Clinical Evidence in Aquaculture Animals

Organomune is effective in all mammals as it is in birds, fish, and many invertebrates. Independent studies performed at the National Taiwan University have shown that it successfully protects shrimp against vibriosis. Other Studies are showing protection against, yersiniosis and furunculosis in shrimp when it is added to the feed or when they are immersed in Organomune suspension.

Initial studies feeding shrimp with Organomune challenged with the Taura Virus have shown promise by producing increased viability rates in excess of 90% in some of the study replicates. However, variability in uncontrolled conditions between replications in this first challenge study also produced variable survival data between replications that nullified statistical significance. The fact that some challenged Organomune protected replication's survival was so much higher than the unprotected Taura Virus challenged controls, could indicate that immune system enhancement had taken place. Additional and more controlled studies are underway to define effectiveness and to refine the incorporation and presentation techniques for Organomune's addition to shrimp and fish feeds.

Authorized Distributor:

RECOMMENDED DOSE

Add Organomune at the rate of 1 kg per metric ton of feed either with your premix, (can be used as base), or directly in feed mixer. Organomune can also be top dressed if so desired.

PRESENTATION

25 kg., (55Lbs.) paper bag.

STORAGE

Store in dry cool environment. Keep partially opened bags closed while stored & away from direct sunlight.

MADE IN U.S.A.

Organic Chemical Solutions L.L.C.
250 John Morrow Pkway, Suite 140, Gainesville, GA 30501, U.S.A.,
Phone 770-755-1788; Fax 770-536-8725
E mail us at info@ocsllc.net; visit us at www.ocsllc.net

Organic Chemical Solutions, L.L.C.

"Organic Natural Safe Chemical Solutions for Livestock"

Use in shrimp, salmon, tilapia, poultry, pigs, cattle, horses & pets

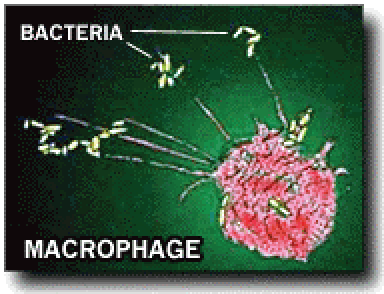
ORGANOMUNE

Advanced Immunology Enhancing Technology

What is ORGANOMUNE?

- Organomune is a highly purified form of combined food and feed grade active ingredients. There are no intermediate carriers to add additional labor, packaging, process and freight costs. With Organomune you get only what you pay for at the highest possible concentration of active materials consistent with safe handling guidelines.
- Organomune is the trade name for a highly purified yeast extract chemically known as beta 1-3 -D- glucan. The active ingredients found in Organomune are **G**enerally **R**ecognized **A**s **S**afe (category *GRAS* according to the FDA), therefore not considered drugs.
- Organomune has no toxicity or adverse side effects. It is 100% natural.
- Organomune is a polysaccharide molecule with a glucose construction. Glucose is a simple saccharide cell that transforms to energy as adeno triphosphate (ATP) and can be then stored in muscle, liver and other tissues in its modified glycogen form.
- The beta 1-3-D- genesis of Organomune is different from energy storing glucose containing polysaccharides because the structural links between the glucose units are different. More specifically, it is the beta 1-3-linkage which makes Organomune highly effective in eliciting an immune cascade reaction.

How does it work?



The activated macrophage is a veritable powerhouse in terms of activity. Not only can a macrophage recognize pathogenic and tumor cells non-specifically as cited earlier, as well as removing foreign debris, but it can produce a number of essential cytokines that are able to stimulate the immune system in general and boost the amount of bone marrow produced in higher animals. Individuals, human or animal, by reason of age or other factors, such as chronic infection or inadequate nutrition, may over a period of time develop a diminished immune system. It was In the late 1980's that Dr. Joyce Czop, at Harvard University, described the mode of action of Beta-Glucans in stimulating the immune system: He surmises the information by stating that there are highly specialized receptors on the surface of certain of the larger immune system cells called macrophages that can be activated also by beta 1-3-D-glucan. Since the macrophage is evidently unable to distinguish the 1-3 Beta Glucan from a primary pathogen at specific receptor sites it triggers and activates a “cascade” of immune events in much the same manner as if an actual pathogenic challenge existed.

Basis for ORGANOMUNES’ Developmental History

The 1,3-D-glucan found in Organomune has a long trajectory of scientific research and scrutiny and a copious reference list. The initial research originated in the 1940's when Pilfer and his colleagues described what amounted to be a crude yeast cell wall preparation. Even at this early developmental stage these researchers came to the conclusion that they had been able to stimulate nonspecific immunity responses by utilizing the yeast extract.

It was unknown at the time which element of this composition, containing a relatively crude mixture of proteins, lipids and polysaccharides, was responsible for the activation of the immune response. The answer came later in the 60's when the late Dr. Nicholas DiLuzio at Tulane University experimented with several glucans and discovered that beta 1-3 - D - glucan configuration isolated from the cell wall of yeast was primarily responsible for the enhanced immune response that had been previously observed by other researchers.

Diminished Immune System Problems:

The following problems are frequently induced by a diminished immune response:

- Reduced cicatrisation capacity (decreased fibrin response).
- Reduced bone marrow proliferation with resulting lowered white cell counts and resulting anemia.
- Increased incidents of all kinds of viral, fungal and bacterial infection.