

# **Investigation of the Effect of L-Carnitine and Fish Oil on the (DFI) Daily Food Intake index in Rainbow Trout 15g during breeding period for 30 days**

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## **Abstract**

The effect of L-carnitine and fish oil in 9 treatments with 0, 2 and 5% fish oil, and 0, 2, 4, and 800 mg of L-carnitine in 1 kg of dry feed on the growth parameters of Rainbow Trout with an average weight of 15 Grams were evaluated within 30 days. Each treatment consisted of 3 replicates and 10 fish were used. A total of 270 fish were used. The feeding rate was 2 times per day and between 2.5 and 3.5 percent of body fish weight. According to the results of two-way analysis of variance ( $P > 0.05$ ), with increasing levels of L-carnitine, especially the level of 800 mg / kg of fish food, the fat burning effect of this supplementation showed that the fat accumulation rate decreased significantly. The increase in fish body catabolism increased the amount of fish consumed by the fish, which only the effect of different levels of fish oil and L-carnitine on the daily feed intake index was significant ( $P < 0.05$ ).

**Keywords:** L-Carnitine, Fish Oil, DFI, Rainbow Trout