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Determination of PAHs in smoked fishes (*Caranx senegallus Cuvier* and *Scomber scombrus*) sold in Beninmetropolis

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There is little information on the levels of PAH in smoked fish widely marketed in Benin City. This study was aimed to investigating the profile of 16 priority Polycyclic Aromatic Hydrocarbon (PAH) in two smoked fishes (*Caranx segenallus* Curvier and *Scomber scombrus*) commonly consumed in Benin City. The fishes were randomly purchased from three major markets in Benin metropolis. The samples were prepared by deboning and cut into small pieces, milled and packed in aluminum foil and stored in ice prior to further analysis. 5 g of the representative samples were collected and analyzed for PAH and its congeners using Agilent 6890 series Gas Chromatography in the laboratory. The result from the investigation of *Caranx senegallus Cuvier*, revealed that twelve of the sixteen congeners were discovered with pyrene having the lowest value of 73.344 ug/kg and Benzo (g,h,i) perylene having the highest value of 1689.9 ug/kg. For the PAH8 congeners considered to be possibly carcinogenic and genotoxic to human, seven were present in this study. Of the sixteen investigated congeners, only eleven were present in *Scomber scomberus*, Chysene occurred with mean concentration of 50.37 ug/kg as the lowest value and Benzo (g,h,i) perylene having the highest value at 1904.3 ug/kg. For the PAH8 congeners only six of the congeners were found in this study. The finding revealed that all values of the congeners exceeded the permitted maximum limit of the EU (2006) suggesting that constant consumption of these food stuffs could lead to possible cancer or non-cancer toxic effect.

Biography

Erhunmwunse Nosakhare Osazee has completed his MSc at the University of Benin, Benin City and is currently a PhD student in same university. He is 34 years old and currently an Assistant Lecturer in the Department of Animal and Environmental Biology, University of Benin. He has published more than 10 papers in reputed journals.

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