

# PROJECT HORIZON

Aquatic animals like shrimp require a balanced set of essential amino acids rather than an excess of crude protein for optimal growth and health. While higher protein content in feed is often perceived as indicative of quality, it is the efficient absorption and utilization of nutrition that contributes to the animal's growth performance.

Over-fortified feeds are not only more expensive but lead to increased waste excretion, affecting both feed efficacy and the quality of the pond water. The notion of reducing dietary protein in feed is not new and studies suggest that supplementing diets with the right nutrients do not compromise growth performance but can actually boost protein retention and lessen environmental impacts.

So, while protein content does play a role in feed pricing, an industry-wide shift towards a more balanced nutrient approach is necessary to reduce negative environmental impacts, particularly as aquaculture continues to intensify globally.

The introduction of the new Horizon feed series which is through 360° nutrition turbo, with new formulations that feature balanced protein levels and a high dose of our unique functional additives to boost feed performance and nutrient utilization efficiency has shown results in reducing water contamination, decreasing the release of nitrogen into the pond. This, in turn, reduces the likelihood of disease outbreaks and the associated costs of water treatment.

In several research trials with Pacific Whiteleg shrimp (*Penaeus vannamei*), we found that slightly reducing dietary crude protein did not impede shrimp growth. In comparative performance evaluations over 8-10 weeks, our lower-protein feed often outperformed standard feeds. Instead, we observed improved feed conversion ratios and return on investment, solidifying the benefits of our nutritional strategy.

