Documentation

Nutramunity™ Beta-Glucan (NBG®)
A natural and versatile immune health ingredient
DOCUMENTATION

Nutramunity™ Beta-Glucan (NBG®) is a beta-1,3/1,6-glucan, a natural bioactive component isolated from the cell walls of baker’s yeast (*Saccharomyces cerevisiae*). In its purified form, this beta-1,3/1,6-glucan functions as a signal that alerts the innate immune system and prepares it to respond quickly and adequately to infections, to counteract inflammatory and allergic reactions, and to promote wound healing and skin repair. NBG® and equivalent beta-glucan products have been studied by independent research groups world-wide as well as by commercial companies and are recognised as safe and effective. Below is an excerpt of the scientific literature concerning beta-1,3/1,6-glucan from baker’s yeast.

INFECTION RESISTANCE

Clinical studies have shown that beta-glucan from baker’s yeast enhances resistance to infections. Substantial preclinical research constitutes the foundation for the clinical studies.


• Lehne, et al., Oral administration of a new soluble branched beta-1,3-D-glucan is well tolerated and can lead to increased salivary concentrations of immunoglobulin A in healthy volunteers. Clin Exp Immunol, 2006.143(1):65-69.* ‡

• Biotec Pharmacon ASA, NBG® reduced sick leave with 44,2 % in a one year study. Internal company information, 2006.* ‡


*clinical trials ‡preclinical studies †reviews with NBG®
INFLAMMATION AND ALLERGY

Beta-glucan from baker’s yeast counteracts inflammatory reactions and alleviates symptoms of allergy (allergen-induced inflammatory reactions in the nasal/eye/lung mucosal tissues).


- Sener, et al., **Protective effect of beta-glucan against oxidative organ injury in a rat model of sepsis.** Int Immunopharmacol, 2005.5(9):1387-1396. †


- Kirmaz, et al., **Effects of glucan treatment on the Th1/Th2 balance in patients with allergic rhinitis: a double-blind placebo-controlled study.** Eur Cytokine Netw, 2005.16(2):128-134.*


WOUND HEALING AND SKIN REPAIR

Beta-1,3/1,6-glucan from baker’s yeast has been used as an ingredient in skin care for a long time and is attractive because of its positive effects on skin tissue and potential in treatment of skin lesions and wounds.

- Wolk and Danon, **Promotion of wound healing by yeast glucan evaluated on single animals.** Med Biol, 1985.63(2):73-80. †

- Berdal, et al., **Aminated beta-1,3-D-glucan improves wound healing in diabetic db/db mice.** Wound Repair Regen, 2007. 15(6):825-832. †


HEALTH AND PERFORMANCE IN ATHLETES

Beta-glucan from baker’s yeast has positive effects on the immune status of athletes. Athletes expose themselves to hard physical (muscular, circulatory as well as respiratory) stress, making them particularly prone to infections.

• Biotec Pharmacon ASA, NBG® reduced sick leave with 44,2 % in a one year study. Internal company information, 2006.*


CHILDREN

The positive effects of beta-1,3/1,6-glucan from baker’s yeast on mucosal immunity that have been found in adults, have been demonstrated also in children.


