

# Sugar-sweetened Beverage Consumption among Adults in Cook County, Illinois, 2017

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## Key Findings

- On average, Cook County adults aged 18-64 consume SSBs almost two times per day in a month.
- Approximately nine in ten adults in Cook County consume at least one SSB in a month, and nearly one in four consume SSBs two or more times per day in a month.
- Younger adults consume SSBs more frequently than older adults and are more likely to be heavy SSB consumers.
- Racial/ethnic minority adults are more likely to be frequent SSB consumers compared to white adults.
- Lower-educated female adults are more likely to be frequent SSB consumers compared to higher-educated female adults. Frequent SSB consumption does not differ by education for male adults.

### AUTHOR AFFILIATIONS

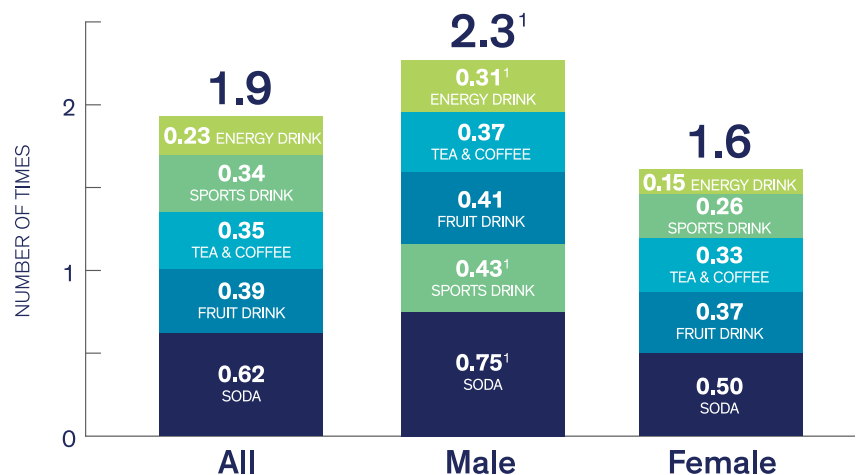
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Sugar-sweetened beverages (SSBs) are the largest contributor of added sugar in the American diet<sup>1</sup> and are associated with obesity, as well as type 2 diabetes, cardiovascular disease, dental caries, and osteoporosis.<sup>2-4</sup> Despite recent reductions in SSB consumption, half of United States (U.S.) adults and 60% of U.S. youth consumed at least one SSB on a given day in 2013-14.<sup>5</sup> In 2011-14, 6.5% of U.S. adults' daily energy intake came from SSBs.<sup>6</sup> Decreasing SSB consumption is a key strategy and policy focus recommended by the Institute of Medicine and the World Health Organization for reducing obesity and risk of related adverse health outcomes.<sup>7,8</sup> This research brief presents information on the frequency of SSB consumption among adults aged 18-64 living in Cook County, Illinois in 2017, including by SSB type for soda, fruit drinks, sports drinks, energy drinks, and tea/coffee. Consumption estimates are also presented by gender, age, race/ethnicity, and education level.

## Number of times per day SSBs are consumed

- On average, adults aged 18-64 consume SSBs 1.9 times per day in a month.
- On average, adults consume soda 0.6 times per day in a month, followed by fruit drinks 0.4 times, tea/coffee 0.4 times, sports drinks 0.3 times, and energy drinks 0.2 times.
- Males consume SSBs more frequently than females (on average, 2.3 versus 1.6 times per day in a month). In particular, males consume energy drinks twice as often as females.
- Sodas are the most frequently consumed type of SSB for both males (on average, 0.8 times per day in a month) and females (on average, 0.5 times per day in a month).

**FIGURE 1** Number of times adults aged 18-64 consume sugar-sweetened beverages, on average, per day in a month, by beverage type and gender, Cook County, IL, 2017



<sup>1</sup>Significantly different from female,  $p \leq 0.05$ .

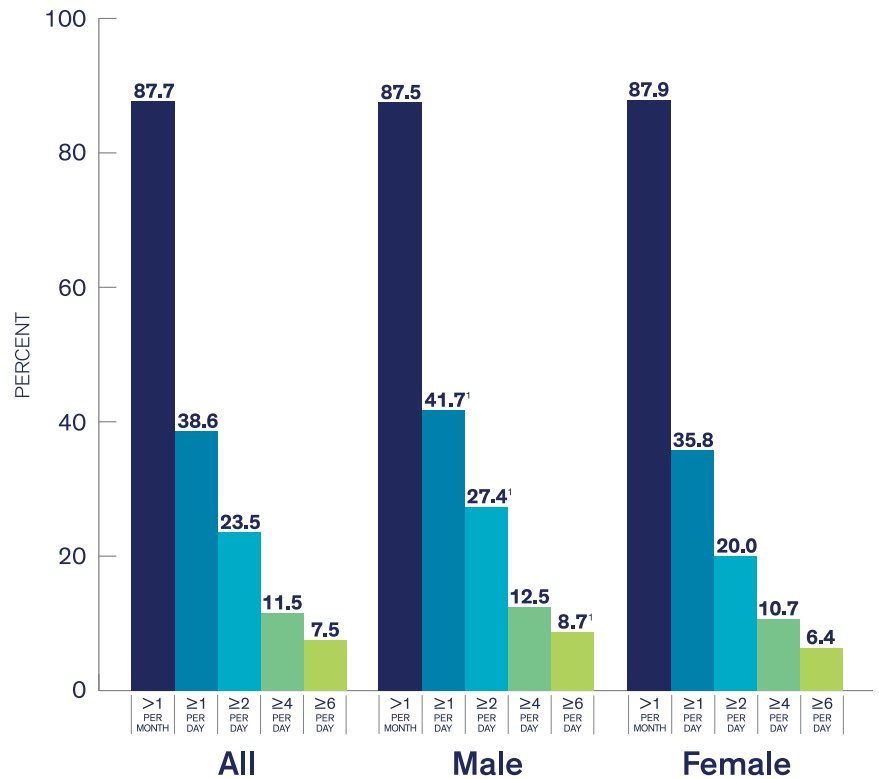
## Frequency of SSB consumption

- 87.7% of adults in Cook County consume SSBs at least one time in a month.
- Almost four in ten adults consume SSBs daily ( $\geq 1$  time per day in a month).
- Almost one quarter of adults are frequent SSB consumers ( $\geq 2$  times per day in a month), 11.5% are heavy SSB consumers ( $\geq 4$  times per day in a month) and 7.5% are very heavy SSB consumers ( $\geq 6$  times per day in a month).
- Male adults have a higher frequency of SSB consumption compared to female adults (e.g., 27.4% of males compared to 20.0% of females are frequent SSB consumers).
- Daily consumption among adults is 16.7% for soda, 9.4% for fruit drinks, 7.9% for tea/coffee, 7.7% for sports drinks, and 5.2% for energy drinks (not shown in figures).
- Frequent consumption among adults is 11.5% for soda, 6.3% for fruit drinks, 5.3% for tea/coffee, 5.1% for sports drinks, and 3.6% for energy drinks (not shown in figures).

## Frequent SSB consumption, by age

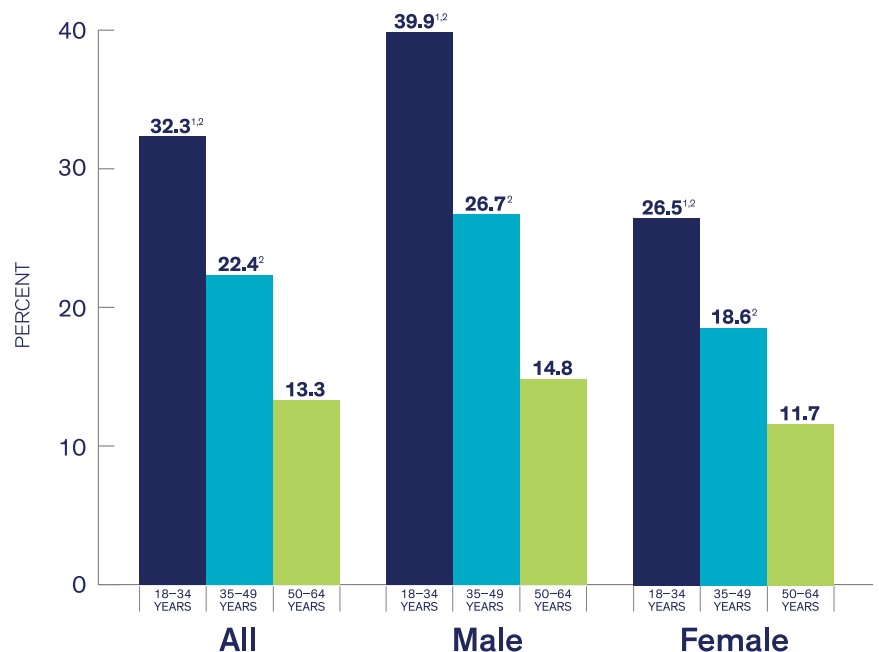
- Almost one third (32.3%) of adults aged 18 to 34 are frequent SSB consumers compared to 22.4% of adults aged 35 to 49 and 13.3% of adults aged 50 to 64 years.
- Heavy SSB consumption declines steeply with: 17.2%, 11.3%, and 4.4% of adults aged 18 to 34, 35 to 49, and 50 to 64, respectively, are heavy SSB consumers (not shown in figures).
- The patterns, by age, in SSB consumption hold for both males and females.

**FIGURE 2** Percentage of adults aged 18–64 who consume sugar-sweetened beverages at least one time in a month and consume SSBs one or more, two or more, four or more, and six or more times per day in a month by gender, Cook County, IL, 2017



<sup>1</sup>Significantly different from female,  $p \leq 0.05$ .

**FIGURE 3** Percentage of adults aged 18–64 who consume sugar-sweetened beverages frequently ( $\geq 2$  times per day in a month), by gender and age, Cook County, IL, 2017



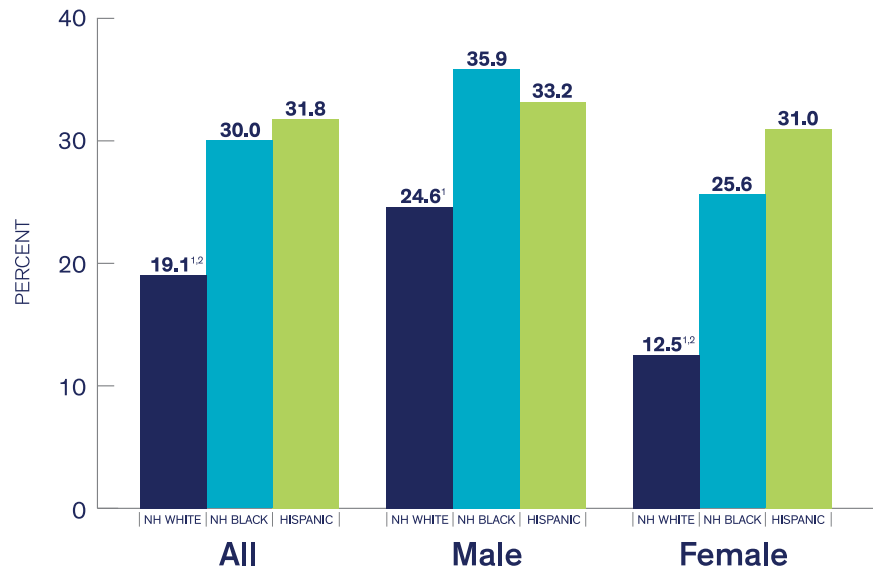
<sup>1</sup>Significantly different from ages 35–49,  $p \leq 0.05$ .

<sup>2</sup>Significantly different from ages 50–64,  $p \leq 0.05$ .

## Frequent SSB consumption, by race/ethnicity

- 30.0% of non-Hispanic black and 31.8% of Hispanic adults are frequent SSB consumers compared to 19.1% of non-Hispanic white adults.
- For males, a higher percentage of non-Hispanic black adults (35.9%) are frequent SSB consumers compared to non-Hispanic white adults (24.6%).
- For females, a higher percentage of non-Hispanic black adults (25.6%) and Hispanic adults (31.0%) are frequent SSB consumers compared to non-Hispanic white adults (12.5%).

**FIGURE 4** Percentage of adults aged 18-64 who consume sugar-sweetened beverages frequently ( $\geq 2$  times per day in a month), by gender and race/ethnicity, Cook County IL, 2017



<sup>1</sup>Significantly different from non-Hispanic black,  $p \leq 0.05$ .

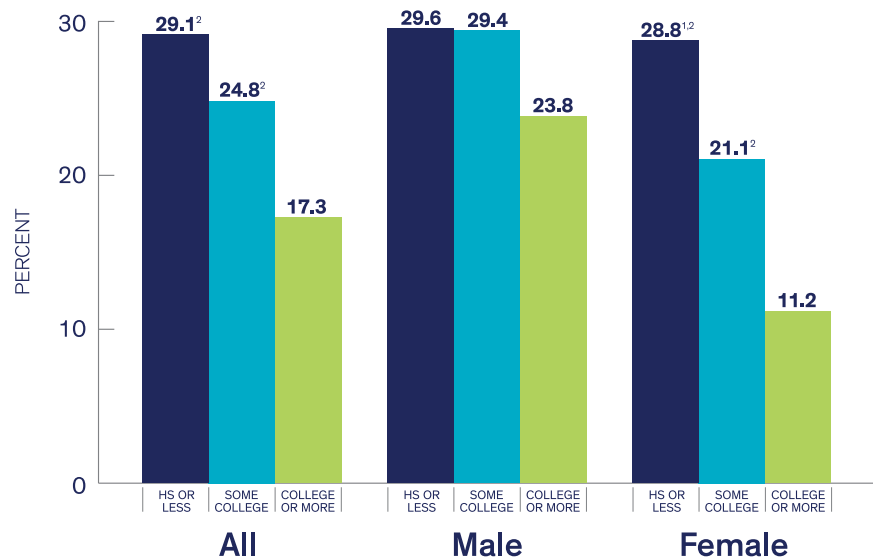
<sup>2</sup>Significantly different from Hispanic,  $p \leq 0.05$ .

NH: non-Hispanic  
Other/mixed: not shown

## Frequent SSB consumption, by education

- 29.1% of adults with high school education or less, 24.8% of adults with some college, and 17.3% of adults with a college degree or more are frequent SSB consumers.
- Percentage of frequent SSB consumption does not differ significantly for males by education level.
- Percentage of frequent SSB consumption is 2.6 times greater for low-educated (high school or less) versus high-educated (college degree) females.
- For females, the gap in frequent SSB consumption by education is strongest for sports drinks and soda where the prevalence is 9.0 and 3.7 times greater, respectively, for low- versus high-educated females (not shown in figures).

**FIGURE 5** Percentage of adults aged 18-64 who consume sugar-sweetened beverages frequently ( $\geq 2$  times per day in a month), by gender and education, Cook County IL, 2017



<sup>1</sup>Significantly different from some college,  $p \leq 0.05$ .

<sup>2</sup>Significantly different from college degree or more,  $p \leq 0.05$ .

HS: high school

## Summary

On average, adults aged 18-64 in Cook County, IL, consume SSBs 1.9 times per day in a month, with significantly higher consumption frequency among male compared to female adults. A number of differences in the frequency of SSB consumption exist by demographic and socioeconomic characteristics. Younger adults are consistently more likely to be frequent and heavy SSB consumers. Frequent SSB consumption is higher among racial/ethnic minority versus white adults and lower- versus higher-educated female adults. These differences in SSB consumption may contribute to disparities in obesity and related health outcomes.

## Definitions

### Sugar-sweetened beverages (SSBs):

SSBs include the following categories of calorically sweetened beverages: soda, fruit drinks, sports drinks, energy drinks, and bottled iced tea/coffee.

### Any SSB Consumption:

SSBs are consumed at least one time in the past month.

### Daily Consumption:

SSBs are consumed  $\geq 1$  time per day in the past month.

### Frequent SSB Consumption:

SSBs are consumed  $\geq 2$  times per day in the past month.

### Heavy SSB Consumption:

SSBs are consumed  $\geq 4$  times per day in the past month.

### Very Heavy SSB Consumption:

SSBs are consumed  $\geq 6$  times per day in the past month.

## Data and Methods

The data for this study were drawn from an online survey of Cook County, IL, adults 18 to 64 years of age administered by Qualtrics, Provo, UT, in June, 2017.<sup>9</sup> 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.<sup>10,11</sup> The final analytic sample consisted of 2,581 people. Consumption data were collected using frequency measures based on the Dietary Screener Questionnaire (DSQ) in the NHANES 2009–2010<sup>12</sup> for five types of SSBs: soda, fruit drinks, sports drinks, energy drinks and bottled iced tea/coffee. Specifically, the following question was used for each SSB type: *During the past month, how often did you drink [SSB type] that contains sugar? Do not include diet [SSB type].* Respondents were able to choose one of the following responses: *Never; 1 time last month; 2–3 times last month; 1 time per week; 2 times per week; 3–4 times per week; 5–6 times per week; 1 time per day; 2–3 times per day; 4–5 times per day; 6 or more times per day.* An overall SSB consumption measure was constructed by aggregating the number of times in the past month each of the five types of SSBs were consumed. Means were reported for the number of times per day SSBs were consumed in the past month, including by SSB type. The prevalence of SSB consumption at least one time in the past month and the prevalence of daily, frequent, heavy, and very heavy SSB consumption in the past month was reported. Summary statistics were 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 by gender, and by age, race/ethnicity and education within the male and female samples were tested using t-tests (for means) and z-tests (for proportions) to determine statistically significant differences ( $p \leq 0.05$ ).

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## SUGGESTED CITATION

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