

Determination of Cr Content in Canned Fish Marketed in Iran

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Abstract : The presence of heavy metals in the environment could constitute a hazard to food security and public health. These can be accumulated in aquatic animals such as fish. Samples of four popular brands of canned fish in the Iranian market (yellowfin tuna, common Kilka, Kawakawa, and longtail tuna) were analyzed for level of Cr after wet digestion with acids using graphite furnace atomic absorption spectrophotometry. The mean concentrations for Cr in the different brands were: 2.57, 3.24, 3.16, and 1.65 $\mu\text{g/g}$ for brands A, B, C, and D respectively. Significant differences were observed in the Cr levels between all of the different brands of canned fish evaluated in this study. The Cr concentrations for the varieties of canned fishes were generally within the FAO/WHO, U.S. FDA, and U.S. EPA recommended limits for fish.

Keywords : heavy metals, essential metals, canned fish, food security

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