

## EVALUATION OF THE ANTIOXIDANT AND ANTIBACTERIAL EFFECTS OF PISTACIA PALAESTINA AND SALVIA DOMINICA METHANOLIC EXTRACT ON SLICED BEEF MORTADELLA

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### **ABSTRACT**

*Three different mortadella formulations were prepared, involving the addition pistacia palaestina and salvia dominica methanolic extract. These include control, without the addition of plant extract, which was also present in all of the experimental formulations. After cooking, the mortadella samples were stored at 4°C for up to 40 days and tested at intervals to determine their oxidative rancidity (TBA), pH, color and microbial content as evaluated by Aerobic Plate Count (APC) and coliforms. Results indicated that during storage, the TBA values of pistacia palaestina and salvia dominica added mortadella was lower than that of the control. No significant differences in pH and color measurement were found between the three treatments.*

*APC increasing by at least 6.0 log<sub>10</sub> units and coliforms increasing by at least 4.0 log<sub>10</sub> units by the first month of storage. By increasing storage time and after 10 weeks of storage the APC and coliforms counthas been reduced for all samples. It could be concluded that the two substances used at the level added were not sufficient to have an inhibitory effect against microorganisms.*

**KEYWORDS:** *Mortadella, Oxidative Rancidity, Phenolic Content, Pistacia Palaestina and Salvia Dominica*

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### **Article History**

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