



Probiotics

WHAT ARE PROBIOTICS?

Probiotics, defined internationally by the Food and Agricultural Organization (FAO) and the World Health Organization (WHO) are: "live microorganisms that, when administered in adequate amounts, confer a health benefit on the host".¹ The Food and Drug Administration (FDA) classifies probiotics for human consumption as "live biotherapeutics".²⁻³

WHY DO WE NEED PROBIOTICS?

Probiotics normally live in a healthy balance with other bacteria in our intestine. Under certain circumstances however this balance may be disrupted by physical stress, poor nutrition, unsanitary environment, aging, traveling, etc. Probiotics offer support for overall digestive health.[†] This includes supporting regularity of bowel movements and consistency of stool, as well as supporting digestive balance during travel.[†] The production and absorption of certain nutrients in the colon are also enhanced by probiotics. For example, a lower pH in the colon can enhance the absorption of calcium and magnesium.^{4-6†}

HOW DO WE KNOW PROBIOTICS ARE GOOD FOR US?

Numerous clinical studies in various parts of the world have reported the roles probiotics can play in keeping us healthy. Some probiotics have been shown to help us with digestive issues such as occasional bloating, gassiness, abdominal discomfort, diarrhea and constipation.[†] Some probiotics have been reported to support immune system functions,⁷ as well as oral and women's health. Helpful roles in supporting healthy physiological parameters such as cholesterol levels, proper body weight, blood glucose levels already in the normal range, to name a few, have also been reported within the scientific literature of probiotics.[†]

MICROORGANISMS USED AS PROBIOTICS:

Organisms and species commonly used as probiotics are:

1. Lactobacillus species
2. Bifidobacterium species
3. Certain Bacillus species
4. Non-bacterial organisms like Saccharomyces (Yeasts)

To qualify as a probiotic, the organism must be non-pathogenic, demonstrate ability to survive stomach acidic environment, resist effect of bile salts, and have the ability to compete successfully against "resident" gut organisms for an appreciable length of time.

PROBIOTIC MECHANISM OF ACTION:

Suggested mechanisms of action for probiotics include the following:

1. Crowding-out of "resident" organisms and preventing them from adhering to gut[†]
2. Production of molecules (bacteriocins) that are capable of destroying other organisms[†]
3. Production of short chain fatty acids (SCFAs) as metabolites from the fermentation dietary fiber or resistant starch; these SCFAs can lower intestinal lumen pH to levels harmful to other organisms[†]



Probiotics



HOW TO SELECT THE RIGHT PROBIOTIC?

To select the probiotic that is the best for each individual, there are a few tips to keep in mind.

- ✓ **Purchase your probiotic from a well-known brand that you know and trust.** A trusted brand will disclose the probiotic strain used in the product formulation, as well as providing a website and toll-free number on the label to address consumer questions.
- ✓ **Read product label** to assure it is describing the health benefit you are seeking.
- ✓ **Check the label for potency measured as Colony Forming Units (CFU)** through product shelf life rather than at time of manufacture.
- ✓ **Confirm with brand or manufacturer that the CFUs in the product for purchase are supported by clinical research.** Inquire to see if the study has been published, and in which peer-reviewed journal.

NATURE MADE® PROBIOTIC PRODUCTS

Most Nature Made Probiotic products contain the *Lactobacillus* organism (*Lactobacillus plantarum* 299v), or the *Bifidobacterium* organism (*Bifidobacterium lactis* SD-5674) or a combination of them, targeting digestive health. While the *L. plantarum* 299v helps support a healthy balance of intestinal microflora,⁷ the *B. lactis* SD-5674 supports regularity.[†] These claims are all supported by well-designed and executed human clinical studies.⁷⁻⁹

Nature Made Advanced Dual Action provides two high quality probiotics:

1. *Lactobacillus plantarum* 299v to naturally help relieve occasional gas, bloating, abdominal discomfort[†]
2. *Bifidobacterium lactis* SD-5674 to naturally help relieve occasional constipation and irregularity[†]

Nature Made Daily Balance has *Lactobacillus plantarum* 299v, which naturally helps relieve occasional gas, bloating and abdominal discomfort.[†]

Nature Made Digestive Probiotics plus Women's Multivitamins has *Lactobacillus plantarum* 299v to support digestive balance for overall health and a multivitamin, which contains 23 key nutrients specially formulated to support women's specific health needs.[†]

ABOUT NATURE MADE®

For 45 years, Nature Made has been a trusted leader in the wellness industry, providing high quality vitamin, mineral and herbal supplements. Nature Made is the national supplement brand with the most products carrying the United States Pharmacopeia (USP) mark*—USP mark verifies that products meet stringent quality criteria for purity and potency. It is also the #1 recommended brand in the U.S. by Pharmacists in eight key vitamin and supplement segments.**

For more information visit: NatureMade.com

REFERENCES

1. FAO/WHO. Report of a Joint FAO/WHO Expert Consultation on Evaluation of Health and Nutritional Properties of Probiotics in Food Including Powder Milk with Live Lactic Acid Bacteria. Oct 2001. <http://www.isapp.net/Portals/0/docs/FAO-WHO-2001-Probiotics-Report.pdf>
2. Sanders, ME. Probiotics: definition, sources, selection, and uses. *Clin Infect Dis* 2008;46:S58-61.
3. Vaillancourt J. Regulating pre- and probiotics: a U.S. FDA perspective. In: Institute of Medicine of the National Academies. Ending the war metaphor: the changing agenda for unraveling the host-microbe relationship. Washington, DC: National Academies Press. 2006:229-37.
4. Slavin J. Fiber and probiotics: mechanisms and health benefits. *Nutrients* 2013;5(4):1417-1435.
5. Abrams SA, Griffin IJ, Hawthorne KM, et al. A combination of prebiotic short- and long-chain inulin-type fructans enhances calcium absorption and bone mineralization in young adolescents. *Am J Clin Nutr* 2005;82(2):471-476.
6. Martin BR, Braun MD, Wigertz K, et al. Fructo-oligosaccharides and calcium absorption and retention in adolescent girls. *J Am Coll Nutr* 2010;29(4):382-386.
7. Ducrotte P, Sawant P, Jayanthi V. Clinical trial: *Lactobacillus plantarum* 299V (DSM 9843) improves symptoms of irritable bowel syndrome. *World J Gastroenterol* 2012;18(30):4012-4018.
8. Berggren A, Lazou Ahren I, Larsson N, et al. Randomized, double-blind and placebo-controlled study using new probiotic lactobacilli for strengthening the body immune defence against viral infections. *Eur J Nutr* 2011;50(3):203-210.
9. Waller PA, Gopal PK, Leyer GJ, et al. Dose-response effect of *Bifidobacterium lactis* HN019 on whole gut transit time and functional gastrointestinal symptoms in adults. *Scand J Gastroenterol* 2011;46(9):1057-1064.

These materials are intended for educational purposes only.

*Find those Nature Made USP verified products on NatureMade.com/USP

**Based on 2017 U.S. News & World Report - Pharmacy Times Survey

†These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure or prevent any disease.

©2018 Pharmavite LLC

PID16518