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INCIDENCE OF SALMONELLAE, *ESCHERICHIA COLI* AND *LISTERIA MONOCYTOGENES* IN CHICKEN CUTS AND NECK IN EGYPTIAN RETAIL MARKETS

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ABSTRACT

Salmonella, *Escherichia coli* and *Listeria monocytogenes* are among the most important of foodborne pathogens that commonly contaminate chicken cuts during the process of preparation. The main objective of our study was to investigate the incidence of these three pathogens in chicken cuts in retail markets. One hundred and fifty samples of chicken cuts (thigh and wings, 50 each) and neck (50 samples) were collected from local retail markets in Giza, Cairo and Kaliobeya governorates and transferred in an ice box without undue delay to the lab. The samples were prepared for isolation and identification of *Salmonella*, *Escherichia coli* and *Listeria monocytogenes*. The results revealed the isolation of *Salmonella enterica* serovar *Kentucky* from 6 % of chicken thigh samples with total incidence of 2 % of all examined cuts. However, *Escherichia coli* O157:H7 and *Listeria monocytogenes* failed to be recovered from all chicken cuts. In conclusion, chicken cuts represent an important source for *Salmonella* and possess a public health hazards for consumers. Therefore, chicken processors should pay more attention to establish practices to minimize or eliminate these pathogens from these cuts.

Key words: chicken cuts, *Salmonella*, *Escherichia coli*, *Listeria monocytogenes*, retail market

INTRODUCTION

Poultry meat is one of the most important sources of protein which is characterized by relatively low production cost, easy digestibility, low fat content with high concentrations of polyunsaturated fatty acids, and high protein. Therefore, poultry meat represents 30 % of the world meat consumption and 38.5 % of Egyptian meat consumption (FAOSTAT, 2009).