



Natural Insights for Well Being®

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Heart & Circulation

Fish oil and vitamin K2 increase chances for a healthy life

Fish oil improves survival rates

Fish oil is rich in the omega-3 polyunsaturated fatty acids EPA and DHA, which doctors have long recommended for preventing heart and circulatory disease, but clinical studies have had conflicting findings. The small size of some placebo trials, and the fact that they require ideal, controlled conditions, make it difficult to generalize the results to large, inclusive populations.

In order to get a more complete picture of the heart and circulatory benefits of omega-3 fish oil, doctors in this long-term study used a large population in a real-world setting. Measuring the diets of 427,678 men and women, aged 40 to 69, without a diagnosis of cardiovascular disease or cancer at the start, doctors followed up over the next eight to 12 years.

Overall, those who regularly used fish oil with EPA and DHA were 16 percent less likely to have died from heart or circulatory disease, and 13 percent less likely to have died from any cause, compared to those who did not regularly use omega-3 fish oil.

The benefits occurred regardless of the dose or number of years of follow-up, or whether participants smoked, drank alcohol, were overweight, sedentary, or had other chronic ailments.



Vitamin K2 reduces heart disease

Prior studies established that vitamin K helps prevent arterial calcification, but its effects on heart disease are unsettled. In this study, doctors measured the diets of 2,987 Norwegian men and women, aged 46 to 49, without a diagnosis of heart disease at the start.

Over 11 years of follow-up, those with the highest levels of vitamin K2 in the diet were half as likely to have developed heart disease compared to those with the lowest vitamin K2 levels. Doctors also observed a consistent link: as levels of vitamin K2 increased, chances for heart disease decreased.

REFERENCE: BMJ; 2020, 368; M456, PUBLISHED ONLINE

SEPTEMBER'S

Healthy Insight Carotenoids Protect Skin

Doctors now believe it is important to protect the skin from long-wave UV-A and medium-wave UV-B radiation with more than sunscreen. In this study, 60 people with fair to olive skin, who burned more or less easily, took a placebo or the carotenoids 4.25 mg beta-carotene, 1.1 mg alpha-carotene, 1.12 mg lutein, and 0.053 mg zeaxanthin, three times per day.

After eight weeks, and continuing through 12 weeks, those taking the mixed carotenoids saw significant protection from UV-A and UV-B light. As early as four weeks, levels of carotenoids in the epidermal—outer layers—of the skin had increased significantly in the carotenoids group.

REFERENCE: PHOTODERMATOLOGY, PHOTOIMMUNOLOGY & PHOTOMEDICINE; 2020, 12541, PUBLISHED ONLINE

This Issue

FENUGREEK AND OMEGA-3 FISH OIL PROVIDE SPORTS BENEFITS	2
SELENIUM AND VITAMIN E BOOST CIRCULATION	2
VITAMINS K AND D MAY IMPROVE COVID-19 OUTCOMES	3
MAGNESIUM AND PROBIOTICS IMPROVE WOMEN'S HEALTH	3
PROBIOTICS EASED SYMPTOMS OF IRRITABLE BOWEL SYNDROME	4

Fitness

Fenugreek and omega-3 fish oil provide sports benefits

Fenugreek boosts muscle mass, strength

Fenugreek has over 100 phytochemicals that provide a range of health benefits. This sports study included 138 non-smoking men, aged 25 to 47, some healthy weight, some overweight. The men took a placebo, 300 mg, or 600 mg of fenugreek extract per day, while participating in a whole-body calisthenic program three times per week.

After eight weeks, all three groups had improved maximal leg-press weight, with both fenugreek groups improving more than placebo. The 600 mg group saw functional threshold power increase over placebo by 7.6 watts.

Also at eight weeks, compared to the start of the study, the 600 mg fenugreek group saw testosterone levels

increase, body mass decrease by 2.6 pounds, body fat decline 1.4 percent, and lean muscle mass increase 1.8 percent.

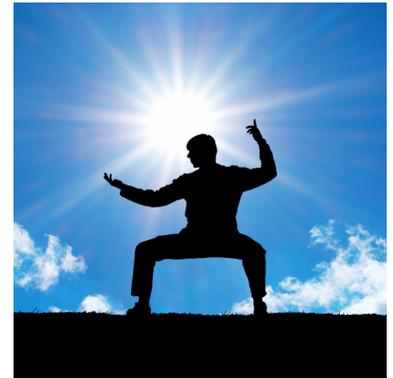
Omega-3, inflammation, reaction time, and mood

This is the first systematic review of fish oil studies of recreational, professional, and Olympic-level athletes, covering 32 placebo-controlled trials. Participants were 25 years of age on average, and 70 percent were men. Doses ranged from 300 to 2,400 mg of EPA and 400 to 1,500 mg of DHA, per day.

The studies most often measured inflammation after exercise, which consistently showed fish oil reduced the inflammatory factors TNF-alpha, and creatine kinase. Fish oil also increased

nitric oxide, a natural molecule that helps relax and dilate blood vessel linings, lowering blood pressure. Studies also evaluated cognition, which revealed positive effects on reaction time and mood states, across many different sports including cycling, gymnastics, karate, rugby, and soccer, among others.

REFERENCE: TRANSLATIONAL SPORTS MEDICINE; 2020, VOL. 3, No. 4, 2.153



Better Circulation

Selenium and vitamin E boost circulation

Selenium increases blood flow

There is a thin, single layer of cells that lines the blood vessels, called the endothelium, which allows fluids and cellular material to pass from the bloodstream to the tissues. The endothelium also controls the ability of blood vessels to expand and contract, and is very sensitive to oxidative stress. Age, weight, lipids, high blood pressure and other factors can impair endothelial function.



In this study, doctors measured endothelial function, total antioxidant status, and selenium levels in 141 participants with high blood pressure. Those with lower selenium levels had stiffer blood vessels—impaired endothelial function—compared to those with higher selenium levels. The same was true for those with lower, rather than higher, total antioxidant status.

Selenium levels independently predicted antioxidant status, and doctors said the selenium level was a more accurate predictor of endothelial function than total antioxidant status.

Vitamin E improved diabetic neuropathy

In diabetes, chronic high blood sugar levels can damage blood vessels

and nerves, impairing movement and feeling, often in the legs and feet. In this study, 80 participants with this type of diabetic peripheral neuropathy took a placebo or 200 mg of tocotrienol-rich vitamin E twice per day.

After eight weeks, those taking vitamin E had significantly increased nerve-signaling speed in the leg calf muscles and in the adjacent tibial bone motor nerves. There was also an increase in levels of a protein—nerve growth factor (NGF)—which maintains, regulates production, and protects the survival of certain neurons.

Discussing the findings, doctors said this is the first clinical trial to demonstrate tocotrienol-rich vitamin E improves diabetic peripheral neuropathy.

REFERENCE: ENVIRONMENTAL TOXICOLOGY AND PHARMACOLOGY; APRIL, 2020, VOL. 75, 103332

Coronavirus Update

Vitamins K and D may improve COVID-19 outcomes

Vitamin K low in COVID-19 patients

Vitamin K plays a role in regulating the blood clotting function, which can become impaired in severe cases of Covid-19. For this reason, doctors in this study theorized vitamin K levels might be low in patients with severe Covid-19.



To determine vitamin K status, doctors measured a type of protein, dp-uc matrix Gla, which increases when vitamin K levels are low.

Levels of matrix Gla protein were significantly higher in 122 people with Covid-19 compared to 184 healthy people, and were also higher in those with unfavorable outcomes compared to those with less severe infections, indicating vitamin K levels were low in those with Covid-19.

Healthy lung function depends on elastin fiber, and doctors also found a link between low levels of vitamin K and impaired elastin fiber in Covid-19.

Low vitamin D linked to higher COVID-19 mortality rates

Earlier studies found a link between low levels of vitamin D and

susceptibility to acute respiratory infections. Good vitamin D levels help regulate the immune response of white blood cells, preventing excess release of inflammatory cytokines, a factor in severe cases of Covid-19.

In this study of 20 European countries, doctors determined Spain and Italy had high Covid-19 mortality rates, and below-average vitamin D levels; less than 23 nanograms per milliliter of blood, or 57 nanomoles per liter.

Northern European countries have the highest average levels of vitamin D because of cod liver oil and vitamin D supplementation, and Scandinavian nations were among the European countries with the lowest numbers of Covid-19 cases, and lowest mortality rates per population, doctors said.

REFERENCE: AGING CLINICAL AND EXPERIMENTAL RESEARCH; JULY, 2020, VOL. 32, NO. 7, 1195-8

Healthy Women

Magnesium and probiotics improve women's health

Magnesium increased survival in postmenopause

Women in postmenopause are more susceptible than other male and female adults to heart and circulatory diseases, including sudden cardiac death. Magnesium is important for healthy heart function, and nearly half the U.S. population does not meet the dietary reference intake recommendation.

In this study, doctors measured magnesium in the diets of 153,369 women and followed up for an average of 10.5 years. Overall, women who got the least, no more than 189 mg of magnesium per day, were 19 percent more likely to have died from coronary heart disease, and 24 percent more susceptible to sudden cardiac death, compared to women who got the most magnesium.

Discussing the findings, doctors said adding magnesium to the diet, including magnesium supplementation, may be a simple, effective way to increase survival in postmenopausal women.

Probiotics reduce bacterial vaginosis

When beneficial and harmful bacteria in the vagina are out of balance, bacterial vaginosis can develop. In this study, 82 women who had cured bacterial vaginosis with metronidazole within the last 48 hours, took a placebo or multiple strains of lactobacillus, twice per day for the next seven days, and once a day from the eighth to the 120th day.

By the end of the four-month study period, infection recurred in 18.3 percent of the women who had taken

probiotics compared to 32.1 percent of the women taking the placebo.

Doctors said bacterial vaginosis can affect women of any age, but is most common during the reproductive years, and that taking probiotics may help maintain a healthy bacterial balance.

REFERENCE: JOURNAL OF WOMEN'S HEALTH; 2020, VOL. 29, NO. 1, 7775





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Good Digestion

Probiotics eased irritable bowel syndrome

More regularity, less pain

People with irritable bowel syndrome (IBS) experience chronic large-intestine abdominal pain, cramping, bloating, excess gas, and diarrhea or constipation. In this study, 330 adults with IBS, aged 18 to 70, took a placebo, lactobacillus acidophilus, or bifidobacterium animalis lactis, with each probiotic dose at 10 billion colony-forming units per day.

After six weeks, overall IBS symptom scores improved for both probiotics groups compared to placebo, with those taking probiotics reporting significantly less pain and more normal stool consistency. Also, more participants taking probiotics had a clinically significant response:

52.3 percent for lactobacillus and 28.2 percent for bifidobacterium, compared to 15.6 percent for placebo.

Discussing the findings, doctors said the high responder rates in the IBS study suggest probiotics may provide relief from occasional episodes of abdominal pain and irregularity in the healthy, general population, since the main difference between healthy people and those with IBS is the frequency and severity of symptoms.

REFERENCE: NUTRIENTS; 2020, VOL. 12, No. 2, 363



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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