## **Abstract**

The food menu for hospital patients has a distinctive feature, the food menu is designed to fit the patient's level of calorie requirements, and there are restrictions for patients according to the type of illness and the patient's blood type diet.

Harris benedict is a method that can be used to calculate the caloric needs of patients in accordance with the activity factor of the patient. While Genetic Algorithm is an algorithm used for optimization inspired by evolutionary processes that occur in the real world in living things.

The results obtained with the genetic algorithm is optimal, the difference in the calories on the menu produced very little food and dietary restrictions of the disease does not appear in the menu.

Keywords: food menu, Harris Benedict, genetic algorithms, energy, disease, diet