Title: ISOLATION OF *Salmonella* spp. FROM COLD MEATS AND EMBEDDED SOLD IN PELOTAS CITY, RS, BRAZIL

Authors: Cunha, K.F ¹, Wozeak, D. R, Voigt, P.K ², Ribeiro, G.A, ³

Institution: ¹ Microbiology and Parasitology, Department, Biology Institute, Federal University of Pelotas- UFPel, Capão do Leão Campus, Pelotas, Brazil, 96010-900.

Abstract:

The lifestyle of consumers in recent decades has increased the need of using easy and rapid preparation of foods such as cold meats and embedded. Foods of this type are very susceptible to microbial contamination, which can reduce their lifetime and render them of potential pathogens vehicles. Bacterial contamination of food is a major public health problems in the country, represented by the Foodborne Diseases where one of the main etiological agents related to food poisoning outbreaks is *Salmonella* spp., and due to high virulence of this agent, the National Agency for Sanitary Surveillance (ANVISA) determines that there is no such bacteria in 25g of any type of food, and their presence makes the food unfit for human consumption as it can cause gastroenteritis, septicemia or enteric fever due to its highly pathogenic. The objective of this study was to isolate *Salmonella* spp. from embedded and cold meat sold in bulk in the city of Pelotas, RS, Brazil. We analyzed 36 samples of different types of embedded and cold meats sold in bulk, such as: sausage “Vienna Type”, bologna, chicken breast, turkey breast and ham. All samples were randomly selected and commercially acquired in Pelotas. From the isolation of *Salmonella* spp. It was used the methodology described by Silva et. al. (2002). Where the 36 samples analyzed, 3 showed up contaminated by *Salmonella* spp., where two were sausage samples “Vienna Type” and one of bologna. Importantly, *Salmonella* spp. Can remain viable at temperatures below 7°C, so the temperature at which the embedded meat and cold meats are stored, despite being low it can still provide conditions for or to remain viable, thus the presence of this bacterium in analyzed foods may indicate contamination of materials during handling and distribution to consumers. Concluded then that according to the legislation, of the 36 samples analyzed, 8.3% are unfit for human consumption due to the presence of *Salmonella* spp., representing a potential risk to consumer health.