

**“The Effect of Giving Mung Bean (*Vigna radiata L.*) Extract on the Fasting Blood Glucose Levels on Patients With Type 2 Diabetes Mellitus at Summersari Subdistrict, Jember District”**

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**ABSTRACT**

Diabetes Mellitus is a blood glucose levels above normal this occurs because body can't respond to insulin which causes glucose to accumulate in the blood circulation. Mung bean (*Vigna radiata L.*) extract contains flavonoids which function as antioxidants that can be used as antidiabetic therapy by providing hypoglycemic effects on patients with type 2 diabetes mellitus at Summersari subdistrict, Jember district. The aimed of this study was to find out the effect of giving mung bean extract on fasting blood glucose levels of patients with type 2 diabetes. This was *Quasy Experimental* study with *Pretest-Posttest Control Group Design*. The sampling technique was *purposive sampling* with 38 respondent of patient with Diabetes Mellitus type 2 divided into 2 group 19 respondents in the treatment group by consuming mung bean (*Vigna radiata L.*) extract 233 ml from 31 gram of mung bean (*Vigna radiata L.*) containing 7,89 mg of flavonoid consumed once a day, and 19 respondents in the control group. Statistical analysis used *Independent Samples T-Test* dan *Paired T-Test*. There was a significant difference between fasting blood glucose levels before and after the treatment group with *p value* 0,036 (*p value* <0,05). There was no difference in the difference in fasting blood glucose levels between the treatment group and the control group. The results showed a decrease in pretest and posttest fasting blood glucose levels of  $-17,11 \pm 32,872$  in the treatment group and an increase of  $-11,42 \pm 54,439$  in the control group but there was no effect of giving mung bean (*Vigna radiata L.*) extract to fasting blood glucose levels.

**Keyword:** DM type 2, blood glucose level, flavonoid, mung bean extract