

Ain Shams University Faculty of Specific Education Home Economic Department

## Antimicrobial and Antioxidant Activities of Some Stone Fruits Kernels - Utilization of Some Fruit Waste

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#### **THESIS**

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### **Abstract**

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The aim of the study: Investigated the antioxidant and antimicrobial of apricot and mango seed kernels extract in beef burger storage at refrigerator temperature for different periods of time. Mango and apricot seeds were collected as wastes from local fruit processing units and the kernels were separated and dried. The results indicated that the protein and fat content in Apricot Seed Kernels (ASK) was five time higher than Mango Seed Kernels (MSK). While, the carbohydrates content in MSK were much higher than ASK. According to the determination the phenolic compounds in apricot and mango seed kernel extract the polyphenols component were higher in mango kernel extract as compared to apricot kernel extract. On the other hand mango and apricot seed kernels extract reduced total bacterial count, inhibited the total bacterial counts and extended the shelf-life of beef burgers. These results provide useful information on the utilization of mango and apricot seed kernels as natural antioxidant and antimicrobial in foods preservation.

**Keywords:** Mango seed kernel extract - Apricot seed kernel extract - Fatty acids -phenolic compounds - Antioxidant - Antimicrobial - beef burgers.

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