

# Natural Insights for Well Being®

# **Immunity**

Nutrients boost general and respiratory health

#### **Ashwagandha**

Ancient Ayurvedic medical practice from India uses ashwagandha for its immune-boosting properties. Doctors believe they have identified the compounds in ashwagandha—called withanolide glycosides—responsible for its immune-boosting effects.

In the first, blinded phase of this study, 24 healthy men and women took a placebo or 60 mg of ashwagandha extract per day for 30 days. In a second open-label phase—where participants knew what they were taking—the groups switched placebo and ashwagandha.

After the first 30 days, levels of immune cytokines, and T-, B-, and NK cells increased. These are part of the general "innate" immune system, which attacks foreign cells. In addition, levels of immune antibodies that target specific invading antigens, part of the "adaptive" immune system, also increased. These include antibodies IgA, IgG, and IgM.

During the second 30-day phase, the new placebo group continued to show improved innate and adaptive immunity, as did those newly taking ashwagandha.

Discussing the findings, doctors said, "This is the first study to demonstrate ashwagandha withanolide glycosides possess potent immune stimulatory properties."



#### Tea catechins

In this large review of studies covering 3,748 people, tea catechins were protective against flu and other upper respiratory infections. The findings include participants who consumed catechin-containing drinks or capsules over various study periods.

Overall, catechins in any form reduced flu and other upper respiratory tract infections by 32 percent compared to placebo. One study found gargling with tea catechins—not a common practice—reduced upper respiratory infection by 17 percent.

Doctors said this is the first comprehensive analysis to reveal the benefits of catechins while adhering to strict systematic review methods; two-tiered screening of publication titles and abstracts by independent researchers; evaluations of study quality and chances for bias, without limitation to the languages of the publications.

**REFERENCE:** JOURNAL OF CLINICAL MEDICINE; 2021, Vol. 10, No. 16, 3644

APRIL'S

# Healthy Insight Curcumin for Covid

This review of six studies covered 438 people hospitalized for Covid and treated with curcumin, plus 120 hospitalized Covid-positive patients not taking curcumin. Overall, treatment with curcumin reduced the cytokine storm doctors believe contributes to severe symptoms.

Doctors measured lower levels of pro-inflammatory cytokines IL-1-beta and IL-6, and an increase in anti-inflammatory cytokines IL-10, -35, and TGF-alpha. One study found a link between curcumin and fewer venous blood clots. Discussing the findings, doctors said that in addition to broad vaccination efforts, there is an urgent need to develop safe and effective treatments to curb the debilitating effects of the disease.

**REFERENCE:** NUTRIENTS; 2022, Vol. 14, No. 2,

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### **Bone**

### Nutrients support postmenopausal bone health

# Collagen, calcium, and vitamin D

Calcium and vitamin D have well-known bone benefits, but here doctors wanted to test these nutrients along with collagen in treating osteopenia—the loss of bone density that can precede osteoporosis. In this study, 51 postmenopausal women with osteopenia took 500 mg of calcium plus 400 IU of vitamin D, with or without 5 grams of collagen peptides per day.

After 12 months, compared to calcium and vitamin D alone, the calcium-vitamin D-collagen group saw a 1.96 percent increase in total bone mineral content (BMC) in the support tissues within the tibia, lumbar spine, and hip; and a 1.01 percent BMC increase in the outer surfaces that form the protective layer of these bones.

Doctors said 12 months of collagen with calcium and vitamin D prevented a decline in bone mineral density and a decrease of bone turnover—bone loss—in postmenopausal women with osteopenia.

#### **Tocotrienols slow bone loss**

Tocotrienols in the vitamin E family slowed bone loss by reducing systemic inflammation and oxidative stress. This is the first study to show that tocotrienols modify the global biochemistry of the human body to improve bone health, rather than treating a specific bone condition, as has been the focus of prior studies.

In this study, 89 postmenopausal women with osteopenia, average age 60, overweight and otherwise healthy, took a placebo, 300 or 600 mg of

tocotrienols per day for 12 weeks. Doctors observed significant metabolic changes during the study, including lower levels of oxidative stress, greater antioxidant capacity—including increased glutathione levels—and a rebalancing of hormones.

**REFERENCE:** JOURNAL OF CLINICAL DENSITOMETRY; 2021.11.011, PUBLISHED ONLINE



# **Heart & Circulation**

## Artichoke, bergamot, and vitamin D protect health

#### Artichoke, bergamot, and lipids

In an earlier study, participants with mildly elevated cholesterol levels had not responded to bergamot alone. Here, doctors added artichoke leaf extract, hoping to unlock the benefits of bergamot.

In this study, 60 men and women, aged 18 to 65, with mildly elevated



cholesterol, from 220 to 280 mg per deciliter of blood (mg/dL), took a placebo or 600 mg of bergamot plus 100 mg of artichoke leaf extract, twice per day.

After two months, those taking the combination saw total cholesterol decline to 224 from 237 mg/dL; LDL cholesterol fall to 139 from 156; and HDL—the "good" cholesterol—increase to 63.9 from 59.5 mg/dL, while the placebo group had not changed. The artichoke group also saw smaller waist size and less abdominal fat tissue, even though participants had not followed a low-calorie diet.

#### Vitamin D's genetic role

In the first study of its kind, doctors

identified genetic evidence of a role for vitamin D deficiency in developing cardiovascular disease (CVD). In this study, doctors evaluated data from 267,980 people, revealing robust statistical evidence of the link between heart disease and vitamin D deficiency.

Overall, those deficient in D are more likely to have heart and circulatory conditions, and higher blood pressure, than those with normal levels of vitamin D. Doctors said it is not ethical to recruit people deficient in vitamin D in a controlled trial and leave them without treatment. Having such a large study population enabled the genetic finding, and suggests raising vitamin D levels can reduce CVD.

**Reference:** Nutrients; 2021, Vol. 14, No. 1, 108

# **Inflammation**

### Vitamin K in Covid, and curcumin in kidney disease

# Vitamin K reduced Covid cytokines

One of the key inflammatory factors in the Covid-19 "cytokine storm" is interleukin-6 (IL-6); responsible for its severe symptoms, and an important therapeutic target. In this study, doctors measured vitamins D and K—which regulate the inflammatory process—in 135 people hospitalized with Covid-19.



Overall, vitamin D levels were not different in people with good or poor outcomes, but IL-6 levels were significantly higher in those with poor outcomes. Doctors found a link between lower levels of vitamin K and higher levels of IL-6, and a link to the impaired elastic fibers responsible for healthy lung function.

Rather than treat Covid with vitamin D alone, as some recommend, doctors say because vitamin D increases demand for vitamin K, the two should be given together.

# **Curcumin improved gut** microbes in kidney condition

In chronic kidney disease (CKD), kidney function steadily deteriorates and gut function is impaired. Curcumin can help rebalance the gut microbiome, and reduce the low-grade chronic inflammation in CKD.

In this study, 24 adults with stage 3a, 3b, or stage 4 CKD, average age 71, took 1,000 mg of curcumin per day for six months. Doctors also followed 20 similar but healthy adults.

At three months, lipid peroxidation had decreased by 18 percent, and by 25 percent at six months for curcumin; both levels significantly lower than in the healthy comparison group. Signs of inflammation also decreased significantly for curcumin. In addition, beneficial gut microbes in the lactobacillaceae family increased, and harmful gut bacteria decreased.

**Reference:** Frontiers in Nutrition; 2022, 10.3389; 761191, Published Online

## Relief

# Alpha-lipoic acid and vitamin D help ease pain

#### Alpha-lipoic acid

When doctors don't know what causes a symptom, they call it "idiopathic." This holds true for generalized pain. In this study, 210 adults, aged 18 to 75, diagnosed with idiopathic pain in the joints or muscles, took a placebo, or 400 or 800 mg of alpha-lipoic acid (ALA) per day.

Compared to the start of the study, after two months, those taking either dose of ALA reported decreases from moderate to mild levels of pain while the placebo group had not changed. There were no differences in relief for different types of pain; all were equally reduced.

Doctors said there is ample evidence ALA reduces chronic nerve pain in diabetes, and have now shown ALA can safely reduce idiopathic pain in those with normal blood sugar levels.

# Vitamin D in opioid palliative care

In the later stages of cancer, it is common for people to be deficient in vitamin D. In this study, 150 people with cancer undergoing palliative care participated in this four-year study. All were deficient in vitamin D at the start of the study.

Participants took a placebo or 4,000 IU of vitamin D per day for 12 weeks. While both groups increased their opioid doses, those in the vitamin D group increased doses an average of 0.56 mcg less per hour, per week. The vitamin D group also reported

less fatigue. The effects, though small, significantly reduced opioid-sensitive pain and fatigue in those undergoing palliative care.

**REFERENCE:** BIOMEDICINE & PHARMACOTHERAPY; 2021, Vol. 144, 112308, Published Online



# Whole In The Wall Herb Shoppe

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Friday: 10 a.m. - 6 p.m.
Saturday: 10 a.m. - 6 p.m.
Saturday: 10 a.m. - 5 p.m.
Sunday: 12 p.m. - 5 p.m.



# **Vegan Protein Builds Muscle**

Soy protein as effective as whey protein

Body builders and casual athletes typically rely on whey protein supplements to support strength training and build muscle mass. A growing number of people seek plantbased alternatives that are as effective.

In this study, 38 men, average age 25, half vegans, half omnivores, took supervised resistance weight training twice per week over the course of three months. Participants controlled the amount of protein in the diet, measuring 0.73 grams of protein per pound of body weight, with vegans taking soy and omnivores taking whey protein.

Overall, lean muscle mass, whole muscle, and muscle fiber of the main long muscles in the lower leg increased

equally in both groups. In addition, muscle strength and number of repetitions during leg-press tests were similar between soy and whey protein groups.

Discussing the findings, doctors said earlier muscle studies of plant-based protein sources were inconsistent, suggesting a possible lower anabolic response compared to animal proteins, which this study refutes.

REFERENCE: SPORTS MEDICINE: 2021, Vol. 51, 1317-30



# 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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