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Quantitative measurements of lead and cadmium in select street foods sold in Taft Avenue, Manila

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Heavy metals are toxic substances which can be transmitted through air and can pollute bodies of water. They may contaminate a variety of products, including street foods. In this study Calamares (fried squid rings) and Isaw (grilled chicken intestines) samples were obtained from two separate stalls in different locations along Taft Avenue, Manila. One kilogram of each sample was analyzed for lead (Pb) and cadmium (Cd) content using Inductive Coupled Plasma- Atomic Absorption (ICP-OES) Spectrophotometry. The results showed that the level of cadmium (Cd) present in the calamares samples exceeded the provisional tolerable weekly intake of 0.025 ppm set by the World Health Organization (WHO) in 2010. On the other hand, the level of lead (Pb) from the same samples was below the provisional tolerable weekly intake of 3 mg of lead/person, equivalent to 0.05 mg/kg b.w. for adults, set by IPCS INCHEM Organization, the Joint FAO/WHO Expert Committee on Food Additives. The lead content for calamares from both Estrada Street and Pedro Gil was lower than the provisional tolerable weekly intake. For future researches it is recommended that other heavy metals should also be studied. Nowadays, pollution along area where vehicles are numerous is getting worse despite measure done by the government such as anti-smoke belching law. It is also recommended that leaded gasoline be totally banned, thus minimizing lead contamination of food sold along streets. Other streets or places where there are many street vendors that sell different kinds of food should also be studied. The results of these studies done and still to be done should serve as a basis for information campaign on heavy metals contamination of food.

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