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INVESTIGATION OF METAL ASSIMILATION EFFICIENCIES IN MARINE FINFISH

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Food is often recognized as the main contribution to metal accumulation in marine fish. Understanding the trophic transfer in fish is therefore key to properly assess global metal accumulation capacities in these organisms. Assimilation efficiency (AE) is one of the most relevant parameter to understand metal trophic transfer in aquatic food webs. The assessment of metal AE is generally carried out using radiotracers and helps to understand factors influencing the metal trophic transfer. Nowadays, the use of natural diet seems a key step, under laboratory conditions, to investigate the factors influencing the metal trophic transfer in marine fish. We looked at, in this study using radioisotopes (such as ^{54}Mn , ^{57}Co , ^{65}Zn , $^{110\text{m}}\text{Ag}$ and ^{109}Cd), the effects of different biotic factors on metal trophic transfer and we showed that depending of the metal some factors such as the quality of food or the life stage of the predator can influence metal AE in marine finfish. We also highlight that the interspecific difference of metal AE may occur for some element (e.g. Co) in marine finfish.