



Research Article

A preliminary risk assessment of the trace metals accumulated in the farmed Beluga sturgeon (*Huso huso*) caviar from Caspian Sea

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ABSTRACT

Beluga sturgeon (*Huso huso*), the source of beluga caviar, is so depleted that they were included on the list of endangered species by the convention on international trade in endangered species (CITES), and it is estimated that overfishing for meat and caviar will soon cause global extinction on the remaining natural wild population; so, production of caviar using aquaculture is seen as a feasible way to prevent extinction of this species. The concentration of Ca, Co, Cr, Cu, Fe, K, Mg, Mn, Se and Zn as essential metals, were determined in caviar of farmed Beluga sturgeon. Co and Mn levels in the samples were less than 0.01 mg kg⁻¹ wet weight. The mean concentration of Cu and Zn in the caviar samples were under the permissible limits proposed by the UK's ministry of agriculture, fisheries and foods (MAFF). The caviar maximum allowable daily consumption rate was calculated. However, the health risks from caviar consumption are uncertain because the amount of caviar consumed by heavy users is not known.

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