TITLLE: CONTAMINATION OF TEAT AFTER MILKING

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ABSTRACT

Teat skin appears to be a major source of milk contamination and, when associated with teatcups, the risks are increased, even though the initial count has been low. Two samples were collected from each set of teatcups, and 3 samples were sampled - totaling 6 samples before milking (sanitized teatcups), 6 samples after use in one animal, 6 samples after use in two animals and 3 samples after use in 3 animals, making a total of 21 samples per day of collection, for a total of 4 days. A total of 84 samples were analyzed. After collection, each swab was placed in a sterile flask containing 10 ml of sterile saline, identified with the number of the teatcup. In the laboratory of Basic Pathology of the Federal University of Paraná, in a laminar flow chamber, aliquots of 0.1 ml of each tube with micropipette were removed after shaking for 30 seconds, poured onto Plate Count Agar (PCA) in duplicates being the material scattered on the plate with Drigalski loop. The plates were then incubated at 35 ° C for 24 hours. To verify the level of contamination of the surfaces, the averages of colony forming units obtained with the counts were divided by 117.75 cm^2. The experimental design was completely randomized, with 4 replicates, and the means were compared by the Student-Newman-Keuls test (SNK), at a significance level of 5%. There was a significant difference between the means of the periods before milking, after milking of two and three cows, remaining the value obtained in the period after milking a cow without significant difference ($p > 0.05$) 33.96 (CFU x 10 cm^2) In relation to the period before milking 12.81 (CFU x 10 cm^2) and after milking of two cows 85.87 (CFU x 10 cm^2). After milking 3 cows the values of 141.62 (CFU x 10 cm^2) were obtained. Considering the area of 117.75 cm^2 and 12.81 x 10 CFU, a value of 1.09 CFU / cm^2 is obtained. According to the American Public Health Association - APHA, values greater than 2.0 UFC / cm^2 on surfaces that come in contact with food indicate inadequate hygiene. The sanitization process was therefore efficient in reducing contamination levels before milking. There was positive linear effect of the number of animals milked on the bacterial count of the surfaces of the teacups ($y = 43.83x + 2.814$ $r^2 = 0.95$). The data show a significant evolution in the number of bacteria as the animals are milked evidencing the need to disinfect the teatcups, among milking, pratice still neglected by many producers.

Keywords: milk, production, sanitization