

TITLE: MICROBIOLOGICAL ANALYSIS IN ICE CREAMS COMMERCIALIZED IN THE CITY OF BARRETOS – SP

AUTHORS: DATO, M.C.F.; GOMES, K.D.

INSTITUTION: CENTRO UNIVERSITÁRIO DA FUNDAÇÃO EDUCACIONAL DE BARRETOS, BARRETOS, SP (AVENIDA PROFESSOR ROBERTO FRADE MONTE, 389, BAIRRO AEROPORTO, CEP 14783-226, BARRETOS-SP, BRAZIL).

ABSTRACT:

Vanilla ice cream is the fourth most appreciated and consumed flavor by the Brazilian population. This ice cream has three intrinsic factors that leads to the growth of microorganisms that cause foodborne diseases: high water activity, pH close to neutrality and its chemical composition that is rich in nutrients, which result in a great spot for microorganism growth. The majority of ice cream producers believe that because the ice cream is frozen, it will be free of contamination. The freezing process is a method of preserving food, so it is not able to eliminate microorganisms that may be present in the food. It is important to remind that, in order to obtain a safe ice cream for the consumers, within the microbiological standards established by ANVISA, it is indispensable the constant application of Good Manufacturing Practices. The objective of this project was to analyze the microbiological quality of vanilla-type self-service ice creams commercialized in the city of Barretos, SP, Brazil, to verify if they meet the official microbiological standards. Five samples of vanilla ice cream were collected at 5 ice cream shops located in the central, northern and southern regions of Barretos. These samples were coded in A, B, C, D and E. Analysis were performed for Coliform counts at 45 ° C / g, *Staphylococcus* Coagulase Positive / g and *Salmonella* sp / 25g. There was absence of *Salmonella* sp / 25g and Coagulase Positive *Staphylococcus* / g in all samples. Regarding to Coliforms at 45 ° C / g, samples A and E were absent and B, C and D were present at 3.6; <3.0 and 3.6 MPa / g of ice cream, respectively. These results are below the ones established by current legislation. However, in sample D, the presence of *Escherichia coli* bacteria was confirmed when the biochemical tests were performed for confirmation.

Keywords: microbiological quality ice cream, Coliformes 45 ° C, *Staphylococcus* Coagulase Positive, *Salmonella*.

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