

Effects of fermented soy milk on the liver lipids underoxidative stress

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Abstract

AIM: To investigate the effects of fermented soy milk powder on the antioxidative status and lipid metabolism in the livers of CCl₄-injected rats. METHODS: Forty-five healthy male Sprague-Dawley rats were randomly assigned to five groups according to five different diets: control (AIN-76), AIN-76+high-dose fermented soy milk powder, AIN-76+low-dose fermented soy milk powder, AIN-76+high-dose milkyogurt powder and AIN-76+low-dose milk yogurt powder. The experiment lasted for 8 wk. After 4 wk, all the rats received intraperitoneal administration of CCl₄ (0.2 mL/100 g body weight) every week. Total cholesterol (TC), triglyceride (TG), TBARS, ALP, and antioxidative enzymes in the liver were evaluated. RESULTS: There was also no significant difference in TBARS and antioxidative enzymes in the liver. TC and TG in the groups fed with fermented soy milk powder were generally lower than those fed with casein powder. CONCLUSION: Consumption of fermented soy milk was positive in lowering total cholesterol and TG accumulation in the liver under CCl₄-induced oxidative stress.