Abstract:

This study was undertaken to evaluate the microbiological quality of ready-to-eat (RTE) liver sandwiches known as “Kibda” from vending shops and different restaurants in Assiut city, Egypt. Microbiological analysis of 100 samples of examined RTE liver sandwiches resulted in total bacterial counts from $1 \times 10$ to $2 \times 10^5$ cfu/g with average $1 \times 10^4$ cfu/g and Enterobacteriaceae counts ranged from $1 \times 10^2$ to $2 \times 10^5$ cfu/g with average $1 \times 10^4$ cfu/g, while, total fungal counts from $1 \times 10^2$ to $5 \times 10^6$ cfu/g with an average $4 \times 10^5$ cfu/g. Coagulase positive Staphylococcus aureus, Bacillus cereus, Shigella and Salmonella Typhimurium were detected in 40, 20, 23 and 7% of examined samples, respectively. S. aureus was the most common pathogen detected in examined samples (mean counts $6 \times 10^2$ cfu/g), while, mean values of B. cereus were $8 \times 10^2$ cfu/g. Three isolates of S. aureus were positive for enterotoxin production. Also, 39 isolates related to family Enterobacteriaceae could be isolated. The obtained results indicate that consumption of RTE liver sandwiches may cause a public health hazard to the consumer. Measures to control the quality of the raw material, environmental and hygienic conditions during preparation and serving should be taken.

Keywords:

Ready-To-Eat Liver Sandwiches Microbiological Quality Staphylococcus aureus Salmonella typhimurium

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