"STUDY OF MAKING PUDDING WITH ADDITIONAL RED DRAGONS PEEL ESSENCE AS SNACKS FOR TYPE 2 DIABETES MELLITUS PATIENTS"

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ABSTRACT

Type 2 diabetes mellitus is a disease characterized by the hyperglycemia and metabolic disorders related to decreased insulin function or secretion which is characterized by fasting blood sugar levels > over than 126 mg/dL or random blood sugar over than 200 mg/dL. One alternative snack for people with type 2 diabetes mellitus is pudding with the addition of red dragon fruit peel essence which is high in antioxidants. The main function of antioxidants is related to increased sensitivity to insulin and prevent damage to other organs. The research design used was a completely randomized design (CRD). Determination of the formulation in this study by adding dragon fruit peel essence were 10 g, 20 g, 30 g, 40 g, 50 g, 60 g and each treatment was repeated 4 times. The analysis used is the content of antioxidants, the level of chewy, organoleptic, and proximate for the best treatment. The results showed that pudding with the addition of dragon fruit peel extract had a significant effect on antioxidant activity, level of chwey, hedonic quality tests on color, taste, and aroma and hedonic tests on color, taste, and aroma. However, it has no significant effect on the hedonic quality of the aroma and texture of gelatin powder and hedonic test on texture. The best treatment is treatment 3 (P3) which is pudding with the addition of 30 g of red dragon fruit peel essence with an antioxidant activity content of 43.47%, while the least preferred treatment by panelists is treatment 6 (P6) which has an antioxidant activity content of 66.15%. The results of the favorability test showed that the entire panelist liked the red dragon fruit essence pudding product given. Consuming 1 cup (100 g) of red dragon fruit peel essence pudding can fulfill 65 kcal energy, 19% protein, 0% fat, and 1% carbohydrates.

Keywords: Pudding, Type 2 Diabetes Mellitus, Red Dragon Fruit Skin Essence