

# Wellbac

## Capsule

### Composition

Each capsule contains-

*Lactobacillus acidophilus* 2 billion,

*Bifidobacterium bifidum* 1 billion,

*Lactobacillus bulgaricus* 1 billion,

Fructo-Oligosaccharides 100 mg.

### 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. *L. 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 intestines and vagina and protect against some unhealthy organisms. *Lactobacillus bulgaricus* is one of several bacteria used for the production of yogurt. First identified in 1905 by the Bulgarian doctor Stamen Grigorov, it is named after Bulgaria. Morphologically, it is a 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 intolerance, whose digestive systems lack the enzymes to break down lactose to simpler sugars. While fermenting milk, *Lactobacillus bulgaricus* produces acetaldehyde, which perfumes yogurt. *Bifidobacteria* are normal inhabitants of the human and animal colon. Newborns, especially 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.

### 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 cytokine 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 gastrointestinal pathogens. Moreover it competes with pathogens for binding and receptor sites. In addition, there is emerging evidence that probiotics induce regulatory T cell that act as a break on the effector T cells that would otherwise cause inflammation. *Lactobacillus acidophilus* and *Bifidobacterium bifidum* appear to enhance the nonspecific immune phagocytic activity of circulating blood granulocytes. This effect may account, in part for the stimulation of IgA responses in infants infected with rotavirus. 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.

### Indications

- Prevention and treatment of diarrhea: Rotavirus diarrhea, Antibiotic associated diarrhea, *Clostridium difficile* diarrhea & Traveler's diarrhea.
- Improves lactose intolerance
- Reduce digestive problems: Ulcerative colitis, Peptic ulcer, IBS

### Dosage and Administration

**Adult** : 1-2 capsules 1-3 times daily.

**Children (6 month and above)** : 1 capsule daily.

**OR AS DIRECTED BY THE PHYSICIAN.**

If unable to swallow the capsule - the content of 1 capsule can be mixed in a glass with water, juice or normal milk to drink.

### Contraindication

Probiotics are contraindicated in those who are hypersensitive to any component of the product containing probiotics.

### Side Effects

Probiotics are generally well tolerated. In some cases constipation and flatulence may occur.

### Use in Pregnancy and Lactation

No known problems.

### Drug Interaction

None well documented.

### Storage Condition

Store in a cool & dry place, protected from light. Keep all medicines out of reach children. Do not store above 25° C.

### Packaging

Each box contains 5 x 6's capsules in Alu-Alu blister strip.



Manufactured by

**The ACME Laboratories Ltd.**

Herbal & Nutraceuticals Division  
Dhulivita, Dhamrai, Dhaka, Bangladesh

For Health, Vigour and Happiness



21005244/01