

TITLE: OCCURRENCE OF *LISTERIA* SP. IN SLICED HAM BY INDUSTRIES AND BY COMMERCIAL ESTABLISHMENTS IN THE WEST REGION OF PARANA.

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ABSTRACT:

Listeria monocytogenes is an environmental pathogen that multiplies over a wide temperature range and it causes listeriosis, an important foodborne infection for public health. The main products involved in contamination by this bacterium are those processed industrially, manipulated after heat treatment and ready to eat, as is the case of baked and sliced ham. Thus, the objective of this study was to evaluate the occurrence of *L. monocytogenes* in ham comparing the contamination between sliced and packaged samples by the industries with sliced samples by commercial establishments. Three brands of importance in commercialization of meat products were selected, with 20 samples of each brand being collected in the original factory packages and also 20 samples of each brand that were sliced by commercial establishments. All samples were analyzed after the acquisition (Time A) and at the end of the validity indicated on the label (Time B). The methodology followed the protocols described in ISO 11290-1. For this, 25 g of each sample was diluted in 225 ml of Half-Fraser Broth (30°C for 24±3 h). After incubation, 0.1 ml was transferred to Fraser Broth (37°C for 48±3 h), then seeded in ALOA according to Ottaviani and Agosti and Modified Oxford Agar (37 ° C for 24-48 ± 3 h). Suggestive colonies were purified on Trypticase Soy Agar with 0.6% Yeast Extract (TSA-YE) and the colony characteristic was also observed under light transmitted at 45°. Biochemical confirmation was performed by motility, catalase, Gram staining, sugar fermentation and hemolysis. In the phenotypic evaluation, *Listeria* sp. was not detected in the samples of sliced ham by the processing industries. However, in 12 samples from commercial establishments (20%), regardless of the day of analysis, the presence of *Listeria* sp. was detected. Of these samples, 10 (16,7%) were already contaminated at the beginning of validity, value that had a slight reduction at the end of product validity (15%). In none of the samples the presence of *L. monocytogenes* were detected, in both sliced by industry and sliced by commercial establishments. It is concluded that the slicing by the retail trade exposes the product to the presence of *Listeria* sp. In addition, the storage time showed no influence on the increase in the detection of *Listeria* sp.

Keywords: foodborne disease, listeriosis, food microbiology.