TITLE: MICROBIOLOGICAL COUNT OF RAW MILK PROCESSED IN DAIRY PERNAMBUCANO

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## **ABSTRACT:**

Most of the volume of milk produced in Pernambuco comes from the Agreste Region, where the largest milk-processing dairy in the state is concentrated. Aiming for a higher yield in the production of milk derivatives and better quality of the products offered to consumers, one of the parameters observed in obtaining the raw material is the microbial count. This factor is of extreme importance because it represents the hygiene used in the milking system of the properties, the type of contaminant pathogen of the milk and the health of the mammary gland of the cows. According to the World Health Organization (WHO), eating disorders caused by contaminated foods have a great impact on the population, and milk with high bacterial counts can increase the risk of the spread of pathogenic microorganisms. MAPA Normative Instruction no. 76/2018 defines that the maximum allowable count of colony forming units (CFU) / mL is 300,000 for individual or community tanks as a result of the quarterly geometric mean. Another point of high relevance are the residues of antibiotics found in milk from treatments of mastitis with bacterial origin. In the light of these important observations, the data from a dairy analysis report were evaluated during the year 2015, the analyzes were carried out in the Northeastern Dairy Herd Management Program - PROGENE (UFRPE). The maximum value of 300.000 CFU / mL defined by IN No. 76/2018 was used as reference, for this, quarterly geometric means were calculated. During the evaluation period all the quarterly averages presented counts above the maximum allowed, being the minimum observed of 434,800 CFU / mL and the maximum of 1,177,000 CFU / mL. The observed result shows that it is necessary to intervene in the properties that supply this dairy, in the questions related to milking hygiene and related activities in order to minimize the bacterial count. When meeting the requirements of IN 76, regarding the CFU, the raw material will be of better quality avoiding problems with public health, it will also increase economic improvements with higher yields of processed products in dairy.

Keywords: CFU, bacterial counts, mastitis, hygiene, public health