Hygienic practices and microbiological profile of street vended fried cocoyam (*Xanthosoma sagittifolium*) chips sold along sango-oshodi expressway in Ogun and Lagos state of Nigeria

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Street vended food though contribute substantially to the diet of the people, it may at the same time, pose potential health risks. The objectives of this study were to identify possible causes of contamination during production, distribution and handling of street vended fried cocoyam chips. Five processing centers in Ipokia local government area, Ogun state, Nigeria were used for the study. 15 samples of raw materials and 27 fried cocoyam samples were aseptically collected from different processors along processing line. The samples were subjected to microbiological analysis. A laboratory prepared sample was used as control. Total plate counts (∗10⁴ Cfu/g) for water, vegetable oil and salt were 0.33 to 15.44, 0.33 to 1.00 and 1.00 respectively for processors I, II III and control. Fungal counts (∗10³ Cfu/g) for vegetable oil and salt were 0.2 to 1 and 1 respectively. *Staphylococcus* and coliform counts detected in processor I water sample only were 7.33 cfu/g and 8.33 cfu/g respectively. Total plate (∗10⁴ Cfu/g) and fungal counts (∗10³ Cfu/g) were 0.33 to 5.00 and 0.58 to 1.89 respectively for the processing stages for the three processors and control. *Staphylococcus* count (0.33 to 0.633 cfu/g), *Salmonella* count (3 to 4 cfu/g) and coliform count (0.67 to 6.67 cfu/g) were detected in processor I. Total plate counts 0.33 to 2.33 (∗10⁴ cfu/g) were detected in the eight street vended sample and were significantly different at p<0.05. The results of this study indicate that consumption of street vended cocoyam chips produced in unhygienic condition may present an important public health risk.

Biography

Folake Idowu-Adebayo has completed her MSc in Food Quality Control and Assurance at Federal University of Agriculture, Abeokuta, Nigeria in 2013 and pursuing her PhD at Wageningen University, Netherlands. She is a Lecturer at Federal University Oye-Ekiti, Nigeria. She has published five papers in reputed journals, two proceedings and has attended more than seven conferences, meetings and training workshops within and outside Nigeria.

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