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
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, XXZ185, Published Online
Performance

Nutrients plus exercise boost immunity, muscle mass

Probiotics protect marathoner immune response

Earlier studies found the probiotic L. casei Shirota (LaC) 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, p: E1678

FEBRUARY’S

Ahead of the Curve

Early-Stage Discoveries: Cilantro Leaf, Green Tea-Carrot, Whole Oats

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

Cilantro leaf is anti-seizure

Cilantro has been used in folk medicine as an anti-convulsant, but modern medicine has not understood how it works. In the lab, doctors isolated a long-chain fatty acid in cilantro leaf, called dodecenal, which opens several potassium nerve-signaling pathways, or channels, in the brain to reduce seizure activity. Until now, epileptic activity involving these pathways, which is usually severe, has resisted modern anti-convulsants. Doctors said the dodecenal fatty acid in cilantro binds to a specific part of the potassium channel, reducing cellular excitability, a factor in convulsions.

Green tea-carrot compounds restore cognition

Green tea contains epigallocatechin-3-gallate and carrots contain ferulic acid. In the lab, doctors gave healthy mice and those with Alzheimer’s disease one or both of these compounds. Doctors tested memory using a Y maze, which healthy animals will instinctively explore for food or an exit. After three months, the combined green tea-carrot treatment enabled the Alzheimer’s group to perform the test as well as the healthy group, possibly by preventing amyloid proteins from fragmenting and clogging nerve pathways.

Whole oats have prebiotic effects

Many studies isolate grain fiber, such as oat beta glucan, for their prebiotic properties, but oats also contain polyphenols. In the lab, doctors separated equal weights of oat beta glucan and oat polyphenols and compared their prebiotic effects to whole oats. Whole oats increased gut levels of bifidobacterium adolescentis (BA), while the isolated beta glucan and polyphenols did not. BA can synthesize and secrete gamma-aminobutyric acid, or GABA, which earlier studies have linked to disease prevention.

Shop Local

Shifting just 10% of your shopping to locally-owned businesses adds $128 million a year to our local Tri-Cities economy.

For every $100 you spend at a national chain, the total local economic impact is only $13, yet the same amount spent with local merchants yields $45.

That's more than 3 times the impact.

When you shop online ALL the money you spend is taken from our LOCAL economy.

A marketplace of more locally-owned businesses ensures greater innovation, competition and diversity in products and services.

Natural Foods Market has been locally-owned for more than 30 years.

No-Bake Valentine’s Day Dark Chocolate Raspberry Bark

In between bites of this irresistible—and healthy!—dark chocolate indulgence, please see page 1 for a new study that found those who regularly ate chocolate were less likely to be depressed than those who didn’t.

Prep time: 5 minutes    Wait time: 1-2 hours    Serves 8

Ingredients:
1 c dark chocolate chips (70 percent cacao or higher)
1/2 c organic freeze-dried raspberries
Parchment paper

Directions: Melt chocolate gently in a double boiler. Pour onto a cookie sheet lined with parchment paper. Spread evenly. Sprinkle the freeze-dried raspberries evenly over the top and allow to sit at room temperature for 1-2 hours until hardened. Break into pieces and serve.

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.