

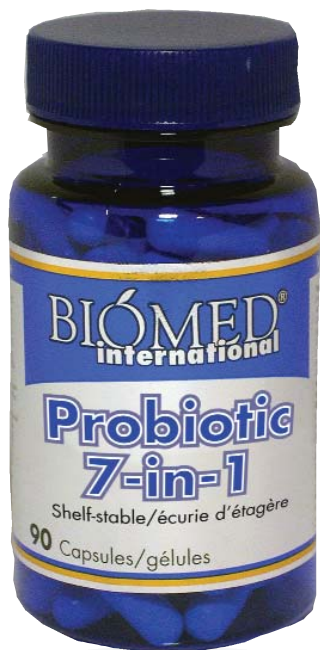
## Seven strain acid and shelf stable probiotic formula in a vegetarian capsule

More than just a tube through which food passes, the intestinal tract is a profoundly complex system of organs that protect the body from external pathogens by means of three basic defense mechanisms: a mucosal barrier, a highly evolved localized immune system, and specialized microflora.<sup>1</sup> The intestinal microflora are also known as probiotics.

The term probiotic means “for life” and is reflective of their important role in the maintenance of overall health. Biomed’s Probiotic 7-in-1 formula has been uniquely designed to incorporate several different forms of healthy bacteria that resist the negative actions of oxygen, gastric acid, and bile salts on probiotic viability, thereby ensuring balanced colonization of these strains throughout the ileum and large colon.

### INDICATIONS:

- Dysbiosis
- Constipation
- Diarrhea
- Dermatitis (atopic)
- Immuno-modulating
- Lactose intolerance
- Increasing HDL cholesterol
- Adjunctive care for *H. pylori* elimination
- Prevention of upper respiratory infections



Each vegetarian capsule contains 2 billion active cells:

Ingredients:	Strength (rounded)	Mode of Action:
Lactobacillus acidophilus	400 million	Constipation, prevention of URI, diarrhea in children
Lactococcus lactis	600 million	Increases HDL cholesterol
Bifidobacterium breve	200 million	Atopic dermatitis, diarrhea in children
Bifidobacterium bifidum	100 million	Immuno-modulating
Lactobacillus rhamnosus	200 million	Immuno-modulating
Streptococcus thermophilus	200 million	Lactose intolerance, diarrhea in children
Bifidobacterium longum	200 million	Carbohydrate digestion

**Other ingredients:** magnesium stearate

**Contains no wheat, corn, soy, yeast, dairy, artificial colors or preservatives.**

**Side effects:** None known

**Contraindications:** Do not take during pregnancy or lactation without the advice of a practitioner. Do not use in individuals with known or suspected sensitivity to any of the above listed ingredients. Probiotics should not be taken by those with late stage cancers or severe immune deficiency states (e.g. HIV).

**ADULT DOSAGE:** Take 1-2 capsules two times a day.

# PROBIOTIC 7-IN-1™

Research has confirmed that probiotics have broad clinical effects. For example, oral consumption of *Lactobacillus acidophilus*, *Lactobacillus rhamnosus*, *Streptococcus thermophilus*, and *Bifidobacterium* species together decreased potentially pathogenic nasal bacteria by 19% ( $p < 0.001$ ) after three weeks of use. This suggests that probiotics may be helpful in preventing upper respiratory infections.<sup>2</sup> Moreover, *Lactobacillus acidophilus* alone may be an excellent natural adjunct to the standard seven-day triple drug therapy (rabeprazole, clarithromycin, amoxicillin) used in the treatment of *H. pylori* infection. A recent study concluded that in persons given the drug combination, eradication of the bacteria was successful in 72% (42/58) of the treated patients. Whereas, in the drug and acidophilus group, there was a significant increase in the eradication rate to 88% (52/59 patients) ( $p = 0.003$ ).<sup>3</sup> However, the use of *L. acidophilus* is not just restricted to the treatment of *H. pylori* and upper respiratory infections.

*L. acidophilus* can also be used effectively by the elderly in the treatment of chronic constipation. Seventy-five percent of patients who received the probiotic reported that they had an improvement in the rate of their bowel movements and a reduction in the need for laxative medication.<sup>4</sup> Diarrhea is another condition that responds well to acidophilus use. In children with acute diarrhea, the addition of *L. acidophilus* (along with an oral rehydration solution) decreased the average duration of diarrhea to 43.4 hours versus 57.0 hours in the placebo group.<sup>5</sup> Moreover, in children who were lactose intolerant and consumed *L. acidophilus* inoculated milk, 9 out of 10 reported experiencing a reduction in symptoms.<sup>6</sup>

*Lactobacillus rhamnosus*, another strain of lactic acid bacteria in Probiotic 7-in-1 may be of help in immunomodulation. Administration of this latter strain in either low fat milk or lactose hydrolyzed low fat milk to 52 volunteers ranging in age from 44 to 80 years of age, increased WBC phagocytic and NK activity by 19/15% and 71/147% respectively after 3 weeks of use.<sup>7</sup> In addition to the immunological benefits seen with *Lactobacillus*

*rhamnosus*, 300 grams per day of yogurt, containing the active cultures *Strep. thermophilus* and *Lactococcus lactis*, increased HDL concentrations by 0.3 mmol/L in 18 women after 6 months of therapy ( $p = 0.002$ ).<sup>8</sup>

Unlike lactobacilli which can be found throughout the intestinal tract, bifidobacteria are found primarily in the colon. Scientists have estimated that 25% of the total gut micro flora is comprised of bifidobacteria. Research has shown that one strain called *Bifidobacterium bifidus*, in combination with *L. acidophilus* not only decreased colonic inflammation and boosted immunity in geriatric patients<sup>9</sup>, but also decreased blood ammonia levels and improved psychological status in patients with hepatic cirrhosis.<sup>9</sup>

The combination of *Bifidobacterium breve* and *Streptococcus thermophilus* given to infants aged 5 to 24 months, over a 17 month period, resulted in significantly decreased incidence of diarrhea. Thirty-one percent (8/26) of infants who received the placebo developed diarrhea during the study compared to just 7% (2/29) for the group receiving the probiotic formula ( $p = 0.035$ ).<sup>10</sup> *Bifidobacterium breve* also caused significantly reduced incidence of allergic skin symptoms ( $p=0.076$ ) in children with atopic dermatitis after 1 month of therapy compared to placebo.<sup>11</sup> Scientists have also shown that *Bifidobacterium longum* supplementation may be helpful in the digestion of complex carbohydrates thereby decreasing gastrointestinal gas and bloating.<sup>12</sup> Together both Bifidobacteria and Lactobacilli strains provide synergistic care that promotes both gastrointestinal health and increased overall wellness.

**Summary:** Probiotics are an important cornerstone of preventative health. Moreover, they can serve as useful adjuncts in the treatment of a wide variety of disease states ranging from diarrhea, and dysbiosis to lactose intolerance and atopic dermatitis.

## References:

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