

Oranusi, S., Obuekwe C.A. and **Olopade, B.K.** (2016). Assessment of microbiological qualities of *Vigna subterranean* pudding sold in Ota, Ogun State, South-West, Nigeria. *Journal of Industrial Research and Technology* **5**(2): 43 -52.

Abstract

Millions of people worldwide depend on ready-to-eat foods (RTEFs) vended on the streets daily, for a wide variety of food choices that are relatively cheap and easily accessible. Bambara Groundnut (*Vigna subterranean* (L.) Verdc.) Pudding 'Okpa' is a RTEF gaining enormous popularity in Nigeria, thus the need to investigate its microbiological qualities. A total of 30 samples were purchased from six different vendors along the popular 'Sango under-bridge' in Ota and were analyzed for total aerobic plate count, coliform count, fungal count and for specific bacterial and fungal pathogens. The mean total aerobic plate count ranged from 4.06×10^4 to 5.38×10^5 cfu/g, mean coliform count ranged from <10 to 1.44×10^2 cfu/g and mean fungal count was 4.54×10^2 to 5.61×10^4 cfu/g. Five different bacteria and three fungi species were identified based on morphological and biochemical tests as major contaminants. These include: *Bacillus*, *Staphylococcus aureus*, *Klebsiella*, *Escherichia coli*, *Pseudomonas*, *Mucor*, *Aspergillus* and *Rhizopus*. The presence of *E. coli* an indicator organism of faecal contamination, and the relatively high coliform count can be an indication of poor hygiene and sanitation standards post processing or inadequate heat treatment during the preparation of these products. The application of good manufacturing practices (GMP), effective hazard analysis critical control point (HACCP) evaluation and adequate supervision and implementation of food safety practices and regular education of food handlers on food quality standards is advanced to improve this product and other RTEFs.