

TITLE: QUALITY INDICATORS IN THE MILK PRODUCTION OF JERSEY AND DUTCH BREEDS

AUTHORS: LAZAROTO, W.; GELINSKI, J.; SOARES, F.A.M.; FERRI, F.M.; STRAUSS, L.D.; ALMEIDA, C.A.; BRIZOLLA, R.; MAZURECK, L.;

INSTITUTION: UNIVERSIDADE DO OESTE DE SANTA CATARINA – NÚCLEO DE BIOTECNOLOGIA (Rua Paese, 198 - 89560-000, Bairro Universitário, Videira-SC - Brazil)

ABSTRACT

Raw milk is a complete food produced in a constant milking cycle of cows. The health of the herd, milking processes and adequate milk cooling during storage are among the main items of good hygiene practices and quality control. Currently, the milk producer can be remunerated for the quality of the milk supplied. The better the hygienic, physical and chemical quality the greater the value of the product (payment of quality). This study evaluated the microbiological quality of raw milk produced in a medium-sized property with Jersey and Dutch breeds within the four seasons of the year, considering the conditions of milking and general management in the production. The microbiological parameters considered were: *Staphylococcus aureus*, Mesophilic Aerobics, Coliforms at 45°C for the following checkpoints: milk from the cooling tank, swabs of teteras (mechanical milking), and milk from manual milking. For *Salmonella* sp. and *Listeria monocytogenes* were realized analysis from samples of the cooling tank (5 °C) and swabs teteras. The physico-chemical analyzes consisted of viscosity, pH, protein, lipids, lactose, acidity and density. A standard checklist was also performed to assess environmental conditions and hygiene management practices. For milk stored at 5 °C, the mean was 10⁴ CFU.ml⁻¹ for *S. aureus* and total aerobics, with absence of coliforms at 45 °C (all seasons). However, in the summer season, *Salmonella* sp. was present in cooling tank and swabs of teteras (Jersey). Although zero tolerance is the ideal target for hygiene conditions, the results indicated that the overall quality of the milk analyzed is satisfactory and in accordance with the legal guidelines. However, considering the payment per quality, to become practical in Brazil it will be necessary a great effort of the producers to meet good hygiene practices; if we want to become more competitive in the market.

Keywords: Sanitary conditions, pathogens, payment and milk quality.

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