Nat-Stim®
Formulated by Dr. James L. Wilson

Deep Immune Enhancement to Help Maintain Health*

Nat-Stim® is a remarkably effective natural immune enhancer developed by World Health Organization scientists to provide long term support for healthy immune system function and optimal immune defense, especially in the critical areas of the lungs, bronchi, throat, nose and intestines.* It is composed of immune enhanced cell wall fractions of a specific subspecies of Lactobacillus bulgaricus known for its immune fortification functions. This very unique NATural immune STIMulator is formulated to safely enhance both cellular and humoral aspects of immune function, giving it a broad scope of support that builds and deepens over time without losing effectiveness.* It is designed for regular daily use to help maintain health through the following processes:*

**Cell wall components safely enhance both cellular and humoral immune function***

**Lactobacillus bulgaricus**
- Shown to beneficially modulate the immune system and regulate allergic response ¹
- Lactobacillus strains, including L bulgaricus, shown to enhance the humoral immune response ²
- Heat-killed cells of L. bulgaricus demonstrated to stimulate macrophages to produce significant amounts of immunological cytokines (TNFα, interleukin [IL-6] and nitric oxide), important for enhancing immune system responses ³
- Compared to other Lactobacillus strains studied, only L. bulgaricus induced a significant production of all three cytokines: TNFα, IL-12 and IL-10. ¹
- Presence of non-living L. bulgaricus increased number of IgA+ cells in intestine, important to mucosal surface protection from pathogens. ⁴
- L. bulgaricus dose-dependently enhanced IgA+ cells in the bronchial mucosa. ⁵

**Lactobacillus cell wall fractions**
- Killed lactobacillus strains containing cell wall fractions called lipoteichoic acids (LTA) shown to stimulate activation of immune regulators in macrophages ⁶
- Peptidoglycans from L. bulgaricus cell walls initiate both classical and alternative activation of the complement system, designed to help antibodies and phagocytic cells attack, kill and remove pathogens. ⁷
- Lyophilized L. bulgaricus stimulated production of beneficial cytokines, including IL-12, which can reduce serum IgE levels, thus decreasing the allergic and inflammatory response of IgE-mediated allergies. ¹
- An isolate from a strain of L. bulgaricus shown to activate phagocytic and secretory functions of human mononuclear cells and enhance host resistance to bacterial infections, supporting frequent clinical observations that children and adults taking killed L. bulgaricus experience benefits in overall number of well days and shorter duration of infectious illnesses* ⁸
- A lysate of a lactobacillus strain demonstrated protection from intestinal inflammation via enhancement of gut barrier function and modulation of mucosal immune response. ⁹
- An oral Lactobacillus bulgaricus preparation shown to activate the phagocytic and secretory functions of mononuclear cells and increase host resistance to bacterial infections. ⁸

**Peptidoglycan and lipoteichoic acid**
- Lipoteichoic acids — immune-regulatory components of lactic acid bacteria — shown to help modulate gastrointestinal immune defense mechanisms and maintain intestinal epithelial integrity via cytoprotection and tissue repair, thus enhancing gut integrity and tissue health* ¹⁰, ¹¹
- Lipoteichoic acid, a cell wall fraction present in L. bulgaricus, increased the killing power of monocytes, a key defense against infectious pathogens. ¹²
- Peptidoglycans, present in gram-positive bacterial cell walls, are responsible for many of the biological activities of probiotic components. A different component, adenosine 5'-diphosphoribose (ADP-ribose), was recently identified as a significant additional cytoprotective agent in L. bulgaricus extracts. ¹³

**Polysaccharide and lipoprotein from L. bulgaricus**
- A polysaccharide from L. bulgaricus shown to support inhibition of IFN-gamma in an inflammatory, auto-immune condition; IFN gamma is responsible for much of the tissue destruction seen in auto-immunity. ¹⁴

Dr. Wilson’s Original Formulations® supplements are produced exclusively by ICA Health | icahealth.com

*These statements have not been evaluated by the Food & Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.
• Novel and unique bacterial cell wall fractions found in L. bulgaricus induced cytokine production from macrophages, suggesting additional and previously unknown mechanisms responsible for immune-enhancing role of L. bulgaricus – demonstrating again the potency and value of killed cell wall fractions in building strong immunity.

Nontoxic
• Classic LD 50 experiments at WHO affiliated lab using 3 animal models administered doses 5,000 times the comparable daily human dose for 3 months elicited no toxic responses.  

Suggested Use
Take 1 capsule with water 1-2 times daily for at least 3 months to optimize immune support.* After 3 months of regular use, most people can usually switch to half the daily amount and still maintain optimal immune enhancement.* For best results, take consistently throughout the year.* During times when extra immune support is desired, an additional capsule of Nat-Stim may be taken 1-2 times a day.

Companion Products Formulated by Dr. Wilson

Quick, Temporary Immune Boost:* Body-Guard®

Adrenal Fatigue: When adrenal fatigue adversely affects immune function, Nat-Stim works well with the products in Dr. Wilson’s Program for Adrenal Fatigue:* Adrenal Rebuilder®, Super Adrenal Stress Formula®, Adrenal C Formula®, Herbal Adrenal Support Formula®

High Stress: For optimum results use Nat-Stim in combination with:* Super Adrenal Stress Formula®, Adrenal C Formula®, Herbal HPA®

References
10. de Vos WM. Lipoteichoic acid in lactobacilli: d-Alanine makes the difference. PNAS August 2, 2005 vol. 102 no. 31 10763-10764.
16. Dr. BN Petrunov, Director National Center of Infectious and Parasitic Diseases. Personal communication summary of multiple Ministry of Health sponsored toxicity studies. 1998.