

**TITLE:** MICROBIOLOGICAL ANALYSIS OF PORK IN NATURA MARKETED IN THE CITY OF BARRETOS-SP.

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**ABSTRACT:**

Pork is one of the most commercial meats in Brazil and in the world, because it is a source of protein, however, its chemical composition makes it a medium for the development of microorganisms. Currently there is a high investment in technology in pig breeding which has progressively reduced the fat, calories and cholesterol in meat. However the sanity and handling of the meat depends on the place to be marketed and the manipulator meets the needs required. Thus, this research aimed to evaluate the quality and level of contamination by microorganisms in pork in natura commercialized in the region of Barretos-SP. A total of 20 samples were collected in several places of sale of pork and analyzed for the presence or absence of mesophilic aerobic bacteria, total coliforms and thermotolerant coliforms, *Staphylococcus* spp and *Salmonella* spp. To identify *Staphylococcus aureus*, Agar-Nutrient (AN) and Agar Baird Parker Base (BP) were used. Cultivation was done on the plates and went to the stove at 37°C for 24 hours; after this period, the CFU count was performed. Xylose-Lysine Deoxycholate-Agar (XLD), Salmonella-Shigella (SS) and Triple Agar Sugar Iron (TSI) were used for the analysis of *Salmonella* sp. The broth was cultured on the plates and proceeded to the stove at 37°C for 24 hours. After this period, counting of colony forming units (CFU) was performed. In the verification of *Escherichia coli*, Eosin Blue Methylene Agar (EMB) was used. The broth was cultured on the plates and proceeded to the oven at 37°C for 24 hours and for total count of mesophilic aerobic bacteria (CFU/g), 1 mL of the meat solution in Plate Count Agar (PCA) was seeded. Of all the plates analyzed and counted, all presented growth of colonies. It is verified that the presence of this bacteria is due to lack of sanity in the handling and storage, and it is suggested to make improvements with the implementation of programs of good practices in all stages of processing, manipulation and conservation of the commercialized meat, including improving the qualification of the manipulators.

**Key words:** microbiology, microbiological quality, contamination, microorganism.

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