Ervin RB, Kit BK, Carroll MD, Ogden CL. Consumption of added sugar among U.S. children and adolescents, 2005–2008. NCHS data brief no 87. Hyattsville, MD: National Center for Health Statistics. 2012.



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Background

The 2010 Dietary Guidelines for Americans recommend that we limit intake of added sugars, defined by the USDA as those used as ingredients in processed and prepared foods such as breads, cakes, soft drinks, jams, chocolates, ice cream, and sugars eaten separately or added to foods at the table. Specifically, it is recommended that we consume no more than ~5–15% of calories from solid fats (saturated and *trans* fatty acids) and added sugars combined. This is because foods high in these ingredients tend to contribute calories but limited amounts of essential nutrients to the diet, resulting in weight gain and its associated sequelae.

It has been estimated that added sugars contribute $\sim 16\%$ of the total calories in the American diet, with soda, energy drinks, and sports drinks representing the most commonly consumed sources. To better understand added sugar consumption patterns among U.S. children and teens, a group garnering considerable public health concern due to burgeoning obesity rates, researchers at the National Center for Health Statistics recently published our nation's most current estimates for added sugar intake in this subset of the population. Data used in this analysis were drawn from the NHANES 2005–2008, which utilized in-person, 24-h dietary recall methodology to assess food and nutrient intakes.

Questions asked and key findings

The report was designed to provide answers to 5 key questions related to the effects of sex, age, race/ethnicity, income level, food source (food vs. beverage), and location of meals on added sugar consumption patterns. The key findings are summarized below.

 Question 1: Are there differences in the mean energy consumed from added sugars by boys and girls and by age group?

- Answer 1: On an absolute basis, boys consumed more energy from added sugar than girls: 362 vs. 282 kcal/d, respectively (P < 0.05). Age was a significant predictor of added sugar intake, with older children consuming more than their younger counterparts.
- Question 2: Are there differences in the percent of energy consumed from added sugars by age group?
- Answer 2: Overall, boys consumed a higher percentage of energy (16.3%) from added sugars than did girls (15.5%). This difference was most pronounced for preschoolers (2–5 y of age).
- Question 3: Are there differences in the percent of energy consumed from added sugars by race and ethnicity?
- Answer 3: Non-Hispanic white boys consumed more of their energy (17.2%) from added sugars than did Mexican American boys (14.8%), with that consumed by non-Hispanic black boys falling in between (15.9%). Both non-Hispanic white (16.1%) and non-Hispanic black girls (15.9%) consumed more total energy from added sugars than did Mexican American girls (14.0%).
- Question 4: Are there differences in the percent of energy consumed from added sugars by poverty income ratio?
- **Answer 4:** There was no effect of poverty income ratio (the ratio of household income to poverty threshold after accounting for inflation and family size) on the percent of energy from added sugars.
- Question 5: Were children and adolescents more likely to consume the added sugars from foods and beverages at home or away from home?
- Answer 5: More added sugars came from foods (59%) than beverages (41%), and more were consumed at home (65%) than away from home (35%).

Conclusions

In summary, this analysis found that a substantial portion of consumed energy eaten by children and adolescents between 2005 and 2008 came from added sugars. Interestingly, Mexican American boys and girls consumed the lowest amounts of added sugars, which were most likely to come from foods consumed at home. Family economic status was not related to added sugar intake. Given the recommendation that no more than 15% of calories should come collectively from added sugars, saturated fats, and *trans* fats, these results suggest that reducing added sugar intake may be important in this age group, especially in terms of lowering risk for obesity.

For More Information

Free copies of this NCHS Data Brief are available at http://www.cdc.gov/nchs/data/databriefs/db87.pdf. You can read more about how the USDA defines and quantifies "added sugars" at http://www.ars.usda.gov/SP2UserFiles/Place/12355000/pdf/mped/mped2_doc.pdf#Chapter10.