

ABSTRACT

Pregnancy is the most memorable moment for a mother's because, with their feelings of worry, anxiety, and happiness their families are waiting for her baby to be born and see the beauty of the world. A good condition of the womb is seen from a mother's in regulating diet and lifestyle. If a mother consumes with a regular diet and the nutritional adequacy rate is met, malnutrition in prospective babies is still common, an example is stunting malnutrition. Stunting is a condition of toddlers who have a lack of height with other children of the same age. According to the Studi Status Gizi Balita Indonesia 2021 survey, Indonesia still has a 24.4% stunting prevalence.

Genetic algorithm can solve search optimization problems. To get optimal food menu recommendations, the first thing to do is generate the initial population. The next process will evaluate individuals in the population with a fitness value. Then, reproduced by means of crossover and mutation. The last process will be selected by elitism selection method so that it meets the stopping condition. The results obtained are the food menus with breakfast, lunch, and afternoon meals. Based on research, the accuracy value of this application is 80% with a total of 15 respondents.

Keywords: *Dietary Choice on Pregnant Mothers, Genetic Algorithm*