Effect of Yak-Kong (*Rhynchosia nolubilis*) on Serum Lipid Level and Proinflammatory Cytokines (TNF-α, IL-1β, IL-6) in DBA/1J Mice

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In contrast to the common usage of soybean, Yak-Kong (*Rhynchosia nolubilis*) has been used as supplements of estrogen for preventing postmenopausal osteoporosis in oriental medicine. In oriental medicine, Yak-Kong is consisted to be abundant in phytoestrogen. Yak-Kong has been prescribed in oriental medicine because it has protective functions for the liver and kidney as well as bone and muscle. The effect of ethanol extract of Yak-Kong on serum lipids and proinflammatory cytokine in DBA/1J mice were studied. Treatment with Yak-Kong extract decreased TG, total- and LDL-cholesterol compared with those of control group, but HDL-cholesterol of Yak-Kong extract group significantly increased (p<0.05). Also, as compared with mice treated with saline, oral administration of Yak-Kong extract inhibited the production of inflammatory cytokines (TNF-α, IL-1β, IL-6). In conclusion, the extract of Yak-Kong inhibits inflammatory and decrease serum lipid level in the type II collagen-induced arthritis in DBA/1J mice.

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