CONSUMPTION OF RED MEAT AND ITS ASSOCIATION WITH PHYSICAL ACTIVITIES AND FUNTIONING OF MALES

ARHAMA WAHEED¹, BURHAN AHMED SIDDIQUI² AND RUBINA HAKEEM³

¹Rana Liaquat Ali Khan College of Home Economic, Karachi-Pakistan. ²Liaquat College of Medicine and Dentistry, Gulistan-e-Johar, Karachi-Pakistan. ³Taibah University, Saudi Arabia.

Abstract

The purpose of this study was to explore consumption of meat in correlation with physical activity and physical function in older men. The males above 40 years of age were considered. 539 cases were retrieved belonging to middle income families. Results indicated that 87.4% males showed hindrance in daily physical activity and physical functioning. When both parameters were related with each other the results showed that about 28% males with poor consumption of red meat faced hindrance in physical activity and physical functioning while those (78%) who had a high level of consumption of red meat had no feeling of hindrance in daily physical activity and physical functioning.

Introduction

Consumption of meat is important for a healthy life and to fulfill our basic requirements of energy and protein, but at the same time however, it is important to eat meat in the daily recommended levels. AcAfee et al (2010), Rondeau et al (2003), Derek et al (2009) and Young et al (2011) described the risks in using higher or lower amount of red meat. The daily consumption of meat should not exceed the appropriate recommended level since excessive intake of red meat can cause cardiovascular diseases and many types of cancers. Prospective data relating consumption of meat and their association with health related quality (Chiuve and Fung 2011, Tajver et al 2008) of life are sparse. This is also true for Pakistan. Few studies have been conducted in this major health related topic which shows the association of dietary patterns of individuals and how it may hinder their daily physical activities (Slattery et al, 1991). Studies showed that there is increasing interest in health-related quality of life (HRQL) and assessments in daily clinical practice. Few empirical studies have been conducted to evaluate the usefulness of such assessments (Symone et al 2002). Studies have also shown that physical fitness is obviously related to a high quality of life, high levels of physical activity have been shown to reduce the risk of many diseases (Rieu 1995). Bonnetain (2010) also carried out similar studies on health related quality of life and their endpoints in oncology (Bonnetain 2010). In our society there are limited studies about issues related to consumption of red meat and its association with the hindrance of daily physical activity. Although few studies examined the role of consumption of meat and its relation to many diseases, limited studies are carried out to discuss the issue related to consumption of red meat and its association with the hindrance of daily physical activities. The purpose of this study is to find out whether there is an association between high intakes of red meat with the daily activities (to quality of life).

Materials and Methods

The data was collected from families of students studying in Govt. College. A sample of 539 males above 40 years of age were included from middle class families who filled questionnaires. Questionnaires were used to record physical activity, functioning scale and their categories. During the survey data about consumption of meat group scale and categories of consumption of meat group were also gather.

Affects of high and low consumption of meat were seen on physical activities / physical functioning of male. For this assessment cross tabulation command was used where physical activities was a dependent variable while intake of meat group was an independent variable. Mean linear correlation was calculated.

Results and Discussion

Total 539 males were enrolled and questioned during this study. The mean age of males was 51.62 years. Highest percentage of males *i.e.* (58.9%) fall in the age range of 40-50 years. In this data 76.8% males were living in single family system while 23.3% live in a joint system in different areas of Karachi.

Consumption of red meat among males: Results regarding the consumption percentage of males are given in Fig. 1. Majority of males (87.4%) had poor level of consumption of red meat. Only 12.4% male had high level of consumption of meat.



Fig. 1. Percentage of males who have been consumed red meat in one week.



Fig. 2. Percentage of males who have done physical activity and physical functioning daily.

Physical activity and physical functioning of males: Results regarding mean percentage of males with the hindrance in daily physical activity and physical functioning are given in Fig.2. Overall, (21.50%) males felt hindrance in physical activity and physical functioning. Seventy four % males did not have hindrance in daily physical activity and physical functioning while 4.5% people did not responded.

Relation between consumption of red meat with physical activity and physical functioning of males: Regarding this relation present study shows that 23.0% males who consumed red meat in poor levels were poorly physically active, physical functioned and felt hindrance during work at home. In comparison those (22%) who consume a high intake of red meat had a good level of physical activity and physical functioning and had no feelings of hindrance during work. The resulted chi value was greater than P<0.05 level of significance.

Research studies show that people with high socioeconomic status have more leisure time to participate in physical activities which directly related with a healthier lifestyle. In high socioeconomic groups consumption of fruits, whole meal and salads were common often rather than white bread and meat. In comparison low socioeconomic group showed that meat intake does not relate with physical activity. Gert. *et al* (2002) also found the same results.

Quality of life is important for everyone. There are many factors that affect the quality of life. One major factor is being active and physically fit. There are many reasons for a physically active life and one of them is the intake of protein rich foods including meat such as beef. They are essential in our daily life and directly associate in improving the quality of health of many people.

Total meat consumption in developing countries, which amounted to 20% of global over time was greater for males. It is also found that young adulthood consumption was greater for poultry, seafood, and beef rather than mutton (Steinfeld *et al* 2010). However more detail investigations are suggested in Pakistan.

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