

The Effect of Different Temperatures and Chemical Substances on Growth of Some Bacterial Species Isolated from Ice Cream and Ice Pop (Sorbates) Sold in Gaborone, Botswana

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ABSTRACT: The study was intended to find out different temperatures affect growth of bacteria isolated from ice cream and the effects of sodium benzoate and sulphur dioxide on the growth of *Klebsiella oxytoca*. The preservatives were found to be effective in inhibiting the growth of this organism. Lowering pH to acidic also made the preservatives more effective. Bacterial growth of four selected isolates from ice cream and ice pop which are, *Salmonella typhimurium*, *Staphylococcus aureus*, *Escherichia coli* and *Yersinia* was found to vary from temperatures between -5°C and 25°C with the organisms striving best at temperatures 4°C – 25°C. When the four organisms were subjected to -5°C they did not grow. The population of organisms was declining.