

INFLUENCE OF SANITARY CONDITIONS OF THE EQUIPMENT AND MILKER HANDS ON THE MICROBIOLOGICAL QUALITY MILK

(INFLUÊNCIA DAS CONDIÇÕES SANITÁRIAS DOS EQUIPAMENTOS E DAS MÃOS DOS ORDENADORES SOBRE A QUALIDADE MICROBIOLÓGICA DO LEITE)

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Milk quality is the most important characteristic in the production chain, triggering through the dairy industry, transformations and constant renewal. Considered as a critical point in the production chain, the producer is the key for swift improvements. Several factors affect the quality of milk, starting with the control of animals; sanitary conditions of equipment, personnel and facilities, as well as milker practices. Another specific condition is the storage of milk, where temperature must be strictly controlled and subsequently adequate for transportation, in order to inhibit the growth of micro-organisms. Currently, when specific sanitary conditions, inherent to the process, are known and practiced, the quality of milk reaches the required minimum standard. This study evaluated the hygienic-sanitary conditions of milking equipment, as well as the hands of the milker. We visited dairy farms and collected samples from the hands of milkers using plastic bags containing 200 mL of sterile saline solution (0.5% NaCl), before and after cleaning with detergent and 2% chlorhexidine. Another four samples were collected from the expansion tank, two after emptying and two following cleaning, through the friction of sterile swab on the inside of the tank and at milk outlet. Thus, eighteen properties were surveyed, of this total, 28% were within the standards of hygiene and 72% did not have appropriate sanitary-hygienic conditions, in most of them bacteria and yeast fungi were isolated from the samples. These microorganisms were identified as the species *Escherichia coli*, *Pseudomonas aeruginosa*, *Staphylococcus aureus*, *Streptococcus dysgalactiae*, *Bacillus subtilis*, and *Candida albicans*. Therefore, the results show lack of adequate sanitation and hygiene during milking, thus favoring the development of undesirable micro-organisms that interfere directly with milk quality.

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