



# ULTIMATE PROTEC MULTI PROBIOTIC

Restore ultimate intestinal flora balance

## ENTERIC-COATED FORMULA FOR ULTIMATE HEALTH

Research is continuously revealing the health benefits available from the use of probiotics or "good bacteria". These include reducing the impact of lactose intolerance and food allergies, preventing certain cancers, lowering cholesterol and blood pressure, improving immune and digestive function, reducing inflammation, increasing mineral absorption, inhibiting growth of harmful bacteria, and even helping you cope with stress.

Refrigeration has made modern-day food preservation easy, but our grandparents and great-grandparents used lacto fermentation to preserve many foods. Yogurt, aged cheeses, sourdough breads, cider, kefir, marinated and pickled vegetables, sauerkraut, and in Asia, kimchi, kombucha, miso, and soy sauce have historically provided daily doses of many types of healthy bacteria.

Today our diets may lack this "good bacteria", and populations of healthy gut flora are often diminished because of our lifestyles. Based on the extensive research now available, Natural Factors has developed Ultimate Protec Multi Probiotic, a high potency, broad spectrum, enteric-coated probiotic formula.

## THE INTESTINAL TERRAIN

The microecology of the human gastrointestinal tract is incredibly complex, as there are at least 500 different species of microflora that are part of the normal intestinal flora. There are nine times as many bacteria in the gastrointestinal tract as there are cells in the human body. The type and number of gut bacteria play an important role in determining health and disease. A state of altered bacterial flora in the gut has become commonly known as dysbiosis. Some of the major causes of dysbiosis include; poor diet, stress, antibiotic or drug therapy, malabsorption of nutrients, intestinal infections, and altered pH balance. Warning signs of dysbiosis include; gas, bloating, poor bowel function, headaches, joint pain, yeast infections, fatigue, skin disorders, diarrhea, weight gain, cravings, hunger, and allergies.

## ADVANCED GENERATION PROBIOTICS

Ultimate Protec Multi Probiotic is the most complete enteric-coated formula available and provides 16 billion active cells at the time of manufacture and a minimum of 12 billion active cells at expiry. It contains 14 different probiotic strains, including nine lactobacilli species and one lactococcus species for the ultimate health of the small intestine, plus four species of bifidobacterium for the ultimate health of the large intestine. Multi strain formulations are more effective than single strain products because each species has unique properties and contributes specific inhibitive functions against pathogenic or putrefactive bacteria (Sanders). The formula includes:

*Lactobacillus casei* (*L. casei*) and two species of *Lactobacillus rhamnosus* (*L. rhamnosus*), to balance the whole digestive tract, with all strains selected for their scientifically-proven health benefits.

*L. casei* is naturally found in the human intestines and in the mouth. As a lactic acid producer, this strain helps propagate desirable bacteria and it is shown to have a wide pH and temperature range. *L. casei* complements the growth of *L. acidophilus*, a producer of amylase, which is a carbohydrate-digesting enzyme. It improves digestion and reduces milk intolerance and constipation, and may inhibit the growth of *H. pylori*, a factor in peptic ulcers.

*L. rhamnosus* is one of the most important probiotic strains for a healthy digestive tract, from the mouth to the small intestine. It coats and protects the mucus lining of the digestive tract, preventing toxins from entering the bloodstream. *L. rhamnosus* survives temperature extremes and is resistant to bile salts and stomach acid. It ferments 23 sugars and inhibits growth of pathogenic bacteria and yeast. It helps improve breath odour and because it is a hardy strain, it keeps well with or without refrigeration. *L. rhamnosus* is eight to ten times more prolific than *L. acidophilus* and has a larger spectrum of sugar fermentation (important for people with milk sugar intolerance). It helps control putrefactive microbes, and is effective at inhibiting disease-causing pathogens (Ying-H, *et al*).

*L. acidophilus* produces lactic acid that maintains healthy pH balance in the small intestine, inhibiting yeast growth. Studies have shown that *L. acidophilus* can improve lactose tolerance, inhibit undesirable organisms in the intestine, reduce cholesterol levels and help control diarrhea.

*B. longum* is effective against putrefactive and pathogenic bacteria. It has anticarcinogenic activity and it deconjugates bile salts, helps synthesize certain B vitamins and may lower serum cholesterol.

*S. thermophilus* and *L. bulgaricus* grow in symbiosis, quickly producing lactic acid that inhibits growth of putrefactive bacteria. These strains produce the enzyme lactase that helps prevent lactose intolerance. They also enhance immune function. FOS (fructooligosaccharides) are short-chain indigestible sugars from chicory root. They pass through the small intestine into the colon intact where friendly bacteria feed on them and multiply. FOS increases populations of good bacteria, reducing overgrowth of bad bacteria. FOS, often called prebiotics, are the ideal addition to a probiotic product to keep healthy levels of friendly bacteria in the digestive tract.

## STRAINS WITH HUMAN, DAIRY AND VEGETABLE ORIGINS

Although from different origins, human and dairy strains play a similar role, restoring and maintaining healthy intestinal flora. Dairy and vegetable origin strains are mostly "transient" and tend to be expelled within 48 hours. Most human origin strains implant themselves on specific receptors in human intestines and stay longer. Bifidobacteria strains found in the large intestine are from human origin, while the lactobacilli strains can be of human, dairy or vegetable origin. People with dairy allergies need not be concerned about taking dairy-origin probiotic strains, as they do not contain lactose or dairy proteins.

## COMPREHENSIVE FORMULA WITH COMPATIBLE STRAINS

There are over 400 different species of bacteria in the human intestines. Like a fingerprint, each person's intestinal flora has a unique bacterial composition. The use of many different probiotic species in a single formula more closely approximates the normal composition of intestinal flora than use of only one strain. A common misconception is that many strains in the same blend compete with each other and compromise the quality of the product. Each strain in Ultimate Protec Multi Probiotic has undergone compatibility testing to ensure that it co-exists with the other strains for optimal activity and benefits.

## WHY ENTERIC COATED?

Natural Factors broad-spectrum multi probiotic formulas contain bacterial strains selected for their resistance to stomach acids and bile. These supplements are guaranteed to survive when they are taken with food (when stomach pH is between 3 and 4). Enteric coating guarantees bacterial survival even if the product is taken on an empty stomach, when conditions are much more acidic. This means each strain in Ultimate Protec Multi Probiotic can survive digestion and reach the intestines at full potency regardless of when you supplement. An enteric coated probiotic offers the convenience of taking probiotics without restrictions.

Each Ultimate Protec Multi Probiotic vegetarian capsule provides a minimum of:

Strain	% of Formula	Quantity
<i>Lactobacillus casei</i> HA-108*	26.5%	(3.18 billion)
<i>Lactobacillus rhamnosus</i> HA-111*	15%	(1.8 billion)
<i>Bifidobacterium breve</i> HA-129*	15%	(1.8 billion)
<i>Lactobacillus acidophilus</i> HA-122*	10%	(1.2 billion)
<i>Lactobacillus rhamnosus</i> (Bifidus) HA-114*	10%	(1.2 billion)
<i>Lactobacillus plantarum</i> HA-119**	5%	(0.6 billion)
<i>Bifidobacterium bifidum</i> HA-132*	5%	(0.6 billion)
<i>Bifidobacterium longum</i> HA-135*	5%	(0.6 billion)
<i>Lactococcus lactis</i> HA-148***	5%	(0.6 billion)
<i>Lactobacillus salivarius</i> HA-118*	1%	(0.12 billion)
<i>Lactobacillus fermentum</i> HA-179***	1%	(0.12 billion)
<i>Lactobacillus bulgaricus</i> HA-137***	0.5%	(0.06 billion)
<i>Lactobacillus helveticus</i> HA-128***	0.5%	(0.06 billion)
<i>Bifidobacterium infantis</i> HA-116*	0.5%	(0.06 billion)

\* Human origin \*\* Vegetable origin \*\*\* Dairy origin

## THE MANY BENEFITS OF PROBIOTICS: (Crayhon)

- Restoring and maintaining healthy, balanced intestinal flora
- Limiting growth of putrefactive and pathogenic bacteria
- Supporting immune system function (60-70% of antibodies are produced in the intestine)
- Preventing or repairing "leaky gut"
- Controlling food allergies, intolerances and reactions
- May help reduce symptoms of celiac disease, Crohn's disease, IBS and other inflammatory bowel conditions
- Counteracting systemic and vaginal *Candida albicans* yeast overgrowth
- Preventing urinary tract and other infections
- Balancing cholesterol levels
- Improving breath

## HELP FOR IMMUNE FUNCTION AS WE AGE

As immune function tends to decline with age, probiotics can be a very useful tool to enhance various aspects of immune function. It has already been shown that some strains of *L. bulgaricus*, *L. brevis*, *L. acidophilus* and *B. bifidum* can enhance cellular immune response. Supplementing with probiotics increases the proportion of lactobacilli and bifidobacteria in the gastrointestinal tract and decreases beta-glucuronidase producing bacteria, which are known to increase endogenous toxins. Increased toxins can suppress the immune system and are associated with an increased cancer risk.

## ANTIBIOTIC OVERUSE

The indiscriminate killing of "good" and "bad" bacterial strains by antibiotics drastically upsets intestinal balance and is believed to be the culprit behind the dramatic upsurge in gastrointestinal disorders like irritable bowel syndrome and Crohn's disease in our society. The residual effects of antibiotic therapy can persist long after people stop taking their medication. Researchers did a meta-analysis on the effect of probiotic administration on people who experienced antibiotic-associated diarrhea. The results showed that diarrhea occurred as a result of antibiotic therapy in 20% (some studies indicate as high as 39%) of patients. This percentage was decreased to 8% of patients through the use of probiotic supplements (Cremonini).

## DOSAGE

Recommended adult dose: 1 capsule, 3 times daily, with or without food or as directed by a health care practitioner.

## SAFETY

All these strains have been shown to be exceptionally safe. If gastrointestinal symptoms are severe or do not abate, consult your health care practitioner.

An *in vivo* clinical study on adults with orally administered bifidobacteria and lactobacilli at a daily dosage of 450 billion for 8 weeks showed no side effects. Based on the available data and considering that a person's natural intestinal flora is composed of over 400 species of bacteria and contains over 100,000 billion microorganisms, there is no risk in taking highly-concentrated probiotics.

*Pregnancy and lactation:* Considered safe during pregnancy and lactation, however, any pregnant woman with an active urogenital infection should consult with her health care practitioner and not self-medicate.

*Children:* Although children can take this product at half the adult dose, Natural Factors Children's Multi Probiotic is recommended, as it is specifically designed for children.

*Drug Interactions:* If you are taking antibiotics, take probiotics two hours before or two hours after the antibiotics to restore good bacteria quickly. Continue to use probiotics long after finishing the antibiotics to rebalance gastrointestinal flora. Use of the Ultimate Protec Multi Probiotic formula can prevent many infections before they start, reducing the need for antibiotics.

*Contraindications:* None known at this time.

In this age of superbugs, antibiotic resistance and compromised immune systems, it is more important than ever to supplement with health-enhancing probiotics for ultimate good health.

## KEY REFERENCES

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