

**ASSESSMENT OF CADMIUM (Cd) AND
LEAD (Pb) IN THE FLESH TISSUES OF
BARRAMUNDI (*Lates calcarifer*) FROM
KLANG VALLEY MARKETS**

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ABSTRACT

Dietary exposure to heavy metal has been clarified as a threat to human health through the consumption of metal contaminated fish. The level of heavy metal including Cadmium (Cd) and Lead (Pb) in the muscle tissue of *Lates calcarifer*, a type of saltwater fish can be found in Klang Valley in Kuala Lumpur was carried out in this research study. Three fish samples were collected from ten different locations which are five from wet markets and another five from supermarkets. The mentioned wet markets and supermarkets are Sri Petaling, Ulek, Taman Midah, Taman Connaught, Pandan Perdana and Carrefour, Econsave, Giant, Jaya Jusco and Tesco. The fish samples were analysed for lead and cadmium using atomic absorption spectrometer (AAS). The concentration of cadmium and lead in barramundi muscle was compared with the permissible level in Fourteenth Schedule (Regulation 38) of the Malaysia Food Act 1983 and Food Regulations 1985. The result obtained in this research showed that the barramundi in either wet markets and supermarkets in Klang Valley are safe to be consumed which is under the permissible level, where the range of cadmium obtained are 0.0550 to 0.1863 mg/kg and lead which are 0.1127 to 0.6197 mg/kg. The result of this research indicated that there are significant amount of heavy metals being absorbed into the barramundi muscle which could be due to the discharges from industrial waste, domestic and agriculture activities.