

Effect of different levels of dietary choline and lipid on growth parameters and biochemical composition of common carp fillet (*Cyprinus carpio*)

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Abstract

The aim of this study was to evaluate the effects of different levels of dietary choline and lipid on growth and feeding parameters and biochemical body composition of common carp *Cyprinus carpio*. So, 336 common carp with initial average weight of 34.44 ± 0.181 g were held in 24 fiberglass tanks (200L) since September 2016 for 8 weeks. Choline was added to the diet at four levels of 0, 500, 1500 and 3000 mg kg⁻¹ diet with two lipid levels of 5 and 10%. The experimental diets were isonitrogenous. Growth index such as weight gain (WG), specific growth rate (SGR) and viscerosomatic index (VSI) were evaluated and no significant difference was observed among treatments ($P>0.05$). But, final body weight (FW), feed conversion ratio (FCR) and hepatosomatic index (HSI) showed a significant difference among treatments ($P<0.05$). The biochemical composition of fillets except lipid was not affected by different levels of dietary lipid and choline ($P>0.05$). According to the results and considering the amount of choline in the diet, the suitable choline level would be 500 mg kg⁻¹ at 5% lipid in diet. Keywords: Choline, Growth, Biochemical body composition, Common carp (*Cyprinus Carpio*).