

## About MGN-3 Immune System Enhancement Treatment

**MGN3 or MGN-3** used to be a major treatment for cancer. However, due to FDA restrictions the name of this product has been changed more than once. The most recent reports have stated that the current name for MGN3 is “Daiwa’s PeakImmune4 RBAC.” You may need to use Google to find a current vendor, but we have provided some possible links at the end of this article.

### How It Works

MGN-3 has been clinically shown to increase Tumor Necrosis Factor (TNF – a cytokine involved in activating the immune system), and increase the number of critical white blood cells: NK-Cells, T-Cells and B-Cells. In other words, MGN-3 works by building the immune system.

### MGN-3

There are a considerable number of impressive testimonials for MGN-3 on the internet, particularly regarding liver cancer and other difficult cancers.

“This potent immune system booster is manufactured using a patented process which hydrolyzes rice bran with the enzymatic extract from three different medicinal mushrooms: Shiitake, Kawaratake and Suehirotake. In Japan, these mushroom extracts have become the leading prescription treatments for cancer. MGN-3 Contains Arabinoxylane compound – The only natural immune complex that is clinically proven to triple natural killer (NK) cell protection, significantly enhances B-cell & T-cell activity and is supported by 7 published efficacy studies (72 human patients).”

### Supercharging This Treatment

This substance is usually taken as part of a multi-faceted treatment plan because it is designed to build the immune system.

### Clinical Summary by Memorial Sloan Kettering Cancer Center

MGN-3 is a proprietary product derived from rice bran. Promoters of MGN-3 claim that it improves immune function against cancer and AIDS. Polysaccharides are the primary ingredients and are thought to increase the levels of TNF-alpha and IFN-gamma secretion, and augment natural killer (NK) cell function in vitro. In vitro and studies in mice have shown that MGN-3 facilitates apoptosis of human T cell leukemia cells, sensitizes human breast cancer cells to a chemo drug, and protects against cisplatin-induced weight loss.

Improved immunomodulatory function was observed with use of MGN-3 in a small study of cancer patients. In another study on patients with liver cancer, MGN-3 increased overall response and reduced adverse effects of standard therapies. Further research is warranted. MGN-3 did not improve symptoms of chronic fatigue syndrome. No adverse effects have been reported following consumption of MGN-3.

## Purported Uses

- Cancer treatment
- Chemotherapy side effects
- HIV and AIDS
- Immunostimulation

### Main ingredients

- Rice bran, enzymatically treated with extracts from shiitake (*Lentinus edodes*), kawaratake (~~*Coriolus versicolor*~~), and suehirotake (*Schizophyllum commune*) mushrooms
- Other ingredients
- Beet root fiber
- Calcium phosphate
- Silica
- Magnesium stearate

## Mechanism of Action

MGN-3 is an arabinoxylan from rice bran made using enzymes from mycelia of shiitake, kawaratake and suehirotake mushrooms. MGN-3 is claimed to cause an overall increase of the immune system, such as natural killer cell activity, increase gamma interferon and tumor necrosis factor-alpha, and to act synergistically with interleukin-2, which also increases natural killer cell activity <sup>(2)</sup>.

## Adverse Reactions

None reported

## Herb-Drug Interactions

None reported

## Herb Lab Interactions

MGN-3 reduces alpha-fetoprotein (AFP) levels in hepatocellular carcinoma patients going through standard therapies <sup>(4)</sup>.

## Literature Summary and Critique

~~(1) Ghoneum M. Production of tumor necrosis factor-alpha and interferon-gamma from human peripheral blood lymphocytes by MGN-3, and its synergy with interleukin-2 in vitro. *Cancer: Detect Prev* 2000;24:314.~~

The mechanism by which MGN-3 elevates NK cytotoxic activity was examined. The effect of MGN-3 on the levels of tumor necrosis factor-alpha and interferon-gamma secretions was measured, as was the expression of key cell surface receptors. Results suggest that MGN-3 is a potent TNF-alpha inducer. Treating highly purified NK cells with MGN-3 also resulted in increased levels of TNF-alpha and IFN-gamma secretion in conjunction with augmentation of

NK cell cytotoxic function. Furthermore, addition of MGN-3 to interleukin 2-activated NK cells resulted in a synergistic induction of TNF-alpha and IFN-gamma secretion.

As of this writing the product is available under the name "PeakImmune4" manufactured by Daiwa through the vendor [www.iHerb.com](http://www.iHerb.com).

**SOURCE: Webster Kehr - Independent Cancer Research Foundation, Inc. –  
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