ASSESSMENT OF Al, Fe, Pb AND Zn IN SELECTED CANNED FOODS

NURUL NASUHA SAFFIEI

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ABSTRACT

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Canned food products started to exist in worldwide market since the 18th century and the demand grown rapidly from time to time. The people all around the world prefer to have canned food products compared to the other type of food packaging as the canned food products are more convenient, easy to serve and delicious. However, there were so many disadvantages of canned food products for daily consumptions because the contents may contaminated with heavy metals. In this study, the assessment of aluminium (Al), iron (Fe), lead (Pb) and zinc (Zn) were done on three types of food samples which were *Spratelloides delicatulus* (sardines), *Stolephorus indicus* (anchovies) and *Bos taurus* (cow meat) from the local and international brands with different product expiry date. The samples were extracted by using the acid digestion technique and analysed the selected heavy metals concentrations with the Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES). The mean concentration obtained for the whole samples were found to be 18.6±13.26 mg/kg of Al, 66.2±33.81 mg/kg of Fe, 0.82±0.38 mg/kg of Pb and 57.48±48.48 mg/kg of Zn. The trend of the concentration of trace metals in all tested canned food samples was Zn > Fe > Al > Pb.

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