

# IMPACT OF DIETARY ACCULTURATION ON THE FOOD HABITS, WEIGHT, BLOOD PRESSURE AND FASTING BLOOD GLUCOSE LEVELS OF INTERNATIONAL COLLEGE STUDENTS

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**Objective:** This study was conducted to determine the impact of dietary acculturation on the health status of newly arrived international students at Virginia Tech in Fall 2010. Participants: Thirty-five international students, 18-36 years of age, completed the study.

**Methods:** Data were collected at 3 different time periods (V1, V2, and V3) approximately 6 weeks apart. A food frequency- and dietary pattern-related questionnaire was administered, and numerically coded responses were analysed. Twenty-four-hour dietary recall data were also collected at V1, V2, and V3. Body weight, fasting blood glucose level, and blood pressure of study participants were also determined at each time period.

**Results:** Total sample population (TSP) had a significant increase in mean weight of 2.79 lb from visit 1 (V1) to visit 3 (V3) ( $p=0.0082$ ). Ten participants gained an average of 9.0 lb (participants who gained weight;  $n=10$ ). There was also an increase in the frequency of consumption of high-calorie American food items from V1 to V3. However, there were no significant changes in mean systolic blood pressure and mean fasting blood glucose was significantly lower at V3 than at V1.

**Conclusions:** There was a gradual shift in the dietary patterns of international students towards the American diet. Dietary acculturation led to weight gain among some of the students, which may potentially have a negative impact on their health status if continued for longer time periods.

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