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# Probiotics

## OVERVIEW

### What are probiotics?

Probiotics are live bacteria and yeasts that are called "the good" microorganisms because they benefit the body, specifically the digestive system. Probiotics, available in some foods and dietary supplements, are similar to probiotics that exist naturally in your gut.

### What do probiotics do; how are they helpful?

The body does not need the addition of food and supplements that contain probiotics to be healthy. However, food and supplements that contain probiotics assist the job of the "good" bacteria already present in your gut. Probiotics may help keep you healthy by:

- Decreasing the number of "bad" bacteria in your gut that can cause infections or inflammation
- Replacing the body's "good" bacteria (replacing the "good" bacteria that have been lost when taking antibiotics, for example)
- Restoring the body's "good" versus "bad" bacterial balance, which then helps to keep your body functioning properly

### What are some examples of probiotics?

- **Probiotics that are naturally found in your intestines include:** *Saccharomyces boulardii* (a yeast) and bacteria in the *Lactobacillus* and *Bifobacterium* families of microorganisms. (Outside of the body, *Lactobacillus acidophilus* is the probiotic that is found in some yogurts.)
- **Foods that contain probiotics include:** some juices and soy drinks, fermented and unfermented milk, buttermilk, some soft cheeses, miso, tempeh, kefir, kim chi, sauerkraut, and many pickles. As said, probably the most well known food product that contains probiotics is yogurt
- **Supplements:** dietary probiotic supplements -- which are available in capsules, tablets, powders and liquid extracts -- each contain a specific type of probiotic. These products are available at health food and natural food stores, vitamin shops, and other stores. For example, one commonly used supplement is *acidophilus*, which is available from several supplement manufacturers.



### What medical conditions are probiotics used for?

- **Digestive tract conditions.** Probiotic supplements may be useful in treating and preventing inflammatory conditions, such as pouchitis (which affects people who have their colons removed), inflammatory bowel diseases (such as ulcerative colitis and

Crohn's disease), and chronic stomach inflammation and ulcers caused by *Helicobacter pylori* bacterium. They may also be helpful in treating constipation, irritable bowel syndrome, acid reflux, spastic colon; shortening the duration of infectious diarrhea; and reducing the recurrence of bladder and colorectal cancer. Some studies suggest that yogurt is helpful in preventing diarrhea - a common side effect of treatment with antibiotics. It has also been shown to prevent or treat urinary tract infections and vaginal yeast infections in women.

- **Other conditions in which probiotics are being studied:** skin infections (such as eczema [atopic dermatitis]) in children; mental illness; childhood stomach and respiratory infections, allergies and asthma; sleeping problems; joint stiffness; lactose intolerance, and for boosting the immune system.

## How safe and effective are probiotics?

Probiotics may trigger allergic reactions. They may also cause mild stomach upset, diarrhea, or flatulence (passing gas) and bloating for the first few days after starting to take them. However, since probiotics already exist naturally in the body, probiotic foods and supplements are generally considered to be safe.

As far as effectiveness, keep in mind that unlike medications, dietary supplements do NOT need to be approved by the FDA. This means that manufacturers can sell supplements simply with "claims" of safety and effectiveness. Currently, researchers are undecided if probiotic supplements are effective. Some say probiotics are effective; others believe they offer no benefit whatsoever. It also remains unclear which probiotics (or combination of probiotics) work to treat certain diseases. Despite these issues, some studies have shown positive results. Still, more research is needed to confirm that probiotics are safe and effective.

Always talk with your doctor (or pediatrician) before taking a supplement or giving one to your child. Supplements might interfere with medicines you may be taking. If you are pregnant or breast feeding, check with your doctor before taking any supplement.

### References:

- The National Institutes of Health National Center for Complementary and Alternative Medicine (<https://nccih.nih.gov/health/probiotics>) Accessed 1/27/2015.
- American Gastroenterological Association. Probiotics: What they are and what they can do for you Accessed 1/27/2015.
- Boyle RJ, Robins-Browne RM, Tang MLK. Probiotic use in clinical practice. What are the risks? *Am J Clin Nutr* 2006;83(6):1256-1264.
- American Gastroenterological Association. Probiotics for the treatment of adult gastrointestinal disorders (<http://patients.gi.org/topics/probiotics-for-the-treatment-of-adult-gastrointestinal-disorders/>) Accessed 1/27/2015.
- Agency for Healthcare Research and Quality. Safety of Probiotics Used to Reduce Risk and Prevent or Treat Disease (<https://archive.ahrq.gov/research/findings/evidence-based-reports/probiotic-evidence-report.pdf>) Accessed 1/27/2015.

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