Sistem Pendukung Keputusan Pemilihan Menu Makanan Berdasarkan Kebutuhan Gizi Menggunakan Metode Algoritma Genetika : Studi Kasus Kantin Politeknik Negeri Jember *(Decision Support System for Food Menu Selection Based on Nutritional Needs Using Genetic Algorithm Method: A Case Study of Jember State Polytechnic Canteen).*

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ABSTRACT

Generally, the nutritional needs of students are obtained from eating in the canteen. Students prefer to eat foods that are filling regardless of the food consumed in accordance with the nutritional needs of the body. From these problems, information is needed which contains recommendations about the food menu in accordance with the nutritional needs of each student. This information will later help students in choosing the food menu in the canteen. To determine this, the parameters used were age, sex, height and weight, as well as physical activity in a day. Applications built using the Genetic Algorithm method in order to find optimal solutions from possible solutions to the problem of selecting food menu combinations. The results of this study are in the form of an android-based application that can provide information about food menu packages according to the nutritional needs of students. The application also provides information on nutritional content including total calories, carbohydrates, protein and fat on each food menu in the Jember State Polytechnic Canteen. In addition, it provides information about the minimum water requirements of each student's body.

***Key words** : genetic algorithm method, nutritional needs, decision support system.*