



SacB 5 Billion CFUs, Saccharomyces Boulardii

- Balances Gastrointestinal Flora
- Boosts Immune Function
- Supports Gastrointestinal Barrier Function and Integrity

What is Saccharomyces boulardii?

Saccharomyces boulardii is a health promoting, probiotic yeast. To be an effective probiotic, microorganisms must have certain qualities to withstand the natural defense factors of the host. These include resistance to gastrointestinal (GI) transit and the ability to thrive at human core temperatures. Saccharomyces boulardii is a stomach acid-resistant probiotic, proven to survive high temperatures and transit into the intestines. As a probiotic, *S. boulardii* actively promotes healthy gastrointestinal flora, strengthens intestinal barrier function, and enhances immune function. This formulation of Saccharomyces boulardii is freeze-dried, lactose-free, and strain-verified through genetic typing to ensure maximum efficacy.

Overview

S. boulardii was first identified in the 1920s by French microbiologist Henri Boulard. Since its discovery, there have been 250 peer-reviewed articles examining S. boulardii, making this one of the most studied probiotics available. S. boulardii is a non-pathogenic yeast and maintains distinct taxonomic and physiological difference from Saccharomyces cerevisiae or "brewer's yeast."^[1,2] S. boulardii has been shown to support gastrointestinal health by boosting secretory IgA (sIgA) levels. slgA is an immunoglobulin (protective antibody) that is found in the digestive tract and in mucosal secretions throughout the body. Maintaining healthy slgA levels is crucial for supporting immune health, particularly in the GI system where there can be significant exposure to pathogenic organisms and viruses. sIgA acts as the first line of defense against foreign invaders in the gut by attaching and neutralizing proteins that are unrecognized by the body. Depleted levels of slgA are often found in people with low immune response, food intolerance and dysbiosis. Dysbiosis occurs when fewer than normal probiotic organisms and an overabundance of potentially

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harmful bacteria, yeast or parasitic organisms prevail. In addition to boosting sIgA levels, *S. boulardii* promotes GI health by competing for space and nutrients against pathogens.

In 53 clinical trials, encompassing 8,475 subjects investigating the safety and efficacy of *S. boulardii* in pediatric and adult populations, 43 trials (81%) found significant protective efficacy of this probiotic. ^[3] Supplementation with *S. boulardii* is an important part of supporting GI health and strengthening the immune system, particularly for those with recent antibiotic use. Each capsule of *Saccharomyces boulardii* includes 5 billion CFUs of this health promoting, probiotic yeast.

Healthy Intestinal Barrier Faunction⁺

Healthy intestinal barrier function is a key factor in maintaining health. Within the GI tract, tightly packed intestinal cells act as a protective barrier preventing substances such as allergenic compounds, undigested food, parasites, and toxins from leaking directly into the bloodstream. These represent the major barrier found within the pathway between intestinal epithelial cells. *S. boulardii* has been shown to improve tight junction structure ensuring that foods and nutrients from the diet are properly absorbed, while blocking the entrance of potentially harmful substances.^[4]

Pathogen Blockade⁺

The intestinal ecosystem is in a state of equilibrium when healthy species of bacteria, or probiotics, are abundant and pathogenic species are kept under control. Factors that can upset the balance of a healthy intestinal ecosystem include antibiotic use, diets high in refined and processed foods, as well as stress and pathogen imbalance. *S. boulardii* has been shown to promote healthy microbial balance by competing against harmful bacteria.^[5] Pathogen adherent microflora (PAM) are probiotics that bind and eliminate pathogens during normal probiotic transit.^[6] *S. boulardii* is an ideal PAM because it attracts pathogens to the mannose component of its cell wall.

Research has demonstrated that pathogens such as *Escherichia coli* and *Salmonella* irreversibly bind to the cell wall of *S. boulardii* resulting in reduced binding to intestinal cells. ^[7] *S. boulardii* effectively competes against *Clostridium difficile*, a bacterium known to flourish during antibiotic use and is responsible for many cases of GI disturbances following antibiotic therapy. ^[5] *S. boulardii* has also been shown to effectively compete against fungal (Candida) colonization. ^[8]

Healthy Immune Balance⁺

In addition to supporting sIgA levels and intestinal barrier function, *S. boulardii* boosts immune response by supporting healthy white blood cell activity.^[9] A double-blind, placebocontrolled trial showed that patients given *S. boulardii* demonstrated an increase in sIgA levels and a subsequent decrease in C-reactive protein (an indicator of a balanced inflammatory response). The researchers of this study concluded that *S. boulardii* supports a healthy immune response and protects GI barrier function by maintaining a healthy inflammatory cycle in the GI tract.^[10]

Directions

1 capsule two times per day or as recommended by your health care professional.

Does Not Contain

Daily Value not established

Wheat, gluten, soy, corn, animal or dairy products, fish, shellfish, peanuts, tree nuts, egg, artificial colors, artificial sweeteners or preservatives.

Cautions

If you are pregnant or nursing, consult your physician before taking this product.

Supplement Facts ^{V1} Serving Size 1 Capsule Servings Per Container 60	
1 capsule contains	Amount Per % Daily Serving Value
Saccharomyces boulardii	5 billion CFU ⁺⁺ *

References

- 1. Buts JP. Twenty-five years of research on Saccharomyces boulardii trophic effects: updates and perspectives. *Dig Dis Sci* 2009; 54(1):15-8.
- McFarland LV. Saccharomyces boulardii is not Saccharomyces cerevisiae. *Clin Infect Dis* 1996;22(1): 200-1.
- 3. McFarland LV. Systematic review and meta-analysis of saccharomyces boulardii in adult patients. *World J Gastroenterol* 2010;16(18): 2202-2222.
- 4. Zanello G, Meurens F, Berri M, Salmon H. Saccharomyces boulardii effects on gastrointestinal diseases. *Curr Issues Mol Biol* 2009; 11(1):47-58.
- 5. Buts JP, Corthier G, Delmee M. Saccharomyces boulardii for Clostridium difficile- Associated Enteropathies in Infants. *J Ped Gastroenterol Nutr* 1993; 16:419-425.
- 6. Czerucka D, Piche T, Rampal P. Review article: yeast as probiotics- Saccharomyces boulardii. *Aliment Pharmacol Ther* 2007; 26(6):767-78.
- Gedek BR. Adherence of Escherichia coli serogroup O 157 and the Salmonella typhimurium mutant DT 104 to the surface of Saccharomyces boulardii. *Mycoses* 1999;42(4):261-4.
- Demirel G, Celik IH, Erdeve O, Saygan S, Dilmen U, Canpolat FE. Prophylactic Saccharomyces boulardii versus nystatin for the prevention of fungal colonization and invasive fungal infection in premature infants. *Eur J Pediatr* 2013; [Epub ahead of print]
- 9. Caetnao JA, Parames MT, Babo MJ, Santos A, et al. Immunopharmacological effects of Saccahromyces boulardii in healthy human volunteers. *Int J Immunopharmacol* 1986; 8(3):245-59.
- 10. Ozkan TB, Sahin E, Erdemir G, Budak F. Effect of Saccharomyces boulardii in children with acute gastroenteritis and its relationship to the immune response. *J Int Med Res* 2007; 35(2): 201-12.

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