

Trophic transfer of trace metals in Waquoit Bay

Consumption of contaminated fish is a serious public health concern and fish are the most important agents of exposure to the neurotoxin, methylmercury (MeHg) by humans. We seek to discover the key mechanisms underlying movement of Hg, as MeHg, through estuarine and reservoir food webs into fish and shellfish. Our broad goals are to determine (1) the variables that enhance or diminish the bioavailability of inorganic mercury (Hg_i) and its transformation to MeHg and (2) the features of food webs in these systems that enhance or diminish bioaccumulation and trophic transfer of MeHg to fish and shellfish.