

## **High Fiber Cookies from Garut Flour and Chocolate Powder as Snack for Patients with Diabetes Mellitus Type 2.**

**Dinda Emphy Agusta**

Clinical Nutrition Study Program

Department of Health

### ***ABSTRACT***

*Increased the capita income and lifestyle changes, especially in big cities has led to rising number of people with degenerative diseases, one of which is Diabetes Mellitus (DM). According to the WHO's latest report in the world, there are about 120 million people with Diabetes Mellitus and is expected to rise to 250 million in 2025. The factors of Type 2 Diabetes Mellitus are unhealthy diet, obesity and modern lifestyle. Eating high fiber foods can help to decrease the number of the body's use of insulin in patients with diabetes mellitus up to 12.5% per day. This study aimed to analyze the quality of high-fiber cookies from arrowroot flour and cocoa powder. The design used was completely randomized design (CRD) with six formulations of treatment are 90%: 10%, 80%: 20%, 70%: 30%, 60%: 40%, 50%: 50% and 40%: 60% by the repeated 4 times. Based on the research results, cookies with a proportion of arrowroot flour 40% and 60% chocolate powder products is the best cookies with organoleptic test results to an average value of 2.44 liking for the taste (a bit like), the color of 2.76 (like), smell 2.96 (love) and the texture of 2.6 (liked). Chemical test results the cookies with the best treatment has a protein content of 3.54%, 12.52% fat, carbohydrates 77.36%, ash 1.75%, water 4.83% and 5.75% dietary fiber. For a one-time consumption, patients are encouraged to eat five pieces of cookies with an energy content of 218 kcal, 2 grams of protein, 6 grams of fat, 39 grams of carbohydrates and 3 grams of dietary fiber content. Within a day, the patient will be given two times so they consumed 10 pieces for one day.*

*Keywords: Cookies, Dietary Fiber, Diabetes Mellitus*