

Resources

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Center for Hygiene & Health in the Home and Community

Overview

According to the Food and Agriculture Organization of the United Nations (FAO) and the World Health Association (WHO) probiotics are "live microorganisms which when administered in adequate amounts confer a health benefit on the host". They are known as 'good bacteria' and are available in foods and supplements. Potential benefits include protection against disease, help with digestion and absorption of food, aiding the proper development of the immune system.



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The Benefits of Probiotics

August 2010

What Are Probiotics?

- The FAO/WHO defines probiotics as “live microorganisms administered in adequate amounts which confer a beneficial health effect on the host”¹.
- The majority of probiotics are bacteria and most products contain either the bacteria *Lactobacillus* or *Bifidobacterium*.
- Probiotics are found in fermented dairy products like yogurt, miso, tempeh, probiotic-infused juice smoothies, soy beverages and frozen yogurts and various dietary supplements.
- Products containing probiotics must be labeled with the strain(s) information and the appropriate storage requirements to allow the microbe(s) to remain alive during the shelf life of the product.



How Do Probiotics Work?

- Humans host more than 1,000 species of microbes on the skin, mouth, gastrointestinal tract and vaginal tract.
- Most of these bacteria contribute to health, growth and development.
- It is important to have the right balance of “good” bacteria in the body for overall health.
- Administering a probiotic adds to the amount of good bacteria in the gastrointestinal tract and works to stimulate the immune system to allow for ideal functioning.

How Do Probiotics Work? (cont'd)

- They also add to the intestinal lining to prevent bacteria from moving to the blood stream. This may result in fewer infections and allergic reactions related to food.

Health Benefits

- Antibiotic-associated diarrhea can be treated and prevented with the use of probiotics, which help to reintroduce the natural flora in the intestines. The active cultures help to lessen the severity and shorten the duration of diarrhea².
- Some people with lactose intolerance are able to eat dairy products with probiotics to alleviate symptoms³. This is due to the presence of lactic acid bacteria in the probiotic, which helps deliver lactase to the small intestine and breaks down the lactose prior to its arrival in the colon.
- Irritable bowel syndrome (IBS) is a disorder that affects the colon and causes abdominal pain, cramping, bloating diarrhea and constipation⁴. Some studies have found that probiotics may alleviate symptoms of IBS. More research is needed to determine the effectiveness.
- A yeast infection is a fungus found in the gut or in the vaginal area of the body. This results in a reduction of good bacteria in the body, also known as natural flora. Probiotics help to prevent the growth of yeast and restore normal flora to the body⁵.

Health Benefits (cont'd)

- A urinary tract infection begins in the urinary system and is caused by bacterial growth. There is strong scientific evidence supporting the use of probiotics in urological conditions⁶.
- Inflammatory bowel disease (IBD) is a group of disorders where the lower intestine becomes inflamed. The origin is unknown, but one potential cause is bacterial. Probiotics are believed to aid in fighting colonic inflammation⁷.

Risks & Side Effects

- The safety of probiotics has not been clearly established through scientific research.
- More information is needed on the safety and efficacy in children, the elderly and those with weakened immune systems.
- Side effects are typically mild and include digestive problems. There is a chance of infection when administering a probiotic in people with a preexisting illness. Probiotics could also cause unhealthy metabolic activities, too much stimulation of the immune system or gene transfer⁷.

