Effect of Different Types of Exercise Programmes on Daily Dietary Intake of Nutrients in Females

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Abstract

The present investigation studied the effect of different types of exercise programmes (aerobic, strength, mixed i.e. combination of aerobic & strength) on daily dietary intake of nutrients in 120 females ranging in age from 20-40 years. The subjects were divided into four groups' viz. aerobic, strength, mixed and control depending upon the type of exercise programme administered to them. Exercise programme was administered for six weeks and five days a week as per the details given in the paper. Information related to the dietary content of food ingested by the subjects was obtained from daily dietary records of the subjects. Subjects were instructed to identify every food and drink and the amount ingested over a period of 45 days (three days before the starting of exercise programme till the end of six weeks period of study). From this information average daily dietary intake of nutrients was calculated using Dine Healthy Software. The results indicate that with the progression of the exercise programme, the aerobic group demonstrated a significant reduction in the daily dietary energy intake, while in the remaining groups this was not the case. Effect of different exercise programmes on the daily dietary intakes of nutrients vary with the nature of exercise schedule and is discussed at length in the research report.

Key Words: Carbohydrates, Fats, Proteins, Body Mass Index

Introduction:

Some people believe that exercise generates an increase in hunger and a drive to eat while others say that physical activity can suppress appetite. From the literature reviewed, regarding the impact of physical activity on the dietary intake, it is gathered that physical activity influences food intake varying from either no change to suppression of appetite (Thompson et al, 1988; Kissileff et al, 1990; Lawton et al, 1993; King et al, 1994; King et al, 1996; Imbeault, 1997 and King et al, 1997). Overall, the body of evidence points to a rather weak pairing between energy intake and physical activity induced energy expenditure (King et al, 1997; Blundell & King, 1998 and King, 1998). Literature is silent as far as the effect of different types of exercise programmes on intake of energy and nutrients in the daily diet is concerned.

The investigation was undertaken to study the effect of different types of exercise programmes on daily dietary intake of nutrients in females.

Materials and Methods:

The study was conducted on 120 females ranging in age from 20 to 40 years. These subjects were grouped into the following categories on random basis and each group comprised of 30 subjects who lasted till the end of the study.

Group I: Aerobic (These subjects were given six weeks of aerobic exercise programme)

Group II: Control (These subjects acted as control and were not subjected to any exercise programme)

Group III: Mixed (These subjects were given six weeks of aerobic plus strengthening exercise programme)