

ABSTRACT

Anugrah, Eca Bhalerina. 2025. *The Effect of Dietary Counseling Using a Booklet Media on Energy and Macronutrient Intake as well as Blood Glucose Levels in Patients with Type 2 Diabetes Mellitus.* UNDERGRADUATED THESIS. Bachelor of Applied Nutrition and Dietetics Study Program, Department of Nutrition, Health Polytechnic of Malang. **Supervisor I: Dr. Etik Sulistyowati, SST., S.Gz., M.Kes., Supervisor II: Dr. Nur Rahman, STP., M.P., RD.)**

Background: Type 2 Diabetes Mellitus (DM) is one of the degenerative diseases whose prevalence continues to rise year after year. The number of DM patients in Indonesia is predicted to increase from 9.1 million in 2014 to 14.1 million in 2035. Providing education and nutritional counseling to patients is expected to offer sufficient knowledge about DM and its complications, which can change patients' attitudes and behavior, enabling them to control blood glucose levels and improve their quality of life. **Objective:** The aim of this study is to determine the effect of dietary counseling through a booklet on energy intake, macro-nutrient intake, and blood glucose levels in patients with type 2 Diabetes Mellitus. **Methods:** This research used a quasi-experiment design with a one group pre-test and post-test treatment. The study was conducted from April to May 2025, with a sample size of 30 participants. Data analysis was performed using the Paired T-Test and Wilcoxon test. **Results:** There was an effect of dietary counseling through a booklet on energy intake, macro-nutrient intake, and blood glucose levels, with a p-value of 0,001 ($p < 0,05$). **Conclusion:** The media booklet has a significant effect in increasing energy and macronutrient intake as well as reducing blood glucose levels in patients with type 2 diabetes mellitus.

Keywords: *Blood Glucose Levels, Booklet Media, Diabetes Mellitus, Energy Intake and Macro-nutrients*