

PROLACTO

A Probiotic Combination

Restores the natural balance in human gut



Composition :

Each capsule contains *Lactobacillus acidophilus* (2 billion), *Bifidobacterium bifidum* (1 billion), *Lactobacillus bulgaricus* (1 billion) and fructo-Oligosaccharides (100mg).

Description :

Probiotics are defined as live microorganisms, including *Lactobacillus* species, *Bifidobacterium* species and yeasts, which may beneficially affect the host upon ingestion by improving the balance of the intestinal micro flora. *Lactobacillus acidophilus* is one of the several bacteria in the genus *Lactobacillus*. It gets its name from lacto meaning milk, bacillus meaning rod-like in shape and acidophilus meaning acid-loving. *Lactobacillus acidophilus* occurs naturally in a variety of foods, including dairy, grain, meat and fish. It is also present in human (and animal) intestine, mouth and vagina. These types of healthy bacteria inhabit in the intestine, vagina and protect against some unhealthy organisms.

Bifidobacteria are normal inhabitants of the human and animal colon. Newborns, specially those that are breast-fed, are colonized with *bifidobacteria* within days after birth. *Bifidobacteria* were first isolated from the feces of breast fed infants. They are gram positive anaerobes, non motile, non-spore forming and catalase-negative. Their name is derived from the observation that they often exist in a 'Y'-shaped or bifid form. To date 30 species of *bifidobacteria* have been isolated.

Lactobacillus bulgaricus is one of the several bacteria used for the production of yogurt. First definition in 1905 by the Bulgarian doctors stamen Girgorov, it is named after Bulgaria. Morphologically it is gram positive rod that may appear long and filamentous. It is also non motile and it does not form spores. The bacterium feeds on milk and produces lactic acid which also helps to preserve the milk. It breaks down lactose and is often helpful to sufferers of lactose to simpler sugars.

Mechanism of action :

Studies of probiotic activity in recent years provide evidence that probiotics counter experimental and human gastrointestinal inflammation (human inflammatory bowel disease) by their effects on epithelial cell function, including epithelial cell barrier function, epithelial cytokines secretion and their antibacterial effects relating to colonization of the epithelial layer. It reduces gastrointestinal pH through stimulation of lactic acid producing bacteria; provide a direct antagonistic action on a gastrointestinal pathogens. Moreover it competes with pathogens for binding and receptor sites.

Lactobacillus acidophilus and *Bifidobacterium bifidum* appear to enhance the nonspecific immune phagocytic activity of circulation blood granulocytes. Lactic acid bacteria, like strains of *Lactobacillus acidophilus*, *Lactobacillus bulgaricus* have also demonstrated antioxidant ability. Mechanisms include chelation of metal ions (Iron, copper), scavenging of reactive oxygen species and reducing activity.

Indication :

- | Prevention and treatment of diarrhea,
- | Alleviation of lactose intolerance,
- | Prevention and treatment of vaginal infections,
- | Enhancement of the immune system,
- | Treatment of allergic conditions.

Dosages : Adults and children over six years of age: One to two capsules daily or as directed by the registered physician.

Adverse effects : No known toxicity or side effects.

Contraindications : None known.

Pregnancy and lactation : No known problems.

Storage : Store in a cool & dry place, away from direct sunlight.

Packing : Each box contains 8 x 4 = 32 capsules in Alu-Alu blister pack.