UNIVERSITI TEKNOLOGI MARA

BMI FOOD RECOMMENDATION WITH NUTRITION INFORMATION

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CHAPTER 1

INTRODUCTION

1.1 PROJECT BACKGROUND

Food and nutrition is a key to have good health. They are important for everyone to maintain a healthy diet especially for diabetic patients who have several limitations. Nutrition therapy is a major solution to prevent, manage and control diabetes by managing the nutrition based on the belief that food provides vital medicine and maintains a good health.

Calorie is a way to measure how much energy a food provides to your body. The number on the food label shows how many calories are in one serving of that food. Percentage of fat in calories tell you the number of total fat you should plate in your meal. For most people, about 30% of all the calories they eat in a day should come from fat. So if you eat 2,000 calories a day, about 600 of these calories should come from fat. This system will show you each calorie that occurs in each food that will be suggested you.

1.2 PROBLEM STATEMENT

If we go to physician's office and inquire about our weight status, he or she will measure our height and weight to derive our BMI (weight in kg divided by height in m squared). Then they will compare our BMI to that of established criteria to decide whether we are underweight, normal weight, overweight or obese. Often times, this measure alone determines whether or not we receive lifestyle treatment (Janiszewski, 2012). Nowadays, Malaysia faced with hundreds of question about health. According to Health Minister Datuk Seri Liow Tiong Lai, he said obesity is becoming the major health issue with the number of obese people almost tripling in the past 15 years from four percent in 1996 14 percent in 2010. If we ignore this problem we will face other chronic disease such as high blood pressure, heart and kidneys.

1.3 OBJECTIVE
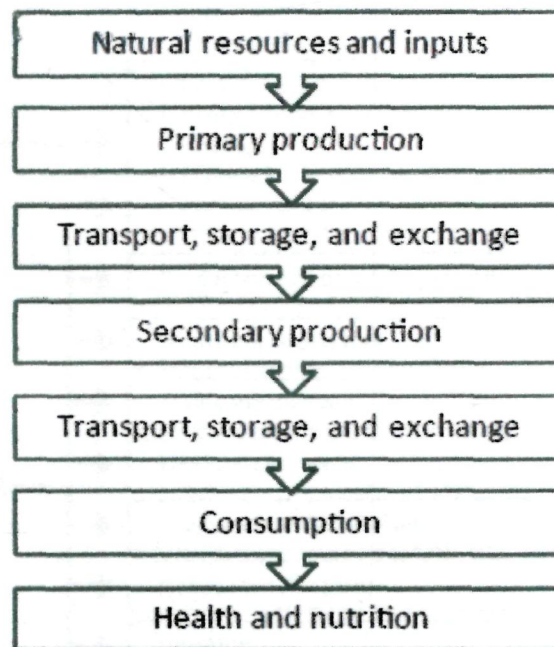
This project focused on three objectives:

1. To identify an appropriate technique in order to calculate the nutrition needed.

2. To design meal recommendation system

3. To develop meal recommendation system

1.4 SCOPE OF RESEARCH

This project will only focus on:

1. Malaysian food, drink and fruit

2. FSKM Student's (cs230 semester 6, March 2012).

2.3.1 A FOOD SYSTEM

Figure 2.1 : Food System (andersen, 2011)

A food system may be described simply as a process that turns natural and human-made resources and inputs into food. As shown in Figure 1, such a system may consist of the resources (such as land, water, a healthy workforce, and sunshine); inputs (such as plant nutrients, pest control measures, and knowledge); primary agricultural production; secondary production or processing; and transport, storage, and exchange activities to make the food available at the time and place and in the form desired by consumers (andersen, 2011).