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## The Possible Benefits of Imm-Kine®, a Food Supplement

- Helps support healthy humoral and cellular immune responses
- Helps support healthy macrophage activity

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## Description

Imm-Kine® provides nutritional support for a healthy immune system. Imm-Kine® contains Muramyl polysaccharide glycan complex (MPGC), a purified and non-toxic bacterial cell wall extract of gram-positive *Lactobacillus fermentum*, and beta-1, 3-glucan. Research suggests that Imm-Kine® may have a healthy effect on the immune system, supporting the production of interleukins 1, 6 and 12, and human lymphocyte proliferation.

Research has shown that some polysaccharide components of various plants and bacteria can support a healthy immune response. The health supporting effects of various mushrooms such as Reishi, Cordyceps, Maitake, and Shiitake, used through the millennia in Eastern medicine, are thought to involve their content of beta-glucans. Recently, similar immunologically supportive polysaccharides have been identified in the cell walls of various bacteria. Some have suggested that this ability of bacterial cell wall components to support the immune response may be partially responsible for the health benefits of probiotic bacteria, such as *Bifidobacterium*, *Lactobacillus casei* and *Lactobacillus acidophilus*.

Many scientific studies have demonstrated the efficacy of muramyl compounds such as MPGC

in supporting a healthy immune system. For instance, another immune stimulating bacterial cell wall analog, muramyl tripeptide phosphatidylethanolamine, supported a healthy Kupffer cell response and protected cells in an animal model. Muramyl compound immunostimulators, natural and synthetic, can support the healthy production of macrophages, thereby supporting the healthy and normal response of the immune system.

MPGC contains muramic acid moieties attached to variable-length mannose-rich polysaccharides. The mannose-rich polysaccharides can promote internalisation of the muramic acid-containing complex. Once internalised, the muramic acid moieties of the MPGC may promote activation of macrophages. MPGC also appears to support healthy human lymphocyte proliferation, and the production of healthy human antigen-presenting dendritic cells in vitro.

Imm-Kine® combines the immune supporting ingredient MPGC with beta-1,3-glucan, to provide a broad spectrum immune supporting supplement.

Serving size: 2 capsules  
Servings per container: 30

**Amount per serving:**

Lactobacillus fermentum Extract	500 mg
Beta-1,3-Glucan (from <i>Saccharomyces cerevisiae</i> )	100 mg

Other ingredients: Gelatine, rice flour, ascorbyl palmitate.

**Suggested Use:** As a food supplement, 2 capsules one to three times daily, or as directed by a healthcare practitioner.

**Caution:** Not intended for use by pregnant or lactating women. Seek the advice of a healthcare practitioner before using this product.

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