

The Interactive Effects of DNA(Deoxyribose Nucleic Acids) and Crude Catechin from Puerariae thunbergiana Roots on the Body Fat Composition and Antioxidant Activity in Rats with Exercise Loading

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DNA and crude catechins, which extracted from Puerariae thunbergiana Roots may take some effects on the body fat composition and antioxidant activity on the rats(Sprague-Dawley) with exercise. The influence which was examined in this study of DNA and crude catechin on the body fat composition and antioxidant activity was evaluated by measuring the weight of organs, biochemistic test with kit assay and TBA and GSH oxidase and reductase.

The rats were randomly assigned to one of the following four groups, Control, Exercise, Exercise +DNA & Exercise + DNA + poly-phenol. During 6 weeks experimental period, body weight and body fat were decreased significantly.

The obtained results were as the followings ;

1. The weight of Heart, Kidney and Spleen were significantly ($P<0.01$) increased by PR crude catechin injection.
2. The weight of Liver, Epididymal Adipose Tissue (E.A.T.) and Perirenal Adipose Tissue (P.A.T) were significantly ($P<0.01$) decreased by DNA and PR crude catechin with Exercise.
3. Phospholipid, Cholesterol and Triglyceride of blood were decreased by exercise, but HDL-Cholesterol contents of blood was significantly ($P<0.01$) increased
4. Blood GOT/GPT and Glucose levels were significantly decreased by PR crude catechin. but Blood NEFA levels was significantly ($P<0.05$) increased by PR crude catechin.
5. TBA values were not affected by PR crude catechin.