



Natural Insights for Well Being®

February 2022

Good Digestion

Everyday nutrients promote gastrointestinal health

Vitamin D protects against cancer

People eating the refined diet typical of developed countries may have greater chances for colorectal cancer, with low levels of vitamin D raising chances further. As this study revealed, Black populations in the U.S. are more likely than any other domestic racial or ethnic group to have these issues, and are also more likely to be low in vitamin D.

In this study, doctors gave food questionnaires every two years to 49,534 Black women between 1995 and 2017, predicting vitamin D scores, and then measuring chances for developing colorectal cancer.

Overall during the 22-year follow-up, women with the lowest vitamin D scores were 41 percent more likely to have developed colorectal cancer compared to those with the highest vitamin D scores.

Probiotics reduce infectious diarrhea

Hospitals typically use antibiotics, which weaken the microbiome and raise chances for infection such as *Clostridioides difficile* (C. diff). Symptoms include disabling diarrhea, and can be more severe. This study had a unique twist that enabled doctors to compare hospital infection rates



with antibiotics alone and after adding probiotics.

Two Montreal hospitals merged, with the larger hospital using probiotics together with antibiotics as standard treatment. The smaller, 335-bed community hospital used antibiotics alone, and hospital-acquired C. diff was common in this facility.

After the merger, at the smaller hospital, doctors began giving a 50-billion colony-forming-unit combination of *L. acidophilus*, *L. casei*, and *L. rhamnosus*, per day to all adults taking antibiotics for two or more days. Compared to the prior 12 months without probiotics, rates of hospital-wide C. diff were 39 percent lower after probiotics. Protection was even greater in those taking multiple antibiotics, with probiotics reducing C. diff more than 50 percent.

REFERENCE: CANCER, EPIDEMIOLOGY, BIOMARKERS & PREVENTION; 2021, 1055-9965.EPI-21-0675

FEBRUARY'S

Healthy Insight Mushrooms & Mind

Researchers at Pennsylvania State University compared diet and mental health in more than 24,000 adults who participated in the U.S. National Health and Nutrition Examination Survey between 2005 and 2016. Overall, those who consumed an average of 4.9 grams per day of any kind of mushroom were 69 percent less likely to have depression compared to those who ate fewer mushrooms, or who ate no mushrooms at all.

Mushrooms contain an important antioxidant amino acid, ergothioneine, which doctors believe may protect against cell damage; and vitamin B12, which has anxiety-fighting properties; also compounds containing nerve-growth factors; and other antioxidant and anti-inflammatory nutrients.

REFERENCE: JOURNAL OF AFFECTIVE DISORDERS; 2021, VOL. 294, 686-92

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Diabetes Update

Nutrients reduced inflammatory factors and pain in type 2 diabetes

Vitamins D, E, and resveratrol

Vitamins D, delta-tocotrienol E, and resveratrol have cholesterol-reducing, anti-inflammatory, and antioxidant effects, which doctors tested, separately and together, on metabolic markers in type 2 diabetes. In the first phase of the study, 120 participants took a placebo, or individually 10,000 IU of vitamin D, 500 mg of delta-tocotrienol, or 500 mg of resveratrol, half after breakfast, and half after dinner. In the second phase, 56 participants took a placebo or all three nutrients together, also twice per day.

All nutrients, separately or together, lowered fasting glucose an average of 11 percent. Those taking the nutrient combination saw long-term average glucose levels decline 10 percent; fasting insulin and insulin resistance decline

9 and 20 percent, respectively; and inflammatory factors high-sensitivity C-reactive protein and malondialdehyde down 23 and 20 percent, respectively.

Vitamin K2 reduced neuropathy

There are two reasons people typically get nerve damage in the extremities, called peripheral neuropathy: diabetes and vitamin B12 deficiency, both common in the U.S. In this study, adults with peripheral neuropathy, 36 with type 2 diabetes, and 28 with B12 deficiency, took a placebo or 100 mcg of vitamin K2 twice per day.

After eight weeks, the vitamin K2 group self-assessed symptom scores of pain, tingling, burning, prickling, numbness, weakness, and general fatigue declined to 3-4 from 8-9 on a scale of

1-10, regardless of whether participants had diabetes or B12 deficiency. Four weeks after stopping vitamin K2, symptom scores averaged 2.

REFERENCE: JOURNAL OF DIABETES AND CLINICAL STUDIES; 2021, VOL. 5, No. 1, 1-16



Exercise

Hesperidin and curcumin boosted performance and recovery

Hesperidin increased antioxidant capacity

The antioxidant hesperidin comes from oranges. In this study, 40 amateur cyclists, aged 18 to 55, with healthy weight, took a placebo or 500 mg of hesperidin per day over a period of eight weeks, during which they completed



five cycling tests of sustainable and maximum power. Before each of the five tests, participants ate the same breakfast of measured carbohydrates, proteins, and lipids.

While there was no improvement for placebo, those taking hesperidin saw an increase of 3.2 percent in sustainable threshold power—the level of force that can be steadily maintained—and a 2.7 percent increase in maximum power to exhaustion. During recovery, superoxide dismutase (SOD) levels increased, raising antioxidant capacity, and markers for oxidative stress and inflammation decreased.

Curcumin reduced muscle damage, inflammation

Exhausting, unusual exercise can damage muscle, and lead to delayed

soreness, weakness, and inflammation. Many earlier studies have found curcumin reduced inflammation. In this review of five studies covering 98 sedentary but healthy young men and women, participants took a placebo or 180 to 400 mg of curcumin per day, for two days to four weeks.

The acute exercises included free weights, leg presses, maximum jump height, and a cycling challenge. Compared to placebo, curcumin reduced levels of inflammatory factors creatine kinase, ammonia, interleukin-6 and -8, and tumor necrosis factor alpha; and increased maximum contraction power and range of motion. The curcumin group also reported less fatigue compared to placebo.

REFERENCE: ANTIOXIDANTS; 2021, VOL. 10, No. 3, 432, PUBLISHED ONLINE

Women

Nutrients improve pregnancy and perimenopause

Pre- and probiotics reduced nausea in pregnancy

Elevated levels of estrogen and progesterone in pregnancy alter the microbiome, and may cause nausea, vomiting, and other gut symptoms in 85 percent of expectant mothers. In this study, 32 pregnant women took 200 mg of inulin plus a combination of 10



probiotics in 10 billion colony-forming-units per day, for six days, then stopping for two days.

The women answered questionnaires each 24 hours during treatment, reporting significant improvements in daily nausea, vomiting, constipation, and overall quality of life.

Probiotics produce free bile acids, which promote healthy digestion and metabolism, levels of which were initially low, and directly linked to high vomiting scores. Doctors said, “Regulating bile acid may explain the benefits of probiotics in gastrointestinal function during early pregnancy.”

Ashwagandha improved perimenopause symptoms

As women approach menopause, symptoms such as hot flashes and night

sweats, along with changes in mood and anxiety, can develop. In this study, 91 perimenopausal women, aged 45 to 55, took a placebo or 300 mg of ashwagandha twice per day.

After eight weeks, women taking ashwagandha reported greater improvements compared to placebo in symptoms on the standard menopause rating scale, including sleep problems, depressed mood, irritability, anxiety, fatigue, and bladder, joint and muscle discomfort. The number of hot flashes per week also declined, and estradiol levels were restored to normal in women taking the ashwagandha.

Doctors said ashwagandha was safe and effective in reducing mild to moderate symptoms in perimenopause, and recommend it as a treatment option.

REFERENCE: NUTRIENTS; 2021, VOL. 13, No. 11, 3931

FEBRUARY'S

Ahead of the Curve

Early-Stage Discoveries: Prebiotics, Mushrooms, Kiwifruit

Good results in the lab can lead to larger human trials. Here are some of the most promising recent findings.

Prebiotics reduce jet lag

Prebiotics are indigestible carbohydrates that pass through the small intestine and nourish trillions of bacteria in the descending colon. In the lab, rats on a prebiotic diet more quickly realigned the sleep-wake cycle and core body temperature in response to changes in the light-dark cycle. Levels of several health-promoting microbes increased, including *ruminiclostridium-5*, which other studies found reduced fragmented sleep. “This is one of the first studies connecting prebiotics to bacterial changes affecting sleep and to disruptions in the circadian rhythm,” doctors said.

Mushrooms increased gut barrier function

The gut microbiome is crucial to good health, with differences in composition between healthy and unhealthy people. Butyrate, a microbe populating the colon, contributes to health by modulating the immune system and metabolism, increasing the gut barrier function, and regulating inflammation. Doctors introduced a blend of three mushrooms into the colon microbiota of healthy adults, equal to 5 to 15 grams of fresh mushrooms. The mushrooms doubled the number of butyrate-producing bacteria compared to those that did not receive the mushroom blend.

Kiwifruit reduced leaky gut

The healthy gut has a barrier function that prevents toxins from escaping, while allowing nutrients to pass through. Certain proteins adhere together to create this barrier. In the lab, rats on a high-fat diet developed “leaky gut” while those that also got kiwifruit saw an increase in the proteins that form the tight junction of the barrier function. The kiwi group also had increases in *lactobacillus*, *bifidobacterium*, and the anti-inflammatory interleukin-10. Levels of *clostridium*, an infectious pathogen, also decreased.

REFERENCE: BRAIN, BEHAVIOR, AND IMMUNITY; OCTOBER, 2021, VOL. 97, 150-66



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Store Hours:

Monday - Friday: 10 a.m. - 6 p.m.
Saturday: 10 a.m. - 4 p.m.
Sunday: Closed



Downtown
Hastings
on the Thornapple

Anne's Health Foods is located in downtown Hastings. Next to the Walldorff Brewpub and across the street from Jamie's Crafts.

Herbed Balsamic Mushrooms

While you enjoy this scrumptious dish, please see page 1 for a new study that found those who regularly ate mushrooms were less likely to be depressed.

Prep time: 10 minutes Cook time: 15 minutes Serves 4

Ingredients:

- 1 lb Cremini mushrooms
- 2 tbsp olive oil
- 1/8 tsp sea salt
- 1 tbsp almond butter
- 3 tbsp balsamic vinegar
- 1 tsp dried thyme



Directions: Slice mushrooms, add to skillet with olive oil and salt on medium-low heat. Cook for 10 minutes, letting mushrooms sweat to release their natural moisture. Combine almond butter, balsamic vinegar, and thyme in a small bowl and whisk. Turn skillet to medium-high heat and pour almond butter mixture over the mushrooms, stirring until liquid thickens and mushrooms are golden brown. Serve over brown rice, with baked potato, on avocado toast, or as an accompaniment to your favorite dish.

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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