# Effects of Dietary Immunogen Prebiotic on Growth, Hematological Indices and Proximate Composition of Rainbow Trout (*Oncorhynchus mykiss*)

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## Abstract

This experiment was conducted to examine the effect of dietary Immunogen prebiotic on growth, hematological indices and body composition of rainbow trout fingerlings. A basal diet supplemented with 0 (control), 0.05, 0.1, 0.15 and 0.2 percent prebiotic to formulate five experimental diets. Each diet was randomly allocated to triplicate groups of fish with initial average weight of approximately 13.76±0.54 g. After 8 weeks of feeding trial, fish fed diets with prebiotic showed the highest final weight and SGR, and lowest in fish fed the control diet ($P<0.05$). The feed conversion ratio (FCR) was better when the fish were fed with 0.15 percent prebiotic. There were significant differences in hematological parameters including hematocrit, RBC, WBC, HB, lymphocyte and neutrophil counts in fish fed by dietary prebiotic ($P<0.05$). At the end of feeding trial, the fish fed 0.1% diet showed higher whole body protein. The fish fed with 0.15% diet exhibited lower levels of lipid and ash. The results suggested that administration of dietary Immunogen at 0.15-0.2 percent exerted positive effects on growth, hematological indices and body composition in rainbow trout.

Keywords: *Rainbow trout, Immunogen Prebiotic, Growth, Hematology, Body composition.*