A STUDY OF MICROBIAL CONTAMINANTS IN VENDED FOOD IN SELECTED AREAS IN KAMPALA

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Abstract

A study of the microbial contaminants in cooked vended food was carried out from four locations that were selected within Kampala city (City Centre, Kawempe, Nakawa and Wandegeya). Food samples were microbiologically analyzed for mesophilic aerobic, Escherichia coli, Staphylococcus aureus and Salmonella bacterial counts. These were determined to indicate food quality and hygiene, personal hygiene of food vendors, food safety and cross-contaminations respectively.

Findings showed that 25%, 63% and 13% had mesophilic aerobic, S. aureus and E. coli counts that were higher than the recommended limits of $5 \times 10^3$, $<10^2$ and $<10^3$ respectively. No salmonella isolates were obtained in any of the food samples. Generally the City Centre and Wandegeya registered the highest counts for all the three bacterial loads (mesophilic aerobic, E. coli and S. aureus), indicating that foods sampled from these locations were of poorest quality. The high load of E. coli in food suggested faecal contamination, and the presence of S. aureus above limits indicated poor food safety. Poor food microbial quality and therefore poor food hygiene characterized the food sampled as indicated by the high loads of Mesophilic aerobic loads. Food safety and food hygiene measures are discussed, and recommendations on proper food handling
measures with suggestions to relevant authorities in this industry to educate both the consumers and food handlers on the proper handling of food are given.