Abstract

Diet is known as a solution to solve a weight problem. But sometimes the fit between certain types of diet eating patterns and physical characteristics are not the same in person, because of that, it needed a doctor / an expert who can provide solutions in determining the proper diet. But even the expert have Limitations in determining the type of effective dietary and nutritional adequacy standards in a short time. It became the next problem because setting diet has a lot of parameters that gave rise to ambiguity. Thus the required fuzzy as a system capable of handling the case of gray area.

Fuzzy system is used to represent the knowledge base acquired through the acquisition of knowledge that has been done previously. Fuzzy built with 2 levels with 3 fuzzy at first level and 1 fuzzy at the next level. The output of the 3 fuzzy on the first level becomes the input to the next level fuzzy.

Knowledge base on the Menu Restaurant Construction Expert System can be done by representing the expert knowledge using fuzzy system with an accuracy of 95%. Expert system can make a person preparing meals for the duration of the diet based on caloric needs with several parameters such as age, sex, blood type, height, weight, and daily physical activity during the diet needed to achieve ideal body weight.

Keywords: diet, gray-area, fuzzy systems, expert systems