

Microbial Contamination of Pastry Cream Supplied in Gorgan

Shabani, Sh. (BSc)

MSc Student of food Science and Technology, Islamic Azad University, Dameghan Branch Dameghan, Iran

Sadeghi Mahoonak, AR. (PhD)

Associate Professor, Department of Food Science and Technology, Gorgan University of Agricultural Sciences & Natural Resources, Gorgan, Iran

Jalali, H. (PhD)

Assistant Professor of food Science and Technology, Department of Food Science and Technology, Islamic Azad University, Dameghan, Iran

Corresponding Author: Shabani, Sh.

Email:
shiva_shabani20@yahoo.com

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Abstract

Background and Objective: Cream pastry, because of their ingredients, making process and preserving conditions are susceptible to many types of microbes. This study was conducted to determine the level of contamination of pastry cream in Gorgan.

Material and Methods: The randomly selected samples (N = 450) were tested according to national standards for microbial tests and then the data was analyzed.

Results: The level of contaminations for *Enterobacteriaceae* and *Staphylococcus aureus* was 56% and 43.3%, respectively. The highest contamination occurred in summer with *Enterobacteriaceae* (N= 113) and the lowest in spring with *Staphylococcus aureus* (N= 40). Also microbial contamination in different types of cream pastries showed the maximum level in cream puff (90%) and the minimum level in roll pastry (30.6%).

Conclusion: There is a significant difference in infection rate between different samples. The infection rate in this study is more than the prevalence of past studies.

Keywords: Cream Pastry, *Enterobacteriaceae*, *Staphylococcus aureus*, Gorgan