

“Effect of Mungbean (*Vigna radiata* L.) Extract Consumption on 2 Hours Post Prandial Blood Sugar Levels on DM Type 2 Patient at Summersari Sub-district Jember District”

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ABSTRACT

Diabetes mellitus is a metabolic disease characterized by high blood sugar levels. Diabetes mellitus is caused by disruption of insulin production, insulin action or both. Mungbean extract contain flavonoids. Flavonoids function as antioxidants and can help reduce 2 hours post prandial blood glucose levels. The purpose of this study was to determine the effect of giving mungbean extract on blood glucose levels of patients with type 2 diabetes mellitus in Puskesmas Summersari, Jember. This study uses Quasi Experiment design with Pretest-Posttest with Control Group Design. The sampling technique was *purposive sampling* with 38 respondent of patient with Diabetes Mellitus type 2 divided into 2 group. The first group was treatment with 233 ml mungbean extract from 31 grams of mungbeans containing 23.69 mg / 100 g of flavonoids consumed once a day and the second group was a control group without consumed mungbean extracts. Statistical analysis used paired t-test and independent sample t-test. There was significant decrease in 2 hours post prandial blood glucose levels of 44.05 mg / dLin treatment group and increas of 5,47 mg/dL in control group. Tere is no effect of mungbean extract consumption. on the decrease of blood glucose level. Conclusion of this study is there is decrease in 2 hours post prandial blood sugar levels of people with type 2 diabetes mellitus, but the decrease is not caused by consumption of mung bean extract.

Keywords: *DM type 2, flavonoid, glucose blood level, mungbean extract*