

The metals toxicology on freshwater fish tissues

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The objective of the present study was to investigate the levels of heavy metals, namely cadmium (Cd), copper (Cu), zinc (Zn), lead (Pb) and chromium (Cr), in muscle, gill and intestine of freshwater fish, *Ctenopharyngodon idella* in Anzali Wetland, Iran. The concentrations were different between the fish species as well as among the tissues of fish. The highest mean concentration of Cd in fish species and fish tissues was observed in the intestine of *C. idella* at 1.08 µg/g. The highest mean concentrations of Zn and Cr were found in the liver of *C. idella* and *P. fluviatilis* at 31.20 µg/g and 4.20 µg/g, respectively. The lowest Cd, Cu, Pb and Cr concentrations were observed in the muscles of *C. idella*, while the lowest Zn concentrations were observed in the gill of *C. idella*. Results showed that the heavy metal concentrations in fish species were in descending order of Zn > Cu > Pb >

Cr > Cd. Results also showed that the Cd, Cu, Zn, and Pb concentrations in the muscle of both fish from Anzali Wetland are below levels of concern for human consumption.

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