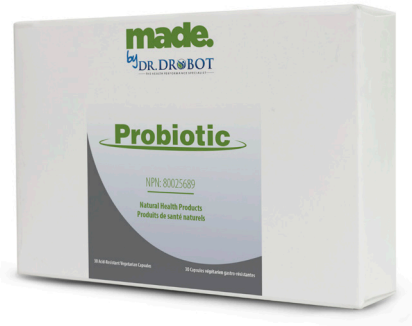


Probiotic

- Probiotic that provides live microorganisms which forms part and contributes to a natural healthy gut flora and health benefits



Discussion

Supplementation with probiotics has many mechanisms of action that benefit health, including but not limited to: (1) supporting metabolic activity, such as the production of short-chain fatty acids and vitamins, nutrient absorption, and digestion of lactose; (2) adhering to intestinal epithelial cells to help maintain a healthy balance of organisms in the intestinal tract; (3) helping to establish populations of good bacteria after disruption in balance; (4) supporting immune function; (5) promoting intestinal epithelial cell survival; (6) supporting healthy bowel function; and (7) degrading oxalates.*^[1-8]

Common challenges associated with probiotic supplementation are maintaining stability of the organisms during distribution and shelf life and, once taken by a consumer, survival of the organisms as they travel through the digestive tract so that they reach the target tissue (intestines) alive. To help ensure stability, Dr. Drobot packages the Probiotic capsules in sealed, nitrogen-purged aluminum blister packs to serve as protection from factors proven to compromise the stability of probiotics, such as heat, moisture, and oxygen. Careful selection of organisms is another way Dr. Drobot helps ensure stability. Careful organism selection, as performed for Probiotic, is also a critical aspect of supporting digestive survival. To further support resistance to low pH and the delivery of microorganisms to the small intestines, Dr. Drobot employs DRcaps™ gastro-resistant capsules. These specially designed, innovative capsules help slow exposure of actives to stomach acid to promote a more targeted release.*

HOWARU™ (*Bifidobacterium lactis* HN019) Discovered in 1899, *B lactis* play a key role in the human microflora throughout a person's life. Researchers have identified strain HN019 as having excellent probiotic potential based upon its ability to survive the transit through the human gastrointestinal tract, adhere to epithelial cells, and proliferate.^[6] *B lactis* HN019 has been extensively studied, and its safety and effectiveness is well accepted.^[7,8] To assess the impact of *Bifidobacterium lactis* HN019 supplementation on whole-gut transit time in adults, 100 subjects were given daily doses for 14 days of 17.2 billion colony-forming units (CFU), 1.8 billion CFU, or placebo. Decreases in mean whole-gut transit time over the 14-day study period were statistically significant in the high-dose group and the low-dose group, but not in the placebo group.^[6] This level of dosing also supported other parameters of healthy GI function, as were self-reported by patient survey.^[6] In another study of preschool-age children, supplementing milk for one year with 1.9 x 10¹⁰ CFU per day *B lactis* HN019 and 2.4 g/day of prebiotic oligosaccharides supported both healthy iron status and weight gain.^[9] In a randomized, double-blind, placebo-controlled human dietary intervention study in elderly subjects (>60 yrs.), supplementary *B lactis* HN019 resulted in statistically significant increases in the beneficial organisms *bifidobacteria* and *lactobacilli*.^{*[10]}

***Lactobacillus acidophilus* (*Lactobacillus acidophilus* La-14)** This common inhabitant of the human mouth, intestinal tract, and vagina, is also found in some traditional fermented milks (e.g., kefir) and is widely used in probiotic foods and supplements. It has a history of safe human consumption. The *L acidophilus* La-14 strain is of human origin and has been identified as a type A1 *L acidophilus*. *L acidophilus* shows excellent adhesion to human epithelial cell-lines.^{*[11,12]}

***Lactobacillus plantarum* (*Lactobacillus plantarum* Lp-115)** This bacteria was isolated from plant material and is abundantly present in lactic acid-fermented foods, such as olives and sauerkraut. In vitro studies have shown that *L plantarum* strain Lp-115 has excellent adhesion to epithelial cell lines.^[13] In addition, *L plantarum* is resistant to low pH conditions and survives the presence of bile at duodenal concentrations.^{*[13,14]}

***Bifidobacterium longum* (*Bifidobacterium longum* BI-05)** The *B longum* BI-05 strain is well accepted as safe for human consumption. *B longum* is resistant to low pH and bile salts and is well suited to the intestinal environment.^{*[14]}

Medicinal Ingredients per acid-resistant vegetarian capsule)

Lactobacillus acidophilus	14.4 Billion cfu	Whole cell, strain	La-14)
HOWARU Bifido Bifidobacterium animalis subsp. lactis			
.....	15 Billion cfu	Whole cell, strain	HN019)
Lactobacillus plantarum	0.3 Billion cfu	Whole cell, strain	Lp-115)
Bifidobacterium longum subsp. longum			
.....	0.3 Billion cfu	Whole cell, strain	Bl-05)

Non-Medicinal Ingredients

Microcrystalline cellulose, Hypromellose, Stearic acid, Magnesium stearate, Silicon dioxide.

Ingrédients médicinaux par capsule végétarienne gastro-résistantes)

Lactobacillus acidophilus	14.4 milliards ufc	Cellules entières, souche	La-14)
Bifidobacterium animalis subsp. lactis HOWARU Bifido			
.....	15 milliards ufc	Cellules entières, souche	HN019)
Lactobacillus plantarum	0.3 milliard ufc	Cellules entières, souche	Lp-115)
Bifidobacterium longum subsp. longum			
.....	0.3 milliard ufc	Cellules entières, souche	Bl-05)

Ingrédients non médicinaux

Cellulose microcristalline, hypromellose, acide stéarique, stéarate de magnésium, dioxyde de silicium.

Recommended Dose

Children age 1 and up to Adults: Take 1 capsule once daily

Discontinue use and consult a healthcare practitioner if symptoms of digestive upset (e.g. diarrhoea) occur, worsen, or persist beyond 3 days.

Do not use if you are experiencing nausea, fever, vomiting, bloody diarrhoea, or severe abdominal pain. Do not use if you have an immune-compromised condition (e.g. AIDS, lymphoma, patients undergoing long-term corticosteroid treatment).

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***These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.**