

**TITLE:** MICROBIOLOGICAL EVALUATION OF BRAZILIAN FROZEN CHEESE BREAD MARKETED IN THE STATE OF MINAS GERAIS

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## **ABSTRACT**

The Brazilian bread cheese (BBC) is a typical product with origin of Minas Gerais State. It is currently produced and marketed in several states of Brazil and even in other countries. Technologically, cheese bread is considered an unfermented product consisting of manioc starch, cheese and other ingredients, shaped or not, cooled or frozen. It is a product widely spread in the food industry, especially among small businesses. This work sought to evaluate the microbiological quality of (BBC) commercialized in MG from 2013 to 2015, collected through the Program of Quality Monitoring of the State and analyzed by the Central Laboratory of Public Health- Minas Gerais (FUNED). The evaluation was carried out according to the microbiological standards of RDC nº12, of January 2, 2001, which recommends the tests of Coliforms at 45°C, Coagulase-Positive *Staphylococcus*, *Bacillus cereus* and *Salmonella*. Microbiological analyzes were performed according to standardized methods (APHA). We analyzed 38 samples of (BBC) of different brands. Of these samples, six (16%) were considered unsatisfactory because they presented counts higher than the limit established in the legislation, two unsatisfactory samples (5,3%) in the parameter of Coliform at 45°C and Coagulase-Positive *Staphylococcus*, two samples for Coliforms at 45°C (5,3%) and two samples for Coagulase-Positive *Staphylococcus* (5,3%). *Salmonella sp* was not isolated from the samples, although they were disapproved in hygienic-sanitary standards. Microbial counts revealed nine samples (23.7%) below the limit established in the legislation, with three samples for Coliforms at 45°C (~8%), three for Coagulase Positive *Staphylococcus* counts (~8%) and three for *Bacillus cereus* counts (~8%). These data serve as a warning to health authorities, having seen the evidence of microbial contamination even though within the standards of acceptability of the legislation. In general, the results show that some brands available in the MG market do not attend the sanitary standard, which could be caused by lack of hygiene in handling, quality of the material, inadequate storage conditions, among other factors. Therefore, the present work demonstrates the importance of the monitoring of foods commercialized in MG, to ensure that the product consumed does not put risks to consumer health.

**Keywords:** Food microbiology, Quality, Sanitary surveillance