



THE SUNSPOT NATURAL MARKET

Natural Insights for Well Being®

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Healthy Knee

Two new studies find nutrients help osteoarthritis of the knee

Chondroitin and celecoxib

In some people with osteoarthritis (OA) of the knee, the membrane that lines the knee joint swells and thickens with excess synovial fluid. In this study, 194 people with these symptoms took 1,200 mg of chondroitin or 200 mg of celecoxib per day.

After 12 months, those in the chondroitin group had a slower rate of cartilage loss compared to celecoxib. After 24 months, those taking chondroitin saw 51 percent less swelling from excess fluid compared to 39 percent for celecoxib. For pain, stiffness, and joint function, the chondroitin group saw an overall reduction in these symptoms of 54 percent compared to 43 percent for celecoxib. Both groups used a similar amount of acetaminophen for pain, and both chondroitin and celecoxib reduced OA symptoms. Doctors said chondroitin was superior to celecoxib in reducing long-term progression of structural changes in OA of the knee.

Curcumin

Doctors are seeking a safer alternative to standard non-steroidal anti-inflammatory drugs (NSAIDs) for treating pain in OA. Earlier studies had shown the anti-inflammatory phytochemicals in curcumin, called



curcuminoids, were effective in protecting cartilage cells.

In this study, 19 people with mild to moderate knee OA took 500 mg of curcuminoids three times per day, or a placebo. At the start of the study, there were no significant differences in OA symptom scores, and participants in both groups were of similar age, gender, and body mass index.

After six weeks, although stiffness was similar in both groups, the curcuminoids group saw greater relief from pain and improved physical function. Also, 84 percent of those in the curcuminoids group had stopped needing to take the NSAID naproxen for relieving pain, compared to 19 percent for placebo. Doctors said curcuminoids were safe and effective in treating symptoms of OA of the knee.

REFERENCE: AMERICAN COLLEGE OF RHEUMATOLOGY MEETING ABSTRACT #950; SEPTEMBER, 2015

APRIL'S

Healthy Insight Black Raspberries are Highest in Antioxidants

Berries are “superfoods” because they contain high amounts of powerful phenolic antioxidants—known as anthocyanins—which give these fruits their distinctive dark colors. In this study, researchers measured the antioxidant levels in several berries grown in Central Europe and found that black raspberries in particular contained three times the total antioxidant levels of other berries, and 1,000 percent more phenolic antioxidants compared to red raspberries or blackberries.

REFERENCE: OPEN CHEMISTRY; 2015, VOL. 13, No. 1, 2391-5420

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Quality of Life

Nutrients support healthy aging and enjoyment of life

CoQ10 and selenium reduce hospital stays

Doctors wanted to know if nutrients could help keep older adults out of the hospital. In this study, 206 independently-living older adults took a daily dose of CoQ10 plus organic selenium yeast, or a placebo, for 48 months.

During a year of follow-up, doctors compared a subset of participants from the nutrient and placebo groups who were of similar age and gender, and who had similar heart health and function, which doctors determined by measuring the tension of the cardiac wall at the start of the study.

Those who had taken CoQ10 plus selenium had 1,779 total days out of the hospital compared to 1,533 for

placebo, or 16 percent more hospital-free days. Also, the CoQ10-selenium group reported better physical performance and greater vitality.

Curcumin improves blood vessel function

Earlier studies found curcumin protected blood vessels, possibly by helping them dilate and relax. In this study, 29 middle-age and older adults took 2,000 mg of curcumin per day or a placebo.

After 12 weeks, while there was no change for placebo, blood flow through the main artery of the upper arm had increased by 34 percent for the curcumin group compared to the start of the study. Doctors attributed part of the improvement in blood flow to

curcumin increasing the bioavailability of nitric oxide, the naturally occurring molecule in the body that helps blood vessels dilate and relax.

REFERENCE: JOURNAL OF NUTRITION, HEALTH & AGING; 2015, VOL. 19, No. 9, 870-7



Healthy Women

Nutrients improve reproductive health

Omega-3s may delay ovarian aging

Each woman is born with a number of eggs in the ovaries, which declines by about 75 percent by puberty. Keeping the remaining eggs from maturing too soon is key to a healthy reproductive life. Doctors wanted to see if omega-3s could help regulate follicle-stimulating hormone (FSH), a compound that

plays a role in maturing eggs. When FSH levels are too high for a woman's life stage, it can mean low ovarian egg reserves.

In this study, 15 obese and 12 healthy weight women, aged 28 to 34, took 4,000 mg of EPA/DHA per day. After one month, FSH levels had declined in the healthy-weight women with normal ovarian reserves. In obese women, omega-3s did not have an effect on FSH levels, but signs of inflammation had decreased. Doctors said omega-3s may delay ovarian aging and may be useful in women with low ovarian egg reserves.

Berberine aids in-vitro fertilization

Some infertile women have PCOS,

or polycystic ovary syndrome, with symptoms such as irregular periods, hormone imbalances, and a link to insulin resistance. In this study, 128 infertile women with PCOS undergoing in-vitro fertilization treatment took 500 mg of berberine or 500 mg of metformin, three times per day, or a placebo.

After three months, both berberine and metformin groups had better hormone balance and fasting insulin levels, but berberine more effectively lowered total and LDL cholesterol. Compared to placebo, both groups had more pregnancies. The live birth rate was highest for berberine, at 48.6 percent, compared to 36.8 and 20.6 percent for metformin and placebo, respectively.

REFERENCE: JOURNAL OF CLINICAL ENDOCRINOLOGY AND METABOLISM; 2016, VOL. 101, No. 1, 324-33



Good Fats

Nutrients help maintain healthy lipids and regulate fat absorption

Omega-3s and lipid levels

New research suggests measuring omega-3 levels may help doctors detect early signs of, and prevent, heart disease in older adults. In this study, doctors measured lipids and EPA/DHA omega-3 levels in 276 adults, aged 65 to 95.

Women had higher omega-3 levels than men, and doctors found a direct link: as omega-3 levels increased, triglyceride levels decreased, and women with the lowest omega-3 levels were more likely to have high triglycerides. Also as omega-3s rose, HDL, the “good” cholesterol, increased as a percentage of total cholesterol. In both men and women, greater omega-3 levels meant better HDL/total cholesterol ratios.

Cactus fiber and weight loss

Earlier lab studies found prickly pear cactus fiber promoted weight loss by binding to dietary fats and reducing fat absorption. In this study, 20 healthy men and women, aged 18 to 60, with body mass index scores from 20 to 30, took a placebo or 1,000 mg of cactus fiber three times per day with meals containing 35 percent fat, in two seven-day study cycles. Before this, everyone ate the diet and took a placebo for seven days.

Doctors collected excretion samples 24 hours after the end of each of the three phases. Participants who had taken cactus fiber excreted 15.79 percent fat compared to 4.56 percent for placebo. Cactus fiber was safe and there were no

side effects.

Doctors said the study was short and don’t know if the results would be sustained over a longer time, but that the findings suggest cactus fiber may help promote weight loss.

REFERENCE: JOURNAL OF NUTRITIONAL BIOCHEMISTRY; 2016, Vol. 27, 233-40



Sports Performance

Nutrients improve health, speed recovery, after exercise

Krill oil boosts immunity

Krill oil contains the omega-3s EPA and DHA, and may alter immune function after exercise. In this study, 37 men and women, average age 26, took 2,000 mg of krill oil per day, or a placebo, for six weeks. To trigger



an immune response before and after taking krill oil, participants performed a maximal exercise test and a cycling time trial.

The krill oil group saw an increase in a molecule, IL-2, which regulates immune white blood cells and natural killer (NK) immune cells. “NK cells are the first line of defense, reacting quickly to threats such as bacteria and viruses to keep them under control...their activity can be decreased by up to 60 percent for several hours after exercise,” doctors said.

Doctors also found EPA, DHA, and overall omega-3 levels increased in those taking krill oil.

Ginger reduced muscle soreness

Muscles often are sore after

endurance training, but taking over-the-counter pain medication (analgesics) can produce serious side effects. In this study, 20 college students took 2,200 mg of ginger per day, or a placebo, for three days before, the day of, and the day after a 20 to 22 mile run on a university marathon course.

Participants compared muscle soreness after the marathon to their typical muscle soreness from jogging before the study. The placebo group ranked muscle soreness at 62 after marathon compared to 21.5 for jogging; the ginger group scored 37 and 9, a 40 percent lower level of muscle soreness. Doctors said ginger may reduce the activity of inflammatory enzymes, helping to decrease muscle soreness.

REFERENCE: JOURNAL PLoS ONE; SEPTEMBER, 2015, PUBLISHED ONLINE

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Sunday: 11:00 a.m. - 6:00 p.m.

Black Raspberry Vinaigrette Dressing

You'll want to keep a jar of this delightful dressing on hand. Please see page 1 for a new study that found black raspberries have the highest phenolic antioxidant levels compared to other berries; a true "superfood"!

Ingredients:

1 c black raspberries or other berries
 $\frac{1}{2}$ c red wine vinegar
1 tbsp brown sugar
 $\frac{1}{2}$ tsp ground ginger
 $\frac{1}{4}$ tsp cinnamon
 $\frac{1}{2}$ c olive oil



Directions: Press the berries through a sieve to remove seeds and create juice. In a sauce pan, combine all ingredients except olive oil and stir on low heat until the sugar dissolves. Cool, whisk in oil, and dress your favorite salad.

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.