#### HOME > NUTRITION

# Beta Glucan for boosting your immune system

#### **DATE**

Updated December 27, 2019

#### **READ TIME**

10 Minutes

Cancer (or any disease) simply cannot exist in someone with a healthy immune system.

Watch this short video as 17 experts, researchers, medical doctors, and cancer survivors discuss the importance of the immune system:

As you heard in the video, a healthy immune system is the most important thing in the fight against cancer.

Bob Wright, the founder of the AACI (American Anti-Cancer Insitute) stated, "No doctor has ever healed anyone of anything in the history of the world; the human immune system heals and that is the only thing that heals."

Dr. Rashid Buttar said, "Cancer first and foremost is a problem with the immune system. You cannot have cancer if you have an intact immune system."

Dr. Keith Scott-Mumby stated, "Many people, I'm one of them, see cancer as basically a disease of the immun What Caused Your Cancer? X modern world, I don't think there is any way.

from firing off and going wrong and turning into rogue cells. There are just too many <u>toxins</u>.

"But a good immune system will pick them up very quickly and eliminate them. So in a very strong sense, cancer is a disease of the immune system. So, you want to do everything in your power to help the immune system; that means you know the right kind of nutrients that will help it. It also means removing the stresses that will stop it from working."

Now that we understand how critical the immune system is in the fight against a disease, if you have cancer you may be wondering, what went wrong with my immune system, and how can I help it?

Now there are many factors that can play into a weakened immune system, not enough sleep, stress, eating the wrong diet, not enough exercise, etc.

### What is beta glucan?

β-Glucans belong to a group of physiologically active compounds called "biological response modifiers" and represent highly conserved structural components of cells walls in yeast, fungi, and seaweed.

Technically beta glucan is an immunomodulator which helps make your immune system smarter. It can help raise your immune system's response so your body can naturally fight off and kill cancer. The term immunomodulator here is the real key; it is not an immune stimulate. Immune stimulation presumably occurs with substances like echinacea and colostrum. Beta glucan modulates or activates but never over stimulates, which is key to the safety of this product.

Dr. Vaclav Vetvicka Ph.D. said in his book or """ agents that stimulate the immune system What Caused Your Cancer? X class apart, because those other agents can push the immune system

to overstimulation. This means they can make matters worse in the case of auto-immune illnesses such as lupus, multiple sclerosis, rheumatoid arthritis, allergies and yeast functions. Glucans, however, do stimulate the immune system, but never to the point where it becomes overactive. In addition, glucan is one of the few natural <a href="mmunomodulators">immunomodulators</a> for which we know not only the composition but also the mechanism of action."

Beta glucan is a safe all natural fiber molecule that scientists all over the world are researching. In fact, beta glucan is the most studied natural immunomodulator on earth. More and more classically trained medical doctors are even waking up and using and / or recommending its use. They are finding and proving that it has many benefits, not only helping the immune system but also in combination with certain drugs, doing a better job to overcome cancer once it has established a foothold in the body.

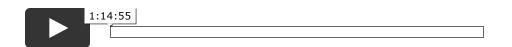
There are many different sources glucans are derived from. Glucan derivatives are contingent upon what natural resources the country has. Most popular are yeast, mushrooms, grains, seaweed. (Glucans can be isolated from almost every species of yeast. Wikipedia shows that 1,500 are currently described).

## Dr. Vaclav Vetvicka, Ph.D.

Dr. Vetvicka has more than 20 years of research, 200 peer-reviewed publications, seven books, and five international patents. Dr. Vaclav Vetvicka is the world's leading researchers on beta glucan and s member of the American Association of Immunologists. He is currently the head of the pathology department at the University of Louisville and researcher at the James Graham Brown Cancer Center. Dr. Vetvicka research and books are mostly focused on the topics of the immune system, cancer, and beta glucan.







## Beta glucan used to treat cancer, other diseases

Beta glucan has been approved as a drug in Japan, Australia, South Korea, and Taiwan as an immunoadjuvant therapy for cancer for the last 30 years.

But helping with cancer is just the beginning of what this amazing <u>supplement</u> can do. There have literally been thousands of studies showing this product has promising results in the following areas:

protect against infections, lower your cholesterol, lower blood sugar, reduce stress, increase your antibody production, heal wounds, help radiation burns, overcome mercury induced immunosuppression (like thimerosal used as a preservative in vaccines), help with diabetes, and even naturally prevent <u>metastasis</u> (or the spreading of your cancer).

What Caused Your Cancer? X

The University of Louisville's School of Medicine is now working other

cancer research centers testing beta glucan on cancer patients, and they have been credited with the:

First use of beta glucan as an immunostimulant for human cancer therapy

 Brown Cancer researchers, led by Dr. Gordon Ross, discovered that beta-glucan can markedly enhance the immune response of mice to injected tumors. This treatment is now being tested for the first time in humans at the University of Louisville and Memorial Sloan-Kettering Cancer Center in New York.

In fact, Dr. Gordon Ross has shown in some of his studies that beta glucan administered alone has reduced tumor weight by almost half in the subjects.

## Common questions on beta glucan

Why haven't we heard about beta glucan before?

Will beta glucan made from yeast cause a yeast infection or yeast allergy, or make either worse?

Is beta glucan safe to take with other medicines?

Do you think that beta-glucans have a place in the medicine of the future?

Can I just eat bread or mushrooms to get all the beta glucan I need?

What Caused Your Cancer? ×

How do we know Beta 1, 3-D Glucan enhances the immune system?	<b>\</b>
Why are baker's yeast beta glucans better than other kinds of beta glucans?	<b>~</b>
Will beta glucan over-stimulate the immune system?	<b>\</b>
Will beta glucan over-stimulate the immune system?	<b>\</b>
How much Beta 1, 3-D Glucan do I need each day to enhance my immune system?	<b>~</b>
Is it a good idea to take beta-glucans to prevent cancer?	<b>\</b>

## Studies on beta glucan and cancer

### **Cancer and Tumors**

- Beta 1,3-Glucan Cancer Research (overview of research)
- $\bullet$   $\beta\mbox{-Glucans}$  in promoting health: Prevention against mutation and cancer

(Mutation Research 2007)

- Medicinal importance of fungal β-(1-3), (1-6)-glucans (Mycological Research 2007)
- Therapeutic Intervention with complement and β-Glucan in Cancer (Immunopharmacology 1999)
- Oral β-Glucan adjuvant therapy converts nonprotective Th2
  response to protective Th1 cell-mediated immune response in
  mammary tumor-bearing mice
  (Folia Histochemica et Cytobiologica)

  What Caused Your Cancer? ×
- β-Glucan, a "Specific" Biologic Response Modifier That Uses

- Antibodies to Target Tumors for Cytotoxic Recognition by Leukocyte Complement Receptor Type 3 (CD11b/CD18)1 (The American Association of Immunologists 1999)
- CR3 (CD1 ib, CD18): a phagocyte and NK cell membrane receptor with multiple ligand specificities and functions (Clinical and Experimental Immunology 1993)
- Regulation of CR3 (CD11b/CD18)-dependent natural killer (NK) cell cytotoxicity by tumor target cell MHC class I molecules (Clinical and Experimental Immunology 1999)
- Soluble b-Glucan Polysaccharide Binding to the Lectin Site of Neutrophil or Natural Killer Cell Complement Receptor Type 3 (CD11b/CD18) Generates a Primed State of the Receptor Capable of Mediating Cytotoxicity of iC3b-Opsonized Target Cells (Journal of Clinical Investigation 1996)
- Effects of β-glucans on benign hyperplasia of prostate (Herbert Open Access Journals, Pathology Discovery 2014)
- $\bullet$  The application of fungal  $\beta\text{-glucans}$  for the treatment of colon cancer
  - (Anti-cancer agents in medicinal chemistry 2013)
- ullet eta-Glucans and their applications in cancer therapy: focus on human studies.
  - (Anti-cancer agents in medicinal chemistry 2013)

### **Chemotherapy and Radiation**

- Beta 1,3-Glucan Radiation Research (overview of research)
- Effect of Beta Glucan on White Blood Cell Counts and Serum Levels of IL-4 and IL-12 in Women with Breast Cancer Undergoing Chemotherapy: A Randomized Double-Blind Placebo-Controlled Clinical Trial
  - (Asian Pacific Journal of Cancer Prevention 2014)
- Positive Effects of Oral β-Glucan on Mucositis and Leukopenia in Colorectal Cancer Patients Receiving Adjuvant FOLFOX-4 Combination Chemotherapy
  - (Asian Pacific Journal of Cancer Preve What Caused Your Cancer? X
- Oral WGP Beta Glucan Treatment Accelerates Myelola Recovery

after Radiation Exposure

(BTR: Unified Science & Technology for Reducing Biological Threats and Countering Terrorism 2003)

- Glucan-immunostimulant, adjuvant, potential drug (World Journal of Clinical Oncology 2011)
- Orally Administered marine (1-3)-β-D-glucan Phycarine stimulates both humoral and cellular immunity (International Journal of Biological Macromolecules 2007)

### **Monoclonal Antibodies and Cancer**

- Yeast-Derived B-Glucan Augments the Therapeutic Efficacy mediated by Anti-Vascular Endothelial Growth Factor Monoclonal Antibody in Human Carcinoma Xenograft Models (Clinical Cancer Research 2008)
- Beta-Glucan enhanced killing of renal cell carcinoma micrometastases by monoclonal antibody G250 directed complement activation (International Journal of Cancer 2004)
- Oral (1-3),(1-4)-B-D-Glucan Synergizes with Antiganglioside GD2 Monoclonal antibody 3F8 in the Therapy of Neuroblastoma (Clinical Cancer Research 2002)
- Yeast whole glucan particle (WGP) β-Glucan in conjunction with antitumor monoclonal antibodies to treat cancer (Expert Opinion in Biological Therapy 2005)
- β-Glucan Functions as an adjuvant for monoclonal antibody immunotherapy by recruiting tumoricidal granulocytes as Killer Cells
  - (The Journal of Cancer Research 2003)
- Mechanism by which orally administered β-1,3-Glucans enhance the tumoricidal activity of antitumor monoclonal antibodies in murine tumor models
  - (Journal of Immunology 2004)
- C5a-Medicated Leukotriene B4-Amplified Neutrophil Chemotaxis is essential in tumor immunotherapy fac What Caused Your Cancer? monoclonal antibody and β-Glucan

(Journal of Immunology 2005)

What Caused Your Cancer? ×

