

BODY COMPOSITION AND PHYSICAL ACTIVITY OF STUDENTS OF THE UNIVERSITY OF THE WEST INDIES

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Background -BMI is an indicator of body fatness which categorizes the weight status of an individual into underweight, normal weight, overweight and obese. Studies have suggested that there is an association between high BMI and activity that is sedentary and physical activity at low intensity which increase the risk for obesity among students of the University of the West Indies.

Objectives- To show the relationship between BMI and Physical Activity among students of the University of the West Indies.

Design- A cross- sectional survey was conducted among 255 under - graduate students (180 females and 75 males) from aged 17 to 44 years who entered the University of the West Indies from 2005 to 2007. These participants were conveniently sampled on campus in November 2009 and they had to complete a self- administered Consumption Survey Questionnaire. The questionnaires collected information on demographics, anthropometric measurements, family history, dietary patterns and participation in both sedentary and physical activity.

Results-The findings revealed that there is a negative relationship between BMI and physical activity. Majority of the participants were females aged 17 to 20 years (**47.2%**) and males aged 21 to 25 years (**44%**). Majority of the participants were of African/ African Descents (**69.3%** and **47.2%**) and from the 2009 year of study (**32%** and **38.9%**) for males and females respectively. Males were significantly taller

(**p < 0.001**), heavier (**p< 0.001**), had higher BMI (**p= 0.002**) and had larger waist circumference (**p < 0.001**) than females, while on the other hand, females had a significantly higher body fat percent (**p<0.001**). Majority of the participants (**88.9%**) were sedentary, while (**5.1%**) were physically active at high intensity. Although, both males and females had high BMI

correlated with physical activity at low intensity, the males were found to have higher BMI than the female participants in this study. However, females were found to have high BMI at physical activity at low intensity and males at high intensity. Thus, BMI was significantly correlated with physical activity at high intensity (i.e. 3 or more days of participation) for males (**p = 0.024**) and BMI was not significantly correlated with physical activity at high intensity for females.

Conclusion – In this study based on the results, BMI was found to be inversely related to the level of Physical activity for both female and male participants.