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## Enhancement of the Quality and Safety of Pastrami Using Fermented Milk Permeate

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### Abstract

Pastrami meat in unfermented milk permeate T1 and fermented milk permeate with was manufactured from *M. longissimus dorsi* beef meat after marinating the *Lb. paracasei* subsp. *paracasei* and *Lb. pentosus* T2 and T3, respectively and C, control treatment, was manufactured without being marinated. All treatments were stored at  $5 \pm 1^\circ\text{C}$  for 60 days and analyzed at periods of (when fresh, 15, 30, 45 and 60 days). Peroxide values (POV), Thiobarbituric acid reactive substances (TBARS), free fatty acids (FFA), pH values, proteolysis, total viable count (TVC), total fungi, coliforms count, *Staphylococcus aureus* and lactic acid bacteria (LAB) and sensory analysis were determined. The results showed that C and T1 treatments had the highest values of POV, TBARS, FFA, pH and TVC. Whereas, T2 and T3 treatments recorded the highest values of proteolysis and LAB count. *Staphylococcus aureus* and coliforms were not detected in all treatments. While, some fungi appeared in C and T1 at the end of the storage period and disappeared in T2 and T3. Marinating of pastrami meat in fermented milk permeate significantly improved the sensory evaluation of pastrami. Finally, T2 and T3 had significantly higher quality improvement than C and T1.

**Keywords:** Pastrami, Milk permeate, *Lactobacillus paracasei*, *Lactobacillus pentosus*, Fermentation.

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