

School breakfast program intake of fiber, cholesterol, total fat, and saturated fat in relationship to 2010 dietary guidelines for Americans in third, fourth, and fifth graders

Chenin Treftz

University of Nevada, Reno, USA

Background: A child's diet has a direct impact on the risk for several chronic diseases including obesity, certain types of cancer and cardiovascular disease. School meal programs, such as the school breakfast program (SBP), are in a unique position to influence a child's health. Some children consume at least 35% of their total nutrient intake from school meals.

Objective: The aim of this study was to evaluate elementary students' SBP intake of fiber, cholesterol, total fat, and saturated fat contribution to the new 2010 Dietary Guidelines for Americans (DGA).

Methods: This was a cross-sectional study assessing third, fourth, and fifth grade students' SBP consumption during the 2011-2012 school year. Data was collected for eight to 11 days at three Washoe County school district elementary schools. SBP intake was evaluated using the Spears Point of Sale Dietary Assessment Tool (Spears POS-DAT). ANOVA and independent t-tests were conducted to explore the difference of means of SBP intake by age, sex, gender, and race. Results: Mean difference of SBP intake contributing to the 2010 DGA revealed: race groups were unequal in kilocalories and all evaluated nutrients, except cholesterol; weight status groups were equal in kilocalories and all nutrients; age groups were unequal in all kilocalorie and all nutrient categories; gender was unequal for kilocalories and all nutrients, except cholesterol.

Conclusion: There was a significant difference among SBP intake and subject characteristics. Future studies should obtain a participant's entire day's intake and activity level for more detailed analysis of SBP intake contribution to meeting the 2010 DGA. The information gained from this study provides insight for policy makers and other nutrition professionals at the national level.

Biography

Chenin Treftz has completed a MS degree at the age of 25 from University of Nevada, Reno. She has been a research assistant for the past 2 years, and is starting a Ph.D. program in Fall 2013. Chenin also works part time as a registered dietitian, teaching nutrition classes in a community setting.