

Original article

Partial replacement of sodium chloride with potassium chloride in marinated rabbit meat

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Summary This study was aimed at evaluating the consequences of sodium chloride reduction by potassium chloride up to 50% on technological, sensorial and microbiological traits of marinated rabbit meat. In total, 226 rabbit loin meat samples were obtained and subjected to vacuum tumbling using solutions with different NaCl/KCl ratios. Replacing of sodium chloride up to 30% by potassium chloride did not change microbiological traits (total aerobic mesophilic and lactic acid bacteria maximum cell loads), sensorial acceptability (perceived saltiness and overall liking) and technological traits (pH, colour, texture, cooking loss and yield). Otherwise, reduction in sodium chloride to 50% significantly decreased perceived saltiness (4.15 vs. 4.73; $P < 0.05$) and reduced microbial shelf life by 1 day when compared to control, even if there was still no effect on technological traits. In conclusion, it is feasible imparting an added value for processed rabbit meat products by reduction in sodium content that could increase market interest.

Keywords Marination, meat quality, potassium chloride, rabbit meat, salt replacement.