

Natural Insights for Well Being® October 2023

Brain & Nerve

Omega-3s and magnesium preserve cognition and physical health

Omega-3s slowed ALS

Those with better omega-3 levels saw slower progression of amyotrophic lateral sclerosis (ALS). The condition starves muscles and damages nerves that control muscle movement. In this study from Harvard, doctors measured omega-3 levels, including alpha-linolenic acid, in 499 participants with ALS, average age 58.

After 18 months, those starting the study with the highest levels of alpha-linolenic acid saw a slower rate of decline in physical function, and were 50 percent less likely to have died prematurely compared to those with the lowest alpha-linolenic levels. Those with higher levels of EPA and linoleic acid were also less likely to have died compared to those with lower levels.

Doctors said these fatty acids appear to protect nerves, and the findings suggest a link between diet and slowing the progression of ALS.

Magnesium preserves brain volume and cognitive function

Since there is no cure for dementia, doctors are focusing on prevention. In this study, doctors measured magnesium in the diets of 6,001 cognitively healthy men and women, aged 40 to 73. The study found those who consumed more than 550 mg of magnesium per day



have a brain age approximately one year younger by the age of 55 compared to those who consumed about 350 mg of magnesium per day.

Higher magnesium levels in the diet had a direct link to larger brain volumes, and smaller lesions in brain white matter, which doctors measured by magnetic resonance imaging (MRI). Lower brain volumes and more white-matter lesions are indicators of dementia.

Discussing the findings, doctors said a 41 percent increase in magnesium per day could lead to less age-related brain shrinkage, better cognitive function, and lower chances of dementia later in life.

REFERENCE: NEUROLOGY; 2023, WNL. 207485

OCTOBER'S

Healthy Insight Anti-Inflammatory CoQ10

To assess the ability of CoQ10 to reduce inflammatory factors, doctors reviewed 31 studies covering 1,517 men and women who took a placebo or 30 to 500 mg of CoQ10 per day for two to 48 weeks

Overall, CoQ10 reduced the inflammatory factor, C-reactive protein, beginning at doses of 100 to 200 mg per day, with optimum effects at 300 to 400 mg per day. The inflammatory factor interleukin-6 also declined significantly at doses of 200 to 300 mg per day, especially in men and in those with heart and circulatory conditions. Another inflammatory marker, tumor necrosis factor-alpha, declined significantly at doses of 300 to 400 mg per day.

REFERENCE: FOOD BIOENGINEERING; APRIL, 2023, MNFR.202200800

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Mother & Child

Carotenoids support mom and newborns, cranberry reduces UTIs

Prenatal lutein and zeaxanthin benefit mother and child

During the third trimester, carotenoids targeting the developing fetus's eyes pass from mother to child, and doctors wanted to know how prenatal carotenoids influence the infant's levels. In two reports from the Lutein and Zeaxanthin in Pregnancy (L-ZIP) Trial, 47 pregnant women took a daily prenatal vitamin with or without 10 mg of lutein and 2 mg of zeaxanthin per day for six to eight months.

Compared to mothers on placebo, infants whose moms took the carotenoids had a fivefold increase in umbilical cord blood serum levels of lutein and zeaxanthin; a threefold increase in cord blood total carotenoids;

a 38 percent increase in skin carotenoid levels, and a 20 percent increase in macular pigment. Mothers taking carotenoids saw similar increases in these areas.

Cranberry reduced recurring UTIs in women and children

This global review of more than 50 recent clinical cranberry trials covered nearly 9,000 participants with active or recurring urinary tract infections (UTIs). The studies included cranberry juice, and tablets and capsules containing cranberry extract.

Overall, cranberry juice and supplements reduced chances of symptomatic UTIs recurring in women by over 25 percent; in children by more than 50 percent; and in those more susceptible to UTIs after medical interventions by 53 percent.

Doctors said cranberry consistently reduced symptom severity and UTI recurrence in women, older adults, and in those with bladder issues from spinal cord injury or other conditions.

REFERENCE: INVESTIGATIVE OPHTHALMOLOGY & VISUAL SCIENCE; 2023, Vol. 64, No. 8, 3826



More Mother & Child

Iron in pregnancy, vitamin B12 in kids

Form of iron boosts gestational red blood cells

Pregnant mothers and their newborns often have anemia, but common iron salts do not absorb well and have gastrointestinal side effects. This review of 17 clinical trials, lasting from four to 20 weeks, compared the ferrous bisglycinate form of iron with



other iron supplements in pregnant women.

Overall, compared to other forms of iron, women taking ferrous bisglycinate had 0.54 grams per deciliter of blood higher concentrations of iron and fewer gastrointestinal adverse events.

Doctors said ferrous bisglycinate is an amino acid iron chelate which is more bioavailable with fewer adverse effects than other forms of iron, and which may reduce chances for anemia in pregnancy, during menstruation, and in children during rapid growth phases.

Kids on plant-based diets have lower vitamin B12 levels

Popular plant-based diets reduce or eliminate animal products, the most common source of vitamin B12, raising chances for stunted growth in the young. In this review and analysis, doctors compared vitamin B12 levels in healthy children and adolescents, aged 5 to 18 years, on plant-based or omnivorous diets.

Overall, those on plant-based diets had B12 levels 97 picomoles per liter of blood lower compared to kids eating an omnivorous diet. Kids on a vegetarian diet were less likely to be deficient in B12 compared to kids on vegan or macrobiotic diets.

"These results indicate that children and adolescents on plant-based diets, especially those on vegan and macrobiotic diets, may be more likely to develop vitamin B12 deficiency," doctors said.

REFERENCE: OXFORD ACADEMIC NUTRITION REVIEWS; 2023, Vol. 81, No. 8, 904-20

Metabolism

Cinnamon and probiotics improved metabolic factors

Cinnamon improves lipid profiles

Cinnamon contains compounds that help lower elevated blood sugar by stimulating insulin. In addition, cinnamon has beneficial lipid-regulating effects, which can become imbalanced in diabetes. This review of 14 clinical trials covered 965 people with type 2 diabetes, aged between 52 and 64, who took a placebo or doses of cinnamon



between 120 and 3,000 mg per day, in studies lasting from six to 16 weeks. All participants were taking one or more anti-diabetic medications or insulin.

Overall, those taking cinnamon saw triglycerides decrease an average of 7.31 mg per deciliter of blood (mg/dL); saw HDL improve by 1.54 mg/dL, and LDL decrease by 6.78 mg/dL, on average. In doses of cinnamon up to 1,200 mg per day, blood sugar-lowering effects averaged 11.1 mg/dL. Total cholesterol and long-term average blood sugar levels did not change.

Probiotics improved body parameters

In this study, 180 overweight men and women, aged at least 18, took a

placebo or three strains of the probiotic L. fermentum, with or without the soluble fiber, acacia gum, per day.

After 12 weeks, both probiotics groups lost an average 1.3 pounds of fat mass while the placebo group gained a quarter pound. The probiotics groups also saw improvements in body mass index scores, waist circumference, waist-to-height ratio, and fat surrounding organs and liver fat.

In a related review of 37 studies covering 2,502 participants, a multistrain probiotic reduced body mass, insulin resistance, fasting glucose and insulin levels, long-term average blood sugar levels, and lipids.

REFERENCE: NUTRIENTS; 2023, VOL. 15, NO. 13, ARTICLE NO. 15132983

More Metabolism

Hesperidin and vitamin D support metabolic factors

Hesperidin improved lipids, inflammation, and glucose

The flavonoid hesperidin may protect against heart and circulatory conditions. This review of 13 studies covered 705 participants, aged 35 to 70, with body mass index scores from 23.1 to 31.7 kg/m2, who took doses of hesperidin from 292 to 1,000 mg per day, in trials from three to 12 weeks. Participants had diagnoses of high cholesterol, metabolic syndrome, non-alcoholic fatty liver disease, previous heart events, or were overweight but otherwise healthy. Amateur cyclists were also included.

At doses of at least 500 mg of hesperidin per day, triglycerides, LDL cholesterol, fasting blood sugar levels, and the inflammatory factor, tumor necrosis factor-alpha, all declined significantly beginning at six weeks. Doses of 1,000 mg hesperidin for more than eight weeks lowered insulin levels.

Vitamin D deficiency raises A1c and BMI

In this study of 415 older men and women, with or without deteriorating muscle mass (sarcopenia), doctors measured vitamin D levels, and considered levels below 20 nanograms per milliliter of blood (ng/mL) as deficient.

Men were more likely than women to be deficient; 64.5 vs. 35.2 percent, respectively, with average vitamin D levels 18.1 ng/mL vs. 25.1 ng/mL, respectively. Both men and women had higher long-term average blood sugar

levels (A1c). Men had higher fat mass and lower muscle strength. Women had higher body mass index scores and the inflammatory marker, tumor necrosis factor-alpha.

As vitamin D levels increased, A1c, body mass index scores, and inflammatory markers all improved significantly in women, but not in men.

REFERENCE: FRONTIERS IN NUTRITION; 2023, Vol. 10, ARTICLE NO. 1177708



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Better Sleep

Aloe vera improved sleep in those with heart conditions

Eight weeks of aloe vera reduced insomnia, improved sleep quality

When the heart does not pump enough blood to the body, the condition is called systolic heart failure. Typical symptoms include sleep disturbances. In this study, 42 people with systolic heart failure took a placebo or a 150 mg capsule of aloe vera gel twice per day.

Before and after eight weeks, doctors measured physical function, quality of life, sleeplessness, and severity of sleep apnea; frequent pauses in breathing, or shallow breathing, that last for a few seconds to a few minutes.

Overall, after eight weeks, those

taking aloe vera gel saw significantly less severe insomnia, and reduced apnea. The aloe vera group also had improved sleep quality, including falling asleep faster and staying asleep longer compared to placebo and to the start of the study.

REFERENCE: PHYTOTHERAPY RESEARCH; 2023, Vol. 37, No. 7, 2800-10



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.

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