**Genetic Algorithm Method for Determining Food Menu for
Obese Patients Mobile Based**
Mentor (1 mentor)

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ABSTRACT

Habit is a pattern that runs for a long enough time that the pattern cannot be separated from daily habits and becomes a must to maintain. By consuming healthy foods and maintaining regular food intake, we will get a healthy lifestyle pattern that should have been implemented from the beginning. The application of a food recommendation system to users based on their nutritional needs and providing food recommendations based on them makes it easier to adopt a healthy lifestyle pattern. Nutritional needs are determined based on energy, protein, fat, and carbohydrates and food recommendations are given to users using a multi-objective genetic algorithm. The study resulted in a UAT with a total percentage of 74.15% and the Statement Coverage of the genetic algorithm approached 100%. Based on the research and testing conducted on users, it is concluded that the genetic algorithm requires a better initial generation determination process and the implementation of multi-threading.

Keyword*: Multi-Objective Genetic Algorithm, diet, determination of nutritional needs.*