantly, those who ate soy with probiotics in the soy-based diet had about 5 percent lower LDL cholesterol.

In another cholesterol study, doctors noted that some people with high cholesterol stop taking statin medication due to muscle pain, and wanted to test red yeast rice as an alternative. Forty-three adults with high cholesterol who had stopped taking statin drugs (other than pravastatin) took red yeast rice or 40 mg of pravastatin per day. Participants also enrolled in a lifestyle-change program focusing on nutrition, regular exercise, and relaxation techniques. After 12 weeks, a small percentage in each group had dropped out due to muscle pain. LDL cholesterol also decreased in both groups; 27 percent less for the pravastatin group and 30 percent less for those who took red yeast rice.

Reference: Atherosclerosis; 2010, Vol. 208, No. 2, 467-72

Healthy Start

Basic nutrients help ensure healthy babies and mothers

Babies whose mothers took folic acid while pregnant had fewer heart defects, babies of moms who took folic acid plus iron were more likely to live, and vitamin B12 lowered birth defects, three new studies reveal.

Researchers in a folic acid study analyzed the nutrition of over 3,000 women who bore children with birth defects. Babies born to mothers who took at least 400 mcg of folic acid per day while pregnant were 18 percent less likely to have congenital heart defects compared to moms who did not. Preventing heart defects is a new benefit of folic acid, doctors said.

In a nutrition study, researchers gave a folic acid-iron supplement, a folic acid-iron-zinc supplement, a third supplement with 11 more micronutrients, or vitamin A alone as a placebo, to more than 4,000 Nepalese women during pregnancy and after birth. Doctors explained that iron deficiency and anemia are common in this population. Compared to women who took vitamin A alone, moms who took folic acid with iron were half as likely to be anemic during and after pregnancy and their children were 45 percent more likely to live.

In a vitamin B12 study, doctors said that when they conducted this study in Ireland, before food manufacturers fortified foods with vitamins, birth defects were common. Doctors measured vitamin B12 levels at the 15th week of pregnancy in about 300 Irish women who were carrying a child with a birth defect, or whose previous children had a defect, and in about 900 pregnant women with no birth-defect history who were carrying healthy babies. As blood levels of vitamin B12 increased, mothers were much more likely to give birth to a healthy baby.

Reference: European Heart Journal; 2010, Vol. 31, No. 4, 464-71

Progress in Diabetes

Nutrients help reduce disease complications

In diabetics, Pycnogenol[®] improved eye health and vision, doctors explain why low levels of vitamin D raise chances of heart disease, and omega-3s

improved kidney function, three new studies reveal.

The U.S. National Institutes of Health reports that nearly half of those with diabetes have poor eye health. In a Pycnogenol study, 46 long-term diabetics with well-controlled blood sugar took 150 mg of Pycnogenol per day, or a placebo. After two months, while the placebo group did not improve, 75 percent in the Pycnogenol group reported better eyesight which doctors confirmed with a vision test. Researchers also found less retinal swelling and improved blood flow in the capillaries that nourish light-sensing cells.

In a lab study, doctors said that certain immune cells, called macrophages, need vitamin D to break down cholesterol, and that diabetics are often deficient in D, raising chances of cardiovascular trouble. Researchers took blood samples from 91 diabetics and placed their macrophages in a culture with or without vitamin D, and then exposed the cells to oxidized LDL cholesterol. When there was no vitamin D in the culture, the macrophages absorbed too much LDL, becoming cholesterol-filled "foam" cells, which can be the building blocks of arterial plaques. When vitamin D was present, the macrophages absorbed and broke down LDL properly.

Doctors in an omega-3 study said diabetics often have poor kidney function, and wanted to measure creatinine, a waste product eliminated by the kidneys. Researchers gave 97 type 2 diabetics 1,680 mg of eicosapentaenoic acid (EPA) plus 1,000 mg of docosahexaenoic acid (DHA) per day, or a placebo. After 12 weeks, while the placebo group had not improved, the omega-3 group had much lower blood levels of creatinine, meaning their kidneys were functioning better.

Reference: Journal of Ocular Pharmacology and Therapeutics; 2009, Vol. 25, No. 6, 537-40

Colon Health

Calcium, vitamin D, and magnesium all help protect against colorectal cancer, several new studies reveal.

In a vitamin D study, researchers evaluated the diets, lifestyles, and blood levels of vitamin D in 520,000 men and women and followed up for several years. During this time, 1,248 participants developed colorectal cancer. Doctors matched these people to 1,248 healthy participants from the study who had similar diet and lifestyle characteristics. Overall, men and women who began the study with the highest blood levels of vitamin D were 40 percent less likely to develop colorectal cancer compared to those who started with the lowest vitamin D levels. Scientists also found that those who consumed more calcium were less likely to develop colorectal cancer. Researchers said that the results did not vary by sex or in what season people gave blood.

In a related lab study, researchers gave 92 people with a confirmed colorectal adenoma 2,000 mg of calcium with or without 800 IU of vitamin D per day, or a placebo. After six months, while there was no change for placebo or calcium alone, colon tissue from the calcium plus vitamin D group showed 22 percent fewer signs of the DNA damage that can lead to colorectal cancer.

In a colon cancer study, researchers measured magnesium in the diets of over 87,000 men and women, average age 57, and followed up for eight years. While there was no link between low levels of magnesium and cancer in women, men who consumed at least 327 mg of magnesium per day were 52 percent less likely to have colon cancer compared to men who got the least magnesium.

Reference: British Medical Journal; 2010, January, Electronic Prepublication