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An assessment study in the determination of chemical elements in sediments and fish in the Zarka River and King Talal Dam, Jordan

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Abstract: Concentrations of several trace elements were detected in the sediments at King Talal Dam and at different locations along the Zarka River, Jordan. Chemical elements were also detected in the edible part of common fish types existing at the dam. Elemental concentrations were determined using neutron activation analysis (NAA). The results showed that the concentration of chemical elements in the sediments decreases as one moves away from the Khirbet Al Samra waste water treatment plant. The results also revealed that most of the elements had higher concentrations in Tilapia fish compared to the Catfish .