

**SAFETY AND CONSUMERS' PERCEPTIONS OF  
JAMAICA'S PACKAGED/BOTTLED WATER**

**A Project Report**

**Submitted in Partial Fulfilment of the Requirements for the**

**Degree of**

**Master of Public Health**

**of**

**The University of the West Indies**

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**2006**

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## ABSTRACT

### A STUDY OF THE SAFETY AND CONSUMERS' PERCEPTIONS OF JAMAICA'S BOTTLED/PACKAGED WATER

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**Objective:** To determine if water that is packaged in Jamaica is safe for drinking and to explore consumers' perceptions of this product.

**Methods:** Twenty eight (28) brands of packaged water were evaluated for coliform, lead, nitrate and sodium using the Membrane Filtration, Atomic Absorption Spectrometry, Flow Injection Analysis and Flame Atomic Absorption Spectrometry techniques respectively. Seven packaging plants were inspected to determine compliance with CARICOM's standards. Two hundred and four (204) questionnaires were administered and 2 focus group discussions conducted. The subjects for this cross-sectional study were from the Western and South East Health Regions. Data were collected between March and April, 2006 and were analyzed using SPSS version 12.

**Results:** Seventeen point nine percent (17.9%) of the brands tested positive for coliform; no lead was detected; 7.4% exceeded permissible nitrate levels while that of sodium was below established standards. Over 70% of the brands were classified as misbranded. Fourteen percent (14%) of the plants satisfied CARICOM's standards. Packaged water was perceived as being pure and better for health than tap water as well as associated with

decreased risk of illness. These perceptions influenced consumption ( $p < 0.005$ ). Contrary to popular belief only 45.2% of packaged water was actually spring water.

**Conclusions:** Based on the zero tolerance of coliform in potable water 17.9% of the brands of Jamaica's bottled water were deemed unfit for human consumption. The industry appears to be poorly monitored and the need for urgent implementation of measures to improve operational standards and product quality was highlighted.