



Natural Insights for Well Being®

May 2020

Kids

Nutrients improve ADHD, metabolics in youth

EPA improved cognition in ADHD

A new study finds the omega-3 EPA may be as, or more, beneficial than drugs for treating attention-deficit hyperactivity disorder (ADHD) in kids with low EPA levels.

In this study, 92 participants, aged six to 18, with a diagnosis of ADHD, took a placebo or 1,200 mg of EPA per day. After 12 weeks, those in the EPA group who began with the lowest blood levels of EPA saw significant improvements in the ability to focus attention and remain vigilant. The benefits were not apparent in those with normal or high baseline EPA levels.

Discussing the findings, doctors said, "Fish oil supplements are at least as effective for attention as conventional pharmacological treatments in children with ADHD and omega-3 deficiency," going on to encourage parents to check omega-3 levels, as excess amounts could affect impulsive behavior. Doctors have begun to rely on the Omega-3 Index to measure omega-3 levels, with a healthy range from 4 to 8 percent in circulation.

Vitamin D improved metabolics in overweight, obese kids

Children who are obese are more likely to be deficient in vitamin D, raising chances for heart and circulatory conditions. In this study, 225 healthy,



overweight or obese participants, aged 10 to 18, 211 of which were African-American, took either 600 IU, 1,000 IU, or 2,000 IU of vitamin D per day.

After six months, while there were no changes in the 600 IU group, those taking higher doses saw central systolic, central diastolic, and systemic diastolic blood pressure (BP) decrease by 2.66, 3.57, and 3.28 mmHg, respectively. Systemic systolic BP did not change in any of the groups.

In the 2,000 IU vitamin D group, beginning at three months, insulin sensitivity increased, and at six months, fasting glucose levels declined. Correcting vitamin D deficiency may improve heart and circulatory health.

REFERENCE: TRANSLATIONAL PSYCHIATRY 9; NOVEMBER, 2019, ARTICLE No. 303

MAY'S

Healthy Insight Relax with Echinacea

New research shows echinacea may have anti-anxiety effects. In this study, 64 adults with scores over 45 on a standard anxiety scale, took a placebo or 40 mg of echinacea twice per day. After seven days, anxiety scores decreased by 11 points, or 24 percent, for echinacea and 3 points for placebo. The anti-anxiety benefits continued through three weeks later for those who had taken echinacea, and were greatest in those who began the study with the highest anxiety scores.

Doctors said echinacea contains alkamides, which bind to a cannabinoid receptor, CB1, which then inhibits an enzyme that decreases a brain nerve-signaling fatty acid linked to anxiety.

REFERENCE: PHYTOTHERAPY RESEARCH; DECEMBER, 2019, PTR.6558, PUBLISHED ONLINE

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Mind & Memory

Soy, omega-3s improve cognition, memory

Soy isoflavones improve cognition

Many studies support the beneficial effect of soy isoflavones on cognition. Here, doctors reviewed 16 soy isoflavone placebo-controlled trials covering 1,386 participants, average age 60. Overall, compared to placebo, those taking soy isoflavones saw a 19 percent improvement in overall cognitive function, and a 15 percent improvement in memory. Doctors concluded soy isoflavones may improve cognitive function in adults.

Omega-3 improved function in mild cognitive impairment

In this analysis of seven omega-3 clinical trials, 434 older adults with

mild cognitive impairment took a placebo or omega-3 fish oil supplements over various study periods. Overall, compared to placebo, omega-3s improved cognitive function in elders with mild cognitive impairment. Benefits appeared at doses of 900 to 2,500 mg of DHA/EPA per day, and not between 300 and 700 mg per day.

Omega-3 improved memory in healthy adults

In this review of 25 placebo-controlled omega-3 studies, doctors analyzed changes in cognitive function in cognitively healthy older adults after participants took omega-3 fish oil supplements.

Overall, compared to placebo, memory improved for those taking

omega-3 fish oil supplements. The omega-3 DHA, the most abundant fatty acid in the brain, plays a direct role in forming nerve cells, synapses, and the protective sheaths around nerves. Doctors said, “DHA may continue to play a part in memory and learning in adulthood because adult neural stem cells play a role in neurogenesis,” or nerve development.

REFERENCE: NUTRITION REVIEWS; 2020, VOL. 78, NO. 2, 134-44



Diabetes Update

Magnesium reduces chances for, probiotics help manage, type 2 diabetes

Magnesium preventive effects

Magnesium is a mineral that plays a role in over 300 enzymatic reactions in the body including glucose control. In this study, doctors reviewed 26 articles reporting on long-term magnesium



studies covering 1.2 million men and women. Participants did not have diabetes at entry, but some were more likely to develop it. Doctors followed up for an average of 11 years, measuring magnesium in the diet and through supplements.

Dividing participants into low- and high-magnesium groups, those who got the most magnesium were 22 percent less likely to develop type 2 diabetes vs. low magnesium. For each 100 mg increase in daily magnesium, chances for diabetes declined by 6 percent.

In a subgroup of 1,168 participants with diabetes or with higher chances of developing it, the high-magnesium group saw fasting glucose and insulin levels decline, insulin resistance and triglycerides decrease, HDL, the good cholesterol, increase, and systolic and diastolic blood pressure decline.

Probiotics improve glycemic control

Earlier studies found that increasing the level of beneficial bacteria in the gut can improve how the body responds to insulin. In this review of nine placebo-controlled probiotics trials, adults with type 2 diabetes who took a multi-strain probiotic including lactobacillus acidophilus, lactobacillus bulgaricus, bifidobacterium lactis, and streptococcus thermophiles, at doses ranging from 7 billion to 100 billion colony-forming units per day, saw improved glycemic control after six to 12 weeks.

Discussing the findings, doctors said further studies should help determine the role and optimal dose of probiotics for balancing the microbiome.

REFERENCE: DIABETES METABOLISM RESEARCH AND REVIEWS; NOVEMBER, 2019, DMRR.3243, PUBLISHED ONLINE

Blood Pressure

Phytosterols and Pycnogenol help control blood pressure

Understanding blood pressure

The two numbers in a blood pressure (BP) test measure the pressure against artery walls first when the heart contracts to pump blood (systolic), then when the heart relaxes between contractions (diastolic). Normal BP is less than 120/80 mmHg, and high BP, or hypertension, begins at 130/80.



Phytosterols help control BP

Phytosterols are plant-based antioxidants that previous studies revealed had circulatory benefits. In this review of 19 placebo-controlled clinical trials, doctors saw significant improvements in systolic BP as the doses of phytosterols increased.

Overall, for all studies, those taking phytosterols saw average decreases in systolic BP of 1.55 mmHg, and decreases of 0.84 mmHg in diastolic BP. The systolic and diastolic benefits began to appear in studies lasting less than 12 weeks. Doctors also found the most significant effects for systolic BP when phytosterol doses reached at least 2,000 mg per day, while the most significant effects for diastolic BP came at doses below 2,000 mg of phytosterols per day.

Pycnogenol reduced BP

Pycnogenol® is an antioxidant compound found in French maritime pine bark. In this review of 12 placebo-controlled clinical trials covering 922 participants with or without high BP, overall, Pycnogenol reduced systolic BP by an average of 3.22 mmHg, and reduced diastolic BP by an average of 1.91 mmHg.

The benefits were magnified in studies that gave participants Pycnogenol along with standard medical treatments for hypertension. And, Pycnogenol had a greater effect on reducing diastolic BP in studies lasting more than 12 weeks.

REFERENCE: CLINICAL NUTRITION JOURNAL; 2019, 50261-5614, PUBLISHED ONLINE

MAY'S

Ahead of the Curve

Early-Stage Discoveries: Vitamin D, Citrus Flavonoids, Resveratrol

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

Vitamin D slows aggressive cancer

Low levels of vitamin D lead to worse outcomes in melanoma, a type of cancer in cells containing pigment, but doctors didn't know why. In the lab, doctors discovered human melanoma tumors had low levels of vitamin D receptors on their cell surfaces, reducing the activity of nerve-signaling pathways the immune system uses to fight the cancer. Also, genes linked to cancer growth and spread had higher activity levels. "Although vitamin D alone won't treat cancer, it can assist the immune system in finding and attacking cancer cells," doctors said.

Citrus flavonoids slow kidney disease

Hesperidin is an antioxidant flavonoid compound found in citrus fruits. In the lab, doctors fed glycosyl-hesperidin, a derivative of hesperidin, to mice with inflamed and fibrous kidneys. After three days of treatment with hesperidin, kidney inflammation was significantly reduced, slowing the progression of kidney disease. Discussing the findings, doctors said, "Our model successfully enabled the suppressive effects of a citrus flavonoid derivative on inflammation and fibrosis in kidney disease." The doctors suggest hesperidin as a possible complementary approach to treating kidney disease.

Resveratrol anti-E-coli effects

E-coli bacteria are the most common cause of urinary tract infection. The bacteria group together and attach to cells that line the walls of the bladder, making it harder for the immune system to attack. Also, E-coli have developed resistance to antibiotics. In the lab, doctors introduced trans-resveratrol, oxyresveratrol, and resveratrol oligomers into a cell culture infected with E-coli which reduced the ability of E-coli to group together and adhere to the bladder cell walls. These results suggest resveratrol may reduce E-coli infection.

REFERENCE: CANCER RESEARCH JOURNALS; NOVEMBER, 2019, 5472, PUBLISHED ONLINE



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Better Blood Pressure

Quercetin lowered BP and improved lipids

Earlier clinical trials examining the effects of quercetin on heart and circulation have been inconsistent. Here, doctors reviewed 17 recent placebo-controlled trials examining the effects of quercetin on blood pressure (BP) and lipids in 896 men and women.

Overall combined results showed quercetin was linked to an average decrease in systolic blood pressure of 3.09 mmHg, and an average decrease of 2.86 mmHg in diastolic blood pressure.

In trials lasting at least eight weeks, those taking quercetin saw increases in high-density lipoprotein, or HDL, the good cholesterol, and decreases in triglycerides. There were no reports of serious adverse events in any of the studies.

Discussing the findings, doctors said the anti-inflammatory and antioxidant properties of quercetin may be responsible for significantly decreasing blood pressure in men and women, and when participants consumed quercetin for at least eight weeks, increasing HDL cholesterol levels and lowering triglycerides. Many fruits, and vegetables such as fennel, kale, and red onion, contain quercetin.

REFERENCE: NUTRITION REVIEWS; JANUARY, 2020, NUZ071, PUBLISHED ONLINE



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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