

Beta Glucan and the Fight Against Cancer



The Health Benefits of Beta Glucan

Much of the chronic [disease](#) of the 21st century is due to a breakdown in the coordination and balance of the immune system. Immunomodulation is a key term that refers to the control and coordination of the immune system.

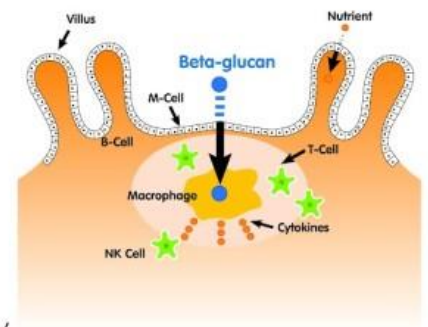
Specific [herbs](#), nutrients and botanical co-factors help to improve the immunodulatory systems of the body. Beta glucans have been shown to be one of the best immunomodulating substances with powerful health benefits.

The immune system is designed to be highly sensitive to the presence of [pathogenic](#) microorganisms that pose a threat to the body. It is also designed to produce a strong inflammatory reaction with minimal collateral damage to the body.

When the body becomes overstressed it impairs the coordination of the immune system. This can lead to lowered or elevated immune activity. One with a lowered immune activity is at risk for various [infections](#) and cancer [cell](#) development. An

individual with elevated immune activity is at risk for chronic inflammatory disorders such as [allergies](#) and asthma and [auto-immune](#) disorders.

What makes Beta-glucan to your body?



- Inhibit the free radical in body
- Stimulate the macrophage of the immune system
- Modulate an allergic immune of the physical condition (Hypoallergenic)
- Prevent of Infection and viral diseases
- Balance cholesterol and fasting blood sugar level
- Relieve inflamed rheumatism
- Lessen the suffer from constipation
- Enhance and maintain moisture within skin
- Wound healing and abirritate inflammation

Beta Glucan and the Immune System:

Beta glucan is a powerful immune stimulating compound found in several mushrooms, [yeasts](#) and other foods. Beta glucan is a polysaccharide that is made up of multiple [sugar](#) molecules linked together. The major beta glucan molecule is called 1,3-D glucan.

Polysaccharides are a diverse class of macromolecules that have a high capacity for carrying biological information due to their large structural variability. [Polysaccharides](#) interconnect at various points and form a wide range of branched structures. The position and length of the branching gives them specific labels such as the Beta 1,3D glucan.

Beta glucans are known by scientists as “biological response modifiers” that bind to the surface of innate [immune](#) cells which allows the cells to have better coordination in their attack. This reduces the tendency towards [auto-immune](#) reactions and hyperinflammatory activity when the body is under attack.

How The Immune System Works with Beta Glucan



Two Major Components of Immune System

- Innate Immune Response
- Acquired Immune Response
- Beta Glucan works to activate both components of the immune system.
- In the Innate Immune system, Beta Glucan binds with macrophages, activates and increases their availability to identify and destroy foreign organisms.

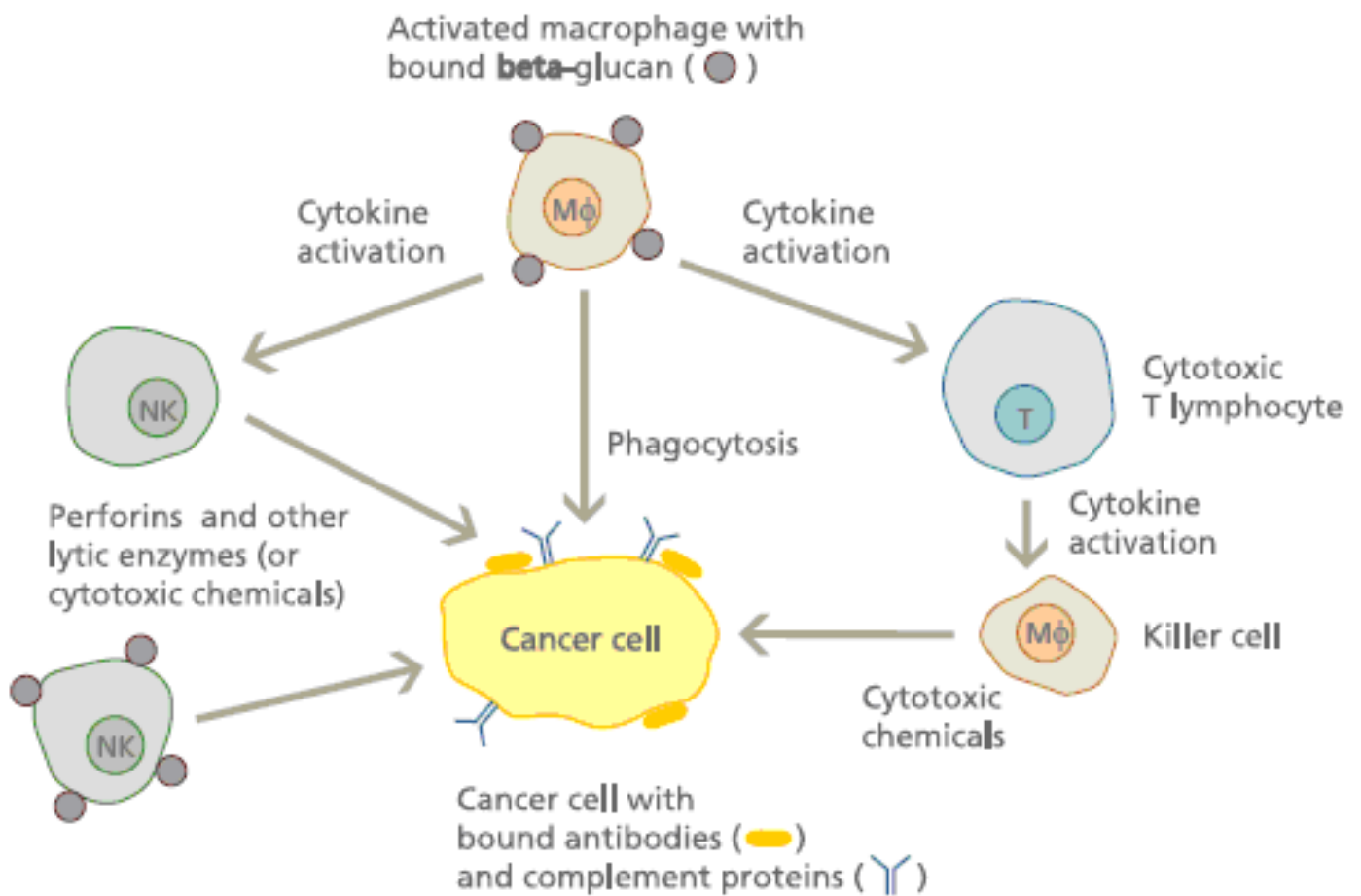
Beta Glucan and Cancer:

Even a healthy immune system can get easily overwhelmed with fast growing [cancer](#) cells. Beta glucan acts to bind to the surface of the antibodies, macrophages and NK cells in order to activate them and coordinate their attack. This provides a significantly stronger and more efficient [immune](#) response.

Beta glucan also helps the anti-body antigen response by priming the immune cells to recognize complement –antibody complexes in order to kill the [tumor](#) cells. The cooperation of antibodies with beta glucan is more potent than [radiation](#) or chemotherapy. This also acts without the delirious side-effects that these traditional treatments have.

This compound activates certain immune cells such as key T-cells, macrophages, natural killer (NK) cells and the cytokines interleukin (IL) 1 and 2. Studies have shown that it inhibits the growth of [cancer](#) and strengthens the immune response to [microbial](#) invaders. (1)

NK cells are a critical player in keeping tumor growth under control as that is their primary life focus. These cells are designed to search the body, target and eliminate cancerous growths all day long.



Beta Glucan and Immune Stem Cells:

Beta glucan also helps stimulate the production of immune stem cells within the [bone](#) marrow. This leads to the release of new immunocytes into the bloodstream and various [lymphoid](#) organs.

This increases the immune surveillance against potential invaders and improves the attack against [cancer](#) cells. This is even more important when the individual is also receiving chemotherapy and/or radiation. These conventional therapies lower circulating immune complexes and decrease immunocyte numbers making the body more susceptible to infection.

Beta glucan also stimulates various cells in the body to release anti-cancerous molecules throughout the body. These include tumor necrosis factor, interleukins 1 & 6, hydrogen peroxide and gamma interferon which are all proven effective in the fight against cancer and invading [microorganisms](#). (2)

The Five Key Immune Responses Targeted By Beta Glucan

01

Production of White Blood Cells

02

Cellular mobilization

03

Phagocytic capacity

04

Production of reactive oxygen intermediates

05

Help shift from an overstimulated TH2 to a TH1 cell mediated immune response

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Beta Glucan Helps Fight Infection:

Beta glucans have been studied for their ability to mitigate [cancer](#) cell growth and reduce the symptoms of the common cold. In one report by the Montana Center for

Work Physiology and Exercise Metabolism they studied firefighters and tracked their cold/flu symptoms. Firefighters have very physically and emotionally [stressful](#) positions that demand a lot out of them.

The results of the study showed that those who took beta glucan instead of the placebo had a 23% reduction in upper [respiratory](#) tract infections. (3) “These results are consistent with previous clinical research involving marathoners, individuals with high stress lifestyles and the general population,” wrote Brent C. Rudy, the director of the Montana Center for Work Physiology and Exercise Metabolism.

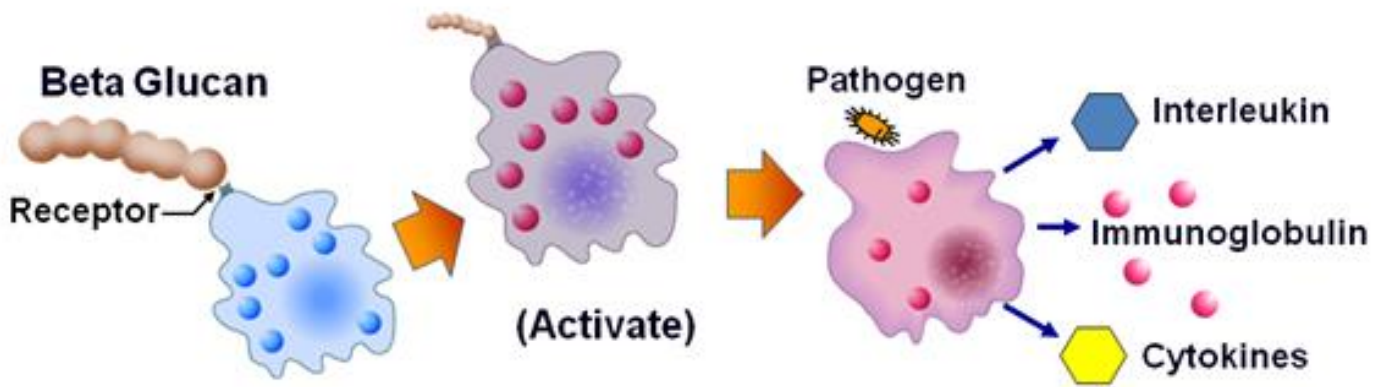


Beta Glucan Beats Traditional Therapies:

Beta glucans ability to stimulate immunoactive molecules and improve the immune-modulation within the body is quite remarkable. Priming and coordinating the immune system is one of the most important factors in preventing infection and the development of chronic inflammatory [diseases](#).

There are over a thousand published scientific studies describing the various biological effects of beta glucan.(4) The cancerostatic and immunostimulating properties that beta glucan brings to the table make it one of the safest and most potent substances available. It is very low-cost compared to various medical interventions and much safer which make it an attractive addition to a natural [cancer](#) prevention or cancer healing [program](#).

How Does Beta Glucan Work?



Macrophage activation via cell surface receptor

How Are Beta Glucans Harvested?

Beta glucans are naturally occurring polysaccharide molecules that are extracted from the cell walls of yeast. Insoluble (1,3/1,6) B-glucans are found in brewers yeast or *saccharomyces boulardii* and medicinal mushrooms such as maitake, reishi and agaricus blazei murrill mushrooms. Oats and barley contain soluble (1,3/1,4) B-glucans in their undigestible soluble [fiber](#). This fiber has an [anti-inflammatory](#) effect on the body.

Research has demonstrated that insoluble (1,3/1,6) B glucans have greater biological activity and immune modulating effects than the soluble form.⁽⁵⁾ Many individuals will benefit from consuming these through [fermented](#) foods and medicinal mushrooms.

It is also recommended to supplement with this insoluble B glucan in order to enhance your immune system function. The specific supplemental versions of beta glucans are isolates that have removed all the potentially harmful proteins for those who are sensitive or allergic to yeast.



Transfer Point Beta 1,3D Glucan



IMMUNE HEALTH
Immune Stimulation

The Best Beta Glucan Supplement:

Not all glucans are created equal, not all sources are equal. Glucans widely differ in physiochemical and biological properties. Some glucans have no biological activity at all. This is why it is so important you know which one is the best.

After reviewing the literature, I have found that Transfer Point's active ingredient, Glucan 300, is the most effective dietary supplement for a healthy immune system on the market.

Every single batch of TP ingredients is tested twice: when it's first made, and then again when it is ready to be encapsulated or mixed in a formula. This ensures that the ingredient has not degraded, and that it has retained complete purity and full potency.

All the assays are conducted by independent 3rd parties. Few other supplement manufacturers can say the same. In fact, many [supplement](#) manufacturers don't even bother to test regularly. Some of them use certificates of authenticity that are years old, which means the current lot has not been tested.

Transfer Point has every single lot receive its own certificate of analysis and they put that information right on the bottle. I value the extra energy they put forth into guaranteeing their product is pure and effective and I know I can trust it to get my clients the results they need!

I recommend 500mg daily for good immune support, 1000 mg for high level immune support and 1000 mg – 2x daily for advanced disease cases. Always take Beta Glucan away from food to maximize absorption. I typically recommend 30 mins – 1 hour before a meal.



Sources For This Article Include:

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