ABSTRACT PAPER PRESENTED ON;

Paper Title***: Microbial Contamination of Drinking sachet Water and Environmental Hygiene Practices of Sachet Water Producers in the Volta Region of Ghana.***

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ABSTRACT

Introduction: Providing safe drinking water to the majority of the world's population, especially those in developing countries, is a major problem. Approximately a billion people lack access to safe drinking water. Water and food contaminated with bacteria, viruses, and protozoa cause infectious diarrhoea. Majority of the population of developing countries including Ghana have sorted to sachet water as a drinking, however, no laboratory study has been carried out to establish the potability and possible microbial contamination of the sachet water.

Methods: The study was an experimental and purposive study conducted to establish the extent of microbial contamination in drinking sachet water and the environmental hygiene practices of the sachet water producers in the Volta Region of Ghana, to establish the contamination in drinking sachet water with microbes such as *E. coli*, faecal coliforms, *enterococcus spp.*, *pseudomonas spp.*, and heterotrophic bacteria using the Idexx defined substrate technology method.

Results: The key findings ascertained were; *E. coli* 8%, Total coliforms 18.3%, *enterococcus species* 35%, *Pseudomonas aeruginosa 28.5%*, HPC 11.7% all the sachet samples analyzed. On the environmental hygiene practices, 34% of Chief Executive Officers (CEOs) respondents indicated that improper and indiscriminate disposal of waste could lead to the breeding of germ and cause diseases and water contamination. Sixty seven percent of the CEOs who responded said they do not segregate the waste in their companies and only 8.3% of CEO respondents adhere to aseptic procedures.

Conclusion: CEO respondents seemed to have adequate knowledge of the basic properties of water. The majority of 83% of the employee respondents together with 71% of the CEO respondents were able to distinction between good quality water and poor one. It was found that

58% of CEO respondents and 74% of Employee respondents indicated that direct sunlight and high temperatures could affect sachet water quality.

Recent Publications

1. Iddrisu B., (2017) Microbial Contamination of \drinking Sachet Water and Environmental Hygiene Practices of Sachet Water Producer in the Volta Region of Ghana – DOI:10.13140/RG.2.2.24868.53127
2. Consumers Perception of the Quality of Sachet Water in the Ahafo-Ano South District of Ghana.
3. *Mothers Knowledge and Practice of Exclusive Breastfeeding in the East Mamprusi Distirct* of Ghana
4. *Household food security in poverty-prone communities in the East Mamprusi District*
5. *Community Iodized Salt Surveys* – Unicef
6. *Care International Nutrition and Gender Project* – Ahafo Ano South District
7. *Solidaridad West Africa Cocoa Farmers Nutrition Project Surveys*



PROFILE: MR IDDRISU BUKARI

Mr. Iddrisu Bukari is a current practicing Public Health Nutritionist and Health Tutor with the Ghana Health Service and the Ministry of Health. He holds Master of Public Health Degree, BSc. (Hons.) Public Health and Diploma in Community Nutrition and Health. He worked in Gambaga and Mankranso Districts Health Directorates in 2012 and 2016 respectively as District Nutrition

Officer. In November, 2016 he was appointed a Nutrition and Public health Tutor by the Ministry of Health and posted to Keta Nursing and Midwifery Training College, where he taught for semesters and was transferred to Hohoe Midwifery Training College till date. His area of research interest is Nutrition, Maternal and Child Health and Water Quality. He is a member of African Nutrition Society, Ghana Nutrition Association.He has worked with Public and Private Sector including international NGOs such as World Food Programme, Care Int., Solidaridad, CRS etc.

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