

## Abstract

*Genetic Algorithm (GA) is one of nature-inspired optimization algorithms from evolutions that happened in real world on organism. GA can be use to solves almost all problems. Because of that, GA expected to find optimal solution in designing menu in expert system.*

*In this final task, GA implemented to optimize differences between combination of foods and total amount of calories that the patient have to fill everyday. It expected to find more variance of menu than when it done by the expert .*

*The result would be done by comparing the menu between the expert's and the result from GA.*

**Kata Kunci :** *Genetic Algorithm, Expert System, Calories.*