

# Probiotic Family



- Probiotic that provides live microorganisms to contribute to a natural healthy gut flora

Available in 30 vegetarian capsules

## 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.\*<sup>[1-8]</sup>

**HOWARU® (*Bifidobacterium lactis* HN019)** Discovered in 1899, *B. lactis* plays 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.<sup>[6]</sup> *B. lactis* HN019 has been extensively studied, and its safety and effectiveness is well-accepted.<sup>[7,8]</sup> To assess the impact of *B. 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.<sup>[8]</sup> This level of dosing also supported other parameters of healthy GI function, as were self-reported by patient survey.<sup>[8]</sup> In another study of preschool-age children, supplementing milk for one year with 1.9 x 10<sup>9</sup> CFU per day *B. lactis* HN019 and 2.4 g/day of prebiotic oligosaccharides supported both healthy iron status and weight gain.<sup>[9]</sup> 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.\*<sup>[10]</sup>

***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.\*<sup>[11,12]</sup>

***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.<sup>[13]</sup> In addition, *L. plantarum* is resistant to low pH conditions and survives the presence of bile at duodenal concentrations.\*<sup>[13,14]</sup>

***Bifidobacterium longum* (*Bifidobacterium longum* B1-05)** The *B. longum* B1-05 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.\*<sup>[14]</sup>

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## Probiotic 30B

### 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: BI-05)

### Non-Medicinal Ingredients

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

### 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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## Probiotic 100B

### Medicinal Ingredients (per vegetarian capsule)

Lactobacillus acidophilus .....	48 Billion cfu (Strain: La-14)
Bifidobacterium animalis subsp. lactis.....	50 Billion cfu (Strain: HN019)
Bifidobacterium longum subsp. longum .....	1 Billion cfu (Strain: BI-05)
Lactobacillus plantarum .....	1 Billion cfu (Strain: Lp-115)

### Non-Medicinal Ingredients

Hypromellose, Cellulose, Magnesium stearate, Silica

### Recommended Dose

Children age 6 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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Additional references available upon request

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