Super Glucan™





CLINICAL APPLICATIONS

- Support Healthy Immune Function
- Support the Body's Defenses Against Cold, Flu and Infection
- Enhance Hematopoiesis Following Radiation or Insult to Bone Marrow

Super GlucanTM is a high quality, pure, patented GRAS ingredient containing an insoluble, complex carbohydrate purified from Saccharomyces cerevisiae (Baker's yeast) known as beta 1,3/1,6 glucan. Numerous animal and human studies have demonstrated safety and shown efficacy as an immune modulator. When taken orally Super GlucanTM interacts with key immune cells to initiate a cascade of immune activity designed to protect the body against foreign challenges.

Super Glucan™ is manufactured in a Federal Drug Registered and State Board Pharmacy cGMP laboratory.

DISCUSSION

While studies are still underway to demonstrate the power and versatility of yeast-derived beta glucan, by the 1960s it was already widely recognized as an immune enhancer. Yeast beta glucan is the subject of more than 800 scientific studies. Two important facts make the ingredient outstanding: 1) its unique mechanism of action has been clearly defined and accepted by the scientific community; 2) its health benefits are demonstrable by measuring significant increases in phagocytosis, selective cytokine release and oxidative degranulation.

Each source of beta glucan, including bacteria, fungi, oats, barley, rye, and yeast has its own unique structure of glucose linkages. The 1,3/1,6 linkages of yeast beta glucan are known to spark the greatest degree of biological immune enhancement. The key difference in these sources is concentration of 1,3/1,6 beta glucan.

Unlike many other beta glucan formulas on the market, 3rd Opinion Inc®'s Super Glucan™ is refined to remove most impurities including proteins and fats that can interfere with its uptake and effectiveness. A component called "mannan" that may trigger an allergic reaction or inflammatory bowel flare in sensitive individuals is also removed.

Once in the body, beta glucan is bound to immune cells called macrophages. The macrophages degrade it into small beta glucan fragments that are secreted and bound to innate immune cells (neutrophils). Neutrophils, the primary cells in the immune response, are the most abundant immune cells circulating throughout the body. When these cells are bound with the small beta glucan fragments, they become primed and are better able to kill pathogenic challenges such as bacteria, viruses, fungi and parasites. Through a process called chemotaxis, these primed neutrophils migrate to the site of tumors or infections with enhanced killing capability.

Research demonstrates that the unique mechanism of action of Super Glucan™ provides a sustained release of soluble fragments over a multi-day period. Recent studies also demonstrate that these soluble fragments secreted in the bone marrow may play an important role in accelerating white blood cell recovery following radiation and other bone marrow insults.



Supplement Facts Serving Size: 1 Capsule Servings Per Container: 60 Amount Per Serving %Daily Value Whole Glucan Particle 500 mg ** (High Potency Beta Glucan naturally derived from saccharomyces cerevisiae) **Daily Value not established.

Other Ingredients: HPMC (Capsules), Vegetable Stearines.

PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS: 5,702,719; 4,992,540; 4,962,094; 5,032,401; 5,037,972; 5,504,079; 5,741,495; 6,020,324; 5,576,015

Dosing:

Take one per day for preventive immune support. Up to two or more may be used for therapeutic immune support.

REFERENCES

Tsikitis V, Albina J, Reichner J b-Glucan Affects Leukocyte Navigation in a Complex Chemotactic Gradient Surgery. 2004 Aug; 136 (2): 384-9.

Kournikakis B, Mandeville R, Brousseau P, Ostroff G. Anthrax-Protective Effects of Yeast Beta 1,3 Glucans Med Gen Med.5 (1) 2003 March 21; 5 (1).

Liang, J., D. et al. Enhanced clearance of a multiple antibiotic-resistant Staphylococcus aureus in rats treated with PGG-glucan is associated with increased leukocyte counts and increased neutrophil oxidative burst activity. Int. J. Immunopharmacol. 1998. 20:595-614. [PMID: 9848393]

Babineau TJ, et.al. A phase II multi-center, double-blind, randomized, placebo-controlled study of three dosages of an immunomodulator (PGGglucan) in high-risk surgical patients. Arch Surg. 1994 Nov;129(11):1204-10. [PMID: 7979954]

Jun Yan, Daniel J Allendorf & Brian Brandley. Yeast Whole Glucan Particle ß-Glucan in Conjunction with Antitumour Monoclonal Antibodies to Treat Cancer. Expert Opinion on Biological Therapy 2005 May; 5,(5): 691-702 [PMID: 15934844]

Bedirli A, et al. Beta-glucan attenuates inflammatory cytokine release and prevents acute lung injury in an experimental model of sepsis. Shock. 2007 Apr;27(4):397-401. [PMID: 17414422]

Turnbull, J. L., M. L. Patchen, D. T. Scadden. The polysaccharide, PGGglucan, enhances human myelopoiesis by direct action independent of and additive to early-acting cytokines. Acta Haematol. 1999. 0102:66-71. PMID:10529508

Patchen, M. L., et al. In vitro and in vivo hematopoietic activities of Betafectin PGG-glucan. Exp. Hematol. 1998. 26:1247-1254. [PMID: 9845381]

Williams DL, et al. Pre-clinical safety evaluation of soluble glucan. Int J Immunopharmacol. 1988;10(4):405-14.[PMID: 3262594]

CAUTIONS:

Insufficient reliable information available in pregnancy and lactation. Generally well-tolerated even in high doses of 15 gm/day for eight weeks.

*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.

