

ImmunoVita® | **Immuno**Vita® ***Kids***

15 capsules | 30 capsules **30 sachets**

Helps to strengthen **the immune system**

- Scientifically endorsed -

INNOVATIVE SME

Only for professional use.
This information should not be transferred to non-professional users.

VITAE

ImmunoVita® | **Immuno**Vita® ***Kids***

15 capsules | 30 capsules **30 sachets**

ImmunoVita® is a food supplement based on beta-glucans, vitamins D3 and B6, and zinc that help modulate the immune system thanks to its synergistic formula.

The main active ingredient of **Immuno**Vita® is the (1,3) - (1,6) beta-glucan extracted from the yeast cell wall *Saccharomyces cerevisae*. Vitamin D3 and B6 together with zinc act as beta-glucan adjuvants.

ImmunoVita® **protects against abnormal immune responses through the complement system.**

It is enriched with vitamin D3, B6 and zinc that strengthen different cell types (NK cells, monocytes, macrophages, lymphocytes and dendritic cells, etc.) and increase innate and adaptive immunity.

ImmunoVita® IS RECOMMENDED FOR:

- **Recurrent infections, bacterial as well as viral and fungal**
- **Minimizing the lowering of defences during periods of high stress**
- **Help to improve the pathological state of children and adults with chronic respiratory disease (bronchitis, asthma...)**
- **Help to reduce rhinoconjunctivitis caused by seasonal allergy**

BENEFITS

- **Less recovery time**
- **Reduces severity of symptoms**
- **Increases cellular immunity**
- **Rapid action (both in prevention as a treatment)**
- **Adapted formula (children and adults)**

The complement system (CS) is one of the fundamental components of the defensive immune response against hostile agents. This system's main objective is cell lysis of pathogens, although it also participates in inflammation processes, microbial opsonization and regulation of the immune response, for example.

The main constituent of the complement system (CS) is called C3 and its activation is key to the proper functioning of the CS.

The complement system is a mechanism of defence whose main mission is to eliminate pathogens from the circulation.

YEAST BETA-GLUCANS

MECHANISM OF ACTION

ImmunoVita® beta-glucans have immunomodulatory character and total agonist action of the C3 neutrophil receptor. Provoking priming and increasing their effectiveness against alterations of the immune system.

Primed neutrophils modulate their activation status facilitating phagocytosis and intracellular destruction of the harmful agent.

With this activation we manage to shorten the duration of infectious crises, reduce their severity and avoid recurrences.

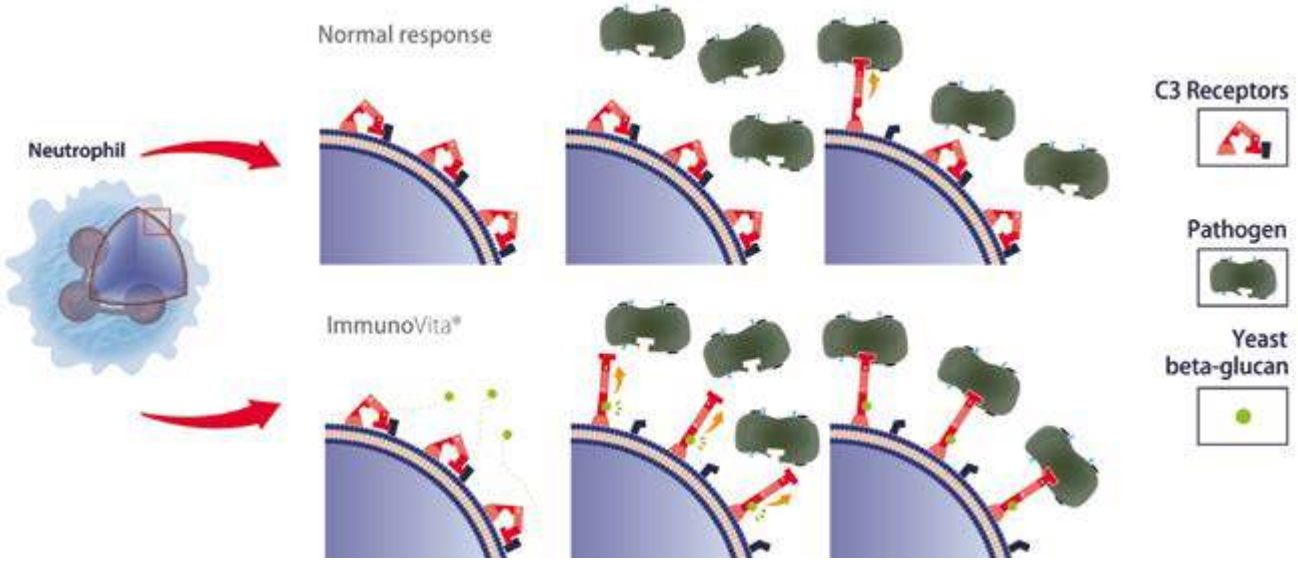


Figure 1. **Immuno**Vita® beta-glucans act as specific C3 agonists of neutrophils, making them more efficient and faster in detecting foreign substances from the immune system.

SCIENTIFIC EVIDENCE IN CHILDREN AND ADULTS:

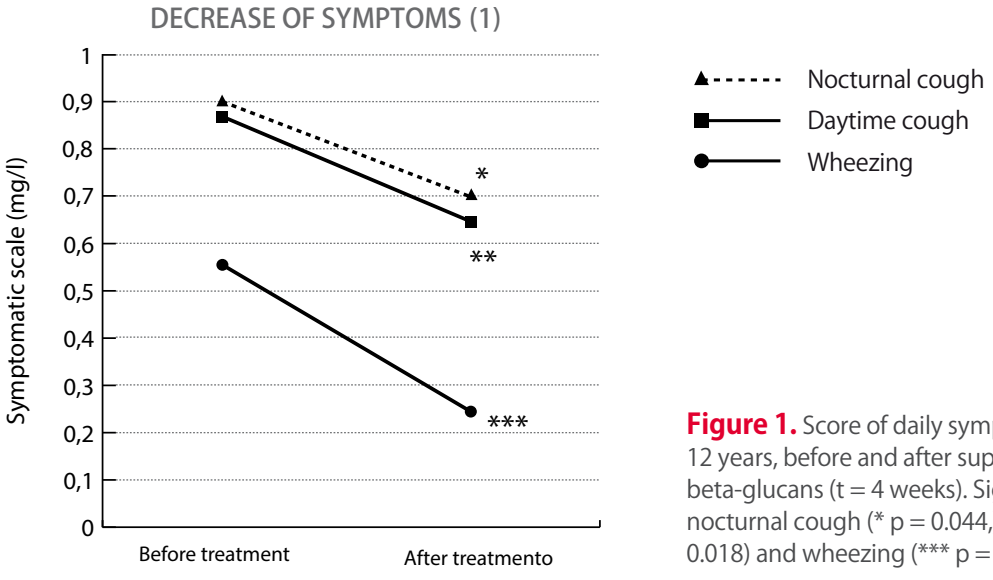


Figure 1. Score of daily symptoms in 20 children 6 to 12 years, before and after supplementation with yeast beta-glucans (t = 4 weeks). Significant improvement in nocturnal cough (* p = 0.044,), daytime cough (** p = 0.018) and wheezing (*** p = 0.022).

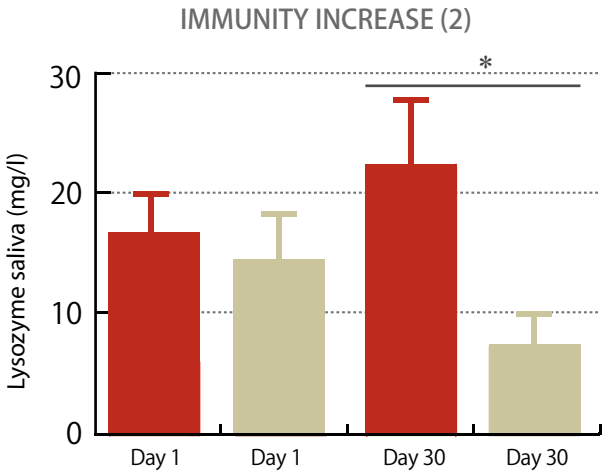


Figure 2. *In vivo* study conducted with children 8-12 years after 4 weeks of administration of placebo and yeast beta-glucans p <0.05

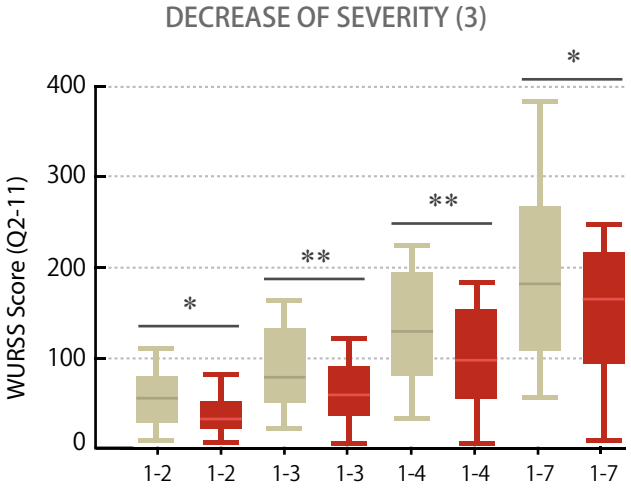


Figure 3. Result of the WURSS questionnaire (Q2-11) ▲ in 290 adults 18 to 70 years of severity of symptoms clinically confirmed in the placebo group - group **Immuno**Vita® on days 1-2, 1-3, 1-4, 1-7. * p <0.05, ** p <0.01

▲ The Wisconsin Upper Respiratory Symptom Survey (WURSS) is an evaluative illness-specific quality of life instrument, designed to assess the negative impact of acute upper respiratory infection.

ENRICHED WITH VITAMIN D3, B6 AND ZINC (4, 5, 6):

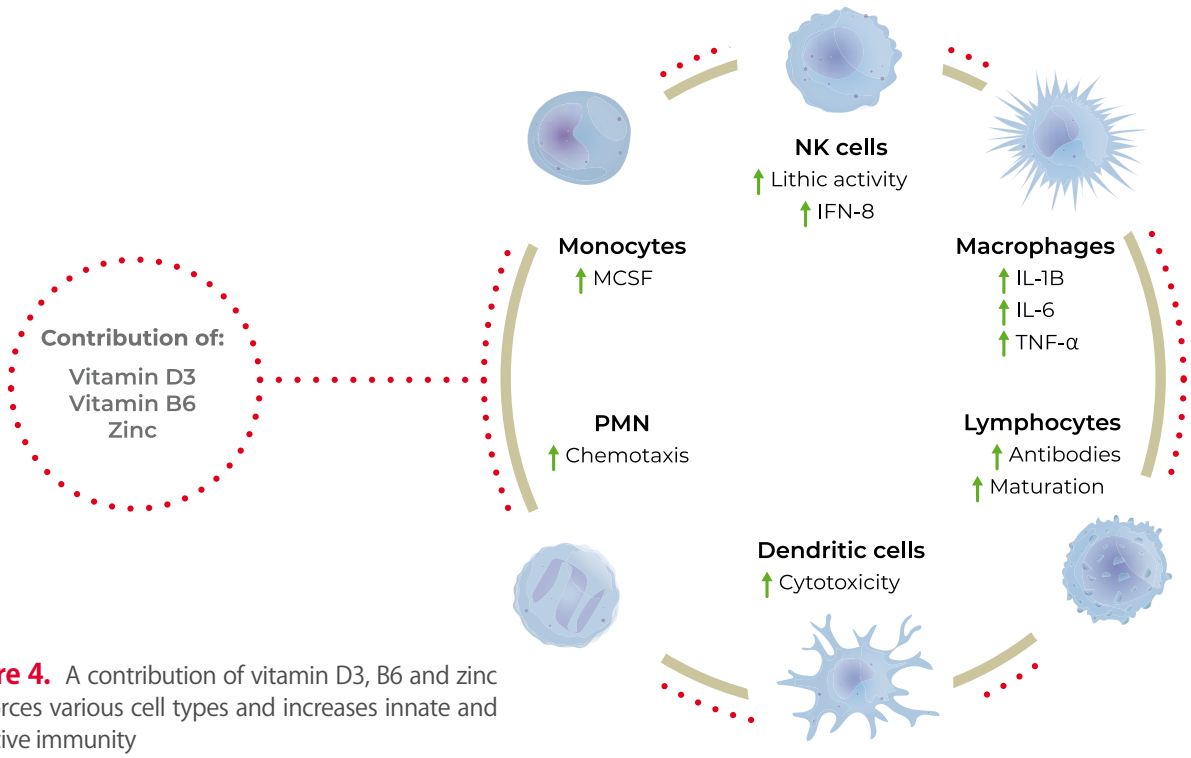


Figure 4. A contribution of vitamin D3, B6 and zinc reinforces various cell types and increases innate and adaptive immunity





ImmunoVita®

1 capsule per day

15 capsules

30 capsules

SUGAR FREE * VEGAN PRODUCT * GLUTEN FREE * LACTOSE FREE *

Without sorbitol or fructose

ImmunoVita® Kids

1 sachet per day

30 sachets

SUGAR FREE * VEGAN PRODUCT * LOW SODIUM CONTENT * GLUTEN FREE * LACTOSE FREE * FAT FREE *

Contributes to the normal functioning of the immune system

INGREDIENTS

β-glucan (β-1,3 / 1,6-D-glucan), filler (microcrystalline cellulose), anti-caking agent (magnesium stearate), zinc gluconate, cholecalciferol (vitamin D3), pyridoxine (vitamin B6), capsule (hypromellose).

Nutritional analysis

Per daily intake	1 capsule	NRV*
Beta-glucans	250 mg	
Zinc	7,5 mg	75 %
Vitamin D3	3,75 µg	75 %
Vitamin B6	1,05 mg	75 %

*NRV= Nutrient Reference Value

DIRECTIONS FOR USE

For adults and kids older than 12 years take **1 capsule per day** with water.

INGREDIENTS

Bulking agent (microcrystalline cellulose), β-glucan (β-1,3 / 1,6-D-glucan), zinc gluconate, cholecalciferol (vitamin D3), pyridoxine (vitamin B6).

Nutritional analysis

Per daily intake	(per 1 sachet)	UI**	(per 2 sachets)	UI**
Yeast β-Glucans	100 mg		200 mg	
Vitamin D3	1,5 µg (*)	60	3 µg (**)	120
Vitamin B6	0,42 mg (*)		0,84 mg (**)	
Zinc	3 mg (*)		6 mg (**)	

*VRN= Nutrient Reference Value: 30%
**VRN= Nutrient Reference Value: 60%
**UI= International Units

DIRECTIONS FOR USE

From 3 years* take one sachet per day diluted in juice or water, or mixed with food or porridge. For children over 12 years and adults dilute 1 to 2 sachets in juice or water.

*The doses of vitamins and minerals that **Immuno**Vita® Kids contains are adjusted to the limits of the RDI established for children of 1 year (average weight established 10.2 Kg). For children under 3 years, administration must be subject to medical prescription.

ImmunoVita®
ImmunoVita® *Kids*

BIBLIOGRAPHY

1. Albeituni SH, Ding C, Liu M, Hu X, Luo F, Zhang H, et al. Yeast-derived Particulate β-Glucan Treatment Subverts the Suppression of Myeloid-derived Suppressor Cells by Inducing PMN-MDSC Apoptosis and M-MDSC Differentiation to APC in Cancer. J Immunol. 2016;196(5):2167–80.

2. Auinger A, Riede L, Bothe G. Yeast (1,3) - (1,6) -beta-glucan helps to maintain the body ' s defence against pathogens : a double-blind , randomized , placebo- controlled , multicentric study in healthy subjects. Eur J Nutr. 2013;52:1913–8.

3. Burg AR, Quigley L, Jones A V, Connor GMO, Boelte K, Mcvicar DW, et al. Orally administered β-glucan attenuates the Th2 response in a model of airway hypersensitivity. Springerplus [Internet]. 2016;5:895. Available from: "http://dx.doi.org/10.1186/s40064-016-2501-1

4. Graubaum H, Busch R, Stier H, Gruenwald J, Ag R. A Double-Blind, Randomized , Placebo-Controlled Nutritional Study Using an Insoluble Yeast Beta-Glucan to Improve the Immune Defense System. Food Nutr Sci. 2012;2012(June):738–46.

5. Hunter Jr K, RA G, Berner MD. Preparation of microparticulate B-glucan from Saccharomyces cerevisiae for use in immune potentiation. Lett Appl Microbiol. 2002;35:267–71.

6. Kirmaz C, Bayrak P, Yilmaz O, Yuksel H. 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(June):128–34.

7. Mcfarlin BK, Carpenter KC, Davidson T, Mcfarlin MA. Baker ' s Yeast Beta Glucan Supplementation Increases Salivary IgA and Decreases Cold / Flu Symptomatic Days After Intense Exercise. J Diet Suppl. 2013;10(February):171–83.

8. Stier H, Ebbeskotte V, Gruenwald J. Immune-modulatory effects of dietary Yeast Beta-1,3-1,6-D-glucan. Nutr J 2014,. 2014;13(1):1–9.

9. Talbott SM, Mba JAT, Talbott SM, Talbott JA. Journal of the American College of Nutrition Baker's Yeast Beta-Glucan Supplement Reduces Upper Respiratory Symptoms and Improves Mood State in Stressed Women Baker ' s Yeast Beta-Glucan Supplement Reduces Upper Respiratory Symptoms and Improves Mood St. J Am Coll Nutr. 2013;(June 2015):37–41.

10. Talbott SM, Talbott JA, Talbott TL, Dingler E. B-Glucan supplementation , allergy symptoms , and quality of life in self-described ragweed allergy sufferers. Food Sci. 2012;90–101.

11. Vetvicka V, Richter J, Svozil V, Dobiášová LR, Král V. Placebo-driven clinical trials of yeast-derived β - (1,3)- glucan in children with chronic respiratory problems. Ann Transl Med. 2013;1(3):3–7.

12. Vetvicka V, Vetvickova J. Glucan Supplementation Has Strong Anti-melanoma Effects : Role of NK Cells. Anticancer Res. 2015;35:5287–92.

REFERENCES

1. Sarinho E, Medeiros D, Schor D, Rego Silva A, Sales V, Motta ME, Costa A, Azoubel A, Rizzo JA. Production of interleukin-10 in asthmatic children after Beta-1-3-glucan. Allergol Immunopathol. 2009;37(4):188-92. doi: 10.1016/j.aller.2009.02.005.

2. Vetvicka V, Richter J, Svozil V, Dobiášová LR, Král V. Placebo-driven clinical trials of yeast-derived β-(1-3) glucan in children with chronic respiratory problems. Ann Transl Med. 2013;1(3):26. doi: 10.3978/j.issn.2305-5839.2013.07.01

3. Dharsono T, Rudnicka, K, Wilhelm, Schoen C. Effects of Yeast (1,3)-(1,6)-Beta-Glucan on Severity of Upper Respiratory Trac Infection: A Double-Blind, Randomized, Placebo-Controlled Study in Healthy Subjects. Journal College of Nutrition, 2018. doi: 10.1080/07315724.2018.1478339

4. Mora, J. R.; Iwata, M.; Ulrich, H. Vitamin effects on the immune system: Vitamins A and D takes centre stage- Nat Rev Immunol. 2008 Sep; 8(9): 685–698. doi: 10.1038/nri2378

5. Bonaventura, P.; Benedetti, G; Albarè de, F.; Miosseca, P. Zinc and its role in immunity and inflammation. Autoimmunity Reviews 2015 Apr; 14(4): 277-285. Doi: 10.1016/j.autrev.2014.11.008

6. Chirumbolo, S.; Bjørklund, G.; Sboarina, A.; Vella, A. The Role of Vitamin D in the Immune System as a Pro-survival Molecule. Clin Ther. 2017 May;39(5):894-916. doi: 10.1016/j.clinthera.2017.03.021

ImmunoVita® and **Immuno**Vita® **Kids** are food supplements. Store in a cool, dry place. Keep out of reach of children. Do not exceed the daily recommended dose. Food supplements are not substitutes for a balanced diet. It is important to have a varied and balanced diet and a healthy lifestyle. Consult with your doctor or pharmacist in case of pregnancy, when taking any medication or when suffering from any illness, before starting supplementation.

VITAE

VITAE HEALTH INNOVATION, S.L.
C/ Verneda del Congost, 5
Polígon Industrial El Circuit
08160 Montmeló - Barcelona
Client services:
info@vitaeinternational.com
www.vitaeinternational.com

LLENG/04