

TITLE: MICROBIOLOGICAL QUALITY OF BUTTER CHEESE PRODUCED AND MARKETING IN THE STATE OF PERNAMBUCO

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ABSTRACT:

The objective of this study was to identify microorganism growth in butter cheese produced in the municipalities of the State of Pernambuco. Twenty one samples of butter cheese were analyzed, of which ten were of brands inspected by the State Inspection Service (SIE), one inspected by the Federal Inspection Service (SIF) and ten copies were handmade cheese without any type of inspection. Collected in different commercial points of the adjacent municipalities of the Federal University of Pernambuco, regions that concentrate the production of this type of cheese in the State of Pernambuco. The samples were sent to the Laboratory of Experimentation and Food Analysis (LEAAL) of the Nutrition Department of the Federal University of Pernambuco. They were processed for determination of total coliforms, molds and yeasts using Petrifilm 3M plates, a method recognized by the Association of Official Analytical Chemists. The interpretation of the results obtained in this study was based on microbiological established in the General Technical Regulation for Fixing the Microbiological Requirements for Cheese, Ordinance No. 146/96 - MAPA. From the results, a sample under Federal Inspection was analyzed, and this was within the standards required by the legislation for all the analyzes performed. Absolute (FA) and relative (FR) frequencies of C. Totals, *E. coli*, *Staphylococcus aureus*, molds and yeasts in samples of Butter Cheese. Regarding total coliform analyzes, 10% (1/10) of the samples with state inspection and 20% (2/10) of samples without inspection is outside the required standards, with counts varying from 1.5×10^4 to 1.9×10^4 CFU / g, being classified as unsatisfactory. All samples were within the established standards for *E. coli*, with a result ranging from 3×10^2 to 7×10^2 CFU / g. In 30% (3/10) of the samples with State Inspection and 40% (4/10) without Surveillance, *Staphylococcus aureus* were found with results varying between 1.5×10^3 and 1.9×10^4 CFU / g. The occurrence of yeasts in the samples evaluated was 20% (2/10) for artisanal cheese production, with counts varying from 1.2×10^4 CFU / g to 1.4×10^4 CFU / g, considered unfit for consumption in accordance with current legislation. It is concluded that butter cheese artisanal under State Inspection Service are in disagreement with the standards required by the legislation, it is suggested the implementation of good production practices with sanitary safety, guaranteeing the quality of the product.

Keywords: Butter cheese, yeasts, *Staphylococci*, coliforms.