

## Proprietary Probiotic Blend 10 Billion CFUs

**Lactobacillus plantarum** has been used in the process of fermenting foods for hundreds of years. It promotes a normal digestive tract. It is able to promote the proper balance of bacteria destroy pathogens while preserving vital nutrients, antioxidants and vitamins. One of the most amazing talents of *L. plantarum* is its ability to synthesize L-lysine, an essential amino acid. *L. plantarum* is able to promote a proper balance of bacteria in the intestine by neutralizing unhealthy bacteria and also by competing for nutrients which the unhealthy bacteria live on. By doing so, harmful bacteria pass harmlessly through the body.

**Lactobacillus acidophilus** is one of the most highly studied and widely used probiotic organisms. It is a strain of lactic acid producing, rod-shaped microbes that have numerous benefits for digestive health. *L. acidophilus* produces vitamin K, lactase and acidolin, acidophilin, lactocidin and bacteriocin. Multiple human trials report benefits of *L. acidophilus* for maintaining vaginal health. Due to the multiple functions of this microorganism, scientists have discovered that administering *L. acidophilus* orally helps maintain the healthy colonization of bacteria within the digestive tract. *L. acidophilus* has been shown to support digestive functions and support the immune system. The lactase that *L. acidophilus* creates is an enzyme that supports the normal breakdown of lactose into simple sugars.

**Lactobacillus rhamnosus** is a strain of probiotics that aids in balancing the gastrointestinal microflora. It is one of the most intensely studied bacteria in the gastrointestinal tract. One of the remarkable things about *L. rhamnosus* is its ability to tolerate and even thrive in the harsh acidic conditions normally found in the stomach. *L. rhamnosus* is believed to be of considerable assistance with immune function in healthy adults, particularly in the urinary tract system (acidic condition). Research has shown that *L. rhamnosus* helps maintain gastric epithelial cell health, supporting the integrity of the stomach lining.

**Lactobacillus salivarius** resides in the mouth and small intestine. It has been shown effective in supporting dental health. *L. salivarius* has the unique ability to support a healthy gastrointestinal tract. Therefore, *L. salivarius* may also support immune health.

**Bifidobacterium** are rod-shaped microbes that have been identified as the most important organisms in the intestine for providing barrier protection. Like *Lactobacillus*, *Bifidobacterium* are lactic acid-producing microbes found in fermented foods such as yogurt and cheese. Despite the fact that when we are born *Bifidobacterium* makes up approximately 95 percent of the total gut population, the *Bifidobacterium* population decreases in our intestines as adults and declines further as we advance in age. *B. bifidum* is the predominant bacteria strain found in the microflora of breast-fed infants. It is believed that *B. bifidum* contributes to the gastrointestinal health of breast-fed infants. In addition to barrier protection, research has shown that *Bifidobacterium* help to support the immune system by promoting normal lymphocyte and phagocyte activity.

**Bifidobacterium breve** is another branched, rod-shaped bacterium. *B. breve* promotes health of the gastrointestinal tract. *B. breve* is also present in the vagina, where it helps support the body's normal resistance to yeast. The job of *B. breve* in the digestive tract is to ferment sugars and produce lactic acid, as well as acetic acid. *B. breve* is like a champion among probiotic bacteria due to its superior ability to metabolize many types of food.

# ROOTS

**Bifidobacterium infantis** is a probiotic bacterium that inhabits the intestine of both infants and adults. According to a study sponsored by P&G Health Sciences Institute and published in the American Journal of Gastroenterology, *B. infantis* may be beneficial to promote stomach health and comfort. *B. infantis* plays an important role in basic digestion, proper metabolism and overall well-being.

**Bifidobacterium longum** is a branched, rod-shaped bacterium that is among the first to colonize the sterile digestive tract of newborn infants. There is evidence that *B. longum* competes for attachment sites on the intestinal mucosal membrane, promoting the balanced colonization of bacteria. It has a high resistance to gastric acid and shares similar functions as *B. bifidum*, such as supporting the immune system and providing barrier protection.

**Lactobacillus casei** is a rod-shaped species of *Lactobacillus* found in milk, cheese, and dairy. It is a lactic acid producer like other species within the *Lactobacillus* genus and has been found to assist in the colonization of beneficial bacteria. *L. casei* is active in a broad temperature and pH range and can be found naturally in the mouth and intestine of humans. It is a lactase producer which supports the normal breakdown of lactose and promotes optimal digestive health.

**Lactobacillus paracasei** is similar to *Lactobacillus rhamnosus* and *Lactobacillus casei*, *Lactobacillus paracasei* is also a rod-shaped, lactic acid producing species of bacteria. It is found in the human mouth as well as in meats, vegetables, dairy products and fermented cereals. *L. paracasei* may provide beneficial support for a healthy gut microbiota, as it may support the increase of the beneficial bacteria *Bifidobacteria* and *Lactobacilli*. In addition, *L. paracasei* may help maintain a healthy upper respiratory tract and skin barrier function.