

Did You Know?

Probiotics

Probiotics

- ❖ Probiotics are dietary supplements that contain living organisms normally found in our bodies that don't usually cause illness. They are often promoted to strengthen the immune system or recolonize the gut or vagina. They are likely harmless in healthy patients, but in rare cases (e.g., immunocompromised patients), probiotics can cause infection and should be avoided in seriously ill patients.
- ❖ The most common organisms used in probiotics are *Lactobacillus*, *Bifidobacterium*, *Bacillus*, and *Saccharomyces boulardii*. Many probiotic supplements available contain multiple species and organisms.
- ❖ It is generally recommended to separate probiotics from antibiotics by at least 2 hours as it has been proposed the antibiotics may kill bacterial probiotics.



- ❖ Probiotics are sold as dietary supplements and therefore not recommended to treat or prevent diseases. Claims made by companies about health benefits are not reviewed or approved by the FDA, nor is product quality and consistency guaranteed.

Did You Know?

Probiotics

DIFFERENCES:

	<i>Lactobacillus</i> (lactic-acid producing bacteria)	<i>Bifidobacterium</i> (lactic-acid producing bacteria)	<i>Saccharomyces</i> (Yeast)	<i>Bacillus</i>
Common species	<i>Acidophilus, bulgaricus, casei, helveticus, plantarum, reuteri, rhamnosus</i> and <i>salivarius</i>	<i>Bifidum, breve, infantis, lactis,</i> and <i>longum</i>	<i>boulardii</i>	<i>Coagulans</i>
Brands available	Culturelle, VSL#3, Florajen, Florajen3, Novaflor, Nature's Bounty, Phillip's Colon Health, Bacid, Risa-Bid, Renew Life Everyday Immune	Align, VSL#3, Florajen3, Nature's Bounty, Phillip's Colon Health, Renew Life Everyday Immune	Florastor	Digestive Advantage
Proposed benefits	<ul style="list-style-type: none"> Better absorption in GI tract compared to other probiotics Prevents growth of pathogenic bacteria Reduces inflammation and improve immune system Improves GI health Reduces duration of antibiotic induced diarrhea <i>L casei</i> improves constipation symptoms Treatment of neonate necrotizing enterocolitis Positive effects for people with irritable bowel syndrome (IBS) 	<ul style="list-style-type: none"> Prevents growth of pathogenic bacteria Reduces inflammation and improve immune system Improves GI health Relieves traveler's diarrhea <i>B lactis</i> improves constipation symptoms Treatment of neonate necrotizing enterocolitis Positive effects for people with IBS 	<ul style="list-style-type: none"> Reduces duration of diarrhea regardless of cause Positive effects for people with IBS 	<ul style="list-style-type: none"> Relieves traveler's diarrhea Improves immune system Works to prevent cavities in children Positive effects for people with IBS

References:

- Ulbrich, Timothy et al. "Probiotics and prebiotics: why are they "bugging" us in the pharmacy?." *The journal of pediatric pharmacology and therapeutics : JPPT : the official journal of PPAG* vol. 14,1 (2009): 17-24. doi:10.5863/1551-6776-14.1.17
- Fijan, Sabina. "Microorganisms with claimed probiotic properties: an overview of recent literature." *International journal of environmental research and public health* vol. 11,5 4745-67. 5 May. 2014, doi:10.3390/ijerph110504745
- Probiotics. In: Natural Products Database [database on the Internet]. Hudson (OH): Lexicomp Inc.: [updated 16 April 2021; cited 3 Aug 2021]. Available from: <http://online.lexi.com>. Subscription required to view.
- Jellin JM, Gregory PJ, et al. Natural Medicines.www.naturalmedicines.com. Accessed on January 7, 2019. © 2001-2019 by Therapeutic Research Center. Terms of Use: <https://naturalmedicines.therapeuticresearch.com/terms-of-use.aspx>.
- Boyle RJ, Robins-Browne RM, Tang ML. Probiotic use in clinical practice: what are the risks? *Am J Clin Nutr* 2006;83:1256-64.