

*The Diet Recommendation Decision Support System in Diabetes Mellitus Using the Simple Additive Weighting Methods*

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**ABSTRACT**

*Diabetes is a serious health issue with significant impacts on one's quality of life and overall health. It occurs when the body fails to produce enough insulin or effectively utilize the insulin it produces. According to the International Diabetes Federation (IDF), Indonesia has a high prevalence of diabetes mellitus, ranking among the countries with the highest number of diabetes cases worldwide. IDF data from 2021 indicates that approximately 10.6% or around 34.5 million people in Indonesia suffer from diabetes. In this study, we developed a decision support system application using the Simple Additive Weighting (SAW) method to calculate the weights of various food menu alternatives. The SAW method allows for the assessment of food menus based on various relevant criteria, such as carbohydrate, fat, protein, fiber, and calorie content. Thus, this application can assist healthcare workers in managing food menu data and providing recommendations tailored to the nutritional needs of diabetes mellitus patients.*

**Keywords:** *Decision Support System, Diabetes Mellitus, Simple Additive Weighting*