Title of Article in Conference Proceedings: Carcinogenicity and Mutagenicity Assessments of Dietary Exposure to PAHs in Imported Fish Products in Nigeria.

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Outlet: Proceedings of the 8th International Conference on Environmental Science and Technology. In: Sorial, G. and Hong, J.: *Environmental Science and Technology 2016* Vol. 1, pp. 388, American Science Press, Houston, USA, ISBN 978-5-5323-2259-4, June 6-10, 2016, Houston, Texas, USA.

Abstract: Polycyclic aromatic hydrocarbons (PAHs) occurrence and assessment of dietary exposure from imported canned sardines (*Sardinops sagax*) commercially marketed in local stores and supermarkets in Nigeria were evaluated for the first time. PAHs determinations were performed using high performance liquid chromatography (HPLC) (Agilent 1290 model) equipped with UV-VIS diodes array detector (DAD) at λ =210 nm and 214 nm. The percentages recoveries were higher than 96%. The degree of contamination expressed as total concentrations of PAH (TPAHs) congeners ranged between 2.53 and 35.55 μg kg−1 dry weight (d.w.) at λ = 210 nm, and 1.30 and 27.93 μg kg−1 (d.w.) at λ = 214 nm. The carcinogenic (BaP-TEQ) and mutagenic toxicities (BaP-MEQ) of eight priority PAHs were evaluated. Benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene and indeno(1,2,3-d) pyrene contributed significantly to the total carcinogenic equivalents of PAHs. The mutagenic equivalents were largely influenced by equivalence factors of benzo(a)anthracene, and benzo(a)pyrene and indeno(1,2,3-d) pyrene. The estimated daily intake (EDI) and excess cancer rate (ECR) were evaluated for adults and children exposure related risks.