

**RISK ASSESSMENT OF HEAVY METALS IN STREET FOOD
FROM SELECTED AREA AROUND JENGKA**

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ABSTRACT

RISK ASSESSMENT OF HEAVY METALS IN STREET FOOD FROM SELECTED AREA AROUND JENGKA

High consumption of street food may cause many harmful health effects due to contamination of heavy metal. Two food items of street food, namely, fried banana and *Keropok Lekor* were collected in stalls nearby Pasaraya Darul Makmur (PDM), UMart, Ten Ten store and stalls at 'Pasar Rabu' in UiTM Pahang, Campus Jengka as a control sample to determine the concentration, carcinogenicity and to compare the concentration of heavy metal in fried banana and *Keropok Lekor* with permissible limit by Food and Agriculture Organization (FAO) and World Health Organization (WHO). The fried banana and *Keropok Lekor* samples were prepared by wet digestion using the mixture of HNO₃ and H₂O₂. The prepared samples and control were analyzed by using ICP-OES. All concentration of selected metals (Al, Cd, Cu and Pb) were below than maximum standard set by FAO/WHO. The highest concentration for Al, Cd, Cu and Pb were 0.27 mg/kg, 0.093 mg/kg, 0.08 mg/kg and 0.03 mg/kg, respectively. The highest value for THQ was in fried banana and *Keropok Lekor* that sold in stalls nearby UMart which are Cd (3.33×10^{-5} and 1.186×10^{-4}). For the HI values are 1.861×10^{-4} and 6.075×10^{-4} for both samples. THQ and HI values measured were below than permissible limit which shows the consumer are not in harmful health effect like cancer. Comparison with permissible limit, all samples were not exceeding the limits which are Al (1 mg/kg), Cd (0.2 mg/kg), Cu (2.0 mg/kg) and Pb (0.5 mg/kg) for fruit and Al (1 mg/kg), Cd (0.5 mg/kg), Cu (3 mg/kg) and Pb (0.5 mg/kg) for fish. The measured concentration can help in estimating the risk of health effect on consumers.