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Mercury Biomagnification in Food Webs of the Northeastern Chukchi Sea, Alaskan Arctic

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ABSTRACT

Predictive tools and a large new dataset for the northeastern Chukchi Sea (NECS) are used here to help identify regional differences and potential future shifts in the magnitude of Hg biomagnification in the Arctic. At the base of the food web in the NECS, concentrations of total mercury (THg) in phytoplankton (20- μ m mesh) ranged from 4–42 ng g⁻¹ dry weight, partly in response to variations in algal biomass and water temperature. A >3-fold increase in monomethylmercury

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