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Effect of *Trapa japonica* flerov. on Glycemic Control and Plasma Lipid Profiles in Db/db Mice

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To control blood glucose levels as close to normal and to prevent of diabetic complications are the major goals of diabetic treatment. Hyperlipidemia is one of risk factors of cardiovascular disease, the most common diabetic complications. The purpose of this study is to examine the effect of *Trapa japonica* flerov. on glycemic control and plasma lipid profiles in animal model of type 2 diabetes mellitus, db/db mice (C57BL/Ks). Four week-old db/db mice (n=12) were fed AIN-93G semipurified diet or diet containing 10% freeze-dried powder of *Trapa japonica* flerov. for 6wk. Body weight and food intake of *Trapa japonica* flerov. group were not significantly different from those of the control group. Blood glycated hemoglobin was measured by chromatography method. Plasma glucose, cholesterol and triglyceride were measured by enzymatic method. Consumption of *Trapa japonica* flerov. significantly decreased plasma glucose ($P < 0.05$) and cholesterol ($P < 0.05$) and blood glycated hemoglobin level ($P < 0.05$) compared with the control group. Thus, we could conclude that chronic feeding of improve glycemic control and blood lipid profile in animal model of diabetes.