

# Natural Insights for Well Bei

# **Women's Healthy Hearts**

Nutrients improve blood pressure and artery flexibility

#### **Amino acids**

Doctors measured seven hearthealthy plant-based amino acids in the diets of 1,898 adult female twins and analyzed blood pressure and artery flexibility. Women who got the most arginine, cysteine, glycine, histidine, leucine, tyrosine, and glutamic acid had lower blood pressure in the main central artery and in the extremities. Women who got the most of the last three of these amino acids had more flexible arteries compared to women who got fewer amino acids in the diet.

The benefits remained even after doctors adjusted for lifestyle factors, medications, and other nutrients the women consumed. Discussing the findings, doctors said the improvements in artery flexibility were similar to those of someone who quits smoking, or who begins taking omega-3 fatty acids, or the difference between those with high blood pressure or cholesterol and those with healthy blood pressure and cholesterol levels.

#### **Blueberries**

Postmenopausal women often develop high blood pressure and arterial stiffness. In this study, 48 postmenopausal women with pre- or stage-1 hypertension took 22 grams of freeze-dried blueberry powder per day or a placebo.



After eight weeks, while the placebo group had not improved, women who took the blueberry powder saw systolic and diastolic blood pressure decrease by 5.1 and 6.3 percent, respectively. Artery stiffness declined by 6.5 percent. Nitric oxide, a molecular compound that helps relax the blood vessels, increased by 68.5 percent in the blueberry group, which doctors believe helps explain the blood pressure benefits with blueberries.

Earlier studies had found benefits in taking blueberry powder, but with doses that equaled as much as 11 cups of fresh berries per day. This study dose equaled just one cup of fresh blueberries per day.

REFERENCE: THE JOURNAL OF NUTRITION; JULY, 2015, PUBLISHED ONLINE

NOVEMBER'S

# Healthy Insight **Live Longer with** Fruits & Veggies

Vitamin C from fruits and vegetables may lower chances for heart disease, but earlier studies were unclear. Doctors gathered information on 97,203 people, some of whom had a genetic tendency toward higher circulating levels of vitamin C, and lower chances for heart disease. Comparing these people with others who had high circulating levels of vitamin C from eating large amounts of fruits and vegetables, doctors found similar heart health benefits. Those who got the most fruits and vegetables were 15 percent less likely to develop heart disease and 20 percent less likely to die prematurely compared to those who got the least.

REFERENCE: AMERICAN JOURNAL OF CLINICAL NUTRITION: 2015, Vol. 101, No. 6, 1135-43

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# Eye

### Nutrients preserve eye health and improve sports performance

# Carotenoids may help preserve eyesight

Maintaining the yellow pigment in the macula of the eye is critical to preserving vision with age. These two studies tested different doses of the three main carotenoids that provide pigment to the eye, in a total of 119 people with early-stage age-related macular degeneration, or AMD.

Participants took lutein and zeaxanthin with or without meso-zeaxathin, at various doses in the first study for one year and in the second for three years. While there were vision benefits in all dosage groups, doctors saw the best results in those who took lutein and zeaxanthin with 17 mg of meso-zeaxanthin per day. In these groups, pigment density increased the

most, and the ability to see an object on a contrasting background such as low light, glare, or fog improved the most.

#### **Caffeine improved golf scores**

In this study, 12 male golfers with a USGA handicap between 3 and 10 took a caffeine supplement or a placebo before tee-off and again after 9 holes, then switched groups and played another 18 holes.

During the caffeine phases, drive distances increased and total stroke scores decreased. Also, in a professional-tour measure of shot quality—greens-in-regulation, meaning the golfer must reach the green leaving two strokes for putting on every hole—golfers achieved better scores during the caffeine phases than in the placebo phases.

Players during the caffeine phases reported feeling more energy and less fatigue over the competitive round. Heart rates, posture, and peak trunk acceleration rates did not change.

**REFERENCE:** EYE; 2015, Vol. 29, No. 7, 902-12



# **Athlete Immunity**

### Nutrients boost the immune response after strenuous exercise

### **About mucosal immunity**

Mucous membranes are lined with cells that secrete a protective antibody—immunoglobulin A or IgA—which plays a key role in mucosal immunity; the first line of defense against infection. The body secretes less IgA with age,



stress, and in nutritional deficiencies. Strenuous exercise suppresses mucosal immunity for up to 24 hours, increasing chances for upper respiratory tract infections.

### Beta-glucan

In this study, 109 young sedentary men and women took 250 mg of beta-glucan per day or a placebo. After 10 days, participants walked or jogged in intervals on a treadmill for 90 minutes in a hot, humid environment to trigger a stress response in the body.

Doctors measured IgA levels in saliva before and after exercise and found higher levels in the beta-glucan group compared to placebo. Discussing the findings, doctors said even a small amount of exercise can reduce the immune response, and that beta-glucan can support key immune functions to

keep people healthy.

#### **Astaxanthin**

Doctors in this study gave 40 trained soccer players 4 mg of the antioxidant carotenoid astaxanthin per day, or a placebo. The athletes participated in a controlled weight, resistance, cardio, and flexibility training program for 10 to 15 hours per week.

After 90 days, doctors measured higher saliva IgA and lower oxidative stress levels in the astaxanthin group compared to placebo. The placebo group also had higher white blood cell counts and increased high-sensitivity C-reactive protein levels—both inflammatory factors—while the astaxanthin group remained at unelevated levels.

**REFERENCE:** NATIONAL STRENGTH AND CONDITIONING ASSOCIATION; FINAL REPORT, JULY, 2015

### Muscle

### Nutrients reduce muscle pain, speed recovery after exercise

#### **Ginger**

Earlier studies found ginger relieved muscle pain as well as non-steroidal antiinflammatory drugs (NSAIDs), without side effects. In this pilot study, 20 non-



weight-trained men and women took 4 grams of ginger powder per day, or a placebo, five days before an exercise test that would cause muscle damage.

A day after the test, both the placebo and ginger groups were able to lift less maximum weight in one repetition than during the test. After 48 hours, while there was no effect on pain, the ginger group could lift more weight than placebo. After the third and fourth days, the placebo group was able to lift more weight than the ginger group.

Discussing the findings, doctors said ginger may help athletes who need to compete in events that require frequent repeated maximum effort, but suggest further study to determine the dosage of ginger that will sustain recovery over a longer period.

#### Curcumin

To test the ability of curcumin to reduce muscle pain after exercise, 17 men took a placebo or 2.5 mg of curcumin twice per day, beginning two days before a leg-press exercise and continuing for three days afterward.

One and two days after exercise, the curcumin group reported moderate to large improvements in pain during new exercises, including single leg squats, gluteal stretches, and squat jumps. The curcumin group also had lower levels of inflammatory factors while these increased for placebo.

Doctors said curcumin may reduce delayed-onset muscle pain and speed recovery after strenuous exercise.

**REFERENCE:** PHYTOTHERAPY RESEARCH; 2015, Vol. 29, No. 6, 887-93

### Ahead of the Curve

# Early-Stage Discoveries: Roasting and Brewing Coffee, Fermented Foods, Tree Nuts and Peanuts

Good results in pilot studies lead to larger experiments. Here are some of the most promising recent findings.

#### **Coffee antioxidants**

Scientists first discovered antioxidants in green coffee beans in 1988 but worried that roasting could destroy them. Researchers in this study found that roasting, aging, grinding, and brewing coffee produces a different class of antioxidants that appear to be beneficial as well.

# Fermented foods reduce anxiety

In a group of 710 college students taking an introductory psychology course, doctors measured the diets, including fermented foods such as

yogurt, kefir, miso, sauerkraut, pickles, tempeh, and kimchi. Students who got the most fermented foods reported having less social anxiety, with students who suffered from neurosis reporting the greatest relief.

### **Tree nuts and peanuts**

Men and women who eat at least 10 grams (about 1/3 ounce) of tree nuts or peanuts per day are less likely to die from several major diseases compared to those who don't eat nuts. Doctors saw the largest benefit for respiratory and brain diseases, diabetes, followed by cancer and cardiovascular disease. The

benefits were evident for peanuts, but not peanut butter.

REFERENCE: PLOS ONE; 2015, Vol. 10, No. 4, Published Online





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# **Fruity Compote**

This is a great anytime quick energy boost. Please see page 1 for a new study that found people who ate lots of fruit had hearthealth benefits.

#### **Ingredients:**

- 2 <sup>1</sup>/<sub>4</sub> c peaches, nectarines, and plums, coarsely chopped\*
- 1 tbsp agave, honey, maple syrup, or raw sugar
- <sup>1</sup>/<sub>4</sub> <sup>1</sup>/<sub>2</sub> c water or orange juice Optional: zest from one lemon, and/or one cinnamon stick



**Directions:** In a small saucepan, combine fruit, sweetener, water or juice, and optional spice. Cook over medium-high heat, stirring occasionally until fruit is soft; 8 to 12 minutes. Mash the fruit if you prefer a smoother consistency. Discard cinnamon stick and transfer to a pint-size jar or container and let cool. Wonderful as a sweet breakfast topper or a vitamin C-rich dessert.

\*If fresh fruit is unavailable, frozen fruits are a good substitute.

## 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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