

Terry-McElrath, Y. M., O'Malley, P. M., Delva, J., & Johnston, L. D. (2009). The school food environment and student body mass index and food consumption: 2004 to 2007 national data. *Journal of Adolescent Health, 45*(3), S45–S56.

Abstract

Purpose. This study identifies trends in the availability of various food choices in United States' middle and high schools from 2004 to 2007, and examines the potential associations between such food availability and students' self-reported eating habits and body mass index (BMI)-related outcomes.

Methods. Data are based on nationally representative samples of 78,442 students in 684 secondary schools surveyed from 2004 to 2007 as part of the Youth, Education, and Society (YES) study and the Monitoring the Future (MTF) study. In the YES study, school administrators and food service managers completed self-administered questionnaires on their school's food environment. In the MTF study, students in the same schools completed self-administered questionnaires, providing data used to construct BMI and food consumption measures.

Results. Overall, there was a decrease in the availability of regular-sugar/fat food items in both middle and high schools, and some indication of an increase in high school availability of reduced-fat food items through school lunch or a la carte. Some minimal evidence was found for relationships between the school food environment and student BMI-related outcomes and food consumption measures.

Conclusions. United States secondary schools are making progress in the types of foods offered to students, with food items of lower nutritional value becoming less prevalent in recent years. Continued monitoring of food environment trends may help clarify whether and how such factors relate to youth health outcomes.