P-135 Fundamental Research on the Changes of Immunoreactivity (IR) of Bivi Myosin Molecules by ^{60}CO γ-Irradiation

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ABSTRACT

Irradiation has been noticed as one method for prolonging shelf-life of meat products in the view of pathogenic microbiology. However, there have not rarely been meat proteins affected by radiation. Therefore, using immunological method, CI-E studied the conformational changes of bovine myosin molecules by radiation. We treate myosin molecules and bovine M. *Semitendinosus* with the different Doses, 1, 3, 5 and respectively. Radiated myosin molecules and myofibrillar proteins were reacted with anti-myosin IgG in the microplate wells. When irradiated dose increased, IRs increase increase of IR appeared at the zone between 3 and 5 KGy in the test for myofibrils. C curves appeared increase of IR surely depending radiated Dose. However, myofibrill solubilities and patterns of SDS-polyacrylamide gel electrophoresis did not differ t control and significancy were not recognized between individuals. We have consid epitopes on the surface of Ag, myosin molecule, become better expossure by confor changes to Ab, and Ab have more reactable chances with Ag treated irradiation t control.

Key words : γ-irradiation, Conformational change, epitope, bovine myosin, and