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# Natural Insights for Well Being®

September 2019

## Metabolics

Nutrients ease stress, improve circulation & metabolism

### Curcumin combination reduced cortisol

The adrenal glands produce the hormone cortisol in stressful situations, and obesity and metabolic syndrome can chronically elevate cortisol levels. In this study, 80 overweight adults, average age 54, with elevated fasting blood sugar levels, took a placebo or 200 mg of curcumin, 120 mg of phosphatidylserine, 480 mg of phosphatidylcholine, and 8 mg of piperine per day. Doctors also recommended lifestyle improvements to all.

After eight weeks, the placebo group saw improvements in triglyceride levels and in fasting blood sugar levels. Those taking the curcumin combination saw cortisol levels decline significantly, lower fasting insulin levels, a two-inch decrease in waist size, a 5mmHg decrease in systolic blood pressure, a 34 mg per deciliter of blood decrease in triglycerides, higher HDL cholesterol levels, and improvements in liver function and in fatty-liver index scores.

Discussing the findings, doctors said to their knowledge, this is the first study to report curcumin combined with phosphatidylserine, phosphatidylcholine, and piperine reduced cortisol levels, and improved glucose factors and liver function in overweight adults with elevated fasting blood sugar levels.

### Tart cherry, circulation, and metabolism

Tart cherry contains powerful antioxidant and anti-inflammatory anthocyanins and polyphenols, as well as fiber. In this study, 11 men and women, average age 49, with three of five factors in metabolic syndrome—including large waist size, high triglycerides, low levels of HDL cholesterol, high blood pressure, and high fasting blood sugar levels—took a placebo or tart cherry juice concentrate or capsules equal to 90 to 110 whole tart cherries.

In three sessions separated by two weeks each, participants fasted for 10 hours the night before taking one of the three treatments at 7:00 a.m. the following morning. Compared to the placebo phases, two hours after taking either form of tart cherry, participants saw significantly lower insulin and systolic blood pressure levels.

REFERENCE: EUROPEAN JOURNAL OF NUTRITION; FEBRUARY, 2019, PUBLISHED ONLINE



SEPTEMBER'S

## Healthy Insight Whole, Fresh Diet for Health

In a first attempt to gauge global diet, doctors measured 15 fruits, vegetables, legumes, whole grains, nuts, seeds, calcium, fiber, omega-3s, and other fatty acids, milk, red and processed meats, sugar-sweetened beverages, trans-fats, and sodium in populations in 195 countries over 18 years through 2017. During this time, more than half of worldwide diet-related deaths had links to high sodium, and low whole grains and fruits. Low amounts of healthy foods were more important than high levels of unhealthy foods, and poor diet caused more deaths than high blood pressure, high blood sugar, diabetes, tobacco, alcohol, and pollution, regardless of age, gender, or income.

REFERENCE: THE LANCET; APRIL, 2019, PUBLISHED ONLINE

### This Issue

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# Joint & Muscles

## Nutrients reduce OA symptoms, improve muscle function

### Andrographis improved knee OA

Andrographis is a flowering plant which Ayurvedic doctors use for a variety of medical conditions. In this study, 103 adults with mild to moderate osteoarthritis (OA) of the knee took a placebo or 300 mg or 600 mg of andrographis per day.

Beginning at 28 days, while the placebo group had not improved, those taking either dose of andrographis saw a significant reduction in pain scores and joint stiffness. By day 56, those taking andrographis reported improved physical function.

By the end of the study, at 84 days, while the placebo group reported no changes, those taking either andrographis dose reported significant improvements in quality-of-life and

functional assessment scores.

### EPA and DHA improve performance

The omega-3s EPA and DHA are major components of the muscle cell membrane, and taking EPA/DHA supplements can increase levels of these fatty acids in muscle cell membranes. Doctors thought EPA/DHA might protect muscle after exercise through its anti-inflammatory action.

In this study, 16 men took a placebo or 2,400 mg of EPA- and DHA-rich fish oil capsules per day for eight weeks before performing six sets of weighted arm curls at 100 percent maximum muscle contraction. The exercise was designed to damage muscle.

Before exercise, immediately after, and one, two, and five days later,

doctors measured muscle stiffness by ultrasound while participants reported muscle soreness. Compared to the EPA/DHA group, the placebo group had significantly more muscle stiffness and reported greater muscle soreness. Those taking EPA/DHA also retained more muscle strength and greater range of motion.

REFERENCE: PHYTOTHERAPY RESEARCH; APRIL, 2019, PUBLISHED ONLINE



# Healthy Heart

## Nutrients protect circulatory health

### Fish oil protects against air pollution

Airborne fine particles smaller than the diameter of a hair, from cars, fires, construction sites, and unpaved roads, can enter the lungs and bloodstream with adverse health effects. In this study, 65 healthy Shanghai, China college students took a placebo or 2,500 mg of EPA- and DHA-rich fish oil capsules per day. During the five-month study,



campus levels of airborne fine particles no larger than 2.5 micrometers averaged 38 micrograms per cubic meter of air ( $\mu\text{g}/\text{m}^3$ ), significantly higher than the  $35.4 \mu\text{g}/\text{m}^3$  level governments consider unhealthy.

Doctors measured blood pressure, systemic inflammation, blood vessel flexibility, oxidative and antioxidant activity, and other heart and metabolic factors. Compared to placebo, those taking EPA/DHA maintained stable levels of most of these biomarkers, with beneficial effects on inflammation, coagulation, blood vessel function, oxidative stress levels, and hormonal responses.

### Linoleic acid, heart, and circulation

Omega-6 fatty acids may be more

beneficial and less harmful than doctors previously thought and there may not be an ideal ratio of omega-6 to omega-3. In this review of 30 studies following 68,659 people from 2.5 to 32 years, those with higher levels of linoleic acid were significantly less likely to have died from heart or circulatory conditions, or from stroke due to restricted blood supply. Doctors also found no harmful link to another omega-6, arachidonic acid (AA).

Doctors said the first step in metabolizing omega-6 may release some pro-inflammatory molecules, but this inflammatory response does not necessarily cause disease, continuing, "We know eating vegetable oils can lower cholesterol."

REFERENCE: JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY; 2019, VOL. 73, NO. 16, 2076-85

# Healthy Kids

## Prebiotics improve gut balance after antibiotics and in autism

### Prebiotic benefits after antibiotics

Earlier studies found the prebiotic inulin reduced fevers requiring medical attention in children, which doctors believe is linked to gut health. In this study, 258 healthy kids, ages three to six, took a placebo or 6 grams of inulin fiber per day.

After 24 weeks including winter, those in the inulin group had



significantly higher gut levels of the probiotic bifidobacterium compared to placebo. When kids required antibiotics, bifidobacterium levels declined in both groups, but the prebiotic group retained higher and more stable levels.

Discussing the findings, doctors said young children are susceptible to wintertime infections requiring antibiotics, an early disturbance which can damage gut microbiota and create an imbalance that may affect health in later years.

### Prebiotic improved regularity in autistic kids

Children with autism spectrum disorder (ASD) often have abnormal gut microbiota, which doctors believe

may lead to systemic and neural inflammation, impairing brain function. Constipation in ASD is common. In this study, 13 children with ASD, aged four to nine, who had not taken constipation medication or antibiotics for at least a month, took 6 grams of partially hydrolyzed guar gum prebiotic fiber per day.

Before the study, nine kids defecated once a week, and four kids, twice a week. After 60 days, all children defecated from two to four times per week. Behavior also improved, with kids becoming less irritable. Doctors also saw significant decreases in interleukin-1 beta and -6, and tumor necrosis factor alpha, which are systemic inflammatory factors.

**REFERENCE:** BENEFICIAL MICROBES; 2019, VOL. 10, No. 3, 253-63

# Mind

## Nutrients ease stress, improve memory

### Probiotics ease response to social stress

Evidence that the gut influences the brain is increasing. In this study, 40 healthy adult volunteers took a placebo or 1 billion colony-forming units of bifidobacterium longum per day for four weeks before a social stress Cyberball game test.

Before the stress test, both groups reported increased vitality, less mental fatigue, and better ability to cope with stress and negative emotions. During the stress test, for the probiotics group only, changes took place in areas of the brain that process stress, altering brainwave activity, increasing the theta waves typical of sleep, and decreasing beta waves active during daily tasks.

Doctors said both groups reported improvements in subjective stress scores after four weeks, but only the

probiotics group had physiological changes in neural brain wave activity in areas involved in regulating emotional responses to social stress, a unique new finding.

### Lutein linked to better memory

Carotenoids, the colorful antioxidants in fruits and vegetables, accumulate in brain nerve tissue. The carotenoid lutein supports eye health, but lutein is also important for the brain. Earlier studies show about 60 percent of the carotenoids in brain tissue are lutein, but lutein makes up only about 12 percent of carotenoids in the typical diet.

In this study, doctors measured circulating and dietary carotenoids in 94 adults, aged 25 to 45. Participants then completed a task of reconstructing a three-dimensional object from memory.

After adjusting for age, gender, and body mass index scores, lutein was the only carotenoid linked to better memory performance in the 3D object reconstruction test.

**REFERENCE:** AMERICAN JOURNAL OF GASTROENTEROLOGY; APRIL, 2019, PUBLISHED ONLINE



# Shop Local

Shifting just 10% of your shopping to locally-owned businesses adds

## \$128 million a year

to our local Tri-Cities economy.

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For every \$100 you spend at a national chain, the total local economic impact is only \$13, yet the same amount spent with local merchants yields \$45.

That's more than **3 times** the impact.

When you shop online ALL the money you spend is taken from our LOCAL economy.

A marketplace of more locally-owned businesses ensures greater innovation, competition and diversity in products and services.

Natural Foods Market has been locally-owned for more than 30 years.

## Nutty Maple Pumpkin Pecan Granola

While you enjoy munching on this crunchy granola, please see page 1 for a new study that found those who ate more nuts and seeds along with fruits and whole grains lived longer, healthier lives worldwide.

Prep time: 5 minutes    Cook time: 25 minutes    Yield: ~8½ cup servings

### Ingredients:

3 c rolled oats	¾ tsp pumpkin pie spice
1¼ c raw pecans	¼ c olive oil
⅓ c raw pumpkin seeds	⅓ c maple syrup, honey or agave
3 tbsp organic brown sugar	⅓ c pumpkin puree
¼ tsp sea salt	

**Directions:** Preheat oven to 325 degrees F. Mix oats, nuts, seeds, sugar, salt, and pumpkin pie spice in a large bowl. In a small saucepan warm the olive oil, syrup or other sweetener, and pumpkin puree over medium-low heat, whisking to combine. Pour over the dry ingredients and quickly mix with a wooden spoon. Spread the granola evenly on a rimmed cookie sheet. Bake for 25-35 minutes until golden brown, stirring gently about halfway through. Allow to cool. Transfer to an airtight container for up to 2 weeks, or freeze for up to 3 months. Enjoy as a snack or serve with sliced fresh fruit and your choice of milk, yogurt, or non-dairy beverage.

## 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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