

Supplementary Material

Effects of a functional palatability enhancer on growth performance, digestive physiology, and immune response in the Pacific white shrimp (*Penaeus vannamei*) fed low-quality fishmeal diets

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Table S1. Effect sizes and omnibus *p*-values for growth, enzymatic, immune, histological, and body composition variables of whiteleg shrimp (*Penaeus vannamei*) fed diets containing a functional palatability enhancer (at 0.08% and 0.2% inclusion) and two control diets without the additive (negative and positive control, containing lower and higher quality fish meal, respectively) for 56 days in a clear water system.

Variable	Omnibus <i>p</i> -value	Effect size (Partial η^2)
Growth performance		
Final body weight	0.026	0.526
Total feed intake	0.103	0.391
Feed conversion ratio	0.346	0.233
Weekly weight gain	0.028	0.518
Daily growth coefficient	0.034	0.501
Survival	0.661	0.120
Gut histomorphometry		
Width	0.371	0.136
Length ^a	0.188	0.146
Area	0.253	0.173
Number of folds	0.888	0.029
Whole body nutrient content		
Nitrogen content ^a	0.565	0.074
Phosphorus content ^a	0.237	0.232
Immunological variables		
Total hemocyte count	0.044	0.479
Total protein	0.837	0.066
Phenoloxidase activity	0.627	0.131
Agglutination titer	0.588	0.143
Digestive enzyme activity		
Amylase ^b	< 0.001	0.297
Chymotrypsin ^b	0.001	0.170
Lipase ^b	0.070	0.079
Trypsin ^b	0.032	0.099

^aWelch's ANOVA *p*-value. ^bKruskal-Wallis *p*-value and ϵ^2 effect size measure. Remaining *p*-values from Fisher's ANOVA.