

An Investigation of the Association of BMI and Body Fat Percentage to Eating Behaviors as Measured by the Three Factor Eating Questionnaire-R18 in University Students

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Background: There is a lack of research concerning the psychological aspects of eating behavior of university students in the Caribbean. The Three Factor Eating Questionnaire Revised 18 item version (TFEQ-R18) is a self-administered questionnaire designed to measure 3 facet of human eating behavior: cognitive restraint (CR) (a tendency to constantly and consciously restrict one's food intake instead of using physiological cues, hunger and satiety, as regulators of food intake), uncontrolled eating (UE) (tendency to overeat, with the feeling of being out of control), and emotional eating (EE) (tendency to eat in response to negative emotions) Anglé (2009).

Objectives: To investigate the relationship between body mass index (BMI), body fat % and eating behaviors as measured by the Three Factor Eating Questionnaire TFEQ-R18 among university students.

Methods: Data were collected from October 18th to November 4th 2010 using a 39 item self completed questionnaire. A convenient sampling method was used. Students were approached in common student areas around campus and 120 students gave their informed consent. Variables measured were anthropometric, cognitive restraint, emotional eating and uncontrolled eating behaviors. Data were analysed using SPSS for Windows version 19.

Results: Analysis of cognitive restraint (CR) and emotional eating (EE) found no significant differences between male and female subjects. However for uncontrolled eating (UE) behavior male scores were significantly higher than female and UE scores were high among males all together. There was a greater incidence of overweight, obesity, high and very high body fat among males than females. Higher CR was associated with higher BMI ($p < 0.01$). There was an inverse relationship between BMI and UE that was not statistically significant; however the inverse relationship between BF% and UE ($p < 0.01$) was significant.

Conclusion: This study reveals novel findings of eating behavior, measured using TFEQ-R18 responses, and their association with BMI and BF% of young adult university students in Trinidad. Healthy eating behaviors exist in the majority of students, however high levels of body fat % and incidence of overweight in male students warrants continuous monitoring.

