

**Residual concentration of PAHs in seafood from Hormozgan province, Iran : human health risk assessment for urban population.**

ABSTRACT

This study is to determine the concentrations of sixteen poly aromatic hydrocarbons in eighteen pooled samples of fish, shrimp, crab and bivalve from markets of Hormozgan province, Iran. The poly aromatic hydrocarbon levels varied from  $16 \pm 8.4$  to  $28.18 \pm 3.74$  ng/g wet weight. The investigated samples were classified as minimally contaminated. Distribution patterns showed that PAHs with 4, 5 and 6 rings dominated, confirming the pyrogenic source of detected PAHs. Fish contributed more than other biota groups in transforming of PAHs to Hormozgan Province people. The average of B (a)P eq values for the studied biota was  $2.71 \pm 2.28$  ng/g that was greater than calculated local screen value. This finding was implemented in poor quality of studied biota and necessity for risk management.

**Keyword:** Hormozgan Province; PAH; Risk assessment; Seafood.