Effects of Zinc Sulfate ($ZnSO_4$) supplementation on carcass quality of goldfish (*Carassius auratus*)

Jahanbakhshi A. [1*]; Jadgal S. [1]; Dolokian I. [1]; Erfanifar E. [1]

1-Agricultural Research Education and Extension Organization (AREEO), Iranian Fisheries Science Research Institute (IFSRI), Offshore Fisheries Research Center, Chabahar, Iran
*Corresponding author's email: abdolreza.jahanbakhshi@yahoo.com

Abstract
Zinc is one of the most important trace elements for fish. In this study, goldfish *Carassius auratus*, (3.3 g) were reared in zinc sulfate ($ZnSO_4$)-containing at concentrations of 0, 25, 75 and 150 mg $ZnSO_4$/kg diet for 9 weeks to investigate effects of $ZnSO_4$ supplementation on carcass quality. At the end of experiment, significant differences were found in ash content ($P<0.05$). Protein, fat and moisture content have not significantly different. $ZnSO_4$ supplemented diets caused reduction in protein, fat and moisture values but no statistically difference was observed among the treatments. Carcass ash content increased for all three experimental diets (containing zinc), and was significantly higher for the diet with 150 mg $ZnSO_4$/kg. These results suggest that $ZnSO_4$ can effectively be included in diets for goldfish up to 150 mg without significant negative effects on carcass composition.

Keywords: Zinc Sulfate, Supplementation, Carcass quality, Goldfish