Digestion
Prebiotics and probiotics improve gut health, reduce gastric pain

What are prebiotics, probiotics, and synbiotics?

Prebiotics and probiotics promote a healthy environment in the gut—the microbiome—by encouraging beneficial bacteria that increase regularity. Synbiotics combine the two.

Synbiotics for toddlers

Doctors believe that the first three years of life are critical to establish a healthy gut microbiome so the child can grow and develop normally. In this study, 129 healthy children, ages one to three, took a placebo or daily doses of the prebiotics fructo- and galacto-oligosaccharides plus the probiotic bifidobacterium breve.

After 12 weeks, while the placebo group had not changed, children in the synbiotics group saw a 22 percent increase in the proportion of bifidobacterium in the gut, and increases in lactobacillus and enterococcus probiotics. The synbiotics kids also had better acid balance in the gut, which doctors said led to softer stool consistency, and improved regularity.

Discussing the findings, doctors said synbiotics may have a positive effect on young children’s microbiome, increasing beneficial bifidobacterium, improving acid balance, and promoting softer stools.

Probiotics relieve gastric pain in adults

Many people experience gut discomfort after eating, but medical treatments can be ineffective and inconvenient. In this study, 100 healthy Japanese adults took a placebo or a daily dose of bifidobacterium bifidum in 100 ml of fermented milk.

After four weeks, compared to placebo, the probiotics group reported greater relief in overall gut discomfort after eating, especially in the upper abdominal (epigastric) area of the gut. The probiotics group also reported less diarrhea and flatulence.

Commenting on the results, doctors said that consuming bifidobacterium bifidum daily helps relieve gastrointestinal discomfort after a meal and reduces upper gastric pain in adults, safely and without side effects.

Reference: Beneficial Microbes; 2018, Vol. 9, No. 4, 541-52
Healthy Women
Nutrients relieve menstrual pain and hot flashes

**Omega-3s and vitamin E**

The body produces hormone-like substances called prostaglandins, which help smooth muscle contract and relax; blood vessels dilate and contract, and can cause inflammation. Doctors believe there is a link between prostaglandins and painful uterine contractions during menstruation.

Omega-3s are anti-inflammatory, and vitamin E suppresses the production of prostaglandins. In this study, 100 women, age 18 to 25, took a daily dose of 180 mg EPA plus 120 mg DHA from fish oil, 200 IU of vitamin E, the omega-3s and vitamin E together, or a placebo.

After eight weeks, while the placebo group did not improve, those taking omega-3s or vitamin E alone had some improvement, but women taking omega-3s plus vitamin E reported the greatest relief from menstrual pain.

**Soy germ and hot flashes**

Soy isoflavones contain phytoestrogens—plant based substances that mimic the action of estrogen. Earlier studies found soy reduced menopausal symptoms, and new evidence supports soy for relieving hot flashes.

In this study, 180 menopausal women reporting at least seven hot flashes per day took a placebo or a soy germ extract containing 100 mg total isoflavones per day. After 12 weeks, women in the soy group reported 43 percent fewer hot flashes compared to 31 percent for placebo. Continuing for another 12 weeks, hot flashes in the soy group declined by 68 percent.

Among women with the most severe symptoms, hot flashes and sweating declined by 71 and 78 percent, respectively, for the soy group compared to 24 percent each for placebo, after 12 weeks.

**Eye**

**Omega-3s and vitamin D reduce eye disease**

**Omega-3s**

In Western populations, fluid pressure within the eye (intraocular pressure, or IOP) increases with age, but in Japan, where diets are rich in omega-3s from fish oil, the reverse is true. Elevated IOP increases chances for glaucoma, which can cause blindness, so doctors are looking for non-drug ways to reduce IOP.

In this study, 105 adults with normal IOP and no current or prior diagnosis of glaucoma, took a placebo or 1,000 mg EPA, 500 mg DHA, and 900 mg alpha-linolenic acid per day. After 90 days, IOP had increased slightly in the placebo group, and had declined by 8 percent in the omega-3 group. Discussing the findings, doctors said, “To our knowledge, this is the first study to report that omega-3 fatty acids lower IOP in humans.”

**Vitamin D**

Noninfectious uveitis (NIU) is a serious sight-threatening inflammatory condition of the eye. In this study doctors compared vitamin D levels in 558 people with NIU to 2,790 people without NIU—meaning five for each person with NIU—on the basis of age, sex, race, ethnicity, and a recent vitamin D measurement. People with vitamin D levels of at least 21 nanograms per milliliter of blood were 21 percent less likely to have NIU compared to those with lower vitamin D levels.

In a similar study, doctors compared vitamin D levels in 436 people with uveitis or scleritis—another inflammatory eye disease—to 329 matching people without eye disease. Those with low vitamin D levels were nearly twice as likely to have uveitis compared to similar people with normal vitamin D levels.
Lean and Fit
Nutrients boost lean body mass, help manage weight

Glutathione, L-citrulline aid lean body mass

Glutathione is an antioxidant in every cell, but highly concentrated in heart, muscle tissue, and the liver. L-citrulline is an amino acid that boosts the efficiency of working muscle. In this study, 75 resistance-trained men, age 18 to 35, took 200 mg of glutathione plus 2,000 mg of L-citrulline; 2,000 mg of L-citrulline malate alone, or a placebo.

The men were not likely to have heart or circulatory disease, didn’t smoke, and had not taken nutritional supplements for three months. The study lasted eight weeks. On exercise days, the men took the nutrients one hour before exercise; on non-exercise days, at breakfast.

After four weeks, lean body mass had increased in both L-citrulline groups compared to placebo, but strength increased only in the glutathione plus L-citrulline group.

Black seed aids weight loss

Doctors reviewed 13 black seed (nigella sativa) studies covering 875 obese men and women. In 10 of the studies, participants taking black seed lost weight compared to placebo. In 11 of the studies, body mass index scores improved for black seed, and in eight studies, waist circumference decreased.

In another review of 11 black seed studies, obese participants that took black seed lost an average of 4.65 pounds, 1.38 inches in waist circumference, and body mass index scores improved. In all the studies, black seed was safe, with participants reporting no serious side effects.


Circulation
Nutrients reduce stroke, lower blood pressure

Resveratrol reduced chances of second stroke

People who have had a stroke are more likely to have another, compared to those who’ve never had one. In this study, 228 men and women who had a first stroke within the last year continued on standard medical treatment and physical therapy. Some participants added 100 mg or 200 mg of resveratrol per day.

After one year, while there were no changes for those not taking resveratrol, those taking either dose of resveratrol saw systolic blood pressure decline by 5 to 6 percent, to about 139.5 mmHg, and diastolic blood pressure decline 3 to 5 percent, to about 85 mmHg.

Both resveratrol groups also saw greater declines in LDL, the “bad” cholesterol, and in triglycerides; while HDL, the “good” cholesterol increased more. For those with diabetes, fasting blood sugar declined 5 to 6 percent, to about 134 mg per deciliter of blood (mg/dl), for both resveratrol groups, but less than 2 percent, to about 141 mg/dl, for the non-resveratrol group.

Omega-3s lower blood pressure

Doctors measured levels of omega-3s circulating in whole blood, called the Omega-3 Index, in 2,036 healthy young adults with normal blood pressure and weight.

Compared to those with the lowest circulating levels of omega-3s, those with the highest Omega-3 Index scores had systolic blood pressure 4 mmHg lower on average, and diastolic blood pressure 2 mmHg lower.

Discussing the findings, doctors said controlling blood pressure is a key factor in living a healthy, long life, and that ensuring good omega-3 levels early in life, even in those without high blood pressure, may be beneficial for healthy aging in the population at large.

Reference: Oxidative Medicine & Cellular Longevity; Vol. 2018, ID 4147320
Hearty Vegan Lentil Soup

You’ll have fun preparing this quick, easy recipe. Please see page 1 for a new study that found people who replaced rice or potatoes with lentils had lower blood sugar levels after the meal.


Ingredients:

- 1/4 c extra virgin olive oil
- 1 medium onion, chopped
- 2 large carrots, diced
- 2 stalks celery, chopped
- 2 large cloves garlic, minced
- 1 tsp dried oregano
- 1 bay leaf
- 1 tsp dried basil
- 2 c dry lentils (rinsed and picked over)
- 8 c organic or homemade vegetable broth
- 1 14.5 oz. can organic crushed tomatoes
- 1/2 c organic spinach, rinsed and thinly sliced
- 2 tbsp red wine or apple cider vinegar
- Salt and pepper to taste

Directions: In a large soup pot, heat oil over medium heat, add onion, carrot, and celery. Cook, stirring until onion is tender. Add garlic, oregano, bay leaf, and basil. Cook 2 minutes; stir in lentils, add broth and tomatoes. Bring to a boil, reduce heat, gently simmer for 30-40 minutes or until lentils and veggies are tender. When ready to serve, stir in spinach until it wilts. Add vinegar, season to taste.