عنوان مقاله:

Estimation of target hazard quotients for heavy metals intake through the consumption of fish from Sirvan River in Kermanshah Province, Iran

محل انتشار:

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خلاصه مقاله:

The aim of this research was to investigate concentrations of cadmium (Cd), lead (Pb), chromium (Cr), copper (Cu), and zinc (Zn) in the muscle, gill, and liver of common carp (Cyprinus carpio), tuwini (Capoeta trutta), and Grass carp (Ctenopharyngodon idella) from Sirvan River, Kermanshah Province, Iran, during November to December 2014. This investigation was conducted in order to determine the potential health risk of the intake of these metals through the consumption of the edible parts of fish and also to assess the safe dietary intake levels of these metals. The results of the present study indicated that the highest and lowest accumulated metal concentrations were related to Zn and Cd, respectively. Moreover, the metal concentrations in the gill and liver were higher than in the muscles of the three fish species. The target hazard quotients (THQs) for an adult with mean body weight of 71.5 kg were below 1 based on Cd, Pb, Cr, Cu, and Zn levels. In conclusion, the obtained results indicated that the levels of metals in the edible muscle of fish species in this study were below the level of concern for human consumption.

کلمات کلیدی:

Gills, Liver, Metals, Carp, Body weight