

Probiotics

Many different bacteria live in the intestines in a two-sided relationship that benefits both our bodies and them. These are called “the good bacteria.” These “good bacteria” perform different jobs in the gut and therefore have different benefits. They are identified by their genus, species and strain level. Live bacteria cultures known to have positive gastrointestinal effects are called “probiotics.” Our diets are the best source of probiotics, however, they are also produced as supplements. Whether taken as a part of a meal or as a supplement, it is very important to keep in mind that these microorganisms have to survive the passage through the gastrointestinal tract and also survive the food manufacturing process, and grow and survive during the ripening and storage periods. Otherwise, they will have no benefits to us.

Here are a few of them:

1. Lactobacillus

There are over 50 species of lactobacilli found in the digestive, urinary, and genital systems.

Externally, lactobacilli bacteria are found in fermented foods such as yogurt and kefir, as well as dietary supplements. Some of the lactobacilli found in foods and supplements are *Lactobacillus acidophilus*, *Lactobacillus bulgaricus*, *Lactobacillus planetarium*, *Lactobacillus casei*, and *Lactobacillus gasseri*. Lactobacilli are beneficial in treating or preventing yeast infections, bacterial vaginosis, urinary tract infections, irritable bowel syndrome, antibiotic and travel related diarrhea, lactose intolerance, canker sores, as well as prevention of respiratory infections.

2. Bifidobacteria

There are around 30 species of bifidobacteria. They make up most of the healthy bacteria in the colon and are crucial to colon health. Some examples of bifidobacteria used as probiotics are *Bifidobacterium bifidum*, *Bifidobacterium lactis*, *Bifidobacterium infantis*, and *Bifidobacterium pseudolongum*. They help improve blood lipids and glucose tolerance and alleviate IBS symptoms.

3. Saccharomyces boulardii

S. boulardii is the only yeast probiotic. It is effective in preventing and treating diarrhea associated with the use of antibiotics and traveler’s diarrhea. It has also been shown to reduce the side effects of *H. pylori* treatment.

4. Streptococcus thermophilus

Produces large quantities of the enzyme lactase, making it effective in preventing lactose intolerance.

Which foods contain probiotics

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Fermented foods contain the good bacteria. Fermentation is a slow decomposition process of organic substances induced by microorganisms or enzymes that convert carbohydrates to alcohols or organic acids. Lactic acid supplies the bacteria that then add the health benefits to the food. Food can be fermented at home or purchased ready to consume.

Kefir: Contains both bacteria and yeast, which makes it a superior dairy probiotic. It has been shown to reduce Hemoglobin A1C levels in diabetic patients.

Kimchi: Kimchi consists of fermented cabbage, radish, green onions, red pepper, garlic, ginger, and fermented seafood. It contains many different bacteria and has anti-cancer, anti-obesity and antioxidant properties and promotes brain health, the immune system, and the skin.

Yogurt: Has been shown to reduce the risk of gastrointestinal disease and improve lactose intolerance, type 2 diabetes, cardiovascular disease, allergies and respiratory diseases. It also improves bone and dental health.

Other food products that may also contain probiotics include miso, tempeh, sauerkraut, sourdough bread, sour pickles and fermented radishes and cucumbers.

Are there any risks or side effects with taking probiotics?

One's diet is the best source of probiotics, however, if they are to be supplemented, the source of the supplement needs to be carefully considered. Probiotics are live bacteria and need to be carefully monitored and stored in order to be available in enough levels to make any difference. As of now, in the United States the manufacturer of the dietary supplement is responsible for ensuring that it is safe before it is marketed and the FDA does not monitor the ingredients or the amounts of active ingredients inside of supplements. So, there is no real way for consumers to know if they are in fact taking the appropriate supplements in sufficient amounts. There is one Voluntary Certification Program which a

manufacturer can use to have their product independently evaluated. Products that have passed ConsumerLab.com's (CL) tests for identity, strength, purity, and nutrition products can the CL Seal of Approval on their product. This will surely give the shopper confidence when searching for a probiotic product.

Another aspect to consider is that when food and dairy products are pasteurized, most of the good bacteria are killed in the process and therefore, no probiotic effects will be obtained from the consumption of those products. Consumers might consider ingesting raw, not pasteurized foods to benefit from the living probiotics available inside them. Some manufacturers will add "live cultures" after the pasteurization process, however, there is no evidence that there are enough amounts of bacteria in there to be effective.

Who Should Not Take Probiotics

There are now special probiotic supplements available for children and newborn infants, however, probiotics should not be given to children or infants before consulting the matter with their pediatrician.

Pregnant women, elderly people, and people with compromised immune systems should also take probiotics after careful consideration by their physician.

Probiotics may actually increase chances of getting sick, developing an infection, or sepsis (infection in the bloodstream) for patients with compromised immune systems due to disease or treatment of a diseases such as cancer chemotherapy.

Probiotics are essential parts of our health and needed by almost every body for full function, so let's make sure we get the right products into our systems.

