

Universiti Teknologi MARA

E-Calories Diary

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ABSTRACT

Good food is important for the maintenance or restoration of health. A calorie used to measure body metabolism and it is not a nutrient or a substance but measure of food composition and heat energy. Most people especially in Malaysia lack of understanding of nutrition, digestion and the effects of the foods and other substances they consumes. Various ways of diet that has been tried but still failed in the process of losing, gaining and maintaining weight. This is because they do not know how to manage diet by taking the correct amount of calories needed in human body. The requirement need to be identified such as Body Mass Index (BMI) and Basal Metabolic Rate (BMR) calculation, and amount of daily calories needed per person. The scope of this project is focused on population in Malaysia. Anyone can use E-Calories Diary to BMI, BMR and daily calories need to control their diet to gain, loss or maintain their weight. Body Mass Index is calculated the same way regardless of height, weight, age and gender. However the results for children and teens interpreted differently than adults. Web based application used as a platform of the system by using the research approach of Web Development Life Cycle Methodology (WDLC). By implementing an artificial intelligence method in the system using knowledge representation, used to solve problems that requires knowledge and will be represented in the computer. The system can be enhance to the mobile application and add more features in the system. As a conclusion, E-Calories Diary system could be a medium to give information about calories in foods and give benefits to person on diet.

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CHAPTER 1

INTRODUCTION

This chapter explains about the outline and briefing of this project. Starting with the introduction, research background, research problem statement, research objectives, scope of the research, significance of the research and summary of the research.

1.1 Research Background

Good food is important for the maintenance or restoration of health. There are six classes of food such as carbohydrates, fats and oils, proteins, minerals, vitamins and water. A calorie used to measure body metabolism and it is not a nutrient or a substance but measure of food composition and heat energy.

Body Mass Index (BMI) used to describe a healthy weight range based on an individual's weight and height. Calculating a person's BMI is a popular way to define a person healthy weight levels. It is simple, fast and low-cost measurement.

According to Dr. Melina Jampolis, an internist and board certified physician nutrition specialist has found a way for losing weight while being able to enjoy the holidays. It is called The Calendar Diet and associates cutting edge research with real-life practical advice (Kristina, 2013). These great tools will help people succeed through their diet challenges.

BMR (Basal Metabolic Rate) is defined as the minimum number of calories of body burns whether at home, working out or resting. This means that everybody has a set number of calories that they require to stay alive and it is as different