

Feeling Better

Nutrients ease depression in healthy people and those with chronic disease

Men with good folate levels were less likely to be depressed, omega-3s eased depression in diabetes and Parkinson's disease, and coenzyme Q10 helped improve mood and reduce fatigue, in several new studies.

In a depression study, doctors measured blood levels of folate in 530 men and women. More than one-third in each group had depressive symptoms. While there was no link between folate and depression in women, men with the most folate were half as likely to have depressive symptoms as men with the lowest levels.

Doctors in a depression study said that type 2 diabetics may become depressed as a side effect of cardiovascular disease complications, and that anti-depressants improve symptoms only in about half of depressed diabetics. The scientists reviewed 17 depression/omega-3 studies and found that those with higher omega-3 levels were less likely to be depressed than those with lower levels, and believe that by reducing the chances of cardiovascular disease complications, omega-3s indirectly reduce depression.

Researchers in an omega-3 study



gave 29 people, average age 64, with Parkinson's disease and major depression, omega-3 fish oil capsules or a placebo for three months. While there was no change for placebo, 42 percent of those in the omega-3 group cut depressive symptoms by at least half, and depression went into remission for 22 percent.

In another depression study, researchers compared coenzyme Q10 blood levels in 35 depressed people—who had not responded to anti-depressants—to 22 healthy people. More than half of the depressed group had lower levels of CoQ10 than the lowest levels in the healthy group. Doctors also found that those with lower CoQ10 levels were more likely to have chronic fatigue syndrome.

In a related study, researchers compared CoQ10 levels in 58 people with chronic fatigue syndrome to 22 healthy people and found that nearly half had lower levels of CoQ10 than the lowest levels in the healthy folks.

Reference: European Journal of Clinical Nutrition; January, 2010, Electronic Prepublication

Healthy Insight Oats in Gluten-Free Diets

Gluten-free diets can lack nutrients, and adding oats can increase levels of vitamin B1, magnesium, zinc, and antioxidants. In a nutrition study, 31 people with celiac disease in remission ate a gluten-free diet with kilned or unkilned oats. After six months, the kilned-oat group had higher blood levels of magnesium and zinc, and the unkilned-oat group had higher levels of magnesium and vitamin B1. In a related study, 19 people with celiac disease ate 50 grams per day of gluten-free rolled oats. After 12 weeks, all had achieved the recommended daily amount of fiber, often a challenge in gluten-free diets.

Reference: European Journal of Clinical Nutrition; 2010, Vol. 64, No. 1, 62-7

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Less Stress

New science on reducing stress naturally

Doctors discuss adaptogens—herbs that help manage stress, low choline levels can mean more anxiety, and Bach® Flower Essences reduced symptoms of severe anxiety, in several new studies.

Herbalists use the term “adaptogen” to mean an herb that gives sustained, positive effects to people undergoing



exhausting physical and mental work. Here, scientists review and discuss the evidence of verified effects from the latest clinical trials.

Rhodiola rosea and *Schisandra chinensis*: Researchers conclude that there is “strong scientific evidence for *Rhodiola rosea*, and good scientific evidence for *Schisandra chinensis*, for improving attention, cognitive function and mental performance in people with fatigue and fatigue syndrome.”

Siberian ginseng (*Eleutherococcus senticosus*): The doctors say there is “good scientific evidence for *Eleutherococcus senticosus* for increased endurance and mental performance in patients with mild fatigue and weakness.”

The scientists conclude that adaptogens are herbal preparations that increase tolerance to mental exhaustion, enhance attention and mental endurance during exhausting physical

and mental work, and help the body maintain its natural internal balance.

In an anxiety study, researchers said that choline is important in the central nervous system and wanted to study its effects on mood. Choline is an essential nutrient, meaning people must consume it in the diet to maintain health. Doctors compared choline concentrations and anxiety symptoms in about 6,000 adults and found that those with the lowest choline levels had the highest levels of anxiety.

In another anxiety study, researchers gave 111 nursing students a standard dose of Bach Flower Essence Rescue Remedy or a placebo after telling them they had to take a surprise exam. Both groups had fewer signs of anxiety, but the Bach Flower group had much greater overall relief from anxiety than placebo.

Reference: Current Clinical Pharmacology; 2009, Vol. 4, No. 3, 198-219

Sharp Mind, Good Mood

Nutrients help ensure alert minds and healthy aging

Older women with good vitamin D levels were more likely to be mentally healthy, carnosine can restore healthy cell function and may protect against mental decline, and older adults who drank green tea were less likely to be depressed, three new studies reveal.

In a brain function study, researchers gave a mental-state test to 750 women, aged at least 75, 20 percent of whom were deficient in vitamin D. The doctors explained that the women were similar; all were relatively healthy, had high body mass index scores (tending toward overweight), regularly

exercised and, other than vitamin D deficiency, had no other significant differences. The scientists found that women with better vitamin D levels were much less likely to be mentally impaired than women who were deficient in vitamin D.

Doctors in a carnosine study explained a new theory that with age, proteins, DNA, and other molecules bond with sugars to form inappropriate attachments, or cross-links. The sugar cross-link process, called glycation, damages cells and leads to premature aging and disease, scientists believe. Recently, researchers have found glycation promotes beta-amyloid, the protein clumps that form in the brain in Alzheimer’s disease.

Carnosine, which is abundant in

the brain, skeletal and heart muscles, can keep cross-links from forming and can eliminate old cross-links, restoring normal cell membrane function, doctors said. The researchers reviewed studies of carnosine and brain activity and concluded that carnosine can improve microcirculation and rejuvenate cells in a lab culture.

In a green tea study, researchers evaluated 1,058 Japanese men and women, aged at least 70, and found that more than one-third were mildly depressed, and 20 percent were severely depressed. Compared to those who drank less than one cup of green tea per day, those who drank more than four cups of green tea per day had 44 percent fewer major depressive symptoms.

Reference: Neurology; 2010, Vol. 5, No. 74, 27-32

Performing Better

Nutrients help athletes prepare, perform, and recover

In athletes, omega-3 improved lung function, beta-alanine improved cyclists' performance, creatine strengthened swimmers, and Rhodiola and ginkgo biloba increased endurance and cut fatigue, several new studies reveal.

In an omega-3 study, 40 non-smoking amateur male wrestlers, average age 19, average body mass index 22.75, took omega-3 supplements with or without training, or took a placebo with or without training. The omega-3 supplement was 180 mg of eicosapentaenoic acid plus 120 mg of docosahexaenoic acid per day. After 12 weeks, while there were no significant changes for the other groups, the omega-3 training group had 41 percent better airflow and 53 percent greater total lung

capacity, compared to the beginning of the study.

In a beta-alanine study, 17 moderately to well-trained cyclists took 2 to 4 grams of beta-alanine per day, or a placebo. After eight weeks, participants cycled in a 110-minute simulated cycling race, followed by a 10-minute timed trial, and a 30-second sprint. During the sprint, compared to placebo, the beta-alanine group had 11.4 percent greater peak power, and 5 percent greater average power.

In a creatine study, 16 male elite fin-swimmers, average age 16, took 5 grams of creatine four times per day, or a placebo. After five days, while there was no change for placebo, the creatine group increased continuous jumping power by 20 percent and swam much faster in two 100-meter swim sprints.

In an endurance study, 67 healthy men, aged 18 to 22, took a 270 mg combination of *Rhodiola* plus ginkgo biloba four times per day, or a placebo.

After seven weeks, while there was no change for placebo, the *Rhodiola*-ginkgo group had much better aerobic (oxygen) capacity in an endurance test compared to the beginning of the study. Researchers also measured cortisol, a sign of stress, and found cortisol levels were much higher in the placebo group, but unchanged in the *Rhodiola*-ginkgo group.

Reference: Journal of Science and Medicine in Sport; 2010, Vol. 13, No. 2, 281-6



Helping Our Furry Friends Feel Better

Omega-3 fatty acids, collagen, glucosamine, and chondroitin all improve symptoms of arthritis in dogs, in several new studies.

In an omega-3 study, veterinarians examined 38 privately-owned pet dogs with osteoarthritis and gave commercial food or a test food containing 3.5 percent omega-3 fish oil. After 90 days, dogs that ate the omega-3s could bear 5.4 percent more weight on the weakest leg compared to 0.4 percent for placebo. Measuring maximum resistance, 82 percent of the omega-3 dogs improved, compared to 38 percent for placebo. The omega-3 dogs also were much less lame compared to the start of the study.

In another omega-3 study, 127 pet dogs with arthritis in one or more joints ate a commercial dog food or a test food that contained much higher levels of omega-3s and had a lower ratio of omega-6s to omega-3s. After six months, the omega-3 dogs had much higher blood levels of omega-3s and lower levels

of omega-6s. While there was no change for the commercial-food group, dog owners reported that the omega-3 dogs got up faster from a resting position, played more, and walked better than at the start of the study.

In an arthritis study, 20 arthritic pet dogs took 10 mg of undenatured type II collagen alone, 2,000 mg of glucosamine plus 1,600 mg of chondroitin alone, these two supplements together, or a placebo. After 120 days, while there was no change for the placebo group, dogs in all three other groups had much less pain overall and after limb manipulation, and much less lameness after exercise, compared to the start of the study.

Reference: Journal of the American Veterinary Medical Association; 2010, Vol. 236, No. 1, 67

