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Survival in shrimp improves three-fold with novel algae-enriched diet



Shrimp survival improves three fold thanks to novel diet of Veramaris algal oil replacing fish oil.

In a recent study published by the Global Aquaculture Alliance (GAA), Pacific White Shrimp fed a fish-free diet containing Veramaris' natural marine algal oil and Menon's MrFeed[®] had significantly higher survival rates for acute hepatopancreatic necrosis syndrome (AHPNS) compared to diets containing fishmeal and fish oil.

AHPNS is an emerging disease causing serious reductions in shrimp production. Also known as early mortality syndrome, the disease has had a significant impact on shrimp production globally, with mortality rates as high as 100% in the first 30 days of infection.

In the study shrimp were fed six diets, one of which constituted a complete replacement for fish oil and fishmeal. Veramaris' algal oil, the richest source of both EPA & DHA Omega-3 fatty acids for aquaculture, is a complete replacement for fish oil and Menon's Oleo-Protein, produced by converting plant-based products into highly digestible nutrients, is a

Shrimp fed this fish-free diet were found to have increased immunity to AHPNS, with a survival rate of over 60% compared to the next most successful diet of fish oil/fishmeal with a survival rate of just over 20%.

Ewen McLean, Principal at Aqua Cognoscenti, is the study's Lead Author, he said: "The study demonstrates that shrimp, and likely many other species, can be fed diets without fishmeal and fish oil, thereby enabling aquaculture expansion to continue unabated, despite fluctuations in forage fish resources.

"A higher survival rate results in better yield and improved feed conversion ratios since less feed is wasted."

Karim Kurmaly is CEO at Veramaris, he said: "This study represents a significant breakthrough in combating a serious disease affecting shrimp production globally.

"Our innovative algal oil has been successfully increasing levels of EPA & DHA in fish and we now know that it is also contributing to a significant increase in survival rates in shrimp.

"Incorporating a natural replacement in fish diets such as Veramaris' algal oil ensures continued stability of supply as well as improving the health, texture, colour and flavour of fish and shrimp, due to increased levels of EPA & DHA Omega-3 fatty acids."

For more information on the study, please visit

www.aquaculturealliance.org/advocate/study-replaces-dietary-fish-oil-with-microalgal-oil/.

ABOUT VERAMARIS

Veramaris, headquartered in Delft, The Netherlands, is a joint venture between DSM and Evonik, both world leaders in science and specialty chemicals. Established in 2018, Veramaris was formed to help realise a vision to conserve natural marine life by using the ocean's own resource, natural marine algae, to sustainably expand the world's access to Omega-3.

Veramaris extracts oil from natural marine algae, rich in both the essential Omega-3 fatty acids EPA & DHA, and also ARA, a long chain Omega-6, vital nutrients for improved brain, heart and eye health in both animals and humans.

The zero-waste industrial scale production process runs at a state-of-the-art site in Blair, Nebraska, USA.

Veramaris enables key stakeholders in aquaculture and pet nutrition to become independent of wild-caught fish and meet the growing demand for sustainable seafood and animal protein.

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