Detection and identification of Campylobacter jejuni and Campylobacter coli from poultry carcasses slaughtered in Gonabad poultry slaughterhouse

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Objective:
Campylobacter is a major cause of human bacterial gastroenteritis and poultry meat is an important source of human outbreaks of campylobacteriosis. The aim of this study was to determine the prevalence of campylobacter in poultry carcasses in Gonabad poultry slaughterhouse.

Method & Materials:
In summer 2008, 100 samples were collected from carcasses in Gonabad slaughterhouse using rinse test. Upon enrichment in Exeter broth, samples were plated out on Skirrow agar with 5% hemolyzed, defibrinated c in microaerophilic condition, with horse blood and incubated for 48h at 42°C. Suspected colonies with gram negative staining and rod shape were tested for oxidase, catalase, hippurate hydrolysis and darting motility.

Results & Conclusion:
Out of 100 examined samples, 31 (31%) were found positive for campylobacter Spp. Biochemical differentiation of the campylobacteria isolates showed that C.Jejuni was more frequently isolated (61/29%) than C.coli (38/71%). The present results showed that chicken carcasses re reservoir of campylobacter. Consequently, appropriate cooking and washing of carcasses are necessary. Also, improving quality control for campylobacter Spp. in chicken abattoirs is highly recommended.

Keywords: Campylobacter, poultry slaughterhouse- Gonabad

Survey on bacterial contamination of traditional ice cream produced in Gonabad

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Objective:
Ice cream, a milk based product is good media for microbial growth due to high nutritional value, almost neutral pH value and long storage duration. Contamination of this product with pathogen microorganism can lead to food poisoning and food borne infections and can endanger the human health. The aim of this research was to assess microbial status of traditional ice creams.

Method & Materials:
In this cross sectional study, in summer 2008, a total of 100 samples of traditional ice creams were obtained randomly from the retailer stores. All of the samples were analyzed for microbial contamination according to the Iran national standard protocol. The collected data were analyzed statistically using t-test by SPSS for Windows.

Results & Conclusion:
23% of the samples were contaminated with higher than standard level (5x10^5/g), 75% of the samples were contaminated with lower than standard level (10^2/g) with entrobacteriacea. Staphylococcus aureus and Escherichia coli were isolated from 4% and 23% of samples respectively. Salmonella was not isolated from samples. To prevent from poisoning outbreaks and microbial infections due to consumption of ice cream, supervision and control over ice cream production is essential.

Keywords: Traditional ice cream, bacterial contamination, Gonabad