

# STABILITY OF FROZEN STORED LAMB MEAT PRODUCT TREATED BY GRAPE SEEDS EXTRACT AND PACKAGED UNDER VACUUM

**A.Y.O. Gaheen, M.A. Kenawi, H.M. Ali, O.I. Soltan**

*Dept. Food sci., Minia University, Egypt  
e-mail: mohamedkenawi@ymail.com*

## **Abstract**

*The stability of lamb meat burgers stored frozen for 8 months was studied using proximate composition, moisture loss, total acidity, pH value, TBA value, TVN value, WHC, Expressible water, total bacterial count, and sensory evaluation. The natural antioxidant (0.1% grape seeds extract) and packaging treatment (without and with vacuum) were both added. The data showed that as storage time increased, all samples' total acidity and TBA values increased while their moisture content and pH values decreased. In comparison to the treated samples, the change was greater in the control samples. The data demonstrated that, when compared to control samples or samples packaged without vacuum, samples treated with 0.1% grape seed extract (as natural antioxidant) and packaged under vacuum had the lowest values of TBA, total bacterial count. Additionally, compared to the control, it has higher assessment ratings for overall acceptance.*

**Key words:** *lamb meat burger, Grape seeds extract, Natural antioxidant, Vacuum packaging*