

PROBIOTICS

Probiotics are beneficial bacteria . Probiotic bacterial cultures are intended to assist the body's naturally occurring healthy bacteria within the digestive tract to reestablish themselves. They are frequently recommended after a course of antibiotics. Many probiotics are present in natural sources such as lactobacillus in yogurt and sauerkraut. The rationale for probiotics is that the body contains a miniature ecology of microbes, collectively known as the gut flora. The number of bacterial types can be thrown out of balance by a wide range of circumstances including the use of antibiotics or other drugs, excess alcohol, stress, disease or exposure to toxic substances. In cases like these, the bacteria that work well with our bodies may decrease in number, an event which allows harmful competitors to thrive, to the detriment of our health.

Effects

Probiotics form beneficial colonies which may assist the body in the same functions as the natural flora, while allowing the natural flora time to recover from depletion. The probiotic strains are then progressively replaced by a naturally developed gut flora. If the conditions which originally caused damage to the natural gut flora persist, the benefits obtained from probiotic supplements will be short lived and continuous supplementation will be needed. *It is very important that the number and types of probiotic bacteria closely mimic our natural gut bacteria for maximum effectiveness.*

Benefits

Scientists have found a range of potentially beneficial medicinal uses for probiotics. Briefly, they are described below:

Managing Lactose Intolerance: Because probiotics can convert lactose into lactic acid, their ingestion may help lactose intolerant individuals tolerate more lactose than what they would have otherwise.[1]

Prevention of Colon Cancer: In laboratory investigations, probiotics have demonstrated anti-mutagenic effects thought to be due to their ability to bind with (and therefore detoxify) heterocyclic amines; carcinogenic substances formed in cooked meat.[2] Animal studies have demonstrated that probiotics can protect against colon cancer in rodents, though human data is limited.[3] Most human trials have found that probiotics may exert anti-cancer effects by decreasing the activity of an enzyme called β -glucuronidase [3] (which can regenerate carcinogens in the digestive system).

Cholesterol Lowering: Animal studies have demonstrated the efficacy of a range of probiotics to be able to lower serum cholesterol levels, presumably by breaking down bile in the gut, thus inhibiting its reabsorption (which enters the blood as cholesterol). Human trials have shown that dairy foods fermented with probiotics can produce modest reductions in total and LDL cholesterol levels. [1]

Lowering Blood Pressure: Several small clinical trials have shown that consumption of probiotics can result in modest reductions in blood pressure. It is thought that this is due to the ACE inhibitor like peptides produced during fermentation. [1]

Improving Immune Function and Preventing Infections: Probiotics are thought to have several presumably beneficial effects on immune function. They may protect against pathogens by means of competitive inhibition (i.e., by competing for growth) and there is evidence to suggest that they may improve immune function by increasing the number and function of immune cells such as T lymphocytes and Natural Killer cells. [4,5] Clinical trials have demonstrated that probiotics may decrease the incidence of respiratory tract infections [6] and dental caries in children[7] as well as aid in the treatment of *Helicobacter pylori* infections (which cause peptic ulcers) in adults when used in combination with standard medical treatments.[8] Probiotics have been shown to be effective in the treatment and prevention of acute diarrhea; decreasing the severity and duration of rotavirus infections in children as well as antibiotic associated and travelers diarrhea in adults.[4,5,9]

Reducing Inflammation: Probiotics have been found to modulate inflammatory and hypersensitivity responses, an observation thought to be at least in part due to the regulation of cytokine function [4]. Clinical studies suggest that they can prevent reoccurrence of Inflammatory Bowel Disease in adults, [4] as well as improve milk allergies [10] and decrease the risk of atopic eczema in children.[11]

Improving Mineral Absorption: It is hypothesized that probiotic lactobacilli may help correct malabsorption of trace minerals, found particularly in those with diets high in phytate content from whole grains, nuts, and legumes.[12]

Prevents Harmful Bacterial Growth Under Stress: In a study done to see the effects of stress on intestinal flora, rats that were fed probiotics had no occurrence of harmful bacteria latched onto their intestines compared to rats that were fed sterile water. [1]

Pregnancy and newborns: Researchers in Finland have discovered that giving probiotics to pregnant and lactating mothers increased the immunoprotective potential of breast milk and reduced the risk of infants developing atopic eczema by 70% during the first 2 years of life. [13]

Recommended probiotic supplements:

<u>Rating</u>	<u>Product</u>	<u>Website</u>
★★★★★	Ultra Flora Plus	www.drpaz.com
★★★★★	Ultra Flora Plus DF	www.drpaz.com
★★★★★	ProbioKids	www.drpaz.com
★★★	Ultimate 10 Probiotic	www.vitaminshoppe.com
★★★	Kyodphilus 9	www.kyolic.com

To Order From Drpaz.Com:

Go to www.drpez.com and click on **Patient Gateway** in the upper right-hand corner. Then click on **Register Now** in the upper left-hand corner and follow the prompts. This will allow you access to the Metagenics product gateway.

Metagenics provides the highest quality supplements available today. Their probiotic strains are ID certified to assure purity and predicted safety. Metagenics sells their products only through health care professionals familiar with their appropriate use.

References

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