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**ANALYSIS OF TRACE METAL CONTENT IN CHILLIE POWDER AVAILABLE IN
THE SRI LANKAN MARKET**

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ABSTRACT

Chillie (*Capsicum annum* L.) powder is the dried, pulverized fruit of chillies and used as a spice to add pungency flavour to the dish. This study was conducted to investigate the trace metal content in chillie powder samples commonly available in the Sri Lankan market. Five brands of chillie powder samples named A, B, C, D and E, and an unbranded sample were selected for this study. Three batches from each brand and three samples from each batch were purchased. An ungrounded whole dry chillie sample was selected as the control. The trace metal content was determined using AAS and XRF spectrometric techniques. Results were statistically analyzed using one-way ANOVA, at 0.05 probability level with MINITAB-14 software package. According to this study, there was no significant difference between the batches in each brand in mean metal contents. But there were significant differences among the brands in mean metal contents. The mean Fe content of brand A, brand B and unbranded samples were significantly higher than the WHO maximum permissible limit. This may be due to the metal (Fe) contamination during the grinding process. Thus brand A, B and unbranded samples are not suitable for daily consumption.

KEYWORDS: Chillie powder, Trace metals.
