

Important information about

# Del-Immune V<sup>®</sup>

NUTRITIONAL SUPPLEMENT

Immediate immune system support\*

## The Immune System: the body's natural defense.

We all rely on our immune systems to protect us from foreign invaders that can lead to illness, but many don't realize that the body actually has *two* immune systems: the "innate" (or immediate) system and the "adaptive," (or long-term) system.

The innate immune system is vital in an immediate defense when germs invade, allowing the body to fight off the invaders before they can develop into illnesses such as winter bugs. This ability to quickly challenge bodily intruders becomes even more important as we age. When the innate immune system does not activate, or it is slow in responding, Del-Immune V<sup>®</sup> can provide immediate immune system support.\* With Del-Immune V<sup>®</sup>, the response and assistance are rapid and natural in supporting the immune system in its crucial role as a defense mechanism.



## Providing a faster way to trigger immune response.

The faster the immune system is able to respond to a possible threat from an illness-causing invader, the more successful the body can be in maintaining good health. Del-Immune V<sup>®</sup> has been shown to trigger activators in the immune system that in turn quickly start the body's natural protective response against foreign invaders that could compromise wellness.

Del-Immune V<sup>®</sup> capsules contain biological substances and other components important to the immune system. What makes Del-Immune V<sup>®</sup> so unique, and in fact makes it a next-generation nutritional supplement for immediate immune system support,\* is the science behind the product, as well as the process used to make it.

Del-Immune V<sup>®</sup> is made from a probiotic strain of *Lactobacillus rhamnosus* (DV strain). Studies have consistently shown that peptides (a vital link in amino acid complexes) found in lactobacillus cells are pivotal for getting the immune system going in a rapid manner and enabling the immune system to do its job of protecting the body.

Research conducted by some of the finest Soviet scientists between the 1960s and 80s demonstrated that the peptides in these lactobacillus cells "activate and excite" a switch in the immune system. Yet, immediate activation can only happen when the cell pieces are broken into smaller pieces or "fragmented" The fragmenting process utilized to produce Del-Immune V<sup>®</sup> is key to maximizing its effectiveness.

The switches that Del-Immune V<sup>®</sup> activates in the immune system are called "cytokines." These cytokines act as messengers, traveling along what could be described as a superhighway – in effect alerting the body to the presence of a potentially dangerous invader and stimulating protective white blood cells. On its own, the body could take 5 to 10 days to complete this process. Del-Immune V<sup>®</sup> generally starts working to perform its crucial task in six hours or less.

## Why Del-Immune V<sup>®</sup>?

At times, the body may require assistance in its imperative job of protecting itself. Del-Immune V<sup>®</sup>, a nutritional supplement resulting from a half-century of research in Bulgaria, Russia, the Ukraine and the United States, has been shown to help people obtain maximum results from their immune system. Del-Immune V<sup>®</sup> is a natural immune modulator that acts as a first responder when immune help is needed. Del-Immune V<sup>®</sup> capsules are formulated to each contain approximately 2 billion cell fragments from a special strain of lactobacillus. These cell fragments contain biological substances – identified as muramyl peptides, DNA, and amino acids – that account for the stimulation of an immune response. This process duplicates the natural immune action that occurs in the intestine, which is the center of human immune activity and accounts for fighting a variety of germs.\*

Turn the page for details  
about Del-Immune V<sup>®</sup> ...

\*This statement has not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent disease.

# Frequently asked questions about Del-Immune V<sup>®</sup>

## What is Del-Immune V<sup>®</sup>?

Del-Immune V<sup>®</sup> is a nutritional supplement containing cell fragments, DNA and components of a unique strain of bacteria called *Lactobacillus rhamnosus* (DV strain). The immune system is known to respond to these cell fragments.

## Where did this product come from?

Del-Immune V<sup>®</sup> is a result of more than a half century of scientific research. The formulation was developed in Russia for biological warfare protection during the cold war. After considering the use of vaccines and antibiotics for protection against bio-warfare agents, scientists determined that our own enhanced immune systems were the best defense against bio-invaders. Further research determined that the cell fragments from a particular strain of lactobacillus bacteria gave broad-spectrum immune system support. Del-Immune V<sup>®</sup> has been used in the United States for many years. It was first brought to the U.S. by a retired pharmacist when he discovered the product had a beneficial effect on his daughter's hepatitis C symptoms when added to her supplement routine. Made at one time in St. Petersburg, Russia, a more potent version of Del-Immune V<sup>®</sup> is now made in the U.S., in Indianapolis, Indiana.

## What is Del-Immune V's mode of action?

Ukrainian research reports state that, "In simple terms, Del-Immune V<sup>®</sup>, in small doses, activates the innate, or primary, immune system." This process has been shown to jump-start the body's natural protective defense capabilities against various types of foreign invaders. Onset of action for Del-Immune V<sup>®</sup> is usually four to six hours.<sup>5</sup>

## Are there any products like Del-Immune V<sup>®</sup>?

There are a small number of prescription drugs based on cell fragment biotechnology, but Del-Immune V<sup>®</sup> is the only non-prescription cell fragment nutritional supplement available in the U.S. and other countries worldwide that has been thoroughly researched. Research on this product continues today.

## What is the dosage for Del-Immune V<sup>®</sup>?

Many people take 1 to 2 capsules per day for regular immune system support, and increase their dosage during travel and during seasons when winter germs may be more prevalent. Others take up to 10 a day for specific immune challenges. Del-Immune V<sup>®</sup> is safe and non-toxic. People of all ages, including children and older adults, may take the product. Del-Immune V<sup>®</sup> requires no refrigeration.

## Are there side effects with the product?

Because the product is manufactured from a natural, beneficial probiotic bacteria side effects are rare. Del-Immune V<sup>®</sup> is free of wheat and dairy products, and is safe for people who are lactose intolerant. There are no known interactions or contra-indications for the use of Del-Immune V<sup>®</sup> with any prescription medications, nutritional supplements or chemo/radiation regimens.

## How should Del-Immune V<sup>®</sup> be used?

Anecdotal reports indicate that Del-Immune V<sup>®</sup> can be effective in minimizing the chance of catching winter-type germs.\* Dr. Roger Mazlan, of Roslyn Heights, New York, has used Del-Immune V<sup>®</sup> for roughly four years in more than 500 patients. He explains how he uses the product: "I see patients in many stages of classical winter infections, but with the use of one to two Del-Immune V<sup>®</sup> a day, most patients find they have fewer bouts of winter germs. But at the first sign of a sore throat, fever, muscle and joint tenderness coupled with fatigue, and any other symptom, take two to three Del-Immune V<sup>®</sup> capsules, and then again in the morning and evening with plenty of water and rest. This dosage is recommended for a minimum of five days...one week's therapy is ideal. I then suggest the patient take two capsules a day during the rest of the winter to minimize a recurrence. My experience now supports an absence of side-effects when Del-Immune V<sup>®</sup> is used for a prolonged period, and there is no problem when mixed with prescription medications. When I see a patient suffering from severe symptoms, I recommend three Del-Immune V<sup>®</sup> capsules four times a day for at least three, sometimes four days. I may suggest to patients that they continue one or two capsules a day for the rest of the winter. As a medical practitioner for more than 40 years I know there is no perfect solution, but Del-Immune V<sup>®</sup> has become the backbone of my treatment regimen during the winter season. I also recommend to many of my patients that they take Del-Immune V<sup>®</sup> capsules for immediate immune system support when suffering from a variety of other health issues."

See [www.delimmune.com](http://www.delimmune.com) for testimonials from many satisfied users of Del-Immune V<sup>®</sup>.

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# Q&A

## REFERENCES

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**Del-Immune V<sup>®</sup> is distributed by Pure Research Products, LLC, Boulder, Colorado**

**For more information and to order Del-Immune V<sup>®</sup> nutritional supplements,  
call Long Natural Health at 888.337.0511 or 303.845.1827, or email  
[info@longnaturalhealth.com](mailto:info@longnaturalhealth.com)**

# Advanced immune system biotechnology.

## How Del-Immune V<sup>®</sup> works to assist the body in defending itself.

Del-Immune V<sup>®</sup> represents a new generation of natural biological immunomodulation substances whose main action is coordinating the activity of individual links of the immune system<sup>3</sup> to create immediate immune system support.\* Del-Immune V<sup>®</sup> nutritional supplements, with their innovative "lysing" production process and cell fragment biotechnology, are different from other immune defense products. This is due to an ability to deliver cell fragments in a much shorter period of time than would normally occur if the body were left to its own defenses.

The ability to in effect "turn on" the immune system rapidly is believed to be instrumental in assisting the body in going about its job of attacking potentially dangerous intruders that may affect well-being. Physicians, along with users of Del-Immune V<sup>®</sup>, have reported impressive results (see below).

### Mode of Action

From a more technical explanation standpoint, the mechanism by which Del-Immune V<sup>®</sup> exerts its immuno-stimulating effects mimics the normal immunological sequence that occurs in the intestinal tract...namely, the signaling of cytokines or "switches."<sup>3</sup>

Cytokines have the ability to affect the immune system of the host in several ways, including: influencing interferons that inhibit virus replication; inducing expression of MHC (mononuclear phagocytic cells) class I and class II antigens; activating macrophages; and forcing immunogenicity of vaccines. Cytokines also have an affect on: IL-1, which stimulates T- and B-cell proliferation; IL-6, which induces B-cell differentiation to plasma cells; and interferon alpha, which stimulates antiviral activity. Specifically, the cytokines that

Del-Immune V<sup>®</sup> signals are IFN-alpha and IFN-gamma that activate other cytokines which in turn stimulate the production of T and B lymphocytes and natural killer cells.<sup>2</sup> Therefore, Del-Immune V<sup>®</sup> is able to provide immediate immune system support in conditions that are affected by IFN-alpha, IFN-gamma, IL-1, IL-6, TNF-alpha, and natural killer cells.<sup>5</sup> The administration of Del-Immune V<sup>®</sup> leads to an onset of action that is typically between four and six hours.

### Supplement Facts

Each Del-Immune V<sup>®</sup> capsule contains 25 mg Lactobacillus rhamnosus (DV strain) lysate powder. Other ingredients include purified cellulose powder NF and vegetable capsule.

### Safety and Side Effects

Del-Immune V<sup>®</sup> has virtually no side effects even when the product is taken for prolonged periods of time. In animals it produced no side effects in mega doses of 50 to 100 times the recommended dose. Del-Immune V<sup>®</sup> can be used simultaneously with prescription medications and/or with other nutritional supplements.

### Physician Recommended Dosage

Label dosage: 1 or more capsules as recommended by a health professional. For immediate support: 2 capsules morning and night for four days, thereafter 2 capsules daily for at least 5 days. For severe issues: 3 capsules three times a day for two days then reduce to 2 capsules.

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## What doctors and customers are saying about Del-Immune V<sup>®</sup>



"I have been recommending Del-Immune V<sup>®</sup> for many patients. When I began using it, I couldn't believe its effectiveness in a variety of immune uses."  
- Ted Hayashida, M.D., Gardiner, California

"I have used this product in over 1,000 people. Many of them have gone on to continue using it on an almost daily basis because they have such a high resistance to winter bugs. Teachers seem to be the most excited about Del-Immune V<sup>®</sup>. This is one profession where there is a high exposure to seasonal germs brought to the classroom by students. Teachers have a special problem getting days off for sickness so they continue to use the product on a daily basis."  
- Elin Ritchie, M.D., Taos, New Mexico

"I find this product to have a restorative effect on the immune system, and have successfully used it in over 500 patients with no side effects."  
- Roger Mazlan, M.D., Roslyn Heights, New York

"Last Thursday afternoon I started to have the clinical issues surrounding a classical winter problem and was suddenly extremely tired and aching. I took four Del-Immune V<sup>®</sup> a day and after the fourth day, woke up completely recovered."  
- Dr. Richard Schneider, Zurich, Switzerland

"My stepson is an over-the-road driver and travels border to border. Last week he came home and became so sick that he was admitted to the hospital and was diagnosed with the problem that's been all over the news. He was in the hospital two days and released with a prescription that was going to cost \$197. He did not want to pay \$197 for a drug, so he went home and took two capsules of Del-Immune V<sup>®</sup> every four hours (three doses), and the next day he felt great. The following day, he picked up his truck and headed out for New York, being sure to take Del-Immune V<sup>®</sup> with him."  
- Duane D., Springfield, Missouri

"I had my first experience with Del-Immune V<sup>®</sup> when my daughter was experiencing extreme fatigue. Our family doctor said that she probably had the problem that many kids pick up typically from kissing and he recommended Del-Immune V<sup>®</sup>. Within 6 hours, she was sitting up in bed. Two weeks after the first symptoms appeared she was back in school, playing soccer and dancing."  
- Elizabeth L.

"Before my doctor made his diagnosis, I was having a horrible time concentrating and remembering things. I later learned I was suffering from 'brain fog.' I began taking Del-Immune V<sup>®</sup> several times daily along with my meds after my diagnosis was complete, and now my brain fog is gone."  
- Jan T.

# Furthering the science of probiotics.

## Decades of research by renowned European scientists.

The development of Del-Immune V<sup>®</sup> involves a rich history. In the early 1960s, a scientific team led by Bulgarian medical doctor and microbiologist Ivan Bogdanov<sup>1</sup>, researched a variety of lactobacillus strains. Dr. Bogdanov's research team injected lab mice with a strain of cancer called sarcoma. When the mice developed the cancer, the researchers gave them a mixture of specific lactobacillus cell fragments. The cancer disappeared within a few days.<sup>2</sup>

The team then tried to re-introduce the cancer in the same mice – but the lab animals' immune systems rejected the cancer cells. Dr. Bogdanov's work is the first documented research showing the impact of probiotic lactobacillus cell fragments on the immune system.

During the Cold War in the 1970s, the Soviet Union initiated development of bio-warfare agents.<sup>4</sup> For protection against these agents, experimental products were made from a strain of lactobacillus cell fragments.

## Enhancing Del-Immune V<sup>®</sup> with development in the U.S.

In 1999, a subsequent cell wall formulation developed from Russian research was brought from Russia to the United States by a retired Boulder, Colorado pharmacist. The pharmacist discovered that the lactobacillus cell wall product had a beneficial effect on his daughter's hepatitis C symptoms when added to her supplement routine. What's more, the product eliminated or improved several other health issues reported by friends and acquaintances. The pharmacist named the product "Del-Immune."

In 2003, product manufacturing was moved from St. Petersburg, Russia to Vivolac Laboratories located in Indianapolis, Indiana. Del-Immune's potency and its quality control were substantially enhanced. The retired pharmacist then renamed his American-made product "Del-Immune V<sup>®</sup>." Today, Del-Immune V<sup>®</sup> nutritional supplements are used by thousands of people in the United States and in a dozen other countries.



## Uniquely innovative production process.

Del-Immune V<sup>®</sup> is produced utilizing a scientific process called "lysing." *Lactobacillus rhamnosus* (DV strain) is cultured, then lysed – or broken apart with natural enzymes that are identical to those found in the human intestine. This creates a product composed of cell wall fragments with pieces of DNA. The product mix is pulverized to produce a fine powder containing microscopic particles of cell wall fragments and other cell components. These components have been identified as activators of the innate immune system which is responsible for immediate immune response.

Within the cell wall of the specific strain of lactobacillus utilized to manufacture Del-Immune V<sup>®</sup> are immune stimulating products identified as organic sugars, otherwise known as polysaccharides,

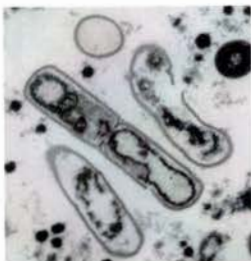
and amino acid complexes called muramyl peptides. The peptide group includes peptidoglycans, which help orchestrate the classic immune response to substances that are foreign to the body.

The immune response activity takes place only when the lactobacillus cell is digested and broken into cell pieces. This entire process occurs naturally in the lower end of the small intestine and in the upper end of the large intestine.

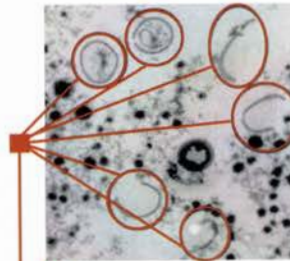
The original Russian research decades ago reported that selected cell fragments have potent and safe immunological benefits. Continuing and emerging research suggests that bacterial surface layer components from cell walls, when taken orally, enhance immune switches, including natural killer cell activity and increase the production of interferons which are known to attack bodily invaders that can lead to illness. The immune activation process from cell wall fragments provides resistance to infection that is non-specific and extends to a number of different substances that may invade the body.

It is estimated that each capsule of Del-Immune V<sup>®</sup> contains more than 2 billion cell wall fragments to accelerate natural immune response.

Electromicroscope images of the lysing process that produces cell wall fragments:



The initial stage of cell wall fracturing or "lysing" of *Lactobacillus Rhamnosus* DV Strain. (magnified 17,000X)



Cell wall fragments after lysing occurs (circles). (magnified 14,000X)



Cell wall fragment containing immune-active components. (magnified 92,000X)