

**【P3-19】****Effect of chronic feeding of *Saururus chinensis* Bail on carbohydrate and lipid metabolism of db/db mice.**

<sup>1</sup>Hee-Jeong Joo, <sup>1</sup>Jung-In Kim, <sup>1</sup>Min-Jung Kang, <sup>1</sup>Tae-Jin Seo and <sup>2</sup>Jong-Won Kim  
<sup>1</sup>School of Life and Food Sciences, Inje University, Gimhae, <sup>2</sup>Department of Oriental Medicine, Dongui University

It was reported that *Saururus chinensis* Bail shows strong inhibitory activity against yeast alpha-glucosidase *in vitro*. It is known that to control blood glucose and improve dyslipidemia are important in prevention of diabetic complications, the major causes of death among patients with diabetes mellitus. The purpose of this study is to investigate the effect of *Saururus chinensis* Bail on control of blood glucose and lipids in animal model of type 2 diabetes. Leaf of *Saururus chinensis* Bail was extracted with 100% methanol. Yield of the extract was 17.6%. Four week-old db/db mice(n=14) were fed AIN-93G semipurified diet or diet containing 1% *Saururus chinensis* Bail extract for 6wk. Body weight, food intake, and feed efficiency ratio of *Saururus chinensis* Bail group(SCB group) were not significantly different from those of the control group. Fasting plasma glucose( $397.6 \pm 14.8$  mg/dL) and blood glycated hemoglobin( $5.4 \pm 0.4\%$ ) levels of SCB group were significantly lower than those of the control group( $472.9 \pm 13.5$  mg/dL,  $7.0 \pm 0.4\%$ ,  $P<0.05$ ). Feeding of *Saururus chinensis* Bail significantly decreased both plasma triglyceride and cholesterol levels by 22% and 35%, respectively( $P<0.05$ ). Thus we could conclude that feeding of a *Saururus chinensis* Bail is beneficial to control hyperglycemia and hyperlipidemia of diabetes mellitus.