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Bacteriological Evaluation and Physical-chemical Parameter of Cheese Fellowships Marketed in the Municipality of Caruaru- PE

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ABSTRACT

Introduction: Foods of animal or vegetable origin, fresh or processed, including cheese, can carry several pathogenic microorganisms, thus causing disease to those who consume it. In particular, fresh hand-crafted cheeses because they are mostly made from raw milk and do not undergo ripening. **Objective:** To analyze the bacteriological quality of artisanal cheeses marketed in the free trade fairs of the city of Caruaru-PE. **Methodology:** The samples were collected in plastic bags and after collection, were transported in an isothermal container and sent to the laboratories of Food Technology and Food Microbiology of Centro Universitário Tabosa de Almeida. The research of total coliforms, thermotolerant and *Pseudomonas aeruginosa* was performed by the multiple tubes technique and the counting of heterotrophic bacteria was by the technique of pour plate both as recommended by the Standard Methods for the Examination of Water and Wastewater (APHA). **Results and Discussion:** Of the 50 rennet samples analyzed, all (100%) showed growth for the coliform group, and 49 samples (98%) showed growth for thermotolerant coliforms. Of these, 17 samples (34.69%) presented counts greater than or equal to 1600 NMP / g. Regarding the *Pseudomonas* count, 46 (92%) of the 6 fairs analyzed presented growth for the genus *Pseudomonas* sp. While 45 (90%) of the samples confirmed *Pseudomonas aeruginosa*, in addition, the heterotrophic bacteria count was above 105 CFU / g. As for the physical-chemical parameter (pH) of the analyzed samples, the results found ranged from 5.2 to 5.9. **Conclusion:** In view of the results, it was concluded that the high index of contamination by faeces (coliforms), organic matter (*Pseudomonas aeruginosa*) and contamination index (heterotrophic bacteria) may be related to the presence of pathogens above the values established by legislation valid. Thus becoming a product of poor conditions for human consumption, requiring a greater supervision.

Keywords: Heterotrophic bacteria; Cheese; *Pseudomonas aeruginosa*

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