



University of Zabol
Graduate school
Faculty of Veterinary Medicine

**Thesis for obtaining a master's degree in hygiene and food quality
control**

**Study of *Salmonella* contamination in quail
eggs distributed in stores
in Zabol city**

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Abstract

Due to the rapid growth of the quail industry in the country and the importance of Salmonella, more monitoring of the meat and eggs of these birds in terms of infection with this bacterium seems necessary. Salmonella is a pathogenic microorganism that causes common to acute symptoms. Salmonella serotypes are considered pathogens for humans and can be transmitted from animal to animal, animal to human, and cause food poisoning in humans, given the importance of food poisoning caused by Salmonella and the way they are transmitted through food. In particular, the eggs of birds such as quail were examined for salmonella infection of quail eggs and their microbial analysis was performed in Zabol city. For this purpose, 200 samples of quail eggs, including 150 native and 50 industrial samples that were randomly collected, were transferred to the Health and Quality Control Laboratory of Zabol Veterinary School and microbiological tests on the shell and contents of quail eggs to detect Salmonella was performed. After confirmation or non-confirmation of Salmonella bacteria by experiments, the presence or absence of Salmonella genus in the tested samples was reported. SPSS statistical software version 25 was used for statistical analysis of data and binomial distribution was used to estimate the reliability limits. Of the 200 quail eggs studied in this study, 6 were native to Salmonella. The prevalence of Salmonella infection in the shell and contents of quail eggs in this study is (3% with 95% confidence range from 1.1% to 6.4%). Due to the presence of shell and contents of native quail eggs in this study And its importance in terms of public health, it seems necessary to further monitor the contamination of quail eggs with this bacterium and the proper implementation of biosafety programs and improve management methods.

Keywords: Salmonella, Quail Egg, Shell, Contents, Zabol