



The Key to Helping Create a Healthy, Balanced Gut Microbiome

Dyvon Lumensa™ is a postbiotic-based functional matrix feed additive containing multiple components that work together to help deliver superior gut performance. The unique formulation from U.S.-based Verdesian Life Sciences combines the power of probiotic metabolites, seaweed extracts, yeast, chelated/complexed minerals, bioavailable vitamins and antioxidants to support the immune system, gut integrity, nutrient absorption and beneficial microbiota in the gastrointestinal tract.

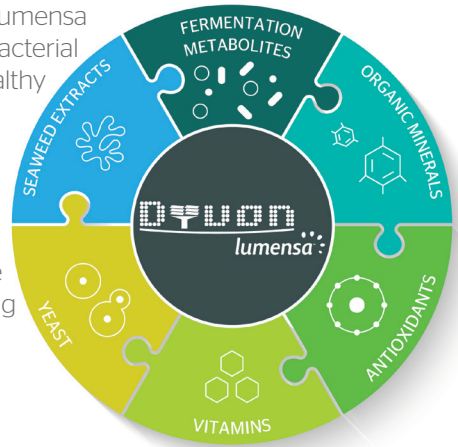
Through a patented two-step fermentation process that transforms product components into a powerful postbiotic, **Dyvon Lumens helps unlock the ability of shrimp to grow bigger by improving digestive and immune health. High-functioning digestive and immune systems can promote improved feed utilization, gut health and productivity to meet market demands.**



Balanced Gut Health Helps Foster Feed Efficiency, Weight Gain and Growth Rate

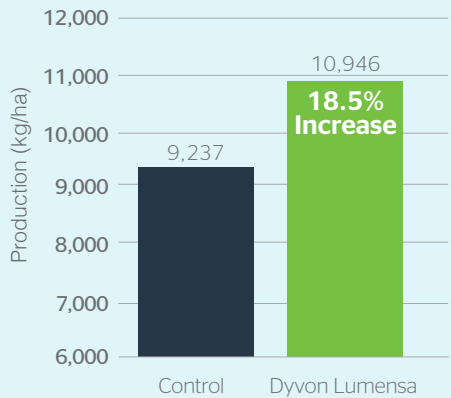
Shrimp encounter various stressors throughout their lifecycle that can negatively impact the gut microbiome. This leads to poor productivity.

The various components within Dyvon Lumensa work together to help maintain desired bacterial diversity within the gut. By creating a healthy and balanced gut microbiota, Dyvon Lumensa helps improve the efficiency of the digestive system and reduces feed conversion ratio (FCR) by an average of 24 percent. In addition, it helps improve the growth performance during the production cycle by influencing nutrient uptake.



Dyvon Lumensa Increased Shrimp Production

Lumensa was added to the commercial shrimp feed and fed daily throughout the production cycle of commercial shrimp farms.



Trials conducted in commercial shrimp farms in Yucatan, Mexico.

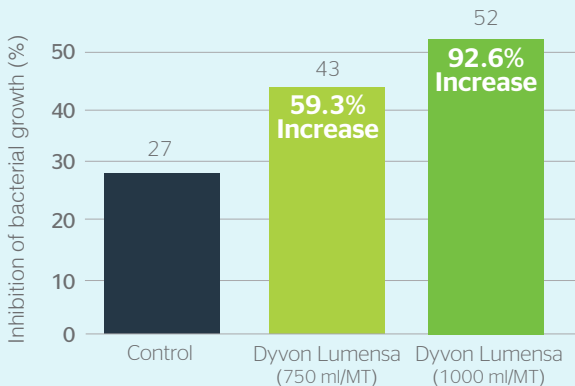
Enhance Immune and Digestive Systems While Decreasing Mortality

Stressors also impact the immune system, and both the digestive and immune systems are connected through the gut microbiome. Dyvon Lumensa helps create a gut environment filled with healthy bacteria, leaving no room for pathogenic organisms like vibrio species to colonize in the gut and compromise shrimp health. By balancing beneficial organisms and enzymes within the gut, Dyvon Lumensa also helps boost the immune system to result in reduced mortality. **In addition, Dyvon Lumensa, a postbiotic, works synergistically with probiotics to support increased competition within the gut that can help protect beneficial bacteria and defend against pathogenic bacteria.**

Effects of Dyvon Lumensa on Shrimp Immunity

Lumensa increased antibacterial activity of shrimp plasma

Increased antibacterial activity in plasma is a crucial factor of overall health and helps improve immunity and disease resistance of shrimp. The antibacterial activity of the plasma was determined by the degree of bacterial growth inhibition by antibacterial peptides present in the plasma of the lymph.



Source: Verdesian Life Sciences. Guayas River, Ecuador.

Creating a Competitive Advantage Through a More Productive Aquaculture System

In addition to protecting shrimp health, aquaculture products from Verdesian help quickly establish a more productive aquaculture system and can result in a more profitable operation to create a competitive advantage in the marketplace. Other products in the product family:

- Proquatic® Maintain helps establish healthy shrimp from the start by creating and maintaining a stable aquaculture system in aerobic conditions.
- Proquatic PondRestore helps create a non-toxic pond bottom that supports a healthy, stable pond environment, resulting in bigger shrimp and higher profit potential.

Trials indicate that together with Dyvon Lumensa, these products on average over untreated help:

- Accelerate growth
 - » Increase average body weight **13 percent**
 - » Decrease FCR **24 percent**
- Create cleaner ponds
 - » Increase diatom population **120 percent**
 - » Increase bacteria/probiotic population **125 percent**
 - » Decrease pond production cycle **8.5 days**
- Yield healthier, larger shrimp
 - » Increase survival rate **23 percent**
 - » Increase shrimp harvest weight **22 percent**
 - » Increase return on investment **5:1**

Scan QR code with your phone camera for more information.



Accelerate growth.
Create cleaner aquaculture systems.
Yield healthier, larger shrimp.

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