Childhood obesity is a public concern, and consumption of caloric sweetened beverages, the frequency of eating fast food, and an array of unhealthy options at schools have been named as possible culprits. Unfortunately, identifying effective obesity-fighting policies is difficult because, for many children, poor food choices are simply the norm, both at and away from home.

ERS researchers used 2 days of children’s dietary intake data from two national food intake surveys to estimate how the number of meals or snacks eaten away from home and at school affect the total number of calories consumed and other measures of daily diet quality. Each meal or snack was classified as food from home, food acquired away from home, or food from school. The designation was based on the source for the majority of calories in each meal or snack, after excluding beverages. For example, a home-packed bag lunch eaten with a bag of chips from school would be classified as an at-home meal.

Among children ages 6-12, food away from home and food from school did not significantly affect daily caloric intake compared with at-home snacks or meals. Among children ages 13-18, however, eating food away from home added 108 calories to total daily intake compared with eating at home; eating food from school added 145 calories. Food from school included USDA-reimbursable school meals and all other foods purchased at school (other than beverages). The similar caloric increase from food away from home and foods from school for 13-18 year olds likely reflects an increased availability of many types of foods in middle and high schools, including a la carte side dishes and desserts. In comparison, elementary schools tend to offer more limited choices.

A closer look at the relationship between changes in daily calories and changes in daily intake of caloric sweetened beverages showed that these beverages significantly increased calories consumed by both younger and older children. But the size of the increase differed by age. This difference may be driven by an underlying variation in the types of caloric sweetened beverages consumed, which included nondairy beverages such as fruit or fruit-flavored drinks, soda, energy drinks, and flavored water. Differences in the way that older and younger children compensate food calories for caloric sweetened beverage calories could also have an effect.

Among 6-12 year olds, 1 ounce of caloric sweetened beverages added 11.6 calories—meaning that a 12-ounce can would boost total daily intake by 139 calories. Among 13-18 year olds, 1 ounce added 10.3 calories, meaning a 12-ounce can would add 123 calories to daily intake. And while each ounce of caloric sweetened beverage had slightly less of an effect on older children’s daily caloric intake, older children drank almost twice as much as younger children did—24 ounces per day, on average, compared with 14 ounces per day.

Improving diet quality is an important goal at any age. Increased knowledge about the impact of beverage choices and food sources on overall caloric intake may enable children and teens to take steps to reduce obesity. The ERS study results suggest that teenagers could especially benefit from paying careful attention to their food and beverage choices when eating away from home.