**TITLE:** MICROBIOLOGICAL QUALITY OF PASTEURIZED FLUID MILK MARKETED IN MINAS GERAIS.

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## **ABSTRAT:**

Milk is characterized an important food in the diet of humans. However, the sanitary quality of the final product exposed in retail is of concern to the regulatory agencies, has seen the high percentage of contaminated or adulterated food. This situation justifies the constant monitoring of the sanitary quality of pasteurized fluid milk by the Sanitary Surveillance. This work had as objective to investigate the sanitary quality of 278 samples of pasteurized fluid milk, commercialized in Minas Gerais, regarding the microbiological standard recommended in Resolution RDC 12 of 2001. These samples, represented by several brands, were obtained from local commerce in different municipalities between 2007 and 2016. Most of the samples (44.6%) collected in the stores were from dairy inspected by SIF, followed by SIM (26.2%) and IMA (24.2%). Only 5% of the analyzed milk samples had no level of inspection. Sixteen (5.8%) were disapproved in hygienic-sanitary standard. Of these, 37.5% had a SIF inspection seal, 31.3% of the IMA, 25.0% of the SIM and 6.3% had no inspection record. All sixteen samples were reproved in the Coliform parameter at 45°C. No sample presented Salmonella sp. The presence of Coliforms at 45°C in pasteurized milk samples is recurrent and has already been reported by several authors. Considering that the Coliform group is sensitive to heat treatment, the presence of this microorganism in the milk samples after its processing (after pasteurization) can be associated with failures in the pasteurization process or contamination after heat treatment. This remit us to a necessity for a greater control in the time and temperature of pasteurization and the sanitization of the equipment that step into contact with the milk after the pasteurization. It is apparent from this study that some brands of pasteurized milk do not attend the legal sanitary standard, and there is a necessity for continuous monitoring and, consequently, mitigation of risks to consumer health.

Keywords: Pasteurized fluid milk, Sanitary quality, Sanitary surveillance