The effect of heavy metals lead and cadmium on the health of adults, women and children with fish consumption (case study: Anzali wetland)

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Abstract

The purpose of this study was to describe the health effects of heavy metals in seafood dominates the household basket and tourists residents of all ages (children, adults and women) on the outskirts of the Anzali wetland using the Spectrophotometry method. The results indicated that the highest and the lowest concentrations of lead in *Esox lucius* fish muscle was 2.56± 0.06 mg/g dry weight) and cadmium (0.1± 0.09 mg/g dry weight) in *Chalcalburnus chalcoides* and the following relationship Cd <Cr <Pb. In examining the health risks resulting from the consumption of contaminated fish Flzatsngyn according to the instructions EPA2010e, The highest daily consumption per capita consumption rate in Iran is due to two elements lead and cadmium in the acceptor, and the risk index calculated for all groups and ages surveyed, less than a show. It can be said fish in general allowance nutrition, recreation and permanent does not create a risk to health but in studies, the possibility of danger to children than other consumer segments were observed in constant use which shows the sensitivity of the group and the need for more attention to health and food security and critical ecosystems such as wetland and rivers far to protect the health related sectors.

Keywords: Heavy metals, Consumers, Native fish, Anzali wetland.