

**APPLICATION OF CERTAIN QUALITY AND SAFETY
CRITERIA DURING PROCESSING OF
SOME MEAT PRODUCTS**

By

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B.Sc. Agric. Sci. (Food Science), Al-Zaiem El-Azhari University, 2006

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ABSTRACT

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The aim of this study was targeted to improve the quality and safety of prepared beef burger and sausage products through the application of HACCP and Critical Control Points "HACCP" preventive tools. Its actions can protect the product from the dangers that affect the safety and health of the consumer, also to evaluate the effects of adding various levels of pomegranate peels powder as natural antimicrobials and antioxidants additives on keeping different quality characteristics of prepared beef burger and sausage products. The effect of pomegranate peels powder at concentrations of 1, 2 and 3% on the quality characteristics of different prepared samples was determined during storage at (4 ± 1 °C) for 12 days. Chemical compositions, physical, physicochemical and chemical characteristics, microbiological criteria, cooking quality and sensory characteristics of different collected and prepared beef burger and beef sausage samples were determined. The addition of different concentrations of pomegranate peels powder caused high storage stability and reduced values of TBARS and TVN of prepared beef samples during refrigerated storage compared to control beef samples. The microbiological criteria of prepared beef burger and beef sausage samples with pomegranate peels powder were also improved. This could be due to the presence of phenolic compounds in pomegranate peels which could act as antioxidant and antimicrobial substances. Prepared beef burger and beef sausage samples containing pomegranate peels powder recorded high cooking quality and sensory characteristics in comparison to control beef burger and beef sausage samples.

Key words: Beef burger, Beef sausage, Cooking characteristics, Microbiological criteria, Pomegranate peels and Sensory characteristics.

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