

ABSTRACT

A STUDY OF HEAVY METALS AND HYDROCARBONS
IN FISH, CRABS AND MUSSELS FOUND IN TRINIDAD

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A baseline study of the heavy metals Zn, Fe, Cu, Ni, Pb, Cr, Cd and Hg, and petroleum hydrocarbons in selected fish, crabs and mussels found in the environment of Trinidad was carried out. In addition, an investigation was undertaken of possible reasons for the severe reduction in the population of the mussel, *Mytella guyanensis*, from the west coast of Trinidad. Temporal and location effects were found with respect to some of the contaminants. Levels of zinc found in fish skin and crab muscle were of concern when compared to international safe limits for these metals in food. Relatively higher levels of mercury at one of the sampling sites were also of concern because of the reported accidental release of a large quantity of mercury in that area. Elevated levels of iron in *Mytella guyanensis* together with the results of an uptake study strongly suggest that iron

toxicity was a major contributor to the reduction in the population of the mussel.

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