# Immune System Support

## Saccharomycin<sup>®</sup> DF

## DNA-Verified Saccharomyces boulardii



## **Clinical Applications**

- » Supports Gastrointestinal-Based Immunity\*
- » Supports Integrity and Function of Mucosal Cells\*
- » Supports Healthy Gut Flora\*

**Saccharomycin® DF** is a lactose-free, stomach acid–resistant, stable formula containing DNA-verified Saccharomyces boulardii. This probiotic yeast supports other probiotic organisms in addition to intestinal barrier function and integrity. Research also suggests that Saccharomyces boulardii supports normal immune responses.\*

Available in 30 capsules and 60 capsules

### Discussion

**Saccharomycin® DF** is manufactured using a process that involves controlled temperature and low vacuum, eliminating the shock of freeze-drying. The drying procedure, which does not modify the water content of the preparation, slows down aging, cell deterioration, and contamination, leading to increased stability and greater resistance to gastric acid. This process does not require or contain dairy products or lactose.\*

**Saccharomyces boulardii** (*S* boulardii) is a natural, nonpathogenic yeast that may help support and maintain the healthy ecology of the small and large intestines. In a 2010 systematic review and meta-analysis of 31 randomized, placebo-controlled treatment arms in 27 trials comprising 5029 adults, "*S* boulardii was found to be significantly efficacious and safe in 84% of those treatment arms."<sup>[1]</sup> A study also suggested that *S* boulardii can be used safely and effectively in children 3 months and older.<sup>[2]</sup> A double-blind, randomized, placebo-controlled study of children ages 3 to 59 months produced statistically significant positive results suggesting that *S* boulardii may play an important role in supporting normal gastrointestinal function in young children.\*<sup>[3]</sup>

Extensively researched and published in European and American peer-reviewed journals, *S boulardii* appears to function through several mechanisms of action. With regard to maintaining normal Gl function and transit time, research suggests that *S boulardii* secretes a protease that may assist in directly degrading bacterial toxins and stimulating antibody production against those toxins.<sup>[4-6]</sup> *S boulardii* is also believed to support the natural inflammatory response, exert a trophic effect on intestinal mucosa, and positively support the immune system.<sup>[3]</sup> These actions further support and help maintain the normal health and function of the intestinal brush border.\*

This probiotic yeast appears to support normal gastrointestinal flora and integrity<sup>[7,8]</sup>; promote the production of intestinal enzymes and secretory IgA<sup>[9]</sup>; and support cytokine balance through its effects on IL-8, IL-6, IL-10, NF-kappaB, TNF-alpha, and PPAR-gamma.<sup>[6,10,11]</sup>

Research suggests a role for *S* boulardii in the production of healthpromoting short-chain fatty acids, including butyrate.<sup>\*[12]</sup> Research suggests that butyrate, in turn, plays an important role in maintaining the integrity, function, and normal flora of the intestines.<sup>[13]</sup>

Following a multidose study in healthy volunteers, the concentration of *S* boulardii in feces increased rapidly, reaching a steady state by day 3 in all subjects. Following the completion of administration, the *S* boulardii population declined consistently and was cleared from the bowel within 5 to 7 days, indicating that the probiotic yeast did not permanently colonize the gastrointestinal tract.<sup>[14]</sup> Saccharomycin DF provides 10 billion colony-forming units of *S* boulardii in a 2-capsule dose.\*

#### Saccharomycin® DF Supplement Facts

Serving Size: 2 Capsules

	Amount Per Serving %Daily Value
Saccharomyces boulardi <sup>\$1</sup>	500 mg (10 Billion CFU <sup>†</sup> ) **
** Daily Value not established.	

Other Ingredients: Capsule (hypromellose and water), microcystalline cellulose, stearic acid, magnesium stearate, silica, and medium-chain triglyceride oil.

**DIRECTIONS:** Take one to two capsules per day, or as directed by your healthcare professional.

Consult your healthcare professional prior to use. Not for use by infants under three months of age. Do not use if you have severe immune suppression or are taking antifungal medication.

**STORAGE:** Keep closed in a cool, dry place out of reach of children. Does not require refrigeration.

**FORMULATED TO EXCLUDE:** Wheat, gluten, corn, soy, animal and dairy products, fish, shellfish, peanuts, tree nuts, egg, sesame, ingredients derived from genetically-modified organisms (GMOs), artificial colors, and artificial sweeteners.

S1. Protected under European patent EP1693445. <sup>†</sup> Colony-Forming Units



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All XYMOGEN® Formulas Meet or Exceed cGMP Quality Standards.

\*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.