Title: DETECTION OF *Salmonella* spp. AND *Listeria monocytogenes* IN CHICKEN MEAT COMMERCIALIZED IN BOTUCATU, SÃO PAULO, BRAZIL

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Abstract:
Salmonella spp. and *Listeria monocytogenes* have been related as the main foodborne pathogens in whole world. *Salmonella* spp. stands out for causing gastroenteritis. *Listeria monocytogenes* is an opportunistic pathogen that causes listeriosis and has public health relevance due to its ability to cause abortions in people in risk group. During the slaughter process the carcasses can be contaminated and the microorganisms found in cuts of meat or meat products. Enterobacterias are used as indicators of hygiene conditions in manufacturing processes as they are easily inactivated by sanitizers and can colonize processing plants when sanitation fails, indicating inadequate processing conditions, possible contamination of fecal origin, presence of pathogens or food spoilage. The aim of this study was to evaluate the safety of fresh chicken meat commercialized in Botucatu, SP, Brazil. One hundred thirteen samples of chicken's wing, thigh, chicken upper leg, thigh and chicken upper leg, breast fillet, breast, neck, thigh and tulip were collected from 13 establishments and submitted to *Salmonella* spp. and *L. monocytogenes* detection, and enterobacteria and *Escherichia coli* counts. Statistical analysis was performed using the nonparametric Wilcoxon test, considering a significance level of 5 %. *Salmonella* spp. was found in 21.23 % (24/113) and *L. monocytogenes* in 11.50 % (13/113) of the samples. All cuts of the different establishments presented enterobacterial contamination with values between <0 – 6.82 CFU/g ($p > 0.05$) and *Escherichia coli* <0 – 4.23 CFU/g ($p < 0.05$). *Salmonella* spp. was isolated from 84.62 % ($p > 0.05$) of the establishments, while *Listeria monocytogenes* was present in 61.54 % ($p > 0.05$). The cuts showed statistical difference ($p < 0.05$) for enterobacteria count but showed little variation for *E. coli* ($p > 0.05$). *Salmonella* spp. was significantly higher ($p < 0.05$) in neck and drumstick cuts and *Listeria monocytogenes* did not show significant differences ($p > 0.05$). The results demonstrate the possible failures during slaughter, handling hygiene, environment and utensils which lead to product contamination and a serious risk to public health.

Keywords: *Enterobacteriaceae*, chicken cuts, contamination, pathogens.