ABSTRACT

According to the International Diabetes Federation (IDF) 2020, diabetes cases in Indonesia increased to 18 million, with a 6.2% prevalence, compared to 11 million in 2019. By 2030, the number of diabetes mellitus patients is predicted to rise 2-3 times from 2000 levels. Meanwhile, potato peels, often discarded as waste, contain flavonoids and antioxidants that can help prevent chronic diseases like diabetes mellitus. This research develops SIMATANG (Si Manis dari Kulit Kentang) candy, utilizing potato peel extract as an antioxidant source. Candy was chosen due to its popularity across all age groups, especially children. The research aims to show the utilize potato peel extract in diabetes prevention, show the characteristics of SIMATANG candy, and determine the most effective potato peel extract composition. The research was conducted in two stages. The first involved candy production, including preparation, extraction, and molding. The second involved flavonoid content testing using NaOH 10% and antioxidant activity testing using literature analysis and DPPH. Results show that SIMATANG A, B, and C function as antioxidant candies that may help prevent diabetes mellitus. SIMATANG candy has a gummy-like texture, with variations in firmness and stickiness among samples. SIMATANG candy A has the firmest texture, followed by SIMATANG candy B, and SIMATANG candy C. As an initial conclusion for antioxidant activity, based on literature analysis, SIMATANG A exhibits the highest antioxidant activity.

Keywords: Diabetes Mellitus, Potato Peel, SIMATANG Candy