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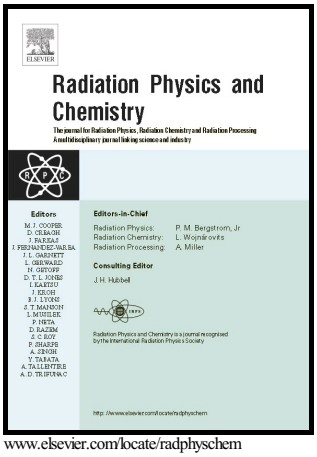


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# Effect of functional chitosan coating and gamma irradiation on the shelf-life of chicken meat during refrigerated storage

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## Abstract

The present study was conducted to evaluate the combined effect of low-dose gamma irradiation (2.5 kGy) and chitosan edible coating (2%) containing grape seed extract (GSE) (0.1%) on the microbial, chemical and sensorial quality of chicken breast meat during 21 days of storage at 4 °C. The samples were periodically analyzed for microbiological (aerobic mesophilic and psychrotrophic counts), chemical (TBA, pH, aw) and sensorial (odor, appearance, and overall acceptability) characteristics. Results indicated that irradiation and the active coating had significant ($P < 0.05$) effects on reduction of bacterial growth with at least a 14-day extension of shelf life. Results represented the protective effect of chitosan coating containing GSE against