CHAPTER I

INTRODUCTION

1.1 Background

Obesity is a medical condition that has accumulated excess fat in the body to the extent that it may have a negative effect on health, leading to reduce life expectancy or increased health problems (Haslam & James, 2005). Obesity is caused by any diet and preventable, increasing prevalence in adults and children, and one of the most serious public health problems of the century 21st (Barness *et al*., 2007). Some contributing factors are said to include a global shift in diet towards increased calories, fat, salt, and sugar intake, a trend towards decreased physical activity due to the sedentary nature of modern work, transportation, and increasing urbanization (Maqboul, 2009).

Dietary habits are the major aspects of people's lifestyles that influence health, morbidity, and mortality for a range of conditions (Christensen & Pettijohn, 2001). Overweight and obesity are main public health problems and the most common nutritional disorders (Yanowski & Yanowsoki, 2002), therefore, associated with abdominal obesity and public alike suffer from chronic diseases, non-communicable diseases such as diabetes type 2, cardiovascular and cerebral vascular disease, digestive disorders, and cancer (Manson *et al*., 1995). As obesity is one of the major health challenges worldwide, it is rapidly reaching epidemic proportions (James 1992; WHO, 2009). Disorders associated with obesity epidemic are growing in both developing and developed countries (Jensen *et al*, 2008; WHO, 1999).

WHO (World Health Organization) classifies adults as overweight when Body Mass Index (BMI) is 25 -29.9 kg/m^2, obese when BMI is >30 kg/m^2, and have abdominal obesity when waist circumference (WC) > 94 cm for men and >80 cm for women, and Waist –to-Hip Ratio (WHR) of > 0.90 in men and > 0.85 in women (Flegal *et al.*, 2002). Overweight is generally defined as having more body fat than is optimally healthy (WHO, 2003; 2005). It was estimated that in 2005 more than 1 billion people worldwide were overweight and more than 300 million were obese. Prevalence is expected to increase further in almost all countries, with 1.5 billion people expected to be overweight in 2015 (Al-Kandari, 2006).

Several studies indicated that causes of obesity are multifactorial (Fouad *et al.*, 2006; Haslam *et al.,* 2005). These factors may include biological and non-biological factors such as heredity, age, sex, occupation, socio-economic level, physical inactivity, eating habits and physiological factors (Jensen et al., 2008; Moon *et al.*, 2008; Fouad *et al.*, 2006; Haslam & James 2005). Complications are either directly caused by obesity or indirectly through mechanisms sharing a common cause such as poor diet or a sedentary lifestyle. The strength of the association between obesity and specific conditions varies. One of the strongest is the link with Type 2 diabetes. Obesity is responsible for a large proportion of the total burden of chronic diseases, 65% of the obesity and overweight in the European region is associated with growing rates of chronic diseases such as heart disease, diabetes and cancers The condition is thus affecting longevity, and in particular trends in childhood obesity are widely expected to lead to shorter life expectancy for today's children (WHO, 2009; Constantine, *et al.*, 2008).

In the United States, obesity is estimated to cause an excess 111,909 to 365,000 deaths per year (Fried & Basdevant, 2007), while 1 million (7.7%) of deaths in the European Union are attributed to excess weight (Whitlock et al., 2009; Peter *et al*., 2003). On average, obesity reduces life expectancy by six to seven years (Whitlock *et al*., 2009; Ogden *et al*., 2006). BMI of 30–35 reduces life expectancy by two to four years, while severe obesity (BMI > 40) reduces life expectancy by 10 years (Ogden *et al*., 2006; Birmingham *et al*., 1999).

1.2 Aim

To assess the prevalence of overweight and obesity, as well as their relationship with dietary habits among Libyan community in Malaysia.

1.3 Objectives of the Study

1. To describe the Libyans' community in Malaysia lifestyle including: food habits, meal pattern, smoking, and physical inactivity.

2. To assess the prevalence of overweight and obesity among Libyan community in Malaysia.

3. To examine the relationship between overweight and obesity by meal pattern among Libyan community in Malaysia.

1.4 Research Questions

The study aimed at answering the following questions:

1. What are the present proportions of overweight and obesity among Libyan community in Malaysia?

2. Are there significant relationships between overweight and obesity as well as lifestyle factors including: food habits, meal pattern, physical activity and smoking?