MICROBIOLOGICAL CONTAMINATION OF EQUIPMENT, HANDLERS AND BOVINE CARCASSES IN MUNICIPAL SLAUGHTERHOUSES IN RIO GRANDE DO NORTE

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Meat is an important food for men because of its nutritional properties. However, it might play a role as substratum to microorganisms borne by inadequate processes during slaughter. The microbiological contamination of equipment, handlers and bovine carcasses was determined in municipal slaughterhouses in Rio Grande do Norte. From five abattoirs, 50 samples of each point were collected: equipment and utensils, handlers’ hands and the dorsal area of the carcasses, for Enterobacteriaceae and Staphylococcus aureus search. The highest contamination of Enterobacteriaceae occurred in the equipment and utensils, followed by handlers’ hands and carcasses with average counts of 1.0; 0.7 and 0.5 log cfu cm$^{-2}$, respectively. The same decreasing pattern was observed in the S. aureus search which showed average counts of 6.1; 5.6 and 3.1 log cfu cm$^{-2}$, for the same points previously mentioned. This correlation is due to the precarious hygiene of the equipment and the importance of the human being, while handling meat, as vehicle for dissemination of microorganisms, because of the direct contact of the handlers with the utensils and final product. Therefore, the microorganisms found in this study are attributed to the lack of application of a microbiological verification system and to the inexistence of Good Manufacturing Practices in the slaughterhouses surveyed.