Illinois Prevention Research Center

ILLINOIS PRC RESEARCH BRIEF
NO. 101
DECEMBER, 2017

Added-sugar Intake from Sugar-sweetened Beverages among Adults in Cook County, Illinois, 2017

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Key Findings

- **On average, added-sugar intake from SSBs is 10.4 teaspoons per day among Cook County adults aged 18-64, making up 48% of total daily added-sugar intake.**
- **Added-sugar intake from SSBs of 8.5 and 12.5 teaspoons per day in a month by female and male adults, respectively, exceeds recommended limits (5 and 9 teaspooons per day for females and males, respectively) for added-sugar.**
- **Younger adults compared to older adults have higher intake of added-sugar from SSBs.**
- **Racial/ethnic minority female adults have greater added-sugar intake from SSBs compared to non-Hispanic white female adults.**
- **Lower- versus higher-educated female adults have greater added-sugar intake from SSBs.**
- **Added-sugar intake from SSBs does not differ significantly by education or race/ethnicity among male adults.**

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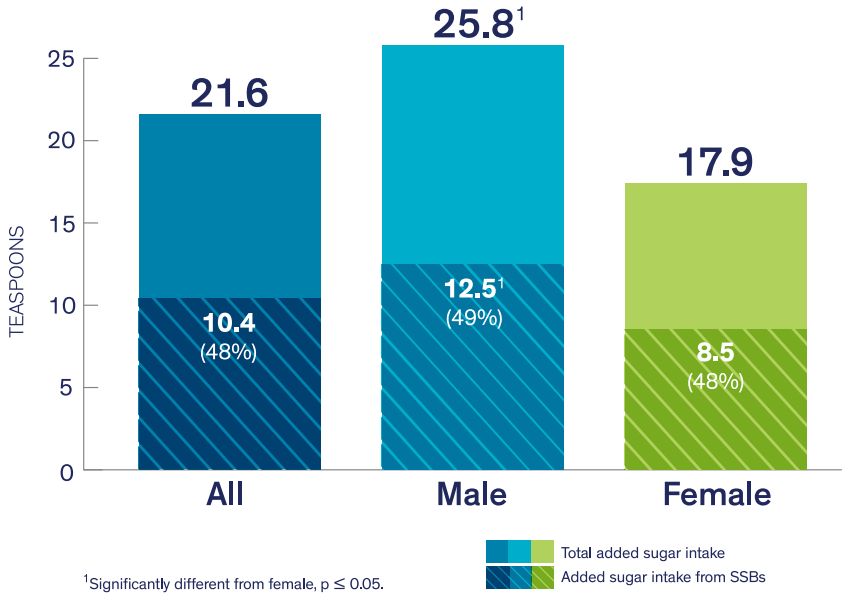
Added sugar accounts for more than 13 percent of calories per day in the overall diet of the United States (U.S.) population, exceeding the 2015–2020 Dietary Guidelines for Americans recommendation that daily intake of calories from added sugars should not exceed 10% of total calories.[1] Beverages are the major source of added sugars being consumed, with non-alcoholic sweetened beverages making up 46% of added sugars.[1] Added-sugar intake is associated with negative health outcomes including cardiovascular disease, type 2 diabetes, and overweight and obesity.[2-4] Reducing consumption of added sugars is a key strategy of CDC's *Winnable Battles* for improving nutrition and reducing obesity rates.[5] This research brief presents information on the estimated number of teaspoons of daily added-sugar intake from sugar-sweetened beverages (SSBs) and the contribution of added-sugar intake from SSBs as a percentage of total added-sugar intake. The estimates are presented by gender, age, race/ethnicity, and education.

Added-sugar intake from SSBs

- On average, added-sugar intake from SSBs is 10.4 teaspoons per day and total added-sugar intake is 21.6 teaspoons among adults.
- Added-sugar from SSBs makes up 48% of total daily added-sugar intake among adults.
- Added-sugar intake from SSBs is greater for males (12.5 teaspoons daily) compared to females (8.5 teaspoons daily), but represents about the same percentage of total added-sugar intake at 49% and 48%, respectively.

FIGURE 1 **Added-sugar intake per day in a month from sugar-sweetened beverages and in total among adults aged 18-64, by gender, Cook County, IL, 2017**



[1]Significantly different from female, $p \leq 0.05$.

Added-sugar intake from SSBs, by age

- On average, intake of added-sugar from SSBs is significantly higher among younger adults: 12.9, 10.1 and 7.5 teaspoons per day among adults aged 18-34, 35-49, and 50-64, respectively.
- Significant differences in added-sugar intake by age are also present for both males and females.
- Added sugar from SSBs makes up a greater percentage of total daily added-sugar intake among younger adults: 51%, 49%, and 43% of total sugar intake for adults aged 18-34, 35-49, and 50-64, respectively.

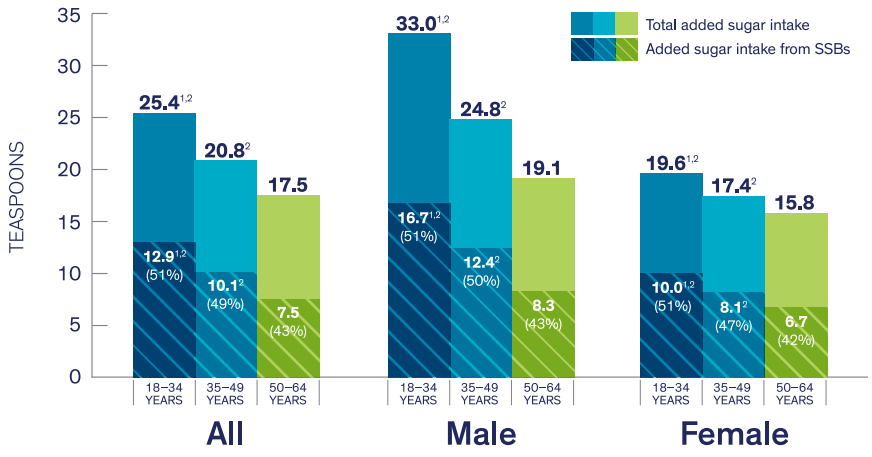
Added-sugar intake from SSBs, by race/ethnicity

- There are no significant differences in added-sugar intake from SSBs across non-Hispanic white, non-Hispanic black, and Hispanic adults overall or for adult males.
- Among females, non-Hispanic blacks (9.2 teaspoons per day) and Hispanics (10.1 teaspoons per day) have higher added-sugar intake from SSBs compared to non-Hispanic whites (7.5 teaspoons per day).
- Added-sugar from SSBs makes up 50% and 51% of total added-sugar intake for non-Hispanic black and Hispanic females, respectively, and 45% for non-Hispanic white females.

Added-sugar intake from SSBs, by education

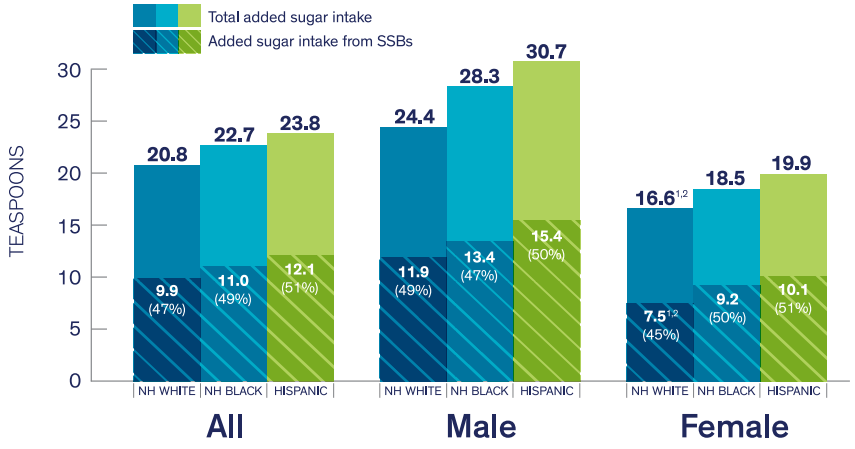
- On average, added-sugar intake from SSBs is 12.0 teaspoons per day for adults with a high school education or less and 10.5 teaspoons per day for adults with some college, compared to 8.8 teaspoons per day for adults with a college degree or more.
- Added-sugar intake from SSBs does not differ significantly by education level for males.
- Added-sugar intake from SSBs for females is lower as education rises: it is 10.2, 8.7, and 6.9 teaspoons per day, respectively, among female adults with a high school education or less, some college, and a college degree or more.
- Added-sugar intake from SSBs makes up 52%, 48%, and 42% of total added-sugar intake for females with a high school education or less, some college, and a college degree or more, respectively.

FIGURE 2 **Added-sugar intake per day in a month from sugar-sweetened beverages and in total among adults aged 18-64, by gender and age, Cook County IL, 2017**



[1]Significantly different from ages 35–49, p ≤ 0.05.
[2]Significantly different from ages 50–64, p ≤ 0.05.

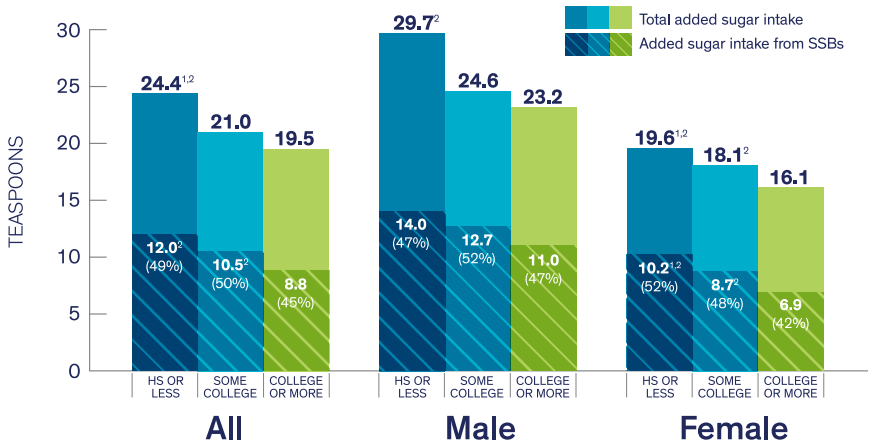
FIGURE 3 **Added-sugar intake per day in a month from sugar-sweetened beverages and in total among adults aged 18-64, by gender and race/ethnicity, Cook County IL, 2017**



[1]Significantly different from non-Hispanic black, p ≤ 0.05.
[2]Significantly different from Hispanic, p ≤ 0.05.

NH: non-Hispanic
Other/mixed: not shown

FIGURE 4 **Added-sugar intake per day in a month from sugar-sweetened beverages and in total among adults aged 18-64, by gender and education, Cook County IL, 2017**



[1]Significantly different from some college, p ≤ 0.05.
[2]Significantly different from college degree or more, p ≤ 0.05.

HS: high school

Summary

On average, total added-sugar intake among adults aged 18-64 in Cook County, IL, is 21.6 teaspoons a day of which 10.4 teaspoons, or 48%, comes from added-sugar intake from SSBs. Although males consume more total added-sugar and added-sugar from SSBs, added-sugar from SSBs makes up roughly the same proportion of total sugar intake for both males (49%) and females (48%). For both males and females, younger adults have higher added-sugar intake from SSBs compared to older adults. However, males and females do not have similar patterns of added-sugar intake from SSBs based on race/ethnicity and education. For males, no significant differences exist in added-sugar intake from SSBs by race/ethnicity (with the exception of "other" and "mixed" race not reported on in this brief) or by education. For females, added-sugar intake from SSBs is higher for non-Hispanic blacks and Hispanics compared to non-Hispanic whites and it is lower at each successive level of education. These differences in intake of added-sugar from SSBs may contribute to disparities in obesity and related health outcomes among females. Overall, based on a 2000 calorie per day diet, estimated total added-sugar intake among Cook County, IL, adults aged 18-64 is about 1.8 times the recommended limit that not more than 10% of calories come from added sugars.[1] Added-sugar intake of 10.4 teaspoons per day from SSBs alone makes up 87% of this recommended daily limit for added sugars. Further, this exceeds other recommended limits of 5 teaspoons per day for females and 9 teaspoons per day for males from added sugars.[6]

Data and Methods

The data for this study were drawn from an online survey of Cook County, IL, adults aged 18 to 64 years administered by Qualtrics, Provo, UT, in June, 2017.[7] Data were collected on food and beverage consumption and on demographic and socioeconomic characteristics. Data were weighted to be representative of the demographic and socioeconomic composition of adults in Cook County, IL.[8, 9] The final analytic sample consisted of 2,563 people. Consumption data on food and beverages that contribute to sugar intake were collected using frequency measures based on the Dietary Screener Questionnaire (DSQ) in the NHANES 2009-2010.[10] Eight of the items included in the DSQ assessed added sugars. Three items in the DSQ were used to estimate added-sugar intake from SSBs: 1) soda; 2) fruit, sports, and energy drinks; and 3) teas and coffees sweetened with sugar. The remaining five DSQ items used in the added-sugar assessment are: frozen desserts; chocolate and candy; doughnuts; cookies, cake, pie, and brownies; and cereal. The DSQ frequency responses are converted to estimates of added-sugar intake in teaspoons using a regression-based scoring algorithm with sex- and age-specific portion size information developed by the National Cancer Institute.[11] Summary statistics for weighted mean added-sugar intake are reported for the full sample and by gender, and also by age, race/ethnicity and education for the full sample and separately for male and female samples. The estimates of added-sugar intake (total and from SSBs) by gender and by age, race/ethnicity, and education within the male and female samples were tested using t-tests to determine statistically significant differences ($p \leq 0.05$).

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ACKNOWLEDGMENTS

The results presented in this brief were supported by a grant from Bloomberg Philanthropies' Obesity Prevention Initiative (www.bloomberg.org). The contents of this publication do not necessarily reflect the view or policies of Bloomberg Philanthropies.

SUGGESTED CITATION

Powell LM, Isgor Z, Pipito AA, Pugach O, Yaroch AL, Zenk SN. Added-sugar Intake from Sugar-sweetened Beverages among Adults in Cook County, Illinois, 2017. Research Brief No. 101. Illinois Prevention Research Center, University of Illinois at Chicago. Chicago, IL. December 2017. https://illinoisprc.org/publications/