NutriDyn_®

UltraBiotic Defense

Targeted Probiotic for Supporting Healthy Immune Response*

UltraBiotic Defense Supplementation

For supporting gut microbe balance, promoting healthy immune response, and helping the body eliminate toxins, UltraBiotic Defense contains a precision blend of three synergistic probiotic strains.

Key Benefits of UltraBiotic Defense:

- Supports healthy gut flora balance*
- Supports healthy immune function*
- Supports digestive function and nutrient absorption
- Promotes regularity

How UltraBiotic Defense Works

UltraBiotic Defense contains a precise ratio of three key probiotics for assisting the immune system, supporting nutrient absorption, promoting cardiovascular function, and encouraging a healthy gastrointestinal tract.

DLUTEN-FREE D





Lactobacillus rhamnosus

Lactobacillus rhamnosus is a bacterium that was originally isolated from the human gut microbiome. This probiotic has a vast body of clinical trials and peer-reviewed research supporting its efficacy and safety in humans of all ages.¹ Clinical evidence demonstrates that L. rhamnosus is effective in promoting both innate and adaptive immune function.*

In a lengthy clinical trial, it was shown that infants given a daily probiotic supplement containing *L. rhamnosus* from birth until age two had a lower risk of developing eczema over the first six years of their lives (compared to infants given a placebo). •2

Moreover, a 9-week clinical trial in healthy middle-aged adults showed that *L. rhamnosus* supplementation increased natural killer (NK) cell activity by 147% and phagocyte activity by 19%, suggesting that this particular probiotic supports a healthy systemic immune function in humans. • 3

Bifidobacterium lactis

The *Bifidobacterium lactis* strain was originally isolated from a yogurt source. It has over 70 peer-reviewed studies as of 2018, with many of them being conducted in the 21st century. It is also considered very safe for human consumption. Research findings thus far suggest that this strain of *B. lactis* has robust immune- and gut-supporting properties.



How UltraBiotic Defense Works Continued

In a large clinical trial, children given a milk beverage fortified with *B. lactis* for one year showed a healthy upper respiratory tract, general well-being, and healthy growth compared to the control group given non-fortified milk.^{†4}

Similar to *L. rhamnosus, B. lactis* has been shown to enhance natural killer (NK) cell activity and phagocyte activity in healthy adults and may help with constipation and abdominal discomfort. • 5

In a clinical trial of 100 healthy adults who experienced mild GI symptoms, those taking a high dose of *B. lactis* had a 60% reduction in colonic transit time (CTT) compared to baseline. The placebo group experienced no significant changes in CTT.⁶ Moreover, the frequency of GI symptoms was greatly decreased in the group receiving high-dose *B. lactis*, with both constipation and abdominal discomfort dropping by as much as 27%.

Other potential evidence-based benefits of *B. lactis* may include supporting healthy blood lipid levels already in the normal range and improved nutritional iron status. • 7,8

Saccharomyces boulardii

Saccharomyces boulardii is a nonpathogenic yeast strain that, when lyophilized, readily colonizes the gut and resists bile salts (which is crucial since it needs to get past some very harsh digestion). In contrast to bacteria, which comprise more than 99% of human flora, yeast account for less than 1%. Nonetheless, Saccharomyces boulardii is a particularly beneficial yeast.

Clinical research demonstrates that *Saccharomyces boulardii* is a potent immunomodulator that may support both acute and chronic gut complications. • 9

Moreover, a contemporary meta-analysis suggests that *Saccharomyces boulardii* supports a healthy inflammatory response by producing soluble anti-inflammatory factors in the intestines and colon of humans. • 10,11

Supplement Facts

Serving Size: 1 Capsule Servings Per Container: 30

Amount Per Serving %DV

1 Billion CFU†

Saccharomyces boulardii Lynside®†† 5.5 Billion CFU†

Bifidobacterium lactis UABIa-12™††† 3 Billion CFU†

Lactobacillus rhamnosus HN001™††††

Other Ingredients: Digestive resistant capsule (hypromellose, gellan gum), microcrystalline cellulose, vegetable magnesium stearate, silica.

† At time of manufacture

††Lynside® is a registered trademark of Lesaffre et Compagnie, S.A.

†††UABla-12™ is a trademark of Chr. Hansen.

†††† HN001™ is a trademark of DuPont.

Directions: Take one capsule daily or as directed by your healthcare practitioner.

Caution: If you are pregnant, nursing, or taking medication, consult your healthcare practitioner before use. Keep out of reach of children.

References:

- Zhou, J. S., Shu, Q., Rutherfurd, K. J., Prasad, J., Birtles, M. J., Gopal, P. K., & Gill, H. (2000). Safety assessment of potential probiotic lactic acid bacterial strains Lactobacillus rhamnosus HN001, Lb. acidophilus HN017, and Bifdobacterium lactis HN019 in BALB/c mice. *International journal of food microbiology*, 56(1), 87-96.
 Wickens, K., Stanley, T. V., Mitchell, E. A., Barthow, C., Fitzharris, P., Purdie, G., ... & Crane,
- Wickens, K., Stanley, T. V., Mitchell, E. A., Barthow, C., Fitzharris, P., Purdie, G., ... & Crane, J.(2013). Early supplementation with Lactobacillus rhamnosus HN001 reduces eczema prevalence to 6 years: does it also reduce atopic sensitization? Clinical & Experimental Allergy, 43(9), 1048-1057.
- Gill, H. S., Rutherfurd, K. J., Prasad, J., & Gopal, P. K. (2000). Enhancement of natural and acquired immunity by Lactobacillus rhamnosus (HN001), Lactobacillus acidophilus (HN017) and Bifidobacterium lactis (HN019). British Journal of Nutrition, 83(2), 167-176.
- Sazawal S. et al., (2010) (2). 'Prebiotic and Probiotic Fortified Milk in Prevention of Morbidities among Children: Community-Bassed, Randomized, Double-Blind, Controlled Trial'. PLoS ONE. 2010; 5(8):e12164.
- Miller L.E, et al., (2017) 'The Effect of Bifidobacterium animalis ssp. lactis HN019 on Cellular Immune Function in Healthy Elderly Subjects: Systematic Review and Meta Analysis' Nutrients. 2017; 9(3):191.

- Waller, P. A. et al., (2011) 'Dose-response effect of Bifidobacterium lactis HN019 on whole gut transit time and functional gastrointestinal symptoms in adults'. Scandinavian Journal of Gastroenterology. 1057–1064
- Bernini L.J., et al., (2016). 'Beneficial effects of Bifidobacterium lactis on lipid profile and cytokines in patients with metabolic syndrome: A randomised trial. Effects of probiotics on metabolic syndrome'. *Nutrition* 32(6):716-9.
 Sazawal S. et al., (2010) (1). 'Effects of Bifidobacterium lactis HN019 and Prebiotic
- Sazawal S. et al., (2010) (1). 'Effects of Bifidobacterium lactis HN019 and Prebiotic Oligosaccharide Added to Milk on Iron Status, Anemia, and Growth Among Children 1 to 4 Years: A Community-Dased, Randomised, Double-masked, Controlled Trial'. Journal of Pediatric Gastroenterology and Nutrition. 51: 341-346.
- Czerucka, D., Piche, T., & Rampal, P. (2007). yeast as probiotics—Saccharomyces boulardii. Alimentary pharmacology & therapeutics, 26(6), 767-778.
- McFarland, L. V. (2010). Systematic review and meta-analysis of Saccharomyces boulardii in adult patients. World journal of gastroenterology: WJG, 16(18), 2202.
- Segarra-Newnham, M. (2007). Probiotics for Clostridium difficile—associated diarrhea: focus on Lactobacillus rhamnosus GG and Saccharomyces boulardii. Annals of Pharmacotherapy, 41(7-8), 1212-1221.
- These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.