

Multi-Probiotic® 40 Billion

Gastrointestinal and Immune Health[‡]

DESCRIPTION

Multi-Probiotic® 40 Billion capsules from Douglas Laboratories provide 40 billion CFUs of probiotic strains from the *Lactobacillus* and *bifidobacterium* genera and prebiotic fructooligosaccharides. These special acid-resistant capsules bypass the stomach and breakdown in the small intestinal fluid to allow targeted release in the intestinal tract.

INDICATIONS

- Support for healthy digestion[‡]
- Support for immune function[‡]

FUNCTIONS AND MECHANISM OF ACTION

The human gut microflora comprises over 1,000 microbial species, which play a major role in our defense mechanisms, neural system and brain function. Age, environment, diet and lifestyle are all factors that may change the gut microbial composition. A balanced gut microbiota is important for metabolic functions and may be achieved through dietary supplementation of probiotics and prebiotics. Probiotics are live microorganisms, which, when administered in adequate amounts, confer a health benefit on the host. A prebiotic is a selectively fermented ingredient that results in specific changes in the composition and/or activity of the gut microbiota. For a synergistic action, probiotics are combined with prebiotics to provide health benefits.[‡]

Lactic acid bacteria and *bifidobacteria* have been extensively studied for their roles in human health. As the benefits they deliver are strain-specific, Multi-Probiotic® 40 Billion is specifically formulated to contain probiotic strains to support gastrointestinal and immune health. Probiotic *Lactobacillus acidophilus* produces compounds called bacteriocins that compete with other bacteria in the gastrointestinal tract and can withstand pH ranges from 2.0 to 12.0, which may enhance probiotic colonization and contribute to a healthy gut microbiota. A meta-analysis of 18 randomized clinical trials on *Lactobacillus plantarum* and immune health suggests *L. plantarum* enhances immune response by modulating cytokines. In cultured intestinal cells, *Lactobacillus lactis* modulated the effects of interleukin 1 beta, a cytokine involved in immune activation in the intestinal epithelium. Similar effects were observed *in vivo* with probiotic *Lactobacillus paracasei*. Supplementation with *Lactobacillus rhamnosus* Lr-32 has been shown to help maintain healthy oral microbial balance, suggesting its role in maintaining oral care. In a clinical trial, supplementation with at least 1 billion CFU of *Bifidobacterium lactis* HN019 was shown to support healthy digestion. Under stress, interleukin 1 beta (IL-1 β) and tumor necrosis factor (TNF- α) are released. *Bifidobacterium longum* has been shown to positively modulate these factors *in vivo*, thus suggesting support for immune function. An *in vitro* study comparing nine probiotic strains reported that *Streptococcus thermophilus* was most effective in supporting healthy microbial balance. These selected probiotics modulate the immune system by colonizing in the gastrointestinal tract and secreting metabolites that affect the growth and function of immune cells.[‡]

Prebiotics promote the growth of beneficial microbes in the intestinal microflora. Fructooligosacchride (FOS) is a well-studied prebiotic that has been shown to modulate gut bacteria and improve mineral absorption in the gut. The combination of probiotics with prebiotic FOS contribute to a healthy digestive tract and support the immune system.[‡]

FORMULA (#202634)

Serving Size 2 Vegetarian Acid-Resistant Capsules:

Proprietary Blend 560 mg

Yielding 40 Billion CFU:

Nutraflora® short-chain FOS prebiotic fiber, *Lactobacillus acidophilus*, *Lactobacillus plantarum*, *Lactobacillus lactis*, *Lactobacillus paracasei*, *Bifidobacterium lactis* HN019, *Bifidobacterium breve*, *Streptococcus thermophilus*, *Bifidobacterium lactis (infantis)*, *Bifidobacterium bifidum*, *Lactobacillus brevis*, *Bifidobacterium longum*, *Lactobacillus gasseri*, *Lactobacillus bulgaricus*, *Lactobacillus rhamnosus*

Other ingredients: Capsule (hydroxypropyl methylcellulose, pectin, glycerol, purified water) and sunflower lecithin

Gluten-free, Non-GMO

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SUGGESTED USE

As a dietary supplement, adults take 2 capsules daily or as directed by a health professional. May increase up to 4 daily if directed.

WARNING

If you are pregnant, nursing, have any health condition or taking any medication, consult your health professional before using this product.

Caution: If you are immunocompromised, consult your health professional before using probiotic-containing products.

Keep out of reach of children.

STORAGE

Store in a cool, dry place. Use only if safety seal is intact.

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For more information on Multi-Probiotic® 40 Billion, visit douglaslabs.com

‡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.

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