

General Microbiological Quality of Ice Cream and Ice Pop Sold in Gaborone, Botswana

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ABSTRACT The study was aimed at investigating the microbial quality of ice cream and ice pop sold in Gaborone. From the study, a variety of microorganisms were isolated. The population of bacteria was found to increase from the open ice cream samples while the pre-packed ice cream had a lower population of bacteria. The types of microorganisms were both mesophilic and psychrotrophic. The population of mesophiles in open ice cream ranged between 3.30 log₁₀CFU/g and 6.78 log₁₀ CFU/g. The psychrotrophs in the same food samples ranged between 2.0 log₁₀ CFU/g and 6.70 log₁₀ CFU/g. These values were found to exceed the acceptable microbiological standard. The results for packed ice cream had lower counts of microbes (ranging between 2.48 and 5.48 log₁₀ CFU/g), with only one sample out of 150 having a log count above the microbiological standard of 4.0 log₁₀ CFU/g.