



Title: A screen for Benzo(a)pyrene in Fish Samples From Crude Oil Polluted Environments

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Abstract: Several studies have shown that exposure to Benzo(a)pyrene increases the risk of cancer. In this study several fish samples from Niger the Delta region of Nigeria were screened for the presence of Benzo(a)pyrene. The study was carried out using Gas chromatograph coupled to a mass spectrometry detector. Benzo(a)pyrenes in the samples were identified through both retention time match with authentic standards and simultaneous maximization of several major ions from GC/MS data. Perylene-d12 was used as the internal standard for quantitation. Concentration of benzo(a)pyrene in the samples ranged from 1.47 to 10.53 mg/kg which is more than WHO recommended maximum allowable concentration. Therefore this study concludes that the population is at an elevated risk of cancer of occurrence.