Background: Non-communicable chronic diseases have become a major public health issues in the Caribbean accounting for most of the mortality and morbidity in the region. Dietary consumption patterns are important precursors of disease and good health status. Dietary pattern analysis is emerging as an approach to examining diet- diseases relation and may be used in understanding the dietary causes of obesity. The objective of the research was to determine whether food consumption patterns have any association to adverse anthropometric data.

Design: The study was conducted on 353 male and female students of the University of the West Indies, St. Augustine Campus. Diet was assessed using a food frequency questionnaire. The food frequency questionnaire was sub-divided into nine groups and a diet index score was used to indentify health and unhealthy consumption pattern.

Results: Two consumption patterns identified as a healthy and an unhealthy pattern was derived using a diet score. Among the female population BMI and body fat percent was found to have inverse relationships with staples, legumes, food from animals, vegetables, fat, snacks, and soda, whereas waist circumference was found to be inversely with the same groups including fruits. With the male population inverse associations were found between body fat and fruits, vegetables, fat and snacks; for BMI inverse associations existed between staples, fruits, dairy, food from animals, fat, snacks and soda; and waist circumference was inversely related to snacks.
**Conclusion:** The more an individual conforms to dietary recommendations is the less likely they are to have adverse anthropometric measurements.