

## Multi-Probiotic® 15 Billion

### DESCRIPTION

Multi-Probiotic® 15 Billion capsules from Douglas Laboratories provide 15 billion CFUs of probiotic strains from the lactobacillus and bifidobacterium genera, mixed in a base of 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 the intestinal microflora and immune health‡

### 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 role in human health. As the benefits they deliver are strain-specific, Multi-Probiotic® 15 Billion is specifically formulated to contain eight probiotic strains to support gastrointestinal and immune health. Probiotic *Lactobacillus acidophilus* La-14 produces compounds called bacteriocins that compete with other bacteria in the gastrointestinal tract and can withstand pH ranging from 2.0 to 12.0, which may enhance probiotic colonization and contribute to a healthy gut microbiota. 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-1β) and tumor necrosis factor (TNF-α) are released. *Bifidobacterium longum* Bb-02 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. Slippery elm is a tree native to central and eastern United States whose inner bark has been shown to have health benefits. In a clinical study, slippery elm bark provided soothing properties for the gastrointestinal tract to aid in digestion. The combination of probiotics with prebiotic FOS and slippery elm bark contribute to a healthy digestive tract and support the immune system.‡

### FORMULA (#202516)

Serving Size 1 Vegetarian Acid-Resistant Capsule:

Multi-Strain Probiotic Blend .....	15 Billion CFU
Containing:	
<i>Lactobacillus acidophilus</i> (La-14) .....	4.3 Billion CFU
<i>Lactobacillus rhamnosus</i> (Lr-32) .....	4.3 Billion CFU
<i>Bifidobacterium lactis</i> (HN019) .....	1.9 Billion CFU
<i>Lactococcus lactis</i> (LI-23) .....	1.0 Billion CFU
<i>Bifidobacterium longum</i> (BI-05) .....	1.0 Billion CFU
<i>Bifidobacterium bifidum</i> (Bb-02) .....	1.0 Billion CFU
<i>Lactobacillus gasseri</i> (Lg-36) .....	1.0 Billion CFU

*Streptococcus thermophilus* (St-21) ..... 0.5 Billion CFU  
Digestive and Prebiotic Blend ..... 210 mg  
FOS (fructooligosaccharides) and Slippery Elm Bark (*Ulmus fulva*)

Other ingredients: Microcrystalline cellulose, capsule (hydroxypropyl methylcellulose, pectin, glycerol, purified water)  
Gluten-free, Non-GMO

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## SUGGESTED USE

Adults take 1 capsule daily with a meal or as directed by a health professional.

## WARNING

Not to be taken by pregnant or lactating women. If you have any health condition or are taking any medication, consult your health professional before use.

## STORAGE

Store in a cool, dry place, away from direct light. Keep out of reach of children.

## REFERENCES

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**For more information on Multi-Probiotic® 15 Billion, visit [douglaslabs.com](http://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.