

**HIGH-FAT FOOD CONSUMPTION, PHYSICAL INACTIVITY AND OTHER
SELECTED RISK FACTORS FOR CARDIOVASCULAR DISEASE AMONG THE
STUDENTS OF THE UNIVERSITY OF THE WEST INDIES, ST AUGUSTINE
CAMPUS**

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2012

Background: Global trends of chronic non-communicable diseases (NCDs) have shown significant increases in prevalence, even to the extent of being now considered as an epidemic in many countries. As one of the most significant contributors of death in the world, this public health issue have caught the attention of many governmental agencies worldwide.

Objective: Limiting studies exists on obesity as a risk factor for cardiovascular disease in the Caribbean. The purpose of this study is to determine whether, consumption of high fat food and physical inactivity, increases the risk for the development of cardiovascular disease, among the students of the University of the West Indies, St Augustine campus.

Design: Using convenient sampling, 80 males and 116 females (n=196), participated in this study. Students were given a self administered questionnaire containing three sections including anthropometrics, background information and a food frequency questionnaire. The anthropometric measurements included BMI, visceral fat and total body fat percent. Blood pressure was also done. Statistical analyses included descriptive statistics, ANOVA with Post Hoc- Tukey analyses as well a multiple linear regression.

Results: The study showed that most students (74%) purchased meals more than 2 times per week, which usually included fast foods (41.3%). Results show that approximately 62 % of the students report that they were moderately physically active, with 18.4% having a current sedentary lifestyle. Using indicators of obesity including, BMI, total body fat and visceral fat, it

was found that in the sample population, total body fat percent was highest among both males and females; with visceral fat and BMI existing within normal range. Greatest linear associations were observed between physical activity and food consumption with visceral fat and total body fat percent, rather than with BMI. It showed that a 1% increase in physical activity can result in a decrease of visceral fat and total body fat by 0.017%. However a 1% increase of frequency of high-fat food consumption can result in a 0.063% increase of visceral fat and total body fat.

Conclusion: The findings suggest that within this population, there are linear associations existing between physical activity and frequency of high-fat food consumption, with total body fat percent and visceral fat.