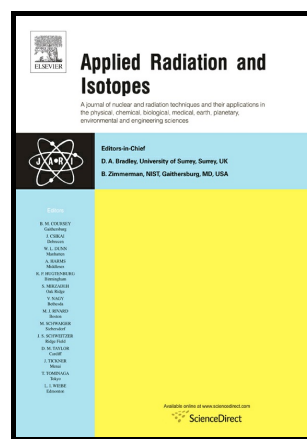


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Antioxidant Potential and Hypolipidemic Effect of Whey Protein against Gamma Irradiation
Induced Damages in Rats

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Abstract

Purpose

Evaluation of the efficacy of whey protein as antioxidant against γ -irradiation induced oxidative stress and dyslipidemia in male rats.

Method

Rats were divided into groups; group 1 (control), rats in group 2 & 3 were exposed to γ -irradiation 5 & 10 Gy respectively and rats in group 4 & 5 were orally administrated with whey protein after γ -irradiation. The antioxidant status (glutathione (GSH), Superoxide dismutase (SOD), catalase (CAT), total antioxidant capacity (TAC) and malondialdehyde (MDA), lipid profile (total cholesterol (TC), triglyceride (TG) and high-density lipoprotein (HDL) as well as the hematological parameters were determined.

Results

γ -irradiation had depletion in GSH, SOD, CAT and TAC levels and elevation in MDA. Moreover, an increase in TC & TG coupled with decrease in HDL after γ -irradiation. The hematological parameters decreased after γ -irradiation. Treated rats with whey protein improved

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