

## GLUTRASOL™ IE

An Integrative Approach to Supporting Immune Health

#### The Challenge

The global need to address immunodeficiency disorders is real and immediate. Richard Bennet Ph.D. states, "It is our ability to create a really healthy immune system that I think represents the greatest potential gains in health in the world".

The outcomes resulting from diminished immune system health are broad. Compromised immune health affects the ability to fight off pathogens, leaving at-risk populations, especially the elderly or 3rd world populations, at a deficit for avoiding disease.

#### At-Risk Populations are Most At-Risk

Many seniors are at risk of contracting disease due to physical limitations, existing health concerns or nutritional deficits. Providing a strong immune health foundation can effectively arm seniors with a better ability to maintain good health and vitality.

In many developing countries vast numbers of at-risk populations arrive at support organizations with immune systems that are severely compromised either from bad nutrition, poor sanitation, environmental stress or aging. Poor sanitation, nutrition and environmental distress are common and systemically hard to overcome.

One solution to supporting both these at-risk groups is to provide nutraceuticals or specialty supplements like Glutrasol IE to support the recipient's immune system health.

#### Immune-System Health and Antigen Exposure

As previously stated, immune-system health is an important factor in fighting off disease. Dr Ananya Mandal, MD notes that "the reason for non-development of immunity to a disease could also be because the host's immune system does not have a B cell capable of generating antibodies against the antigen or microbe or the immune system may not be strong enough to fight off the infection".

Kenneth L. Marcella, DVM states, "It is the immune system, after all, which provides humans and animals with the ability to recognize and remember potentially harmful foreign substances such as bacteria and viruses. The immune system allows us to then respond to these threatening invaders in our systems."

In short, build the immune system to generate a better response to antigenic exposure.

### **Maximizing Immunity and Extended Protection**

Glutrasol IE is a nutraceutical developed specifically to support immune system health.

Cell-medicated immunity increased 4-5 times when Glutrasol compounds were tested on cattle. Also, populations that were non-responsive to antigenic stimulus without Glutrasol compounds developed a response with Glutrasol compounds. Further, animal testing

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showed that protection periods were increased, making recipients less susceptible to additional health concerns.

Global healthcare workers treat very large populations in many developing countries. Efficacy and extended protection periods affect logistics and economics. From a practical standpoint, reducing the frequency of interactions stretches the budget. Fewer visits are required to achieve goals. Delivery costs drop proportionately. More time per visit becomes practical. The need for follow-up treatments decreases.

#### **Effective Delivery is Critical**

"We should anticipate a growing frequency of infectious disease threats to global security" says Peter Sands, Chair Commission on a Global Health Risk Framework for the Future. Maximizing the health of those in developing countries can help minimize the impacts of each new pandemic. Treatments must be stable and easy to manage in extreme climates and where sanitation challenges are great. Doses need to be small, lightweight and easy to administer and distribute.

Researchers are looking at ways to enhance immune system health with easy to administer integrative solutions. Easy-to-transport specialty supplements is a promising approach. Glutrasol IE provides such a solution.

### How Does Glutrasol IE Help Support Immune Health?

Glutrasol IE has been found to:

- Increase antibody titer for a subject 4-5 times
- Extend protection between vaccine booster treatments
- · Improve response to antigenic stimulus
- · Provide ease of delivery in hard to reach populations
- Be stable in excessively hot climates

Additional positive, proven outcomes from animal research:

- Reduced stress
- Increased food utilization or growth rate
- · Improved off-spring mortality
- Increased fertility

To learn more, also read "The Science Behind Glutrasol™" on the CortControl website.

#### **Product Development Timeline for Glutrasol IE**

Glutrasol IE was granted a US Patent in 2017. Glutrasol IE will be tested in clinical studies for human applications.with those studies scheduled for completion in early 2018.

Infectious disease epidemics cost the world US\$60 billion each year. They match wars and natural disasters in their capacity to endanger lives, disrupt societies and damage economies.

> — Coalition for Epidemic Preparedness Innovations (CEPI)

# What is a Nutraceutical?

As nutraceuticals, Glutrasol products are regulated as dietary supplements by the FDA under the authority of the Federal Food, Drug, and Cosmetic Act. Unlike drugs, supplements are not intended to treat, diagnose, prevent, or cure diseases. A nutraceutical is a category of specialty supplement that contains active constituents from foods, herbs, natural compounds and other botanicals. Nutraceuticals have pharmacological benefits and are specially designed to support specific structure/function applications in the body.

More information on specialty supplements can be found at:

https://www.fda.gov/food/ dietarysupplements