

## Study on toxic metal levels in commercial marine organisms from Romanian market

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**Abstract** The goal of this study was to analyze the content of heavy metals in fish, shellfish, molluscs cephalopods on the Romanian market. We have analyzed heavy metals traces in sixteen marine organisms species. Analyses of heavy metal traces were done with mass spectrometer with inductively coupled plasma-ICP-MS, Agilent Technologies 7500 Series. Among the elements identified it was analyzed the content of Cd, Hg, Pb, metals with high toxicity to the human body, and the obtained values were interpreted in accordance with Commission Regulation (EC) No 1881/2006 concerning the maximum allowable quantity per kg wet product and Provisional Tolerated Weekly Intake (PTWI) established by the Joint Committee experts WHO / FAO. The risk assessment performed indicated that marine organisms were safe for the consumer except the four species that cadmium content may be exceeded for a regular or excessive consumption.

*Keywords:* heavy metals, risk assesment.

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