



Natural Insights for Well Being®

February 2020

Mood

New study finds several nutrients improve mental health

EPA, NAC, methylfolate, vitamin D

In a large-scale analysis, doctors gathered mental health and nutritional data from clinical trials worldwide involving a total of over 10,000 people. Building on recent research linking mental health to oxidative stress, inflammation, nutrition, and gut balance, doctors discovered several nutrients that appear to be beneficial for mood. Participants in the studies were diagnosed with common and severe disorders including depression, type I and II bipolarity, anxiety, dissociative personality (schizophrenia), and ADHD.

Overall, people who added an average of 2,200 mg of the omega-3 fatty acid EPA per day, saw depressive symptoms decrease more than with antidepressants alone; and at doses of up to 2,513 mg per day, small positive effects for ADHD. N-acetylcysteine, an essential amino acid, in doses of 2,000 mg per day, moderately reduced various depressive symptoms, and reduced functional impairment in bipolar disorder. A special, high dosage of methylfolate (15 mg per day) was effective in reducing symptoms of major depression and schizophrenia. And vitamin D, at 50,000 IU per week, improved symptoms in major depression.



Vitamin D in older adults

In a new study of 78 adults over age 60 with moderate to severe depression, participants took a placebo or 50,000 IU of vitamin D every week for eight weeks. Both groups began the study with levels of vitamin D below normal, with the vitamin D group achieving normal levels by the end of the study. After eight weeks, depression symptom scores had decreased to normal, non-depressive levels for vitamin D while increasing slightly for placebo.

Discussing the findings, doctors said the area of the brain linked to depression, the hippocampus, has many vitamin D receptors, and that several vitamin D molecules can cross the blood-brain barrier, helping to explain the depression benefit of vitamin D.

REFERENCE: WORLD PSYCHIATRY; 2019, VOL. 18, NO. 3, WPS.20672

FEBRUARY'S

Healthy Insight Saffron for Depression

Earlier studies found saffron improved symptoms in post-partum depression, but research combining saffron with antidepressant therapy to treat general depression is limited.

In this study, 139 physically healthy people with persistent depression continued taking standard antidepressants plus a placebo, or 14 mg of saffron extract, twice per day. After eight weeks, while the two groups self-reported similar improvements in symptoms, symptoms measured by clinicians on the Montgomery Asberg Depression Rating Scale declined by 21 percent for placebo and by 41 percent for saffron. Doctors noted other improvements for saffron including better sleep quality, initiative, motivation, interest, and taking pleasure in activities.

REFERENCE: JOURNAL OF PSYCHOPHARMACOLOGY; SEPTEMBER, 2019, PUBLISHED ONLINE

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Circulation

Omega-3s and curcumin protect heart and blood vessels

Omega-3s reduce adverse heart events

A new analysis from Harvard University suggests daily omega-3 fish oil supplements may reduce chances for heart disease and death. The review included 13 clinical trials lasting an average of five years and covered 127,477 overweight participants worldwide.

Overall, those who took omega-3 fish oil daily were 8 percent less likely to have a heart attack or to die from heart disease compared to those who did not take omega-3s. The heart benefits were particularly evident at levels above 840 mg of marine omega-3s per day. The benefits remained even after doctors excluded a study using very high doses of omega-3s. Also, as the dose of omega-3s increased, chances for adverse heart and circulatory events decreased.

Discussing the findings, doctors said the fatty acids in omega-3s help produce cellular energy and molecules called eicosanoids, which perform signaling functions in the heart and circulatory system.

Curcumin improves circulation

Flexible blood vessels are healthy blood vessels, easily adapting to changes in blood flow. Keeping blood vessels from hardening reduces the chances for heart and circulatory events. This is the first large review of studies that evaluated the effect of curcumin on blood vessel function, also known as endothelial function. The analysis included 10 placebo-controlled trials of varying lengths, covering 765 participants.

Overall, compared to placebo,

participants taking curcumin saw improvements in the ability of blood vessels to dilate in response to increases in blood flow. Doctors said it is likely the antioxidant and anti-inflammatory actions of curcumin that provide its blood vessel benefit.

REFERENCE: JOURNAL OF THE AMERICAN HEART ASSOCIATION; 2019, E013543, PUBLISHED ONLINE



Kids' Behavior & Health

Vitamin D and probiotics improve child behavior and metabolics

Low vitamin D linked to behavioral problems

Low vitamin D levels in adults have mood and behavioral links, but these effects were unknown in children. In this study, doctors measured levels of vitamin D in 273 children, aged five

to 12, and followed up six years later to assess behavior via kids' and parents' questionnaires.

Those who had been deficient in vitamin D in elementary school were twice as likely as kids with sufficient levels to have behavioral problems, including aggression and rule-breaking, by the time they reached adolescence.

Vitamin D, fat mass, and insulin resistance

In this study, doctors measured vitamin D in 533 young children and adolescents and found 90 percent were low or deficient, with levels no higher than 30 nanograms per milliliter, or 75 nanomoles per liter, of blood. As levels of vitamin D increased, fat mass and insulin resistance decreased.

Probiotics promote healthy weight

This is the first study to assess probiotics in obese children. In the trial, 54 obese kids, aged six to 14, ate a reduced calorie diet and increased physical activity for 12 weeks. Some diets included a multi-strain probiotic, others a placebo.

Compared to placebo, the kids taking probiotics saw greater improvement in body mass index (BMI) scores, and reductions in several signs of chronic inflammation linked to obesity. Doctors said, "It is very promising that in only 12 weeks of supplementation, probiotics reduced BMI and improved other metabolic markers of obesity, including lower fasting blood sugar."

REFERENCE: JOURNAL OF NUTRITION; 2019, NXZ185, PUBLISHED ONLINE

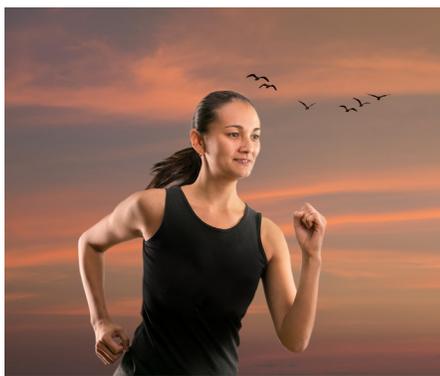


Performance

Nutrients plus exercise boost immunity, muscle mass

Probiotics protect marathoner immune response

Earlier studies found the probiotic *L. casei* Shirota (LcS) protected the immune system, but this is the first to examine the effects in marathon runners. In this study, 43 male marathon runners took 40 billion colony-forming-units of LcS per day for 30 days before running a marathon.



Immediately after the marathon, the placebo group had reduced levels in saliva of an antibody, secretory immunoglobulin A (SIgA), while the probiotics group maintained good levels. Doctors consider SIgA the first line of defense protecting mucosal glands from attack by pathogens that raise chances for upper respiratory tract infection. The placebo group also had increases in pro-inflammatory factors while those taking probiotics had greater anti-inflammatory protection.

Rhodiola, mushroom, and muscle mass

Doctors wanted to know if sedentary young adults could enhance body composition with nutrition when beginning an endurance training program. In this pilot study, eight

men and six women participated in supervised exercise training while taking a placebo or a combination of rhodiola and cordyceps mushroom at 9 mg per pound of body weight per day.

After eight weeks, compared to placebo, those in the rhodiola-cordyceps mushroom group had lost more body weight, reduced more fat mass in the upper arms, and added more muscle mass in the legs.

Doctors said the results suggest rhodiola with cordyceps mushroom can help untrained individuals safely improve results as they initiate an endurance training program. Doctors don't know the mechanism responsible for these benefits, but believe rhodiola and cordyceps mushroom help the body adapt to physical stress.

REFERENCE: NUTRIENTS; 2019, VOL. 11, No. 7, PII: E1678

FEBRUARY'S

Ahead of the Curve

Early-Stage Discoveries: Choline, Curcumin, Piperine, and Ginkgo Biloba

Good results in the lab can lead to larger human trials. Here are some of the most promising recent findings.

Choline may combat Alzheimer's

Previously, doctors discovered mothers' choline reduced Alzheimer's disease (AD) in offspring. Here, in the lab, mice with AD that got lifelong choline supplementation had improved spatial memory, a factor in AD. Choline reduced the activation of microglia; specialized cells that rid the brain of debris, but when over-active, cause brain inflammation and cell death, common symptoms in AD. Also, choline blocked production of amyloid-beta plaques, the primary AD symptom. Regulating microglia with choline may be a new treatment for several brain disorders.

Curcuminoids and piperine inhibited mesothelioma

People who have been chronically exposed to asbestos may develop mesothelioma, an aggressive type of cancer. Standard chemotherapy has serious side effects, including the cancer cells developing resistance to treatment. In the lab, doctors exposed mouse mesothelioma cells to a combination of curcuminoids and piperine, which effectively impaired the viability of the cancer cells, slowed the ability and rate of cell regeneration, and reduced the spread of the cells. Doctors hope the findings lead to a more effective alternative treatment.

Ginkgo biloba may help treat type 2 diabetes

In type 2 diabetes, the number of beta cells that produce insulin declines, reducing the amount of insulin the body has to metabolize sugars. In the lab, rats with type 2 diabetes got ginkgo biloba along with magnetized water. After four weeks, the number of beta cells had increased, and the amount of insulin these cells produced also had returned to near-normal levels. In addition, ginkgo biloba with magnetized water improved antioxidant capacity and reduced oxidative stress.

REFERENCE: AGING CELL; SEPTEMBER, 2019, E13037, PUBLISHED ONLINE



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Ahhh...Sleep!

Ashwagandha improved sleep quality, anxiety

Ayurvedic medicinal herb is safe, effective

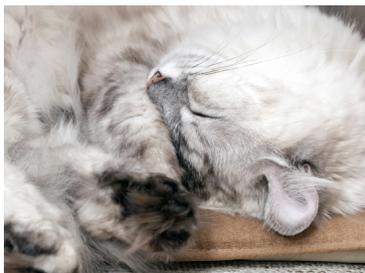
Many people have insomnia, but standard drug treatments often have unwanted side effects. In this study, 58 adults with insomnia and a clinical diagnosis of anxiety took a placebo or 300 mg of ashwagandha extract, twice per day. After five weeks, both groups were falling asleep sooner than before the study, but by 10 weeks, those in the ashwagandha group were falling asleep much sooner than placebo.

Also after 10 weeks, the percentage of time in bed spent asleep, called sleep efficiency, had not changed for placebo, but increased significantly in the ashwagandha group. Sleep quality, including how many times

participants woke up during a single night, was much better for those taking ashwagandha, meaning more continuous, undisturbed transitions between nightly sleep stages.

Doctors also measured mental and physical symptoms of anxiety, and after 10 weeks saw symptom scores improve by 9.1 percent for placebo, and by 23 percent for ashwagandha.

REFERENCE: CUREUS; 2019, VOL. 11, No. 9, E5797



Your Good News!®

We're dedicated to discovering the benefits of good nutrition and healthy lifestyle, and hope this issue of Natural Insights for Well Being® informs and inspires you to take an active role in your health. Please ask us to assist you with any natural products you would like to know more about.

These articles provide nutritional information only and do not replace professional medical advice.

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