

Sugary Drinks Fast Facts *2021 Update*

To provide you with the best science and reduce review time, use the following science-approved facts in your campaigns and materials. After each fact, you will find fast facts based on the science, which can be cut and pasted word-for-word without additional science review. Note that any change in wording will require your documents go through the science review process before release.

What is a sugary drink?

The American Heart Association defines sugary drinks as any nonalcoholic beverage, whether carbonated or noncarbonated, sold for human consumption that contains any added sugars.

This includes sports drinks, lemonade, energy drinks, sweetened coffee and teas, fruit drinks with added sugar and full-calorie soda. Animal milk, 100% juice, unsweetened waters, teas and coffees, diet drinks, plant-based milk with fewer than 5 grams of added sugars per 8 ounces, infant formula and medically necessary beverages are not considered sugary drinks.

Rates of sugary drink consumption

FACT 1

On average, children consume more than 30 gallons of sugary drinks every year. This is enough to fill a bathtub.

Fast Facts:

- ▶ Children consume more than 30 gallons of sugary drinks, on average, every year.
- ▶ On average, children consume enough sugary drinks — 30 gallons — every year to fill a bathtub.
- ▶ On average, kids drink 30 gallons of sugary drinks each year — that's enough to fill an entire bathtub.

Source:

American Heart Association. American Academy of Pediatrics and American Heart Association endorse suite of policies to reduce kids' consumption of sugary drinks. News release. March 24, 2019. Available at: [American Academy of Pediatrics and American Heart Association endorse suite of policies to reduce kids' consumption of sugary drinks | American Heart Association](#).

FACT 2

Kids consume as much as 140 teaspoons of added sugars from sugary drinks per week. That's as much added sugars as 280 gummy bear candies.

Fast Facts:

- ▶ Each week, kids consume as much as 140 teaspoons of added sugars from sugary drinks alone. That's like eating 280 gummy bear candies.
- ▶ Kids eat the equivalent of 280 gummy bear candies — or 140 teaspoons of sugar — each week in added sugars from sugary drinks.
- ▶ Kids consume the equivalent of 280 gummy bear candies in added sugars from sugary drinks each week.
- ▶ Kids consume 140 teaspoons of added sugars from sugary drinks each week.

Source:

Vos MB, Kaar JL, Welsh JA, Van Horn LV, Feig DI, Anderson CAM, et al. Added sugars and cardiovascular disease risk in children: a scientific statement from the American Heart Association. *Circulation*. 2017; 135:e1017-e1034. doi: 10.1161/CIR.0000000000000439.

FACT 3

Sugary drinks are the single leading source of added sugars in the American diet. Nearly one-quarter (24%) of all added sugars consumed by the U.S. population ages 2 and older come from sugary drinks.

Fast Facts:

- ▶ Sugary drinks are the leading source of added sugars in the American diet.
- ▶ Sugary drinks, such as soft drinks, fruit drinks, sweetened coffees and teas and energy drinks, are the leading source of added sugars in the American diet.
- ▶ People in the U.S. consume more added sugars from sugary drinks than any other food source.
- ▶ Nearly half of all added sugars consumed by people in the U.S. over the age of 2 come from sugary drinks.

Source:

U.S. Department of Agriculture and U.S. Department of Health and Human Services and. 2020–2025 Dietary Guidelines for Americans. 9th edition. December 2020. Available at: <https://www.dietaryguidelines.gov/>.

FACT 4

In 2013–14, 61% of children and 50% of adults in the United States drank sugary drinks on a given day. The rate of sugary drink consumption is higher among non-Hispanic Black (65.5%), Mexican-American (69.7%) and non-Mexican Hispanic (76.9%) children ages 6–11, compared to non-Hispanic white children (59.8%). The trend is similar for adolescents and young adults.

Fast Facts:

- ▶ Sixty-one percent of U.S. children drink sugary drinks on a given day.
- ▶ More than 60% of U.S. children drink a sugary drink on a given day.
- ▶ Fifty percent of U.S. adults drink sugary drinks on a given day.
- ▶ Half of U.S. adults drink sugary drinks on a given day.

Source:

Bleich SN, Vercammen KA, Koma JW, Li Z. Trends in beverage consumption among children and adults, 2003–2014. *Obesity*. 2018; 26:432–441. doi: 10.1002/oby.22056.

FACT 5

Nearly half (46.5%) of all 2- to 5-year-olds have at least one sugary drink daily. Non-Mexican Hispanic (43.3%) and non-Hispanic white (44.0%) young children have the lowest consumption, compared to non-Hispanic Black (65.5%) and Mexican-American (53.6%) young children.

Fast Facts:

- ▶ Almost half of 2- to 5-year-olds have at least one sugary drink daily.
- ▶ When it comes to daily sugary drink consumption:
 - 43% of non-Mexican Hispanic young children drink at least one sugary drink each day.
 - 44% of non-Hispanic white young children drink at least one sugary drink each day.

- Over half of Mexican American young children drink at least one sugary drink each day.
- Two out of three non-Hispanic Black young children drink at least one sugary drink each day.
- ▶ Of all children who consume at least one sugary drink a day, non-Hispanic white children drink the least amount, while non-Hispanic Black children drink the most.

Source:

Bleich SN, Vercammen KA, Koma JW, Li Z. Trends in beverage consumption among children and adults, 2003–2014. *Obesity*. 2018; 26:432–441. doi: 10.1002/oby.22056.

FACT 6

Nearly one in six (14.9%) children ages 2-5 consumes a regular soda and nearly one in four (24.1%) consumes a fruit drink on a given day.

Fast Facts:

- ▶ One in six children ages 2- 5 consumes a regular soda each day.
- ▶ One in four children ages 2- 5 consumes a fruit drink each day.
- ▶ One in six children ages 2- 5 consumes a regular soda and one in four consumes a fruit drink each day.
- ▶ Nearly 15% of children ages 2- 5 consume a regular soda each day.
- ▶ Nearly 25% of children ages 2- 5 consume a fruit drink each day.
- ▶ Nearly 15% of children ages 2- 5 consume a regular soda and nearly 25% consume a fruit drink each day.

Source:

Bleich SN, Vercammen KA, Koma JW, Li Z. Trends in beverage consumption among children and adults, 2003–2014. *Obesity*. 2018; 26:432–441. doi: 10.1002/oby.22056.

FACT 7

On average, in 2013–14, youth consumed approximately 133 calories and adults consumed approximate 138 calories from sugary drinks on a given day.

Fast Facts:

- ▶ U.S. youth consume approximately 133 calories on a given day from sugary drinks.
- ▶ U.S. adults consume approximately 138 calories on a given day from sugary drinks.

Source:

Bleich SN, Vercammen KA, Koma JW, Li Z. Trends in beverage consumption among children and adults, 2003–2014. *Obesity*. 2018; 26:432–441. doi: 10.1002/oby.22056.

FACT 8

Approximately one in five (21.9%) pregnant women and more than one in four (27.3%) nonpregnant women of reproductive age consume a sugary drink at least once per day. Pregnant women who were non-Hispanic Black, had less than a college education and lived in nonmetropolitan counties were more likely to consume sugary drinks daily.

Fast Facts:

- ▶ More than 20% of pregnant women drink at least one sugary drink each day.
- ▶ More than 25% of women of child-bearing age drink at least one sugary drink each day.
- ▶ Twenty-two percent of pregnant women drink at least one sugary drink each day.

- ▶ Twenty-seven percent of nonpregnant women of child-bearing age drink at least one sugary drink each day.
- ▶ More than 20% of pregnant women drink at least one sugary drink each day. Of those, pregnant women who were non-Hispanic Black, had less than a college education and lived in nonmetropolitan counties were more likely to consume sugary drinks daily.
- ▶ Twenty-two percent of pregnant women drink at least one sugary drink each day. Of those, pregnant women who were non-Hispanic Black had less than a college education and lived in nonmetropolitan counties were more likely to consume sugary drinks daily.

Source:

Lundeen EA, Park S, Woo Baidal JA, Sharma AJ, Blank HM. Sugar-sweetened beverage intake among pregnant and non-pregnant women of reproductive age. *Maternal Child Health J.* 2020; 24: 709-717. doi: 10.1007/s10995-020-02918-2.

FACT 9

In 2011-16, Asian-American children and adolescents consumed the least amount of sugary drinks, compared to children who were white, Black, Mexican American, other Hispanic and other race/ethnicities. Fruit drinks and soft drinks were the most common sugary drinks consumed by Asian-American children.

Fast Facts:

- ▶ Of all youth in the U.S., Asian-American children and adolescents consume the least amount of sugary drinks.
- ▶ When Asian-American children do consume sugary drinks, they tend to reach for fruit drinks and soft drinks.

Source:

Russo RG, Northridge ME, Wu B, Yi SS. Characterizing sugar-sweetened beverage consumption for US children and adolescents by race/ethnicity. *J Racial Ethn Health Disparities.* 2020; 7(6): 100-116. doi: 10.1007/s40615-020-00733-7.

FACT 10

By state, the percentage of adults who consume sugary drinks (including sweetened coffees and teas) one or more times daily ranges from 44.5% in Alaska to 76.4% in Hawaii. Hawaii (76.4%), Arkansas (74.2%), Wyoming (73.2%), South Dakota (72.5%), Connecticut (72.2%) and South Carolina (70.2%) have the highest percentage of adults who consumed one or more sugary drinks daily.

Fast Facts:

- ▶ By state, the percentage of adults who consume sugary drinks one or more times daily ranges from about 45% in Alaska to 76% in Hawaii.
- ▶ The states where adults drink the most sugary drinks are Hawaii, Arkansas, Wyoming, South Dakota, Connecticut and South Carolina.
- ▶ In Hawaii, 76% of adults drink one or more sugary drinks daily. This is the highest in the nation.
- ▶ In Arkansas, 74% of adults drink one or more sugary drinks daily. This is the second highest in the nation.
- ▶ In Wyoming, 73% of adults drink one or more sugary drinks daily. This is the third highest in the nation.
- ▶ In South Dakota, almost 73% of adults drink one or more sugary drinks daily. This is the fourth highest in the nation.

- ▶ In Connecticut, 72% of adults drink one or more sugary drinks daily. This is the fifth highest in the nation.
- ▶ In South Carolina, 70% of adults drink one or more sugary drinks daily. This is the sixth highest in the nation.

Source:

Chevinsky JR, Lee SH, Blank HM, Park S. Prevalence of self-reported intake of sugar-sweetened beverages among US adults in 50 states and the District of Columbia, 2010 and 2015. *Prev Chronic Dis*. 2021; 18:E35. doi: 10.5888/pcd18.200434.

FACT 11

During 2011-12, the average calories from sugary beverages were sourced from: supermarkets/grocery stores (52.4%), fast-food restaurants (15.5%), convenience stores (11.2%), full-service restaurants (8%), vending machines (4%) and other sources (8.9%). 52.4% of average calories from sugary beverages were purchased from supermarkets/grocery stores, 15.5% from fast-food restaurants, 11.2% from convenience stores, 8% from full-service restaurants, 4% from vending machines and 8.9% from other sources.

Fast Facts:

- ▶ Over half of sugary beverages purchased in 2011-12 were from grocery stores.
- ▶ Convenience stores contribute 11% of overall sugary beverage sales.
- ▶ While more than a quarter of sugary beverages were sold in public environments such as restaurants, more than half were sold from supermarkets and grocery stores.

Source:

An R, Maurer G. Consumption of sugar-sweetened beverages and discretionary foods among US adults by purchase location. *Eur J Clin Nutr*. 2016; 70(12):1396-1400. doi: 10.1038/ejcn.2016.136.

Health effects — all

FACT 12

Consuming sugary drinks sets up children for a lifetime of health challenges that include type 2 diabetes, tooth decay, and heart disease.

Fast Facts:

- ▶ Consuming sugary drinks sets up children for a lifetime of health challenges including type 2 diabetes.
- ▶ Consuming sugary drinks sets up children for a lifetime of health challenges, including tooth decay.
- ▶ Consuming sugary drinks sets up children for a lifetime of health challenges, including heart disease.

Source:

Muth ND, Dietz WH, Magge SN, Johnson RK; AMERICAN ACADEMY OF PEDIATRICS; SECTION ON OBESITY; COMMITTEE ON NUTRITION; AMERICAN HEART ASSOCIATION. Public policies to reduce sugary drink consumption in children and adolescents. *Pediatrics*. 2019; 143(4):e20190282. doi: 10.1542/peds.2019-0282.

FACT 13

People with low incomes and people of color disproportionately experience higher rates of chronic diseases such as type 2 diabetes and heart disease, that are associated with sugary drinks.

Fast Facts:

- ▶ People with low incomes disproportionately experience higher rates of chronic diseases, including type 2 diabetes and heart disease, that are associated with sugary drinks.
- ▶ People of color disproportionately experience higher rates of chronic diseases, including type 2 diabetes and heart disease, that are associated with sugary drinks.
- ▶ People with low incomes and people of color disproportionately experience higher rates of chronic diseases, such as type 2 diabetes and heart disease, that are associated with sugary drinks.
- ▶ People with low incomes and people of color disproportionately experience higher rates of chronic diseases associated with sugary drinks.

Source:

Healthy Food America. Inequities in sugary drink-related diseases by race/ethnicity and income. Research Brief. January 2020. Available at: https://d3n8a8pro7vnm.cloudfront.net/healthyfoodamerica/pages/436/attachments/original/1580248276/Data_on_SSB_Related_Diseases_FINAL_1.26.20.pdf?1580248276.

FACT 14

Consuming too many sugary drinks leads to weight gain and chronic diseases in both children and adults. Early research shows a strong connection between COVID-19 and obesity, with one study finding that obesity was the most prevalent underlying health condition among children hospitalized for COVID-19.

Fast Facts:

- ▶ Consuming too many sugary drinks leads to weight gain and chronic diseases in both children and adults.
- ▶ Some recent research links COVID-19 susceptibility and illness severity with obesity.
- ▶ One recent study found that obesity was the most prevalent underlying health condition among children hospitalized for COVID-19.

Source:

Muth ND, Dietz WH, Magge SN, Johnson RK; AMERICAN ACADEMY OF PEDIATRICS; SECTION ON OBESITY; COMMITTEE ON NUTRITION; AMERICAN HEART ASSOCIATION. Public policies to reduce sugary drink consumption in children and adolescents. *Pediatrics*. 2019; 143(4):e20190282. doi: 10.1542/peds.2019-0282.

Garg S, Kim L, Whitaker M, O'Halloran A, Cummings C, Holstein R, et al. Hospitalization rates and characteristics of patients hospitalized with laboratory-confirmed coronavirus disease 2019 – COVID-NET, 14 states, March 1-30, 2020. *MMWR*. 2020; 2020; 69(15):458-464.

FACT 15

In 2012, 50,000 deaths were associated with drinking too many sugary drinks. Of that, 40,000 deaths in the U.S. were attributed to heart problems and 10,000 deaths were attributed to type 2 diabetes caused by consuming too many sugary drinks.

Fast Facts:

- ▶ In 2012, approximately 40,000 people in the U.S. died from heart problems related to drinking too many sugary drinks.
- ▶ In 2012, approximately 10,000 people in the U.S. died from type 2 diabetes related to drinking too many sugary drinks.
- ▶ In 2012, approximately 50,000 people died from diseases related to drinking too many sugary drinks.
- ▶ In 2012, approximately 50,000 heart disease and type 2 diabetes deaths were associated with drinking too many sugary drinks.

Source:

Micha R, Peñalvo JL, Cudhea F, Imamura F, Rehm CD, Mozaffarian D. Association Between Dietary Factors and Mortality from Heart Disease, Stroke, and Type 2 Diabetes in the United States. *JAMA*. 2017; 317:912-24. doi: 10.1001/jama.2017.0947.

FACT 16

A 2018 systematic review found that there is consistent evidence for the negative effect of sugary drinks on children's health. In particular, there is strong evidence that consumption of sugary drinks increases obesity risk and tooth decay among children and adolescents, with emerging evidence supporting an association with insulin resistance (a marker of increased cardiometabolic risk and type 2 diabetes) and caffeine-related effects (including reduced sleep quality and headaches).

Fast Facts:

- ▶ Sugary drinks hurt/harm children's health.
- ▶ Sugary drinks hurt/harm children's health by increasing their risk of having obesity, tooth decay and type 2 diabetes.
- ▶ The caffeine found in some sugary drinks children's health by reducing their sleep quality and by giving them headaches.

Source:

Bleich SN, Vercammen KA. The negative impact of sugar-sweetened beverages on children's health: an update of the literature. *BMC Obes*. 2018; 5:6. doi: 10.1186/s40608-017-0178-9.

Health effects — heart disease

FACT 17

Sugary drinks increase the risk of hypertension and heart disease, independent of weight gain.

Fast Facts:

- ▶ Sugary drinks increase the risk of heart disease.
- ▶ Sugary drinks increase the risk of high blood pressure.
- ▶ Sugary drinks increase the risk of high blood pressure and heart disease even without weight gain.
- ▶ Sugary drinks increase the risk of high blood pressure even without weight gain.
- ▶ Sugary drinks increase the risk of heart disease even without weight gain.

Source:

Malik VS, Hu FB. Sugar-sweetened beverages and cardiometabolic health: an update of the evidence. *Nutrients*. 2019; pii:E1840. doi:10.3390/nu11081840.

FACT 18

A 2015 review found that increasing sugary drink consumption by one serving per day may increase the risk of hypertension by 8% and the risk of heart disease by 17%.

Fast Facts:

- ▶ Drinking one additional sugary drink each day increases a person's risk of heart disease by 17%.
- ▶ Drinking one additional sugary drink each day increases a person's risk of high blood pressure by 8%.

- ▶ A person is 17% more likely to develop heart disease if they drink one additional sugary drink each day.
- ▶ A person is 8% more likely to develop high blood pressure if they drink one additional sugary drink each day.

Source:

Xi B, Huang Y, Reilly KH, et al. Sugar-sweetened beverages and risk of hypertension and CVD: a dose-response meta-analysis. *Br J Nutr*. 2015; 113:709-17. doi: 10.1017/S0007114514004383.

FACT 19

Researchers from the Harvard School of Public Health found that people who drank two or more servings of sugary drinks per day had a 31% higher risk of death from heart disease, compared to people who drank less than one serving of sugary drinks per month. Each additional serving per day of sugary drinks increased the risk of dying from heart disease by 10%.

Fast Facts:

- ▶ Harvard researchers found that people who drink two sugary drinks each day have a 31% higher risk of dying from heart disease than people who drink less than one sugary drink each month.
- ▶ People who drink two sugary drinks each day have a 31% higher risk of dying from heart disease than people who drank less than one sugary drink each month.
- ▶ Each additional sugary drink a person consumes per day increases their risk of dying from heart disease by 10%.

Source:

Malik VS, Li Y, Pan A, De Koning L, Schernhammer E, Willett WC, Hu FB. Long-term consumption of sugar-sweetened and artificially sweetened beverages and risk of mortality in U.S. adults. *Circulation*. 2019; 139:2113-2125. doi: 10.1161/CIRCULATIONAHA.118.037401.

FACT 20

A 2020 study found that drinking a sugary drink (12 oz. of soda or 8 oz. of a fruit-flavored drink) daily was associated with a 53% higher incidence of high triglycerides and a 98% higher incidence of having low levels of HDL cholesterol (the “good” type), compared to those who drank less than one serving per month, over a mean of 12.5 years. These findings suggest that higher consumption of sugary drinks is associated with dyslipidemia, a risk factor for heart disease.

Fast Facts:

- ▶ Sugary drinks can lead to an imbalance in blood cholesterol, increasing the risk for heart disease.
- ▶ Drinking sugary drinks daily is associated with higher triglycerides and lower levels of good cholesterol, both of which can lead to heart disease.

Source:

McKeown N, Haslam D, Peloso G, Herman M, Dupuis J, Lichtenstein A, et al. Beverage consumption and longitudinal changes in lipoprotein concentration and incident dyslipidemia in U.S. adults: the Framingham Heart Study. *JAHA*. 2020; 8:e014083. doi: 10.1161/JAHA.119.014083.

Health effects — type 2 diabetes

FACT 21

Emerging evidence shows an association between insulin resistance, a marker of type 2 diabetes risk, and sugary drink consumption in children and adolescents.

Fast Facts:

- ▶ Recent research links the risk of developing type 2 diabetes with sugary drink consumption in children and adolescents.
- ▶ Recent research suggests that children and adolescents who drink sugary drinks are more likely to develop type 2 diabetes.
- ▶ Children and adolescents who drink sugary drinks are more likely to develop type 2 diabetes.

Source:

Bleich SN, Vercammen KA. The negative impact of sugar-sweetened beverages on children's health: an update of the literature. *BMC Obes.* 2018; 5:6. doi: 10.1186/s40608-017-0178-9.

FACT 22

A 2015 review of studies found that each additional serving of sugary drinks per day increased the risk of type 2 diabetes by 13-18%. Over 10 years, about 2 million type 2 diabetes cases in the United States are attributable to consumption of sugary beverages.

Fast Facts:

- ▶ For each additional sugary drink a person consumes daily, their risk of developing type 2 diabetes increases by 13-18%.
- ▶ The risk for developing type 2 diabetes increases by 13-18% for each additional sugary drink a person consumes daily.
- ▶ It's estimated that 2 million people will develop type 2 diabetes over the next 10 years due to their consumption of sugary drinks.

Source:

Imamura F, O'Connor L, Ye Z, Mursu J, Hayashino Y, Bhupathiraju SN, Forouhi NG. Consumption of sugar-sweetened beverages, artificially sweetened beverages, and fruit juice and incidence of type 2 diabetes: systematic review, meta-analysis, and estimation of population attributable fraction. *BMJ.* 2015; 351. doi: 10.1136/bmj.h3576

FACT 23

A Harvard study found that replacing one daily serving of sugary beverage with water, coffee or tea was associated with a 2-10% lower type 2 diabetes risk.

Fast Facts:

- ▶ A Harvard study found that replacing one sugary drink each day with water, sugar-free coffee or sugar-free tea was associated with up to a 10% lower risk of developing type 2 diabetes.
- ▶ Exchanging just one sugary drink each day with water, sugar-free coffee or sugar-free tea was associated with decreasing the chance of developing type 2 diabetes by up to 10%.
- ▶ Want to decrease the risk of developing type 2 diabetes by up to 10%? Replace just one sugary drink each day with water, sugar-free coffee or sugar-free tea.
- ▶ People can reduce their risk of developing type 2 diabetes by up to 10% by replacing just one sugary drink each day with water, sugar-free coffee or sugar-free tea.

Source:

Drouin-Chartier JP, Zheng Y, Li Y, Malik V, Pan A, Bhupathiraju SN, et al. Changes in consumption of sugary beverages and artificially sweetened beverages and subsequent risk of type 2 diabetes: results from three large prospective U.S. cohorts of women and men. *Diabetes Care*. 2019; 42(12):2181-2189. doi: 10.2337/dc19-0734.

FACT 24

In the U.S., American Indian and Alaskan Native adults are almost three times more likely than non-Hispanic white adults to be diagnosed with diabetes (23.5% vs. 8.0%). In 2018, American Indian and Alaskan Native adults were 2.3 times more likely than non-Hispanic white adults to die from diabetes.

Fast Facts:

- ▶ American Indians and Alaskan Natives are almost three times more likely than non-Hispanic whites adults to develop diabetes.
- ▶ Nearly 24% of American Indians and Alaskan Natives will develop diabetes in comparison to only 8% of non-Hispanic whites.
- ▶ American Indians and Alaskan Natives are 2.3 times more likely than non-Hispanic whites to die from diabetes.
- ▶ Diabetes kills American Indians and Alaskan Natives at a higher rate than non-Hispanic whites.

Source:

U.S. Department of Health and Human Services, Office of Minority Health. Diabetes and American Indians/Alaska Natives. Updated March 2021. Available at: <https://minorityhealth.hhs.gov/omh/browse.aspx?lvl=4&lvlID=33> (based on CDC 2021. Summary Health Statistics: National Health Interview Survey: 2018. Table A-4a. <http://www.cdc.gov/nchs/nhis/shs/tables.htm>).

FACT 25

In the U.S., Hispanic and Latino adults are more likely to have type 2 diabetes than non-Hispanic white adults (17% vs. 8%). The chance of having type 2 diabetes is closely tied to your racial/ethnic background. For example, adults with Puerto Rican heritage are about twice as likely to have type 2 diabetes as someone whose racial/ethnic background is South American.

Fast Facts:

- ▶ Hispanics and Latinos in the U.S. are more likely to have type 2 diabetes than non-Hispanic whites.
- ▶ Nearly 17% of Hispanics and Latinos in the U.S. will develop type 2 diabetes in comparison to only 8% of non-Hispanic whites.
- ▶ The risk of developing type 2 diabetes is closely tied to a person's race and ethnicity.
- ▶ People of Puerto Rican heritage are about twice as likely to develop type 2 diabetes as someone whose racial/ethnic background is South American.
- ▶ Even among Hispanics and Latinos, the risk of developing type 2 diabetes is closely tied to their origin. For example, people of Puerto Rican heritage are about twice as likely to develop type 2 diabetes as someone whose racial/ethnic background is South American.

Source:

U.S. Centers for Disease Control and Prevention. Hispanic/Latino Americans and Type 2 Diabetes. Updated April 2021. Available at: <https://www.cdc.gov/diabetes/library/features/hispanic-diabetes.html>.

FACT 26

In 2018, Native Hawaiians/Pacific Islanders and Asian-American adults were 2.5 and 1.4 times, respectively, more likely to be diagnosed with diabetes, as compared to non-Hispanic white adults.

Fast Facts:

- ▶ Native Hawaiians/Pacific Islanders are 2.5 more likely to develop diabetes than non-Hispanic whites.
- ▶ Asian Americans are 1.4 times more likely to develop diabetes than non-Hispanic white adults.

Source:

U.S. Department of Health and Human Services, Office of Minority Health. Diabetes and Native Hawaiians/Pacific Islanders. Updated March 2020. Available at: <https://www.minorityhealth.hhs.gov/omh/browse.aspx?lvl=4&lvlid=78> (based on CDC 2021. Summary Health Statistics: National Health Interview Survey: 2018. Table A-4a. <http://www.cdc.gov/nchs/nhis/shs/tables.htm>).

U.S. Department of Health and Human Services, Office of Minority Health. Diabetes and Asian Americans. Updated March 2021. Available at: <https://www.minorityhealth.hhs.gov/omh/browse.aspx?lvl=4&lvlid=48> (based on CDC 2021. Summary Health Statistics: National Health Interview Survey: 2018. Table A-4a. <http://www.cdc.gov/nchs/nhis/shs/tables.htm>).

Health effects — oral health

FACT 27

A study of third graders reported that each additional serving of sugary drinks consumed by children per day increased the prevalence of dental caries by 22%.

Fast Facts:

- ▶ A study of third graders found that each additional serving of sugary drinks the kids consumed increased their prevalence of dental decay and cavities by 22%.
- ▶ A study of 8- and 9-year-olds found that each additional serving of sugary drinks the kids consumed increased their prevalence of dental decay and cavities by 22%.
- ▶ For each additional serving of sugary drinks kids consume, their prevalence of dental decay and cavities increases by 22%.

Source:

Wilder JR, Kaste LM, Handler A, Chapple-McGruder T, Ranking KM. The association between sugar-sweetened beverages and dental caries among third-grade students in Georgia. *J Public Health Dent.* 2016; 76(1):76-84. Doi: 10.1111/jphd.12116.

FACT 28

Frequent consumption of sugary drinks during the first 10-12 months of age increased the odds of having dental caries by 83% by age 6.

Fast Facts:

- ▶ Infants who frequently drink sugary drinks are more likely to have dental decay and cavities.
- ▶ Infants between the ages of 10 and 12 months who frequently drink sugary drinks are more likely to have dental decay and cavities.
- ▶ Infants who frequently drink sugary drinks are more likely to have dental decay and cavities by age 6.
- ▶ Infants between the ages of 10 and 12 months who frequently drink sugary drinks are more likely to have dental decay and cavities by age 6.

- ▶ Infants who frequently drink sugary drinks are 83% more likely to have dental decay and cavities by age 6.
- ▶ Infants between the ages of 10 and 12 months who frequently drink sugary drinks are 83% more likely to have dental decay and cavities by age 6.

Source:

Park S, Lin M, Onufrak S, Li R. Association of sugar-sweetened beverage intake during infancy with dental caries in 6-year-olds. *Clin Nutr Res*. 2015; 4(1):9-19. doi: 10.7762/cnr.2015.4.1.9.

FACT 29

A study of Black children found that consistent regular soda intake during early childhood (ages 0-5) led to one additional dental caries lesion compared to those with no regular soda intake.

Fast Facts:

- ▶ A study of Black children found that frequently drinking regular soda contributed to dental decay, especially in those 5 and younger.
- ▶ Black children who frequently drink regular soda are at a higher risk of dental decay than those who do not drink soda.
- ▶ Black children who frequently drink regular soda are at a higher risk of dental decay than those who do not drink soda.

Source:

Lim S, Tellez M, Ismail A. Estimating a dynamic effect of soda intake on pediatric dental caries using targeted maximum likelihood estimation method. *Caries Res*. 2019; 53(5):532-540. doi: 10.1159/000497359.

FACT 30

A study of American Indian children found that by 36 months, dental caries were nearly universal in the population, with sugary drinks as a leading risk factor.

Fast Facts:

- ▶ By age 3, most American-Indian children have dental disease.
- ▶ By age 3, most American-Indian children have dental disease, with sugary drinks being the leading contributor.
- ▶ American-Indian children who regularly consume sugary drinks often have the first incidence of dental disease within the first 3 years of their lives.
- ▶ Sugary drinks contribute to dental decay in American-Indian children.

Source:

Warren JJ, Blanchette D, Dawson DV, Marshall TA, Phipps KR, et al. Factors associated with dental caries in a group of American Indian children at age 36 months. *Community Dent Oral Epidemiol*. 2016; 44(2):154-61. doi: 10.1111/cdoe.12200.

Health effects — weight gain and obesity

FACT 31

Replacing one serving of sugary drinks with water would lower the proportion of adults with obesity from 35% to 32% of the population.

Fast Facts:

- ▶ If U.S. adults replaced one serving of sugary drinks with water, obesity rates in the nation would drop by 3%.
- ▶ If U.S. adults replaced one serving of sugary drinks with water, obesity rates in the nation would drop from 35% to 32%
- ▶ Adult obesity rates in the U.S. would decrease if people replaced one serving of sugary drinks with water.

Source:

Duffey KJ, Poti J. Modeling the effect of replacing sugar-sweetened beverage consumption with water on energy intake, HBI score, and obesity prevalence. *Nutrients*. 2016; 8(7):395. doi: 10.3390/nu8070395.

FACT 32

Two-year-old children who consumed more than one sugary drink per day had significantly greater increase in body mass index over the next two years compared to children who rarely or never consumed sugary drinks.

Fast Facts:

- ▶ Kids who drink more than one sugary drink per day frequently experience an increased body mass index (BMI) than kids who rarely or never drink sugary drinks.
- ▶ Kids who drink more than one sugary drink per day frequently experience an increased body mass index (BMI).
- ▶ Kids who drink more than one sugary drink per day frequently experience an increased body mass index (BMI) over the next two years of their lives.

Source:

DeBoer MD, Scharf RJ, Demmer RT. Sugar-sweetened beverages and weight gain in 2- to 5-year-old children. *Pediatrics*. 2013;132(3):413-20. <https://doi.org/10.1542/peds.2013-0570>.

FACT 33

In a study of Latino toddlers, high intake of sugary drinks led to an increase in weight-for-height z-score (measures of relative weight adjusted for child age and sex) after 6 months.

Fast Facts:

- ▶ In a study of Latino toddlers, those who frequently drank sugary drinks were more likely to have a higher weight for height than those who didn't drink sugary drinks.

Source:

Chaidez V, McNiven S, Vosti SA, Kaiser LL. Sweetened food purchases and indulgent feeding are associated with increased toddler anthropometry. *J Nutr Educ Behav*. 2014; 46(4): 293-298. doi: 10.1016/j.jneb.2013.05.011.

FACT 34

In a study of Black toddlers, the odds of becoming overweight after 2 years increased by 4% for each additional ounce of sugary drinks consumed.

Fast Facts:

- ▶ Black toddlers who drink sugary drinks are at risk of becoming overweight.
- ▶ Black toddlers who drink sugary drinks are at risk of becoming an unhealthy weight.
- ▶ Black toddlers who drink sugary drinks are at risk of becoming overweight and that risk increases by 4% for each additional ounce of sugary drink they have daily.
- ▶ Black toddlers who drink sugary drinks are at risk of becoming an unhealthy weight and that risk increases by 4% for each additional ounce of sugary drink they have daily.

Source:

Lim S, Zoellner JM, Lee JM, Burt BA, Sandretto AM, Sohn W, et al. Obesity and sugar-sweetened beverages in African American preschool children: a longitudinal study. *Obesity (Silver Spring)*. 2009; 17(6):1262-8. doi: 10.1038/oby.2008.656.

FACT 35

In 2016, Native Hawaiians and Pacific Islanders were 80% more likely to be obese than non-Hispanic white adults. In 2017, Native Hawaiian and Pacific Islanders were more than twice as likely to be obese compared to non-Hispanic white adolescents. In 2014, Samoans were 5.6 times more likely to be obese as compared to the overall Asian-American population.

Fast Facts:

- ▶ Native Hawaiians and Pacific Islanders are 80% more likely to have obesity than non-Hispanic white adults.
- ▶ Native Hawaiians and Pacific Islanders are 80% more likely to have an unhealthy weight than non-Hispanic white adults.
- ▶ Native Hawaiian and Pacific Islanders are more than twice as likely to have obesity than non-Hispanic white teens.
- ▶ Native Hawaiian and Pacific Islanders are more than twice as likely to have an unhealthy weight than non-Hispanic white teens.
- ▶ Samoan people are nearly 6 times more likely to have obesity than other Asian-American people.
- ▶ Samoan people are nearly 6 times more likely to have an unhealthy weight than other Asian-American people.

Source:

U.S. Department of Health and Human Services, Office of Minority Health. Obesity and Native Hawaiians/Pacific Islanders. Updated March 2020. <https://www.minorityhealth.hhs.gov/omh/browse.aspx?vl=4&vld=85>.

Expert recommendations

FACT 36

The American Heart Association recommends that children ages 2 to 18 years old should have no more than 6 teaspoons of added sugars per day from foods and beverages and no more than one 8-ounce serving of sugary drinks per week. Yet children today are consuming as much as seven servings of sugary drinks per week, seven times the recommended amount.

Fast Facts:

- ▶ The American Heart Association recommends that children consume no more than 6 teaspoons, or 24 grams, of added sugars per day from foods and beverages and no more than one 8-ounce serving of sugary drinks per week. Yet kids today are consuming as much as seven servings of sugary drinks per week, seven times the maximum recommended amount.
- ▶ The American Heart Association recommends that children between 2 and 18 consume no more than 6 teaspoons, or 24 grams, of added sugars per day from all sources. Yet children today take in about seven times that amount.
- ▶ On average, kids consume seven times the maximum recommended amount of daily sugar intake, much of which comes from sugary drinks.
- ▶ While the American Heart Association recommends that children between 2 and 18 consume no more than one sugary drink per week, kids are drinking seven times that amount, on average.

- ▶ On average, kids as young as 2 are consuming sugary drinks daily. That's seven times the recommended maximum number of sugary drinks each week.

Source:

Vos MB, Kaar JL, Welsh JA, Van Horn LV, Feig DI, Anderson CAM, et al. Added sugars and cardiovascular disease risk in children: a scientific statement from the American Heart Association. *Circulation*. 2017; 135:e1017-e1034. doi: 10.1161/CIR.0000000000000439.

Virani SS, Alonso A, Aparicio HJ, Benjamin EJ, Bittencourt MS, Callaway CW, et al. heart disease and stroke statistics 2021 update: a report from the American Heart Association. *Circulation*. 2021. Jan 27. doi: 10.1161/CIR.0000000000000950.

FACT 37

The American Heart Association recommends that adult women consume no more than 100 calories per day from added sugars from foods and beverages and adult men consume no more than 150 calories per day from added sugars. The Association also recommends that adults consume no more than 36 ounces of sugary beverages each week.

Fast Facts:

- ▶ The American Heart Association recommends that women consume no more than 100 calories per day from added sugars and men consume no more than 150 calories per day from added sugars. The Association also recommends that adults consume no more than 36 ounces of sugary beverages each week.
- ▶ The American Heart Association recommends that women consume no more than 100 calories per day from added sugars.
- ▶ The American Heart Association recommends that men consume no more than 150 calories per day from added sugars.
- ▶ The American Heart Association recommends that adults consume no more than 36 ounces of sugary beverages each week.

Source:

Johnson RK, Appel LJ, Brands M, Howard BV, Lefevre M, Lustig RH, et al. Dietary sugars intake and cardiovascular health: a scientific statement from the American Heart Association. *Circulation*. 2009; 120:1011-20. doi: 10.1161/CIRCULATIONAHA.109.192627.

Lloyd-Jones DM, Hong Y, Labarthe D, Mozaffarian D, Appel LJ, Van Horn L, et al. Defining and setting national goals for cardiovascular health promotion and disease reduction: the American Heart Association's strategic Impact Goal through 2020 and beyond. *Circulation*. 2010; 121:586-612. doi: 10.1161/CIRCULATIONAHA.109.192703.

FACT 38

The 2020–25 Dietary Guidelines for Americans recommends that people aged 2 and older consume less than 10% of their total calories per day from added sugars. Children younger than age 2 should avoid foods and beverages with added sugars. However, U.S. children and adolescents report consuming 17% of their calories from added sugars, nearly half of which are from sugary drinks.

Fast Facts:

- ▶ Children 2 and older should consume less than 10% of their total calories per day from added sugars and those under 2 should avoid added sugars altogether.
- ▶ While children 2 and older should consume less than 10% of their total calories per day from added sugars and those under 2 should avoid added sugars altogether, U.S. children and adolescents report consuming 17% of their calories from added sugars, nearly half of which are from sugary drinks.
- ▶ U.S. children and adolescents report consuming 17% of their calories from added sugars, nearly half of which are from sugary drinks.

Source:

U.S. Department of Agriculture and U.S. Department of Health and Human Services. 2020–2025 Dietary Guidelines for Americans. 9th edition. December 2020. Available at: <https://www.dietaryguidelines.gov/>.

Powell ES, Smith-Tallie LP, Popkin BM. Added sugars intake across the distribution of U.S. children and adult consumers: 1977–2012. *J Acad Nutr Diet*. 2016; 116:1543–1550. doi: 10.1016/j.jand.2016.06.003.

FACT 39

The American Heart Association cautions against prolonged consumption of low-calorie sweetened drinks (i.e., diet drinks, which get their sweetness from low- or no-calorie sweeteners) for children between 2 and 18 years of age. Adults may choose to consume low-calorie sweetened drinks to help them transition from sugary drinks to water.

Fast Facts:

- ▶ The American Heart Association recommends that children between 2 and 18 avoid prolonged consumption of artificially sweetened or diet drinks.
- ▶ While adults may choose to consume artificially sweetened or diet drinks to help them transition from sugary drinks to water, the American Heart Association recommends that those 18 and under avoid them altogether.

Source:

Johnson RK, Lichtenstein AH, Anderson CAM, Carson JA, Després JP, Hu FB, et al. Low-calorie sweetened beverages and cardiometabolic health: a scientific advisory from the American Heart Association. *Circulation*. 2018; 138:e126–e140. doi: 10.1161/CIR.0000000000000569.

FACT 40

Experts at the American Heart Association, the Academy of Nutrition and Dietetics, the American Academy of Pediatric Dentistry and the American Academy of Pediatrics recommend that young children 0 to 5 years old only consume age-appropriate drinks, mainly breast milk or formula, water and plain milk. Specifically, children 2–3 years old should consume only plain, pasteurized low-fat or fat-free milk and water; on occasion, no more than 4 ounces of 100% fruit juice with no added sugars per day. Children 4–5 years old should consume only plain, pasteurized low-fat or fat-free milk and water; on occasion, no more than 6 ounces of 100% fruit juice with no added sugars per day.

Fast Facts:

- ▶ Experts at the American Heart Association, the Academy of Nutrition and Dietetics, the American Academy of Pediatric Dentistry and the American Academy of Pediatrics recommend that children 5 and younger only consume age-appropriate drinks, mainly breast milk or formula, water and plain milk.
- ▶ Experts at the American Heart Association, the Academy of Nutrition and Dietetics, the American Academy of Pediatric Dentistry and the American Academy of Pediatrics recommend that:
 - Children 5 and younger only drink breast milk, formula, plain animal or plant-based milk or water.
 - Children 2–3 years old only drink plain, pasteurized low-fat or fat-free milk and water, and occasionally drink 4 ounces or less of 100% fruit juice.
 - Children 4–5 years old only drink plain, pasteurized low-fat or fat-free milk and water, and occasionally drink no more than 6 ounces of 100% fruit juice with no added sugars.

Source:

Lott M, Callahan E, Welker Duffy E, Story M, Daniels S. Healthy Beverage Consumption in Early Childhood: Recommendations from Key National Health and Nutrition Organizations. Technical Scientific Report. Durham, NC: Healthy Eating Research, 2019. Available at: <https://healthydrinkshealthykids.org/app/uploads/2019/09/HER-HealthyBeverageTechnicalReport.pdf>.

Targeted marketing

FACT 41

In 2018, beverage companies spent more than \$1 billion to advertise sugary drinks — a 26% increase from 2013. More than one half of the sugary drink ad expenditures (\$586 million) promoted regular soda and soda brands, while \$159 million was spent on sports drink advertising. In contrast, total advertising spending for diet and unsweetened drink categories (including plain water and 100% juice) totaled \$573 million — less than the amount spent to advertise regular soda and soda brands alone.

Fast Facts:

- ▶ In 2018, the beverage industry spent more than \$1 billion to advertise sugary drinks — a 26% increase from 2013.
- ▶ In 2018, the beverage industry spent \$586 million on regular soda and soda brand advertising.
- ▶ In 2018, the beverage industry spent more \$159 million on sports drink advertising.
- ▶ While the beverage industry spent \$745 million on regular soda and sports drink advertising in 2018, it only spent \$573 million on advertising on all drinks, including diet drinks, water and 100% juice, without added sugars.
- ▶ The bulk of the beverage industry's advertising budget goes toward regular soda with added sugar. In fact, in 2018 it spent more on regular soda ads alone than it did on all other drinks, including water, diet drinks and 100% fruit juice, combined.

Source:

Harris JL, Fleming-Milici F, Kibwana-Jaff A, Phaneuf L. Sugary Drink FACTS 2020. Sugary drink advertising to youth: Continued barrier to public health progress. June 2020. Available at: http://sugarydrinkfacts.org/resources/Sugary%20Drink%20FACTS%202020/Sugary_Drink_FACTS_Full%20Report_final.pdf.

FACT 42

In 2018, Black children and teens saw twice as many sugary drink ads, compared to white children and teens. Black teens saw nearly three times as many ads for sports drinks as white children.

Fast Facts:

- ▶ In 2018, Black children and teens saw twice as many sugary drink ads as white children and teens.
- ▶ In 2018, Black teens saw nearly three times as many ads for sports drinks as white teens.
- ▶ Black children and teens see more ads for sugary drinks than white children and teens.

Source:

Harris JL, Fleming-Milici F, Kibwana-Jaff A, Phaneuf L. Sugary Drink FACTS 2020. Sugary drink advertising to youth: Continued barrier to public health progress. June 2020. Available at: http://sugarydrinkfacts.org/resources/Sugary%20Drink%20FACTS%202020/Sugary_Drink_FACTS_Full%20Report_final.pdf.

FACT 43

Regular soda/soda, sports drinks and energy drinks brands spent \$84 million to advertise on Spanish-language television in 2018, an increase of 8% compared to 2013 and 80% compared to 2010. Latino teens' exposure to Spanish-language ads for sports drinks increased more than 10-fold from 2013 to 2018.

Fast Facts:

- ▶ Sugary drink brands spent \$84 million to advertise on Spanish-language television in 2018, an increase of 8% compared to 2013 and 80% compared to 2010.
- ▶ Sugary drink brands spent \$84 million to advertise on Spanish-language television in 2018.
- ▶ Sugary drink brands spent 80% more on Spanish-language TV ads in 2018 than they did in 2010.
- ▶ Sugary drink brands spent 8% more on Spanish-language TV ads in 2018 than they did in 2013.
- ▶ Latino teens are seeing more Spanish-language ads for sports drinks. In fact, their exposure to these ads increased more than 10-fold from 2013 to 2018.

Source:

Harris JL, Fleming-Milici F, Kibwana-Jaff A, Phaneuf L. Sugary Drink FACTS 2020. Sugary drink advertising to youth: Continued barrier to public health progress. June 2020. Available at: http://sugarydrinkfacts.org/resources/Sugary%20Drink%20FACTS%202020/Sugary_Drink_FACTS_Full%20Report_final.pdf.

FACT 44

Children as young as 2 years old are targeted with sugary drinks ads. In 2018, preschoolers saw 26% more TV ads for sugary drinks than they did in 2013. This increase occurred despite a 35% decline in average TV viewing time for preschoolers.

Fast Facts:

- ▶ The beverage industry targets children as young as 2 years old with ads for their products.
- ▶ On study found that preschoolers saw 26% more TV ads for sugary drinks in 2018 than they did in 2013. This increase occurred despite a 35% decrease in average TV viewing time for preschoolers.
- ▶ While preschoolers are watching less TV, the sugary drink industry is exposing them to more ads. In fact, one study found that preschoolers saw 26% more TV ads for sugary drinks in 2018 than they did in 2013, even though there was a 35% decrease in TV screen time.

Source:

Harris JL, Fleming-Milici F, Kibwana-Jaff A, Phaneuf L. Sugary Drink FACTS 2020. Sugary drink advertising to youth: Continued barrier to public health progress. June 2020. Available at: http://sugarydrinkfacts.org/resources/Sugary%20Drink%20FACTS%202020/Sugary_Drink_FACTS_Full%20Report_final.pdf.

FACT 45

In 2018, children ages 2-11 saw more than twice as many ads for sweetened drinks than for drinks without added sweeteners and more than four times as many ads for sweetened children's drinks than adults.

Fast Facts:

- ▶ Kids see more than twice as many ads for sweetened drinks as they do for drinks without added sweeteners.
- ▶ Kids see more than four times as many ads for sweetened children's drinks than adults do.
- ▶ Kids see more ads for sweetened drinks than they do for drinks without added sweeteners.
- ▶ The beverage industry targets children with ads for sugary drinks. In fact, kids see twice as many ads for drinks with added sweeteners than they do for drinks without added sweeteners.
- ▶ The beverage industry targets children with ads for sugary drinks. In fact, kids see more than four times as many ads for sweetened children's drinks than adults do.

Source:

Harris JL, Romo-Palafos M, Choi Y-Y, Kibwana A. Children's Drink FACTS 2019. Sales, Nutrition, and Marketing of Children's Drinks. October 2019. Available at: <https://www.sugarydrinkfacts.org/resources/FACTS2019.pdf>.

FACT 46

A 2020 study found that a higher percentage of adolescents follow sugary drink brands (7.9%) compared to low-calorie drink brands (4.3%) on Instagram. Similar percentages were also found on Twitter (9.6% vs. 3.9%).

Fast Facts:

- ▶ Adolescents are more likely to follow sugary drink brands on social media than they are to follow low-calorie drink brands.
- ▶ Adolescents are about twice as likely to follow sugary drink brands on Instagram and Twitter than they are to follow low-calorie drink brands.
- ▶ When it comes to adolescents who use Instagram, nearly 8% follow sugary drink brands, while only 4% follow low-calorie drink brands.
- ▶ When it comes to adolescents who use Twitter, nearly 10% follow sugary drink brands, while only 4% follow low-calorie drink brands.

Source:

Rummo PE, Cassidy O, Wells I, Coffino JA, Bragg MA. Examining the relationship between youth-targeted food marketing expenditures and the demographics of social media followers. *Int J Environ Res Public Health*. 2020; 17(5):1631. doi: 10.3390/ijerph17051631.

FACT 47

In today's digital age, cutting-edge technology can be used to target low-income families and communities of color, including youth, more precisely than ever with ads for junk food and sugary drinks. Marketers can now understand a person's entire location history — where they go and what they do every minute of the day, including what they buy in stores and online.

Fast Facts:

- ▶ Modern technology makes it easier for marketers to target families with low incomes with ads for sugary drinks and junk food.
- ▶ Modern technology makes it easier for marketers to target communities of color with ads for sugary drinks and junk food.
- ▶ Modern technology makes it easier for marketers to track our every move. They know where we go and what we do every minute of the day, including what we buy in stores and online.

Source:

Berkeley Media Studies Group. The 4 Ps of Marketing: Selling Junk Food to Communities of Color: *Place*. July 2019. Available at: <http://www.bmsg.org/resources/publications/the-4-ps-of-marketing-selling-junk-food-to-communities-of-color/>.

Trends in beverage sales

FACT 48

Sales of regular soda have declined since their peak around 1998, but the decline has slowed down more recently. At the same time, sales of sports drinks, energy drinks, bottled coffees and teas and sweetened waters have been rising in the past decade. For example, sales of sports drinks have doubled from about two gallons per person per year in 2000 to more than four gallons per person per year in 2015.

Fast Facts:

- ▶ While sales of regular soda have declined, sales of other sugary drinks (including sports and energy drinks, bottled coffees and teas, and sweetened waters) have increased.
- ▶ While sales of regular soda have declined since their peak around 1998, the decline has slowed more recently.
- ▶ Over the last decade, sales of sports drinks, energy drinks, bottled coffees and teas and sweetened waters have increased.
- ▶ Sales of sports drinks have doubled from about two gallons per person per year in 2000 to more than four gallons per person per year in 2015.
- ▶ Sales of sports drinks are on the rise, with people drinking about twice as much as they previously did.

Source:

Healthy Food America. Sugary Drinks in America: Who's Drinking What and How Much? June 2018. Available at: [SugaryDrinksUpdate_v11 \(d3n8a8pro7vhmx.cloudfront.net\)](#).

FACT 49

Regular soda is the most popular sugary drink, making up about two-thirds (65%) of the sugary drinks sold in the U.S.

Fast Facts:

- ▶ Regular soda is the most popular sugary drink in the U.S.
- ▶ Regular soda is the most popular sugary drink, making up about two-thirds of the sugary drinks sold in the U.S.
- ▶ Regular soda makes up about two-thirds of the sugary drinks sold in the U.S.
- ▶ While sugary drinks include fruit drinks with added sugar, sports and energy drinks and sweetened coffees and teas, regular soda is still the most popular, making up about two-thirds of sugary drink sales in the U.S.

Source:

Healthy Food America. Sugary Drinks in America: Who's Drinking What and How Much? June 2018. Available at: [SugaryDrinksUpdate_v11 \(d3n8a8pro7vhmx.cloudfront.net\)](#).

FACT 50

Sugary drinks are often cheaper than healthier options. One study looking at the prices of soda in supermarkets across the country found that, on average, milk cost 160% more per fluid ounce than soda.

Fast Facts:

- ▶ Sugary drinks are often cheaper than healthier options.
- ▶ Sugary drinks are often cheaper than healthier options, such as milk.
- ▶ Sugary drinks are often cheaper than healthier options. For example, one study found that milk cost 160% more per fluid ounce than soda.

Source:

Kern DM, Auchincloss AH, Ballester LS, Robinson LF. Neighbourhood variation in the price of soda relative to milk and its association with neighbourhood socio-economic status and race. *Public Health Nutrition*. 2016; 1. doi: 10.1017/S1368980016001579.

FACT 51

A study of beverage pricing data collected in food stores in four U.S. cities in 2017 found that out of all the sugary drinks sold, soda was the least expensive (on average 3.4 cents per ounce), followed by sports drinks, juice drinks, ready-to-drink tea/coffee and energy drinks. Prices were lower for family-sized sugary drinks (on average 9.6 cents per ounce) as compared to individual-sized drinks (on average 3.5 cents per ounce). Overall, the prices of sugary beverage were lower in stores in majority non-Hispanic Black Census tracts compared to majority non-Hispanic white tracts (-0.27 cents per ounce).

Fast Facts:

- ▶ Of all beverage options, soda is the least expensive choice for consumers.
- ▶ Family-sized sugary drinks are the least expensive beverage option in stores.

Source:

Leider J, Powell LM. Sugar-sweetened beverage prices: variations by beverage food store, neighborhood characteristics, 2017. *Prev Med Reports*. 2019; 15:10083. doi: 10.1016/j.pmedr.2019.100883.

Economic costs related to sugary drinks

FACT 52

Consuming sugary drinks contributes to a lifetime of health challenges for children and adults that include tooth decay, type 2 diabetes and heart disease. Treating heart disease alone costs the country \$216 billion each year.

Fast Facts:

- ▶ Sugary drink consumption contributes to a lifetime of health challenges for children and adults.
- ▶ Sugary drink consumption contributes to heart disease in children and adults and costs the U.S. more than \$200 billion each year.
- ▶ Sugary drink consumption contributes to a lifetime of health challenges for children and adults, including tooth decay, type 2 diabetes and heart disease. In fact, it costs the nation more than \$200 billion each year to treat heart disease alone.
- ▶ Sugary drink consumption not only contributes to a lifetime of health challenges but also costs the nation hundreds of billions of dollars each year to treat.
- ▶ It costs the nation hundreds of billions of dollars to treat the health challenges associated with sugary drink consumption each year.

Source:

Muth ND, Dietz WH, Magge SN, Johnson RK; AMERICAN ACADEMY OF PEDIATRICS; SECTION ON OBESITY; COMMITTEE ON NUTRITION; AMERICAN HEART ASSOCIATION. Public policies to reduce sugary drink consumption in children and adolescents. *Pediatrics*. 2019; 143(4):e20190282. doi: 10.1542/peds.2019-0282.

Virani SS, Alonso A, Aparicio HJ, Benjamin EJ, Bittencourt MS, Callaway CW. Heart Disease and Stroke Statistics –2021 Update: A Report from the American Heart Association. *Circulation*. 2021; 143(8): e254-e743. doi: 10.1161/CIR.0000000000000950.

FACT 53

In 2015, missed work due to sugary drink-related diseases was estimated to cost the nation \$11 billion per year due to obesity, \$10 billion per year due to high blood pressure and \$2.2 billion per year due to diabetes (types 1 and 2).

Fast Facts:

- ▶ Missed work due to sugary drink-related diseases is estimated to cost the nation \$11 billion per year due to obesity.
- ▶ Missed work due to sugary drink-related diseases is estimated to cost the nation \$10 billion per year due to high blood pressure.
- ▶ Missed work due to sugary drink-related diseases is estimated to cost the nation more than \$2 billion per year due to diabetes.
- ▶ Missed work due to sugary drink-related diseases is estimated to cost the nation \$11 billion per year due to obesity, \$10 billion per year due to high blood pressure and \$2.2 billion per year due to diabetes.
- ▶ Missed work due to sugary drink-related diseases is estimated to cost the nation more than \$23 billion per year due to obesity, high blood pressure and diabetes.

Source:

Asay GR, Roy K, Lang JE, Payne RL, Howard DH. Absenteeism and employer costs associated with chronic diseases and health risk factors in the U.S. workforce. *Prev Chronic Dis.* 2016; 13:E141. doi: 10.5888/pcd13.150503

FACT 54

From 2009–17, sugary drink companies spent more than \$107 million to oppose state and local sugary drink policies.

Fast Facts:

- ▶ From 2009–17, sugary drink companies/the beverage industry spent more than \$107 million to oppose state and local sugary drink policies.
- ▶ Between 2009 and 2017, sugary drink companies/the beverage industry spent more than \$107 million to oppose state and local sugary drink policies.
- ▶ Sugary drink companies/the beverage industry spent more than \$107 million to oppose state and local sugary drink policies.
- ▶ Sugary drink companies invested more than \$100 million from 2009–17 to oppose sugary drink policies.

Source:

Center for Science in the Public Interest. Big Soda vs. Public Health: 2017 Edition. November 2017. Available at: <https://cspinet.org/sites/default/files/attachment/big-soda-2017.pdf>.

Sugary drink taxes

The American Heart Association supports taxing sugary drinks, ideally structuring the taxes in a tiered approach that considers grams of total sugars per fluid ounce and levies the tax by volume to optimally decrease consumer consumption of less-healthy beverages and spur industry reformulation. In the U.S., all current local sugary drink taxes are volume-based but tiered and sugar-based taxes have been implemented in other parts of the world. The American Heart Association supports all three tax structure options as a way that states, tribal areas and communities can encourage changes in consumer behavior and encourage the industry to reformulate its products to have less added sugars.

Evidence of sugary drink tax impact

FACT 55

As of July 2021, seven U.S. cities and more than 40 nations have adopted sugary drink taxes. These taxes reduce the sales of sugary drinks and raise valuable revenue for communities.

Fast Facts:

- ▶ As of July 2021, seven U.S. cities and more than 40 nations have adopted sugary drink taxes.
- ▶ As of July 2021, seven U.S. cities and more than 40 nations have adopted sugary drink taxes to reduce the sales of sugary drinks and raise revenue for communities.
- ▶ Several U.S. cities and dozens of nations have adopted sugary drink taxes.
- ▶ Several U.S. cities and dozens of nations have adopted sugary drink taxes to reduce the sales of sugary drinks and raise revenue for communities.

Source:

Krieger J, Bleich SN, Scarmo S, Ng SW. Sugar-sweetened beverage reduction policies: progress and promise. *Ann Rev Public Health*. 2021; 42:439-461. doi: 10.1146/annurev-publhealth-090419-103005.

FACT 56

Sugary drink taxes increase the price and reduce purchases of taxed beverages. In the United States, 43% to 123% of the taxes have been passed from the distributors to the consumers in the form of higher prices. Sales of taxed beverages have decreased by 21% to 39%, after accounting for tax avoidance from shopping in neighboring areas.

Fast Facts:

- ▶ By taxing sugary drinks, the price of these products increases and can, therefore, reduce purchases.
- ▶ Distributors are taxed when a sugary drink tax is implemented. They usually pass that price on to consumers.
- ▶ In the U.S., 43% to 123% of sugary drink taxes have been passed from the distributors to the consumers in the form of higher prices.
- ▶ Sales of taxed beverages have decreased by 21% to 39%, after accounting for tax avoidance from shopping in neighboring areas.

Source:

Krieger J, Bleich SN, Scarmo S, Ng SW. Sugar-sweetened beverage reduction policies: progress and promise. *Ann Rev Public Health*. 2021; 42:439-461. doi: 10.1146/annurev-publhealth-090419-103005.

FACT 57

An 8-ounce serving of a fruit drink can contain anywhere from 1 gram to 57 grams of added sugars. A tiered tax on sugary drinks establishes different tax rates based on how much sugar is in the drink. As the amount of sugar increases, the amount of tax per ounce increases. In the United Kingdom, consumption of added sugars from soft drinks fell by 10% one year after a tiered tax was implemented.

Fast Facts:

- ▶ Sugary drinks vary in grams of added sugar. A tiered tax on sugary drinks takes this into account by establishing different tax rates based on how much sugar is in the drink.
- ▶ Sugary drinks vary in grams of added sugar. A tiered tax on sugary drinks takes this into account by establishing different tax rates based on how much sugar is in the drink. As the amount of sugar increases, the amount of tax per ounce increases.
- ▶ A tiered tax on sugary drinks establishes different tax rates based on how much sugar is in the drink. As the amount of sugar increases, the amount of tax per ounce increases.
- ▶ Sugary drinks vary in grams of added sugar. A tiered tax on sugary drinks takes this into account by establishing different tax rates based on how much sugar is in the drink. As the amount of sugar increases, the amount of tax per ounce increases. In the United Kingdom, consumption of added sugars from soft drinks fell by 10% one year after the nation implemented a tiered tax.
- ▶ In the United Kingdom, consumption of added sugars from soft drinks fell by 10% one year after the nation implemented a tiered tax.

Source:

Harris JL, Schwartz MB, LoDolce M, Munsell C, Fleming-Milici F, Elsey J, et al. Sugary Drink FACTS 2014: Some progress but much room for improvement in marketing to youth. November 2014. Available at: https://www.sugarydrinkfacts.org/resources/SugaryDrinkFACTS_Report.pdf.

Pell D, Mytton O, Penney TL, Briggs A, Cummins S, Penn-Jones C, et al. Changes in soft drinks purchased by British households associated with UK soft drinks industry levy: controlled interrupted time series analysis. *BMJ*. 2021; 10:372:n254. doi: 10.1136/bmj.n254.

FACT 58

Two years after implementation of Philadelphia's 1.5-cents-per-ounce sweetened beverage tax, there was an average 2-cents-per-ounce increase in taxed beverage price and a 42% decline in the volume of taxed beverages bought at small independent stores by people in Philadelphia compared to Baltimore. On average, people in Philadelphia consumed about 70 fewer calories from both beverages and high-sugar foods, suggesting they did not substitute high-sugar foods for taxed beverages.

Fast Facts:

- ▶ In the years following Philadelphia's implementation of a sweetened beverage tax, taxed beverage prices rose by about 2 cents per ounce.
- ▶ In the years following Philadelphia's implementation of a sweetened beverage tax, the volume of taxed beverages bought at small independent stores dropped by more than 40%.
- ▶ In the years following Philadelphia's implementation of a sweetened beverage tax, the volume of taxed beverages bought at small independent stores dropped by 42%.
- ▶ On average, people in Philadelphia consume about 70 fewer calories from both beverages and high-sugar foods, suggesting they aren't substituting high-sugar foods for taxed beverages.

- ▶ People in Philadelphia aren't substituting high-sugar foods for taxed beverages. In fact, on average, they now consume about 70 fewer calories from both beverages and high-sugar foods.

Source:

Bleich SN, Dunn CG, Soto MJ, Yan J, Gibson LA, Lawman HG, et al. Association of a sweetened beverage tax with purchases of beverages and high-sugar foods at independent stores in Philadelphia. *JAMA Netw Open*. 2021; 4(6):e2113527. doi: 10.1001/jamanetworkopen.2021.13527.

FACT 59

A recent economic study estimated that Philadelphia's beverage tax created between 800 and 1,350 new jobs in the city since its implementation, in part by increasing funding for child care services that allowed more parents to enter the labor force.

Fast Facts:

- ▶ Philadelphia's sweetened beverage tax has created between 800 and 1,350 new jobs since it was implemented in January 2017.
- ▶ Philadelphia's sweetened beverage tax has created more than 800 new jobs since it was implemented in January 2017.
- ▶ Philadelphia's sweetened beverage tax has created between 800 and 1,350 new jobs since it was implemented in January 2017, in part by increasing funding for early care and education programs which allowed more parents to return to the workforce.

Source:

Lahr M, Yao Y, and Nores M. The Total Economic Impact of Philadelphia's Beverage Tax. New Brunswick, NJ: National Institute for Early Education Research. September 2021. Available at: https://nieer.org/wp-content/uploads/2021/09/Policy_Brief_PHILPreK_v6.8.21_5pm_Final.pdf.

FACT 60

One year after implementation of Seattle's 1.75-cent-per-ounce. sugary beverage tax, prices of taxed beverages rose by about 1 cent per ounce and purchases of taxed beverages declined by 22% compared to Portland, with no evidence of cross-border shopping. Purchases of untaxed beverages, such as bottled water, increased by about 4% compared to Portland.

Fast Facts:

- ▶ In the year following Seattle's implementation of a sugary drink tax, taxed beverage prices rose by about 1 cent per ounce.
- ▶ In the year following Seattle's implementation of a sugary drink tax, purchases of taxed beverages declined by 22% compared to Portland, with no evidence of cross-border shopping.
- ▶ In the year following Seattle's implementation of a sugary drink tax, there was no evidence of cross-border shopping.
- ▶ In the year following Seattle's implementation of a sugary drink tax, purchases of untaxed beverages, such as bottled water, increased by about 4% in Seattle compared to Portland.
- ▶ In the year following Seattle's implementation of a sugary drink tax, purchases of taxed beverages declined by 22% compared to Portland, and purchases of untaxed beverages, such as bottled water, increased by about 4%.

Source:

Powell LM, Leider J. The impact of Seattle's sweetened beverage tax on beverage prices and volume sold. *Econ Hum Biol*. 2020; 37:100856. doi: 10.1016/j.ehb.2020.100856.

FACT 61

Research looking at the first year of the Berkeley, Calif., sugary drink tax showed the tax was working as intended: Sales of sugary drinks declined almost 10% and sales of water increased by 15%. Three years later, consumption of sugary drinks dropped by 52% and water increased by 25% among Berkeley residents in diverse neighborhoods with a large proportion of Black and Latino residents.

Fast Facts:

- ▶ Berkeley, Calif.'s sugary drink tax is working as intended as sugary drink sales have declined and water sales have increased.
- ▶ In the year following the implementation of Berkeley, Calif.'s sugary drink tax, sugary drink sales declined by about 10% and water sales increased by about 15%.
- ▶ Berkeley, Calif.'s sugary drink tax is working as intended as sugary drink consumption dropped and water consumption increased.
- ▶ Four years after the implementation of Berkeley, Calif.'s sugary drink tax, sugary drink consumption dropped by 52% and water consumption increased by 25%.
- ▶ Four years after the implementation of Berkeley, Calif.'s sugary drink tax, people living in predominantly Black and Latino communities began drinking fewer sugary drinks and more water.
- ▶ Four years after the implementation of Berkeley, Calif.'s sugary drink tax, sugary drink consumption among Black and Latino residents dropped by 52%, while water consumption increased by 25%.

Source:

Silver LD, Ng SW, Ryan-Ibarra S, Taillie LS, Induni M, Miles DR, et al. (2017) Changes in prices, sales, consumer spending, and beverage consumption one year after a tax on sugar-sweetened beverages in Berkeley, California, US: A before-and-after study. *PLoS Med.* 2017; 14: e1002283. doi: 10.1371/journal.pmed.1002283.

Lee MM, Falbe J, Schillinger D, Basu S, McCulloch CE, Madsen KA. Sugar-sweetened beverage consumption 3 years after the Berkeley, California, sugar-sweetened beverage tax. *Am J Public Health.* 2019; 109:637-639. doi: 10.2105/AJPH.2019.304971.

FACT 62

During the four months that the 1-cent-per-ounce Cook County, Ill., sugary drink tax was in effect, purchases of taxed beverages decline by 21% compared to St. Louis, Mo, after accounting for cross-border shopping.

Fast Facts:

- ▶ During the four months that the 1-cent-per-oz. Cook County, Ill., sugary drink tax was in effect, purchases of taxed beverages declined by 21% compared to St. Louis, Mo., after accounting for cross-border shopping.
- ▶ Purchases of sugary drinks fell by more than 20% during the time Cook County, Ill., had a sugary drink tax.

Source:

Powell LM, Leider J, Léger PT. The impact of a sweetened beverage tax on beverage volume sold in Cook County, Illinois, and its border area. *Ann Intern Med.* 2020; 172:390-397. doi: 10.7326/M19-2961.

FACT 63

Across store types, there is no evidence of increases in volume or dollar sales of candy, snacks or spirits in Philadelphia compared to nearby counties, suggesting that Philadelphia's decline in taxed beverage purchases is not offset by increases in purchases of other unhealthy foods and beverages.

Fast Facts:

- ▶ Data demonstrate that people in Philadelphia are not substituting taxed sweetened beverages with candy, snacks or alcohol.
- ▶ There is no evidence of increases in sales of candy, snacks or spirits in Philadelphia compared to nearby counties, suggesting that Philadelphia's decline in taxed beverage purchases is not offset by increases in purchases of other unhealthy foods and beverages.

Source:

Gibson LA, Lawman HG, Bleich SN, Yan J, Mitra N, LeVasseur MT, et al. No evidence of food or alcohol substitution in response to a sweetened beverage tax. *Am J Prev Med.* 2021; 60:e49-e57. doi: 10.1016/j.amepre.2020.08.021.

Tax revenue raised and community impact

FACT 64

Sugary drink taxes in the United States have raised substantial revenues. Across the seven cities with taxes, the average revenue raised from taxes is \$133.9 million each year, with nearly all (\$133.2 million) of the revenue allocated.

Fast Facts:

- ▶ Sugary drink taxes in the United States have raised substantial revenues. Across the seven cities with taxes, the average revenue raised from taxes is nearly \$134 million each year, with nearly all of the revenue allocated.
- ▶ Currently, seven U.S. cities have sugary drink taxes and the average revenue raised is nearly \$134 million each year.
- ▶ Currently, seven U.S. cities have sugary drink taxes. On average, each city raises nearly \$134 million in revenue annually as a result of the tax.
- ▶ Sugary drink taxes can bring in tens of millions of dollars for the cities that implement them. Currently, seven U.S. cities have sugary drink taxes. On average, each city raises nearly \$134 million in revenue annually from the tax.

Source:

Krieger J, Magee K, Hennings T, Schoof J, Madsen KA. How sugar-sweetened beverage tax revenues are being used in the United States. *Prev Med Rep.* 2021; 23: 01388. doi: 10.1016/j.pmedr.2021.101388.

FACT 65

Across the seven cities with sugary drink taxes, the largest revenue investments support early childhood development (annual average of \$57.6 million), improvements to community infrastructure (\$21.2 million) and increased access to healthy foods (\$17.2 million). Investments have been varied and specific to each community's needs:

Fast Facts:

- ▶ Albany (Fla.), Berkeley (Calif.), Boulder (Colo.) and San Francisco (Calif.) have focused their revenue allocations on health-related goals.
- ▶ Philadelphia (Pa.) has focused almost solely on human and community capital, allocating more than 90% of its revenues to expand access to pre-K and improve community infrastructure.
- ▶ Oakland (Calif.) and Seattle (Wash.) have divided their revenue investments between health and human and community capital.
- ▶ Currently, seven cities have implemented sugary drink taxes. Revenue investments in these locations include support to early childhood development, improvements to community infrastructure and increased access to healthy foods.

- ▶ Currently, seven cities have implemented sugary drink taxes. Revenue investments in these locations include support to early childhood development at about \$58 million, improvements to community infrastructure at about \$21 million and increased access to healthy foods at about \$17 million.
- ▶ The seven cities that have implemented sugary drink taxes have invested nearly \$100 million in early childhood development, community infrastructure and access to healthy foods.
- ▶ Albany, Fla.; Boulder, Colo.; and Berkeley and San Francisco, Calif., have invested sugary drink tax revenue in health-related goals.
- ▶ Philadelphia has invested its sweetened beverage tax revenue almost solely in its residents and the communities in which they live. In fact, the city has allocated more than 90% of its revenue to expand access to pre-K and improve community infrastructure.
- ▶ Oakland, Calif., and Seattle, Wash., have divided their revenue investments between health, residents and the communities in which they live.

Source:

Krieger J, Magee K, Hennings T, Schoof J, Madsen KA. How sugar-sweetened beverage tax revenues are being used in the United States. *Prev Med Rep.* 2021; 23: 01388. doi: 10.1016/j.pmedr.2021.101388.

Additional Examples:

[*note: borrowed directly from the Voices sugary drink messaging guide – not science*]

- ▶ In Philadelphia, funding from the sugary drink tax has been used to support thousands of pre-K slots, more than a dozen community schools and improvements to parks and recreation centers. The city focuses funding in areas lacking child-care options and communities with greater numbers of families with low incomes.
- ▶ In Seattle, a community-driven campaign directed tax revenues where the community sees its greatest needs, including to help feed families who are food insecure during COVID-19.
- ▶ San Francisco has used the tax revenue to improve school food, health and recreation programs for families and children who have low incomes and to create Peace Parks to increase recreation options for teens and young adults who live in neighborhoods affected by crime.
- ▶ In 2014, the Navajo Nation passed the Healthy Diné Nation Act to address the health concerns of the Diné community. It is the first such policy in the world serving as an example of tribal sovereignty to support community wellness. The act places a 2% tax on calorie-dense food and drinks with little-to-no nutritional value and waives a 6% tax on healthy foods such as fruits and vegetables. The act has funded more than 1,300 community-selected wellness projects across Navajo Nation, including community fitness classes, greenhouses, youth clubs, clean water initiatives, Navajo language and culture classes and more.

Source:

Voices for Healthy Kids. Sugary Drink Messaging for Policy Change: A Resource for Advocacy Campaigns. April 2021. Available at: https://voicesforhealthykids.org/assets/resources/vhk_sugarydrinkmessageguide_final-2021.pdf.

Responding to tax regressivity concerns

FACT 66

A systematic review found only a small difference in the impact of sugary drink taxes on spending between low- and high-income households (an additional 0.1-1.0% of annual household income for low-income vs. 0.03-0.6% for high-income households).

Fast Facts:

- ▶ A systematic review found that sugary drink taxes only marginally impact spending in most households.
- ▶ A systematic review found that sugary drink taxes only marginally impact spending for low- and high-income households.
- ▶ A systematic review found that low-income households in cities with sugary drink taxes spent marginally more, about 0.1% to 1% more.
- ▶ A systematic review found that high-income households in cities with sugary drink taxes spent marginally more, about 0.03% to 0.6% more.

Source:

Backholer K, Sarink D, Beauchamp A, Keating C, Loh V, Ball K, et al. The impact of a tax on sugar-sweetened beverages according to socio-economic position: a systematic review of the evidence. *Public Health Nutr.* 2016; 19:3070-3084. doi: 10.1017/S136898001600104X.

FACT 67

Studies modeling effects of sugary drink taxes in the U.S. estimated they would result in less than a \$2 average difference in annual spending increases between high- and low-income individuals.

Fast Facts:

- ▶ Studies show that sugary drink taxes result in less than a \$2 average difference in annual spending increases between individuals with high and low incomes.
- ▶ People, regardless of income, spend only about \$2 more per year on beverages because of sugary drink taxes.

Source:

Falbe J. The ethics of excise taxes on sugar-sweetened beverages. *Physiol Behav.* 2020; 225:113105. doi: 10.1016/j.physbeh.2020.113105.

FACT 68

Compared to other groups, families with low-incomes and communities of color are exposed to more advertising for sugary drinks and experience disproportionately higher rates of sugary drink-related chronic diseases. As a result, modeling studies predict that these groups would experience the largest gain in health and greatest reduction in health care costs.

Fast Facts:

- ▶ Families with low incomes and communities of color are exposed to more sugary drinks ads than their peers from other racial or ethnic groups.
- ▶ Families with low incomes and communities of color experience disproportionately higher rates of sugary drink-related chronic diseases than their peers from other racial or ethnic groups.
- ▶ Families with low incomes and communities of color would experience the largest gain in health and greatest reduction in health care costs if sugary drink taxes were implemented in their cities.

- ▶ Families with low incomes and communities of color are exposed to more sugary drinks ads and experience disproportionately higher rates of sugary drink-related chronic diseases than their peers from other racial or ethnic groups. As a result, studies show that these groups would experience the largest gain in health and greatest reduction in health care costs if sugary drink taxes were implemented in their cities.

Source:

Falbe J. The ethics of excise taxes on sugar-sweetened beverages. *Physiol Behav.* 2020; 225:113105. doi: 10.1016/j.physbeh.2020.113105.

Impact on employment and store revenues

FACT 69

Up to two and a half years after the Philadelphia sweetened beverage tax was implemented, there was no evidence that the tax resulted in job losses in the overall economy, private sector, limited-service restaurants or convenience stores.

Fast Facts:

- ▶ Philadelphia's sweetened beverage tax has not caused job losses in the city.
- ▶ Despite beverage industry talking points, Philadelphia's sweetened beverage tax has not caused job losses in the city.
- ▶ Even though Philadelphia implemented a sweetened beverage tax, there has been no evidence to suggest the tax caused job losses of any kind.
- ▶ In the two and a half years after Philadelphia implemented its sweetened beverage tax, there was no evidence that the tax resulted in job losses of any kind.
- ▶ Even though Philadelphia implemented a sweetened beverage tax, there has been no evidence to suggest the tax caused job losses in the overall economy, private sector, limited-service restaurants or convenience stores.
- ▶ In the two and a half years after Philadelphia implemented its sweetened beverage tax, there was no evidence that the tax resulted in job losses in the overall economy, private sector, limited-service restaurants or convenience stores.

Source:

Marinello S, Leider J, Pugach O, Powell LM. The impact of the Philadelphia beverage tax on employment: a synthetic control analysis. *Econ Hum Biol.* 2021; 40:100939. doi: 10.1016/j.ehb.2020.100939.

FACT 70

Up to two years after the San Francisco sugary drink tax was implemented, there was no evidence that the tax resulted in job losses overall or in the private sector, nor any job losses in beverage manufacturing, supermarket and other grocery store, convenience store or limited-service restaurant industries.

Fast Facts:

- ▶ San Francisco's sugary drink tax has not caused job losses in the city.
- ▶ Despite beverage industry talking points, San Francisco's sugary drink tax has not caused job losses in the city.
- ▶ Even though San Francisco implemented a sugary drink tax, there has been no evidence to suggest the tax caused job losses of any kind.
- ▶ In the two years after San Francisco implemented a sugary drink tax, there was no evidence that the tax resulted in job losses of any kind.

- ▶ After San Francisco implemented a sugary drink tax, there has been no evidence to suggest the tax caused job losses overall or in the private sector, nor any job losses in beverage manufacturing, supermarket and other grocery store, convenience store or limited-service restaurant industries.
- ▶ In the two years after San Francisco implemented sugary drink tax, there was no evidence that the tax resulted in job losses in beverage manufacturing, supermarket and other grocery store, convenience store or limited-service restaurant industries.

Source:

Marinello S, Leider J, Powell LM. Employment impacts of the San Francisco sugar-sweetened beverage tax two years after implementation. *PLoS One*. 2021; 16:e0252094. doi: 10.1371/journal.pone.0252094.

FACT 71

In Berkeley, Calif., the sugary drink tax has strengthened the local economy. Food sector sales tax revenue rose by 15%, while food sector jobs increased by 7.2% just 18 months after the tax was passed.

Fast Facts:

- ▶ Berkeley, Calif.'s sugary drink tax has strengthened the local economy.
- ▶ Despite beverage industry talking points, Berkeley, Calif.'s sugary drink tax strengthened the local economy.
- ▶ When Berkeley, Calif., implemented its sugary drink tax, both food sector sales tax revenue and food sector jobs increased.
- ▶ When Berkeley, Calif., implemented its sugary drink tax, food sector sales tax revenue rose by 15% and food sector jobs increased by more than 7%.
- ▶ Just 18 months after Berkeley, Calif., implemented its sugary drink tax, both food sector sales tax revenues and food sector jobs increased.
- ▶ Just 18 months after Berkeley, Calif., implemented its sugary drink tax, food sector sales tax revenue rose by 15% and while food sector jobs increased by more than 7%.

Source:

Public Health Institute. Berkeley's Sugar Sweetened Beverage Tax: What Happened to Jobs and Business Revenue? Issue brief. May 2017. Available at: <https://www.phi.org/uploads/application/files/zq8houfhy138b4rggefjpaj7t2s7k2hpfjpfjofgin6pw2tp77h.pdf>.