

**Myoinositol requirement in diets for juvenile Olive flounder,
*Paralichthys olivaceus***

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Inositol is classified as a vitamin-like nutrient for most animals. However, it has not been clearly demonstrated whether the vitamin should be supplemented in diets for fishes because of its *de novo* synthesis. Therefore, a long-term (26 weeks) feeding experiment was conducted to examine the essentiality and requirement of inositol in diets for olive flounder because no information is available in the species. Five casein-gelatin based semipurified diets were formulated to contain four different levels of myoinositol (0, 0+antibiotic, 400, 800, and 1600 mg/kg, designated as M0, M0+, M400, M800, and M1600, respectively). One (M0+) of the control diets contained tetracycline hydrochloride (0.4%, wt/wt) as antibiotic to inhibit biosynthesis of inositol by micro-organism in intestine of fish. Olive flounder at the early juvenile stage (initial body weight 1.22g) were randomly distributed into fifteen 35 L tanks (48 fish/tank) and fed with the experimental diets (3 replicates per diet). At the end of the feeding trial, the weight gain, feed intake, and specific growth rate of fish fed diets containing higher levels of myoinositol (M800 & M1600) were significantly higher than those of fish fed the other diets ($P < 0.05$). Feed conversion ratio, survival, hematocrits, and hemoglobin of fish fed experimental diets were not different among all the fish groups. This study indicates that juvenile olive flounder requires myoinositol in diets for normal growth and its optimum level seems to be approximately 800 mg myoinositol/kg diet.

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