

HEALTH & VITALITY

IMMUNOGUARD

STRESS & IMMUNITY

QUICK INFO

- X LACTOSE FREE
- X GLUTEN FREE
- ACID FREE
- NO SWEETENERS
- X NO ARTIFICIAL COLOURS
- X NO PRESERVATIVES



PRODUCT DESCRIPTION

IMMUNOGUARD by SPONSER® is a scientifically designed dietary supplement, not only for professional athletes, but also for people in special stress situations.

Based on functional active substances such as nucleotides, arabinogalactan, yeast beta-glucans, vitamins, zinc and extracts of turmeric, reishi, black pepper and olive leaves.

Vitamins C, D, B12, folic acid and zinc support the normal function of the immune system. Vitamine C and E as well as the mineral zinc help protecting cells from oxidative stress. Plant extracts contain valuable polyphenols and enzymes.

ADVANTAGES

- **Scientifically designed dietary supplement with broadband spectrum of action**
- **Supports normal functioning of the immune system and protect against oxidative stress**
- **Patented extracts**
- **Easy to use – every day 1 stick in phases of increased stress situations**

GENERAL INFORMATION – INTEGRATED ACTIVE SUBSTANCES

Nucleotides	Nucleotides are the primary building blocks of cell replication (RNA and DNA). Whenever cells need to be re-formed, such as in the formation of white blood cells during an immune response, nucleotides play a central role.
Arabinogalactan ResistAid®	Arabinogalactan is a soluble dietary fibre, which has antioxidative properties as they contain polyphenols. Arabinogalactans boost the immune response by increasing the activity of natural killer cells, cytokines and macrophages. Due to the increased immunocompetence of the body, viruses and bacterial stressors can be better inactivated.
Turmeric extract	Part of the Far Eastern diet since centuries. Turmeric is considered anti-inflammatory and anti-microbial.
Reishi extract	Reishi is a nutritional mushroom with anti-inflammatory properties. It is also used in the Far Eastern diet for thousands of years. The mechanism of action is based on bioactive polysaccharides, which, in a similar way to arabinogalactans or beta-glucans, attach to viral or bacterial stressors and inactivate them.

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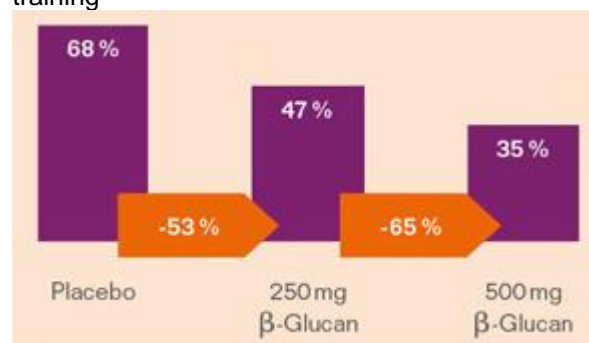
Olive leaves extract

Olive leaves are rich in hydroxytyrosol. A substance of the large polyphenol family with strong antioxidant properties.

1,3-1,6 yeast beta-glucans
Wellmune®

Beta-glucans are polysaccharides and occur naturally in yeast and cereals. Yeast beta-glucans have a slightly different chemical structure than beta-glucans from cereals. The elongated 1.3/1.6 carbon branches allow granulocytes to attach to bacterial and viral stressors, allowing the immune response of the body. A study on athletes showed that professionals with a daily intake of 250 mg yeast beta-glucans suffered significantly less from respiratory infections, compared to placebo. In addition, it showed a dose-dependant system of action, i.e. the larger the amount of beta-glucans extract, the lower the susceptibility to infections.

Picture: Occurrence of upper respiratory infections after 4 weeks of marathon training



Source: Talbott S. et al: Effect of BETA 1,3/1,6 GLUCAN on Upper Respiratory Tract Infection Symptoms and Mood State in Marathon Athletes. J Sports Sci Med. 2009, Dec ; 6(4) :509-515
Picture: <http://www.betaglucan-info.de/anwendungsgebiete/sport.html>

Black pepper

Black pepper contains piperine, which is responsible for the heat of foods. But for humans, piperine is not only of interest as a sensory molecule. In the context of immune defence, piperine has antimicrobial effects. Further, piperine appears to enhance the assimilation of other nutrients, such as curcumin, which is the reason why piperine is frequently used in dietary supplements.

APPLICATION

As a dietary supplement to support the normal function of the immune system and to protect the cells from oxidative stress. Take every day 1 stick dissolved in 250 ml of water.

Do not exceed the recommended daily allowance, keep out of children's reach. No substitute for a balanced diet. A varied and balanced diet as well as a healthy lifestyle are important to our health.

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INGREDIENTS

Arabinogalactan 12%, acidulant citric acid, turmeric extract 11%, reishi extract 10%, maltodextrin, inositol, nucleotides from thermolysed yeast extract (saccharomyces cerevisiae) 7.8%, colouring beetroot juice and hibiscus extract, 1,3/1,6-betaglucans from yeast (saccharomyces cerevisiae) 6%, vitamins (ascorbic acid, D-alpha-tocopheryl acetate, cholecalciferol containing yeast, calcium pantothenate, folic acid, biotin, cyanocobalamine), curcuma extract, flavour, sweetener sucralose, emulsifier sunflower lecithin, olive leaf extract 0.6%, fructo-oligosaccharides, zinc lactate, acidity regulator sodium citrate, black pepper extract 0.4%.

FLAVOUR

Blackcurrant

PACKAGING

Box 10 x 4 g

NUTRITIONAL VALUE

per stick (= 4 g) = 1 daily ration		
		NRV*
vitamin D	8.0 ug	160%
vitamin E	9.0 mg	75%
vitamin C	120 mg	150%
folic acid	80 ug	40%
vitamin B12	1.0 ug	40%
biotin	25 ug	50%
pantothenic acid	3.0 mg	50%
zinc	5.0 mg	50%

*Nutrient Reference Value

Additional ingredients

per stick (= 4 g) = 1 daily ration	
inositol	300 mg
ResistAid® arabinogalactans	500 mg
Wellmune® 1,3/1,6 – beta-glucans	250 mg
curcuminoids	50 mg
hydroxytyrosol	5 mg

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LITERATURE**Nucleotides**

Sterczala AJ. et al.: Physiological Effects of Nucleotide Supplementation on Resistance Exercise Stress in Men and Women. *J Strength Cond Res.* 2016 Feb; 30(2):569-78.

Davidson I. et al.: A Randomised Double Blind Placebo Controlled Trial of a Nucleotide-Containing Supplement NuCell® on Symptoms of Participants with the Common Cold – A Pilot Study. *EC Nutrition* 4.1 (2016):804-811.

McNaughton L., et al.: The Effects of Nucleotide Supplement on the Immune and Metabolic Response to Short Term, High Intensity Exercise Performance in Trained Male Subjects. *Journal of Sports Medicine and Physical Fitness* 47.1(2007):112-118.

McNaughton L., et al.: The Effects of Nucleotide Supplement on Salivary IgA and Cortisol after Moderate Endurance Exercise. *Journal of Sports Medicine and Physical Fitness* 46.1(2006):84-89.

Ostojic S.M., et al.: Sublingual Nucleotides Prolong Run Time to Exhaustion in Young Physically Active Men. *Nutrients* 2013 Nov; 5(11):4776-4785.

Arabinogalactans

Udani JK.: Immunomodulatory effects of ResistAid™: A randomized, double-blind, placebo-controlled multidose study. *J Am Coll Nutr.* 2013;32(5):331-8.

Riede L et al.: Larch arabinogalactan effects on reducing incidence of upper respiratory infections. *Curr Med Res Opin.* 2013 Mar;29(3):251-8.

Dion C. et al.: Does larch arabinogalactan enhance immune function? A review of mechanistic and clinical trials. *Nutr Metab (Lond)*, 2016 Apr 12;13:28.

Yeast beta-glucans

Carpenter KC et al.: Baker's yeast β -glucan supplementation increases monocytes and cytokines post-exercise: implications for infection risk? *Br J Nutr.* 2013 Feb 14;109(3):478-86.

Samuelsen AB et al.: Effects of orally administered yeast-derived beta-glucans: a review. *Mol Nutr Food Res.* 2014 Jan; 58(1):183-93

Stier H et al.: Immune-modulatory effects of dietary Yeast Beta 1,3/1,6-D-glucan. *Nutr J.* 2014 Apr 28; 13:38

Reishi extract

Zhang K. et al.: Anti-inflammatory properties of GLPss58, a sulfated polysaccharide from *Ganoderma lucidum*. *Int J Biol Macromol* 2017, Sep. 7.

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Cai Q. et al.: Polysaccharides from *Ganoderma lucidum* attenuate microglia mediated neuroinflammation and modulate microglial phagocytosis and behavioural response. *J Neuroinflammation* 2017 Mar 24; 14(1) :63

Carrieri R. et al.: Structural data and immunomodulatory properties of a water-soluble heteroglykan extracted from the mycelin of an Italian Isolate of *Ganoderma Lucidum*. *Nat Prod Res.* 2017 Sep; 31(18): 2119-2125

Turmeric

Menon V.P. et al.: Antioxidant and anti-inflammatory properties of curcumin. *Adv Exp Med Biol.* 2007; 595:105-25

Chainani-Wu N. et al.: Safety and Anti-Inflammatory Activity of Curcumin: A Component of Tumeric (*Curcuma longa*). *J Alt Compl Med.* 2004, 9(1):161-8.

Beverage in powder form as a dietary supplement with yeast extract as nucleotide source, with arabinogalactan, yeast beta-glucans, vitamins, zinc as well as extracts of reishi, turmeric, black pepper and olive leaves. With sweetener and blackcurrant flavour.

Carefully developed and manufactured in Switzerland

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