
Abstract No. 13

PaperTitle **The Effect of Gamma Irradiation on Shelf Life and Safety of Ready -
to -Eat(RTE) Bovine Tripe**

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ABSTRACT

The aim of this study was to determine the effect of gamma irradiation, at a target dose of 9kGy, and storage temperature of 5 and 15 °C on the shelf life of ready-to-eat (RTE) bovine tripe with respect to aerobic plate count (APC) and aerobic spore count (ASC). Boiling for 1h caused 2.5 log₁₀cfu/g reductions in both APC and ASC. Gamma irradiation significantly reduced APC and ASC, and extended the shelf life of RTE bovine tripe to at least 14 days at both 5 and 15 °C. At 15 °C, APC and ASC from irradiated samples followed the same trend as APC and ASC of irradiated and control samples stored at 5 °C. However, there was an increase in APC and ASC from 0kGy control samples stored at 15 °C to reach unacceptable levels (>7 log₁₀cfu/g) by day 7. Therefore, when non-irradiated RTE bovine tripe is processed in an aerobic environment, it is important to store it at ≤ 5 °C to extend its keeping quality. However, due to the high resistance of aerobic spores that survive boiling and irradiation treatments, sous-vide tripe may be unsafe for consumption though its shelf life may be extended to at least 14 days.