



Natural Insights for Well Being®

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Mother & Child

Nutrients, before and during pregnancy, promote healthy births

Folic acid, multivitamins, healthy hearts

Women who took either folic acid or multivitamins, during or before conception, were more likely to give birth to children with healthy hearts compared to women not taking these supplements. In this study, doctors measured folic acid and multivitamin-mineral supplements in 63,939 mothers with a single birth between 2013 and 2018.

Overall, babies whose mothers took folic acid separately, or as part of a multivitamin-mineral supplement, were less likely to have congenital heart defects (CHD), especially critical defects. Children whose mothers began taking the supplements before conception had the greatest protection.

For mothers who took folic acid, their children were 59 percent less likely to have a critical CHD; 53 percent less likely to have a ventricular septal defect, and 40 percent less likely to have any CHD at all. When mothers took either supplement before conception, chances for a critical CHD declined by 74 percent.

DHA promotes full-term births

Women who supplemented with 1,000 mg of DHA per day beginning at 12 to 20 weeks pregnant, were much



less likely to have a pre-term birth than women taking a lower dose. This is the first study to compare higher-dose DHA with the 200 mg in most prenatal supplements. In this study, doctors compared early pre-term births—those before 34 weeks—between women on the two different doses of DHA.

Overall, 1.7 percent of women taking 1,000 mg of DHA had a pre-term birth compared to 2.4 percent of women taking 200 mg. Benefits were greatest among women who began the study with low levels of DHA, with pre-term births of 2 percent for those taking 1,000 mg compared to 4.1 percent for women on the 200 mg dose. Doctors said this “dramatic decrease” in early pre-term births is “a game changer for obstetricians and their patients.”

REFERENCE: JOURNAL OF PEDIATRICS; 2021, VOL. 9, NO. 4, PUBLISHED ONLINE

JANUARY'S

Healthy Insight Expectant Moms

Pregnant women can develop vaginal yeast infections, which doctors say may be due to the high estrogen levels during gestation. While the pregnancy is safe, physical and emotional symptoms can be uncomfortable. In this study, 78 pregnant women with vaginal candidiasis took a placebo or a combination of lactobacillus probiotics, twice per day. After eight weeks, while the placebo group had not improved, irritation, discharge, burning, and other symptoms had decreased by 45 percent for probiotics. Women taking the probiotics also reported less impairment of daily activities, less emotional stress and worry, and improved social impacts. Doctors said probiotics improved quality of life in vaginal candidiasis.

REFERENCE: JOURNAL OF APPLIED MICROBIOLOGY; 2021, 13652672, PUBLISHED ONLINE

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Mind & Mood

Omega-3 and vitamin D preserved memory in AD, reduced depression

Omega-3 preserved memory in AD

In Alzheimer's disease (AD), memory continually deteriorates. In the first phase of this study, 33 people with mild to moderate AD took 2,300 mg of omega-3 fish oil per day, or did not take omega-3 supplements. Doctors tested



memory at the start of the study, and again at the end.

After three months, memory function remained stable in those with mild AD who had taken omega-3, while declining in those who had not taken the fish oil supplement. Participants then switched, with the non-supplement group beginning to take omega-3 and the other group stopping the supplement. After the following three months, memory function remained stable in those with mild AD who had begun taking omega-3 in the second phase.

Omega-3, vitamin D, and depression

In this study, 168 pre-diabetic women of childbearing age, who were

also low in vitamin D, took a placebo; 50,000 IU of vitamin D every two weeks; 2,000 mg of omega-3 fish oil per day; or vitamin D and omega-3 together.

After eight weeks, symptoms of depression, anxiety, stress, and sleep quality had all deteriorated for placebo while improving for all three supplement groups. Those taking omega-3 together with vitamin D saw the greatest improvement in these symptoms, and had the largest increase in circulating levels of vitamin D. Doctors said omega-3 with vitamin D improved mental health and sleep quality in pre-diabetic women of childbearing age who were low in vitamin D.

REFERENCE: JOURNAL OF ALZHEIMER'S DISEASE; 2021, VOL. 83, No. 3, 1291-1301

Protecting Nerves

Vitamin E and omega-3 protect against nerve damage

Vitamin E reduced chemotherapy nerve damage

Chemotherapy can damage nerves in the hands and feet—known as peripheral neuropathy—reducing sensitivity to temperature, touch, and pain. There is no preventive treatment. In this analysis, doctors reviewed eight studies covering 488 cancer patients on chemotherapy who took a placebo or 450 to 900 IU of vitamin E per day, from the start of therapy up to three months afterward.

Overall compared to placebo, those taking vitamin E were 18 percent less likely to develop peripheral neuropathy. In trials using 900 IU of vitamin E, chances declined 69 percent. One of the most powerful chemo drugs, cisplatin, treats a wide range of cancers. Among those taking cisplatin, compared to

placebo, the vitamin E group was 72 percent likely to develop peripheral neuropathy.

Omega-3 reduced athletic head trauma

American football players experience concussion in severe impacts, but also milder, non-concussive impacts that may damage the brain over time. In this study, 31 college athletes took 2,000 mg of DHA, 560 mg of EPA, and 320 mg of DPA per day, or did not take these supplements, during the pre-season and regular season.

To identify sub-concussive injury, doctors measured levels of a biomarker, neurofilament light (Nf-L), which increases when fibers that carry nerve signals from nerves to the body, called axons, are damaged. From the end of

pre-season through the regular season, Nf-L levels were 50 percent higher in the non-omega-3 group, while remaining stable for omega-3. By the end of the study, for those taking omega-3, Omega-3 Index scores had increased to 7.5 percent from 4.3 percent, while decreasing in the non-omega-3 group. Doctors say 8.0 percent is the ideal Omega-3 Index score.

REFERENCE: ANNALS OF NUTRITION AND METABOLISM; 2021, VOL. 77, No. 3, 127-37



Digestion

Probiotics and oat beta-glucan strengthen the gut

Probiotics protect the gut in NAFLD

The job of the small intestine is to digest and absorb nutrients through its mucosal membrane lining, and to act as a first line of defense against pathogens. When the lining functions properly, bacteria and toxins can't pass through and leak into the bloodstream, while beneficial nutrients can. Since the liver accepts blood directly from the gut, doctors wanted to examine the role the small intestine may play in non-alcoholic fatty liver disease (NAFLD).

In this study, 39 people with NAFLD took a placebo or a daily probiotic combination including strains of lactobacilli and bifidobacteria. After six months, while the probiotics hadn't altered symptoms of NAFLD, they had stabilized the mucosal immune function

in the small intestine, strengthening its impermeability to bacteria and toxins.

Oat beta-glucan reduced gastritis damage

The stomach has a mucosal barrier that keeps digestive juices from inflaming and damaging its walls. Stress, age, excessive alcohol, regularly using pain relievers such as aspirin and other NSAIDs, and bacterial infection with H-pylori may all contribute to this condition, called gastritis.

In this study, 48 people with gastritis took a placebo, or 3 grams of high- or low-molar mass oat beta-glucan per day. After 30 days, those in the high-molar mass oat beta-glucan group had less mucosal damage, better intestinal barrier function, improved metabolism, and greater antioxidant capacity.

Doctors said the findings suggest oat beta-glucan is a new nutritional treatment for gastritis.

REFERENCE: NUTRIENTS; 2021, VOL. 13, No. 9, NU13093192



Heart & Circulation

Iron and folic acid provide heart and kidney protection

Circulating iron protects the heart

To determine iron deficiency, doctors typically measure iron and ferritin stored in the body. While



iron stores may be sufficient, too little circulating iron may prevent the body from working properly, leading doctors to consider "functional" iron deficiency (FID)—circulating and stored—rather than "absolute" iron deficiency (AID)—stored iron only.

Here, doctors evaluated FID and AID in 12,164 participants in three studies lasting an average 13.3 years. At the start, 60 percent had AID while 64 percent had FID. Those with FID were 24 percent more likely to develop coronary heart disease compared to 20 percent of those with AID. Those with FID were also 26 percent more likely to die from heart and circulatory conditions, while there was no link detected in AID, suggesting that measuring FID rather than AID can save lives, doctors said.

Folic acid protects the kidneys in high blood pressure

High blood pressure (BP) can damage the kidneys, raising chances for protein to escape into the urine, a condition called proteinuria. To build muscle and bone, protein must remain circulating in the blood.

This study followed 8,208 people treating high BP with enalapril, who began without proteinuria. Participants had high neutrophil counts; an inflammatory factor in BP. After an average of 4.4 years, chances for developing proteinuria was 2.8 percent for those who had added folic acid to enalapril, compared to 5.2 percent for those who had not added folic acid.

REFERENCE: EUROPEAN SOCIETY OF CARDIOLOGY—HEART FAILURE; 2021, EHF2.13589, PUBLISHED ONLINE



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Exercise

Resveratrol sped recovery after intense exercise

Less muscle damage, inflammation, and soreness

Physical training coaches use jumping exercises at maximum muscle force to increase power. But untrained athletes may fail to adapt, become overloaded, and sustain muscle damage. In this study, doctors gave 36 untrained men a jumping test designed to cause muscle damage before taking a placebo, 500 mg, or 1,000 mg of resveratrol per day, for seven days before being tested again.

After seven days, both resveratrol groups performed as well on the second jumping test as they had on the first, while the placebo group deteriorated significantly. Those taking resveratrol recovered peak and average power

faster, had lower fatigue levels, and less muscle soreness. These performance and recovery benefits were more significant in the high-dose resveratrol group.

Those taking resveratrol also had fewer signs of muscle damage, with lower levels of the inflammatory factors creatine kinase and lactate dehydrogenase. Doctors concluded resveratrol effectively controlled muscle damage and preserved performance after high-repetition eccentric exercises.

REFERENCE: NUTRIENTS; 2021, Vol. 13, No. 9, 3217



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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