Comparing Dietary Intake of University Students from Peru and Alabama with an Analysis of the Effect of Dietary Intake on Anthropometrics Across Cultures

Kaitlyn Wilson, Emily Hood, Mary Yarber, and Jill Goode Englett

**Introduction:** College students worldwide have issues meeting dietary guidelines suggesting the hypothesis that students in Peru and Alabama had similar dietary intake.

**Methods:** This quasi-experimental study compared dietary intake (DI) and anthropometric measures (AM) of college students from Peru (n=62) with students from Alabama (n=58). Students completed Food Screeners and AM were taken. Differences between the Peruvian students (PS) and Alabamian students (AS) were evaluated. Data from both groups were combined and examined for associations between DI and AM.

**Results:** An independent-samples t-test demonstrated that PS had a significantly higher (p <.05) fruit and vegetable intake, fiber intake, and percentage body fat, AS had a significantly higher (p <.05) total fat intake, saturated fat (SF) intake, percentage of total kilocalories (kcal) from fat, percentage of total kcal from SF (%SF), waist circumference (WC), hip circumference (HC), and body mass index (BMI).

A Pearson’s correlation association demonstrated a small, positive correlation between SF intake and WC, HC and waist to hip ratio (WHR); cholesterol intake and WC and WHR; and %SF and HC and WHR. A moderate, positive correlation exists between %SF and WC. A small, negative correlation exists between %SF and percent body fat.

**Conclusion:** PS consume a diet higher in fruits, vegetables, and fiber while AS’s diets are higher in fat and saturated fat. In this age group there is limited correlation between DI and AM.