

RESEARCH PAPER

# Effect of thermal processing on shelf stable canned salted beef with tomato gravy

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Studies were conducted to analyze the characteristics of shelf stable canned salted beef with tomato gravy involving the effect of thermal processing. Product standardization was done by traditional method utilizing tomato gravy along with salted beef for making shelf stable canned meat. After that the optimized preservative concentration and thermal treatments were given to it at different temperature time combinations *viz.*, 110°C 115°C and 121°C for 20,30 and 40 minutes, respectively in order to interpret the effect of thermal processing and salt as a preservative. Samples were evaluated initially and after that at the intervals of 0, 15, 30, 45, 60, days for sensory analysis. Microbiological, chemical and sensory studies were conducted after each 15 day interval upto other 60 days in order to depict the increase in shelf-life stability due to application of curd as an emulsifier (*i.e.* effect of preservative and thermal processing). It was found that the thermal processing of shelf stable canned salted beef with tomato gravy done at 121 °C for 40 minutes had significantly superior acceptability and the adequate protein, fat, moisture content was found significantly superior in 110°C for 40 min.

**Key words :** Thermal processing, Preservative, Sensory analysis, Shelf-life, Emulsifier

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