



Comparative Study of Presence of Heavy Metals in Randomly Selected Softdrinks of Patna

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Abstract : *This study reports the presence of heavy metals in randomly selected soft drinks from local market of Patna (district Bihar) at a concentration above the limit specified by the World Health Organization (WHO) for food and drink products in India. This work has been designed to compare the levels of lead, cadmium, chromium and copper in selected Indian soft drinks with the specified recommended limits by the world health organization. These heavy metals in selected Indian soft drinks were estimated by Atomic Absorption spectrophotometer after digestion of soft drinks with nitric acid.*

The result obtained showed that only copper content of the selected drinks was within the limit (except one sample)

while the limit failed for the remaining parameters i.e., lead, cadmium and chromium.

Keywords: *Soft drinks, WHO, AAS, heavy metals.*

Introduction:

Soft drinks are sweetened water based non alcoholic beverages mostly with balanced acidity. The non alcoholic beverages include many drinks such as carbonated drinks, juices, energy drink, bottled water, coffee and tea. Carbonated drinks represent the highest portion of non –alcoholic consumed beverages.

Manufacturers of soft drinks should special attention to the purity and uniformity of ingredients, raw materials sources of water and packaging material which are actually the source of impurities in the drinks. The presence of metallic impurities in soft drinks can constitute health hazards to public (Bakare Olumola, 2005; Kreplio et al., 2005 ; Onianwa et al., 1999;). Obesity along with an increased risk of heart problems and diabetes are some of the most prominent health issues that are caused due to these drinks.

Water should be purified properly during the production process of soft drink because if not, then it

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