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Antioxidative effect of active proportion of *Rubus coreanus* in db/db mice

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The prevalence of diabetes mellitus among Koreans is about 9.0%. Diabetes mellitus is the fourth leading cause of death among Koreans, and the prevalence of diabetes has significantly increased mainly due to westernization of food habit and life style. Most of diabetic patients suffer from diabetic complications such as cardiovascular diseases, retinopathapy and kidney diseases. Oxidative stress is on of major factor to cause diabetic complications. We investigated antioxidative effects of chronic feeding of active proportion *Rubus coreanus(RC)* in animal model of type 2 diabetes mellitus. *Rubus coreanus* was extracted with 50% ethanol and concentrated. Fractions with M.W. over 10,000 were isolated using UF membrane and lyophilized. Four week-old db/db mice(n=16) were fed AIN-93G semipurified diet or diet containing 5% active proportion of RC for 6wk. Body weight and food intake of active proportion of RC group were not significantly different from those of control group. Hepatic thiobarbituric acid reactive substances(TBARS) of RC group(0.69±0.02 nmol MDA/mg protein) were significantly lower than that of control group(0.83±0.06nmol MDA/mg protein). Feeding of *R*active proportion of RC significantly increased hepatic superoxide dismutase(SOD) activity(15.5±0.7Unit/mg protein) compared with control group(9.9±0.4Unit/mg protein) and tended to increase catalase activty. These results demonstrated that chronic feeding of *Rubus coreanus* extract could have a protective effect against diabetics complications in rats.