HOLLY HILL HEALTH FOODS
• Since 1991 •

Natural Insights for Well Being®
March 2021

Heart

Nutrients prolong life, reduce heart and circulatory events

Glucosamine and chondroitin

Two natural nutrients, glucosamine and chondroitin, help keep joint cartilage healthy. Here, doctors reveal heart and circulatory benefits, as well. In this study, doctors in 2015 counted deaths in a group of 16,686 adults who had participated in a large trial from 1999 through 2010.

Overall, those who had taken glucosamine and chondroitin supplements for at least one year were 39 percent less likely to have died from any cause compared to those who hadn't taken glucosamine and chondroitin. Also, glucosamine/chondroitin takers were 65 percent less likely to have had a stroke, coronary artery or heart disease.

Doctors were careful to note that this was a "look-back" study of a population that had or had not taken glucosamine and chondroitin, and was not a clinical trial where participants were treated or given a placebo.

After taking into account factors such as age, sex, smoking, and exercise, doctors said the findings still "support a strong association between regular intake of glucosamine/chondroitin" and increased life expectancy.

Flavones, flavanones, and polyphenols

Flexible, supple blood vessels that relax and dilate to adjust for increases in blood flow are healthy. One of the first signs of circulatory disease is when these vessels stiffen and restrict blood flow.

In this study, 96 men and women, average age 49, took a placebo or a total of 1,000 mg of citrus flavones, flavanones, and olive leaf polyphenols per day. After eight weeks, vessel flexibility increased 3 percent compared to 0.5 percent for placebo. Systolic and diastolic blood pressure also decreased.

Total and LDL cholesterol decreased for the flavone/polyphenol group while increasing for placebo, and HDL—the good cholesterol—increased while decreasing for placebo. Signs of oxidative stress and inflammation also decreased in the antioxidant group while not improving for placebo.

Reference: Journal of the American Board of Family Medicine; 2020; Vol. 33, No. 6, 842-7

MARCH'S

Healthy Insight

Vitamins for IBD

People with inflammatory bowel diseases (IBD) such as Crohn's and ulcerative colitis do not absorb foods well, making many deficient in vitamins and nutrients. In this study, doctors measured nutrient levels in 87 people with an IBD. More than a third were deficient in vitamin D; 18.4 percent were deficient in folate (vitamin B9), and 5.7 percent were deficient in cobalamin (vitamin B12). Those with higher folate levels had lower disease activity and inflammation.

Doctors usually evaluate IBD through blood and stool samples, but these results suggest vitamin levels may be a complementary way to measure disease activity, and a possible form of treatment.

Reference: Nutrients; 2020, Vol. 12, No. 12, nu12123734

This Issue

Green tea extract and zinc helped manage lipids in diabetes 2

Nutrients slow decline and improve cognitive performance 2

Omega-3s and niacin preserve and improve muscle 3

Nutrients reduce blood sugar in type 2 diabetes and PCOS 3

CoQ10 and beta-carotene low in oral cancer 4

Diabetes Update

Green tea extract and zinc help manage lipids in type 2 diabetes

Green tea extract

Earlier studies revealed green tea extract improved glucose levels in type 2 diabetes, but results in diabetes lipid studies have been mixed. In this review of seven placebo-controlled trials, lasting four to 16 weeks, doctors evaluated the results among 512 participants aged 50 to 65, with type 2 diabetes and body mass index scores from 24 to 30.4. Doses of green tea extract ranged from 400 mg to 10,000 mg per day.

In studies lasting at least eight weeks, with green tea extract doses of at least 800 mg per day, triglyceride and total cholesterol levels declined significantly. In studies lasting longer than eight weeks, green tea extract effectively reduced triglycerides and total cholesterol at doses lower than 800 mg of green tea extract per day.

Zinc

Zinc has many functions in the body, including efficiently metabolizing carbohydrates and fatty acids. In this review of nine placebo-controlled trials covering 424 participants with type 2 diabetes, zinc lowered triglycerides, total and LDL cholesterol, and increased HDL—the good cholesterol.

Overall, in studies of all lengths, zinc lowered triglycerides by an average of 3.58 milligrams per deciliter of blood (mg/dL), and 2.62 mg/dL for total cholesterol.

In studies lasting less than 12 weeks, zinc at doses less than 100 mg per day lowered total and LDL—the "bad" cholesterol, and in most study groups, increased levels of HDL, the "good" cholesterol.

Reference: Diabetes & Metabolic Syndrome; Jul-Aug 2020; Vol. 14, No. 4, 293-301

Better Cognition

Nutrients slow decline and improve cognitive performance

Vitamin E and carotenoids

One factor that may contribute to cognitive decline with age is oxidative stress—when levels of pro-oxidants exceed levels of antioxidants in the body. Doctors believe brain matter, which is rich in fatty acids, is particularly vulnerable to this antioxidant/oxidant imbalance. Earlier studies suggest that diets rich in antioxidants, and taking antioxidant supplements, can protect brain function with age.

In this study, doctors measured dietary and circulating levels of antioxidants in 3,270 adults, aged 30 to 65. Participants took cognitive tests over the course of six years, periodically reporting their diets, and giving blood samples.

Overall, those with higher dietary and circulating levels of carotenoids, especially lycopene and vitamin E, had better verbal memory, verbal fluency, attention, and reasoning and decision-making performance, compared to those with lower levels of these antioxidants and carotenoids.

Matcha green tea for women

This is the first study to evaluate daily matcha green tea and cognition in older adults. In this trial, 39 women and 15 men, average age 74, took a placebo drink, or 1.5 grams of decaffeinated matcha green tea extract, twice per day.

After 12 weeks, while there was no effect in men, women taking matcha saw a 1.95 increase in cognitive test scores compared to 0.15 for placebo. Working memory—the ability to reason and make decisions—was the most improved cognitive area. Doctors said vitamin K in matcha may be the bioactive compound responsible for the cognitive benefit in healthy, older women.

Reference: Nutrients; 2020, Vol. 12, No. 11, 3558

Muscle

Omega-3s and niacin preserve and improve muscle

Omega-3s improve muscle mass, increase walking speed

Study evidence is mounting that fatty acids, including omega-3 polyunsaturated fatty acids, are critical for regulating, building, and sustaining skeletal muscle mass, and for maintaining muscle function with age. This review of 10 placebo-controlled omega-3 fish oil trials of different lengths and dosages, covered 552 participants, aged at least 60.

Overall, in trials lasting longer than six months, for those taking more than 2,000 mg of omega-3 fish oil supplements per day, participants gained an average nearly three-quarters of a pound (0.73 lb.) of lean muscle mass. In another important measure, those in the omega-3 groups were able to increase walking speed by nearly six feet (5.8 ft.) per second compared to the start of the studies.

Niacin slows muscle disease

Muscles require lots of energy, and depend on mitochondria—the "energy factories" in every cell—to produce it. In an inherited, or genetic muscle-wasting condition called adult-onset mitochondrial myopathy (MM), mitochondria can fail when stores of a molecule that plays a role in producing energy—nicotinamide adenine dinucleotide (NAD)—decline.

In this study, doctors compared 15 people with MM and low levels of NAD to 15 similar, but healthy people. Doctors gave the MM group increasingly large doses of niacin, from 250 mg daily per month to 1,000 mg daily at 10 months.

NAD levels for the entire MM group rose to match healthy participants, muscle strength increased, and new mitochondria formations increased.

Reference: Nutrients; 2020, Vol. 12, No. 12, 3390

Blood Sugar

Nutrients reduce blood sugar in type 2 diabetes and PCOS

Berberine and probiotics

Recent trials suggest it is possible to manage glucose levels in type 2 diabetes through diet. In this study, 409 people with a new diagnosis of type 2 diabetes took a placebo, berberine alone, probiotics alone, or these two together. The probiotics were lactobacillus and bifidobacterium.

After 12 weeks, those taking berberine together with probiotics saw a reduction in long-term average blood sugar levels (A1C), to 6.62 percent from 7.66 percent, or to 131 from 171. Those taking berberine alone saw slightly less, but similar improvement.

Those taking berberine also saw other benefits including reduced fasting blood sugar levels, lower triglycerides, and lower total and LDL cholesterol levels.

Curcumin for PCOS

Polycystic ovary syndrome (PCOS), is a condition where the ovaries produce an abnormal amount of androgens—male hormones. Insulin resistance and greater chances for developing diabetes often accompany PCOS. In this study, 67 women with PCOS took a placebo or 500 mg of curcumin three times per day.

After 12 weeks, fasting blood sugar levels declined an average of 4.11 milligrams per deciliter of blood (mg/dL) for curcumin compared to 0.35 mg/dL for placebo. Also, the male hormone precursor, dehydroepiandrosterone (DHEA), declined 26.53 micrograms per deciliter of blood (mcg/dL) for curcumin compared to 4.34 mcg/dL for placebo.

Estradiol, the female sex hormone, had a slight increase in those taking curcumin compared to those in the placebo group. Doctors concluded curcumin safely reduced elevated blood sugar and male hormone levels in women with PCOS.

Reference: Nature Communications; 2020, Vol. 11, Article No. 5015

Holly Hill Health Foods
1200 Welsh Road
North Wales, PA 19454
(215) 361-7770, ext. 2
www.hollyhillvitamins.com

Store Hours:

Monday:	*10 a.m.-6 p.m.*
Tuesday:	*10 a.m.-6 p.m.*
Wednesday:	*10 a.m.-6 p.m.*
Thursday:	*10 a.m.-7 p.m.*
Friday:	*10 a.m.-7 p.m.*
Saturday:	*10 a.m.-6 p.m.*
Sunday:	*11 a.m.-5 p.m.*

Healthy Mouth

CoQ10 and beta-carotene low in oral cancer

Oxidative stress, inflammation

This is the first study to measure antioxidant vitamin levels in those with oral cancer. Doctors in this study theorized cancer develops through oxidative stress and inflammatory processes linked to metabolic disorders.

Doctors measured CoQ10, beta-carotene, and metabolic factors in 194 people with oral cancer. More than half of participants had high blood pressure, blood sugar, and lipids; and abdominal obesity, regardless of the stage of their tumors.

Nearly all—94 percent—were deficient in CoQ10, and 46 percent were deficient in beta-carotene. Those with higher levels of CoQ10 or beta-carotene were less likely to have abdominal obesity, elevated lipids, or metabolic syndrome. Doctors also found, as the cancer advanced, levels of antioxidant enzyme activity decreased, and levels of inflammatory markers increased.

Discussing the findings, doctors said, "Since patients with oral cancer suffer from high oxidative stress and inflammation, supplementation with antioxidant vitamins such as ubiquinone (CoQ10) or beta-carotene could be beneficial."

Reference: BMC Cancer; Article No. 310, 2020

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.

Printed on Recycled Paper ©2021 RI