

High rates of sugary drink intake among children and teens, including youth of color, continue to raise public health concerns. Despite beverage companies' pledges to reduce beverage calories, the findings in this report demonstrate that advertising of sugary drinks and energy drinks has increased, including ads targeted to teens and Hispanic and Black youth.

Sugary drink consumption by children and teens remains a significant public health concern. More than one-half of youth consume at least one sugary drink on a given day.¹ Sugary drinks contribute approximately one-half of added sugars in young people's diets,² with teens and young adults consuming more sugary drinks than other age groups.³ Consumption is also higher among low-income youth and non-Hispanic Black and Mexican-American children and teens.^{4,6} Disproportionate sugary drink consumption raises additional concerns about health disparities affecting low-income youth and communities of color.⁷⁻⁹ While youth consumption of regular soda and fruit drinks has recently declined,¹⁰ youth consumption of sports drinks and energy drinks has increased.¹¹⁻¹³

Recognizing the role beverage companies may play in unhealthy rates of sugary drink consumption, industry groups have launched voluntary initiatives to advertise only healthier beverages to children under age 12¹⁴ and to increase consumer demand for lower-calorie choices.¹⁵ However, any promises by beverage companies to reduce advertising or other forms of marketing for sugary drinks to children age 12 and older or to youth in communities of color have been notably absent. Therefore, independent research is necessary to continue to monitor beverage company advertising of sugary drinks.

This report assesses nutrition content and 2018 advertising spending, TV advertising exposure, and targeted advertising for sugary drinks, excluding children's drinks that were previously reported in Children's Drink FACTS.¹⁶

Methods and scope

Using Nielsen data, we identified brands in the soda, sports drink, energy drink, iced tea, fruit drink, and flavored water categories that spent at least \$100,000 in advertising and that contained added sugar, excluding children's drinks previously reported. We also report on diet soda and diet drinks in the same categories for comparison. All energy drinks and shots, including drinks without added sugar, are included in total sugary drink numbers.

Advertising spending in all media (including TV, magazines, and digital) and TV exposure data were licensed from Nielsen. Utilizing the same methods as previous FACTS reports, we collected data on the nutrition content and advertising of

sugary drinks and energy drinks by category, company, and brand in 2018. We assessed changes in advertising from 2010 and 2013 when possible. We also identified categories, companies, and brands with TV advertising targeted to teens, Hispanic youth, and/or Black youth.

Analyses include:

- Nutrition content and ingredients in advertised sugary drinks and energy drinks for package types and sizes listed on brand websites (Dec 2019 - Feb 2020).
- Advertising spending for sugary drinks and diet drinks (2018).
- Exposure to TV advertising by preschoolers (2-5 years), children (6-11 years), and teens (12-17 years), including targeted ratios of ads viewed by teens versus adults (2018).
- TV advertising targeted to Black and Hispanic consumers, including ads on Spanish-language TV and targeted ratios of ads viewed by Black youth versus White youth (2018).
- Changes in advertising spending and TV ad exposure from 2010 and 2013 (reported in Sugary Drink FACTS 2014¹⁷).

Results

A total of 48 brands (89 sub-brands) of sugary drinks and energy drinks from 24 different companies each spent at least \$100,000 in total advertising in 2018. They included 18 regular soda, 11 energy drink, eight iced tea, six fruit drink, four sports drink, and one flavored water brand.

What is the nutrition content of advertised sugary drinks?

Median serving sizes of products ranged from 12 ounces for regular soda, fruit drinks, and sports drinks, to 16 ounces for energy drinks, 16.9 ounces for iced tea, and 20 ounces for flavored water. Median sugar content and other ingredients varied by category.

- Sugar-sweetened energy drinks and regular soda had the highest median sugar content in our analysis at 44 grams and 37 grams, respectively. One regular soda product had the highest calories and sugar of any product analyzed: 310 calories and 81 grams of sugar in a 20-ounce container.
- Products in other categories had somewhat less sugar, with a median sugar content of 27 grams for flavored water, 25.5 grams for iced tea, 23 grams for fruit drinks, and 21 grams for sports drinks.
- A number of brands offered products that contained zero-calorie sweeteners in addition to added sugar, including 88% of sugar-sweetened energy drinks, 40% of iced tea, and approximately 30% of fruit drink, sports drink, and regular soda sub-brands.

- The median caffeine content in energy drinks (including sugar-sweetened and zero-sugar products) was 160 milligrams. One product had 350 milligrams in a 16-ounce non-resealable can.

How has sugary drink advertising spending changed?

In 2018, beverage companies spent \$1.04 billion to advertise sugary drinks and energy drinks – in addition to the \$21 million spent to advertise sweetened children’s drinks – a 26% increase from 2013. However, changes in ad spending varied by category.

- More than one-half of these ad expenditures (\$586 million) promoted regular soda and soda brands (ads that promoted the brand and did not specify a regular or diet product), an increase of 41% versus 2013.
- Sports drink advertising increased by 24%, totaling \$159 million in 2018; advertising for iced tea almost tripled, from \$38 million in 2013 to \$111 million in 2018.
- Advertising for energy drinks declined by 34%, but energy drinks still ranked third in total advertising spending (\$115 million) in 2018.
- Ad spending declined by 5% for fruit drinks and flavored water (combined), totaling \$28 million in 2018.
- Companies allocated 84% of total advertising spending to TV advertising in 2018, a similar proportion to 2013 (85%). Digital, magazine, outdoor, and radio advertising each represented 3 to 4% of total ad spending in 2018.

Most brands that offered lower-calorie and/or diet varieties, in addition to high-sugar products, allocated the majority of ad expenditures to high-sugar varieties.

- Advertising spending for diet and unsweetened drink categories (including plain water and 100% juice) totaled \$573 million in 2018 – less than the amount spent to advertise regular soda and soda brands alone.
- Regular soda varieties outspent diet soda by 78% (\$525 vs. \$296 million), while sugar-sweetened sports drinks, iced tea, fruit drinks, and flavored water outspent diet varieties (i.e., products with no added sugar) of these categories by more than five times (\$298 vs. \$58 million).
- Three Coca-Cola brands were the only brands to allocate more than 50% of their advertising spending to low-calorie and/or diet versions: Coke devoted 55% to diet varieties (Coke Zero and Diet Coke); Simply devoted 71% to Simply Light low-calorie and diet fruit drinks; and Glaceau Vitaminwater allocated 90% to Vitaminwater Zero.

Are preschoolers, children, and teens seeing less TV advertising for sugary drinks?

Changes in young people’s exposure to TV advertising must be evaluated in the context of substantial declines in the amount of time they spend watching TV. From 2013 to 2018, average TV viewing times declined by 35% for preschoolers (2-5 years), by 42% for children (6-11 years), and by 52% for teens (12-17 years).

- Still, preschoolers saw 26% more TV ads for sugary drinks in 2018 than in 2013, and children’s exposure increased by 8%. Preschoolers and children viewed on average 139 and 135 TV ads, respectively, for sugary drinks and energy drinks in 2018. By comparison, preschoolers and children saw 38 and 45 TV ads for sweetened children’s drinks.¹⁸
 - From 2013 to 2018, teens’ exposure to sugary drink TV ads declined by 35% to 169 ads, but this decline was less than expected given the 52% decline in TV viewing time.
 - Regular soda/soda brand ads viewed increased for all age groups: by 78% for preschoolers, 55% for children, and 1% for teens (72, 69, and 87 ads viewed in 2018, respectively).
 - Exposure to TV ads for iced tea increased by more than two-and-a-half times for preschoolers and children (25 ads viewed in 2018 each) and by 68% for teens (29 ads viewed).
 - Sports drink ads viewed increased for preschoolers (+11%), while declines for children (-13%) and teens (-38%) were less than expected given reductions in TV viewing times (16, 15, and 21 ads viewed in 2018).
 - Preschoolers, children, and teens saw less than one-half the number of energy drink ads in 2018 compared to 2013. However, energy drinks continued to rank third in number of ads viewed by all age groups in 2018 (behind regular soda/soda brands and iced tea) (17 ads viewed by preschoolers and children and 23 ads viewed by teens).
- Furthermore, some categories appeared to target TV advertising to teens, as evidenced by disproportionately high ratios of ads viewed by teens versus adults (i.e., teen-targeted ratios).
- Energy drinks and sports drinks had higher-than-average teen-targeted ratios (0.53 and 0.52, respectively). Flavored water had the highest teen-targeted ratio (0.60) but the number of ads viewed was low.
 - Teen-targeted ratios for regular soda/soda brand ads (0.49) and iced tea ads (0.48) were comparable to differences in TV viewing times for teens versus adults. Teen-targeted ratios for all other categories (fruit drinks, drink brands, and diet drinks) were lower than expected (0.44 or less) given differences in TV viewing times.

How has targeting of sugary drinks to Hispanic and Black youth changed?

Regular soda/soda brands, sports drinks, and energy drinks spent \$84 million on Spanish-language TV advertising in 2018, increases of 8% compared to 2013 and 80% compared to 2010.

- Regular soda/soda brands represented 61% of sugary drink advertising spending on Spanish-language TV in 2018 (\$51 million), and sports drinks represented 33% (\$27 million). Energy drinks represented 5% (\$4 million). There was no fruit drink or flavored water advertising on Spanish-language TV (excluding children's drinks) in 2018.
- On average, companies allocated 10% of their total TV advertising budgets to Spanish-language TV, but sports drinks devoted 21%, the highest of any category.
- The amount of time that Hispanic preschoolers and children spent watching Spanish-language TV declined by more than 40% from 2013 to 2018. However, Hispanic preschoolers viewed 13% more Spanish-language TV ads for regular soda/soda brands in 2018 than in 2013 (38 vs. 33 ads viewed), and Hispanic children viewed 25% more ads (32 vs. 26).
- Exposure to Spanish-language ads for sports drinks increased more than 10-fold, reaching 9 ads viewed by Hispanic preschoolers and 8.5 ads viewed by Hispanic children in 2018.
- From 2013 to 2018, Hispanic teens' exposure to sports drink ads increased 10-fold to 7 ads viewed in 2018, while their exposure to ads for regular soda/soda brands declined slightly (-7%, 24 ads viewed), despite a 56% decline in time spent watching Spanish-language TV.
- In contrast, exposure to ads for energy drinks on Spanish-language TV declined by more than 90% for Hispanic preschoolers, children, and teens (approximately one ad viewed by all age groups in 2018).

Black preschoolers, children, and teens continued to view more than twice the number of TV ads for sugary drinks and energy drinks compared to White youth in the same age groups, totaling 256 ads viewed by Black preschoolers and children and 331 ads viewed by Black teens in 2018.

- These differences can be explained only partially by differences in TV viewing times as Black youth spent on average 39% to 78% more time watching TV in 2018 than their White peers.
- Black teens saw nearly three times as many ads for sports drinks (47 ads), and more than double the number of ads for regular soda/soda brands (171 ads) and energy drinks (46 ads) compared to White teens.

- From 2013 to 2018, exposure to regular soda/soda brand ads increased by 17% for Black teens. In contrast, exposure to these ads remained the same for White teens.
- Similarly, sports drink ads viewed increased by 16% for Black preschoolers and children but declined by 4% for White preschoolers and children.

What companies and brands were responsible for sugary drink advertising?

In 2018, six companies were responsible for 98% of sugary drink and energy drink advertising spending and approximately 96% of TV ads viewed by preschoolers, children, and teens.

- PepsiCo was responsible for 38% of all sugary drink advertising spending and sugary drink TV ads viewed by children, as well as 41% of TV ads viewed by teens in 2018.
- Coca-Cola was responsible for 31% of sugary drink advertising spending, 23% of TV ads viewed by teens, and 21% of TV ads viewed by children.
- Dr Pepper Snapple Group ranked third, with 13% of ad spending and 15% of ads viewed by children and teens.
- Red Bull, Pepsi Lipton, and Innovation Ventures together represented 16% of ad spending and 21 to 22% of TV ads viewed by children and teens.
- Eighteen additional companies advertised sugary drinks in 2018, but together they accounted for just 2% of all advertising spending and approximately 4% of TV ads viewed by youth.
- Among individual brands, Pepsi, Gatorade, and Mtn Dew (PepsiCo brands) and Coke each spent more than \$100 million to advertise sugar-sweetened varieties in 2018, while Dr Pepper, 5-hour Energy, and Red Bull each spent more than \$47 million.

Increases in total sugary drink advertising from 2013 to 2018 were primarily driven by PepsiCo and Coca-Cola brands.

- During this time, Coca-Cola advertising spending increased by 81% and PepsiCo spending increased by 28%. Pepsi Lipton ad spending tripled, but the company contributed just 5% of total sugary drink ad spending.
- Children viewed more than twice as many ads for Coca-Cola sugary drinks in 2018 than in 2013 and 34% more ads for PepsiCo sugary drinks. Children's exposure to ads for Pepsi Lipton sugary drinks and Red Bull also increased.
- Teens viewed 84% more ads for Pepsi Lipton iced tea brands from 2013 to 2018, and their exposure to some regular soda brands – Mtn Dew, Sprite, Coke, and Fanta – increased by 20% or more.

- The substantial decline in energy drink advertising during this time was due to the discontinuation of one energy shot brand that was highly advertised in 2013 (SK Energy) and a 39% reduction in advertising spending by Innovation Ventures (5-hour Energy). Advertising for the other major energy drink brand (Red Bull) did not change from 2013 to 2018.

Which companies and brands targeted their advertising to teens and Hispanic and Black youth?

Five beverage companies were responsible for all brands that disproportionately targeted their advertising to teens.

- Sprite, Fanta, and Honest Tea (Coca-Cola); Gatorade and Mtn Dew Kickstart (PepsiCo); Snapple and Cherry Dr Pepper (Dr Pepper Snapple Group); Red Bull; and 5-hour Energy (Innovation Ventures) all purchased TV advertising during programming that was disproportionately viewed by teens compared to adults as evidenced by teen-targeted ratios of 0.52 or higher.

On Spanish-language TV, four companies – PepsiCo, Coca-Cola, Dr Pepper Snapple Group, and Innovation Ventures – were responsible for 98% of sugary drink and energy drink ad spending.

- Spanish-language advertising promoted six brands: Coke, Gatorade, Pepsi, Powerade, Dr Pepper, and 5-hour Energy. Powerade dedicated 32% of its total TV ad dollars to Spanish-language TV, a higher percentage than any other brand.
- From 2013 to 2018, PepsiCo more than doubled its Spanish-language ad spending for sugary drinks, and Coca-Cola increased its spending by 66%. From 2010 to 2018, PepsiCo increased its spending from \$0.4 million to \$17 million.
- Dr Pepper Snapple Group was the only company to spend less to advertise sugary drinks on Spanish-language TV in 2018 than in 2013 (-57%).

The top-six companies were also responsible for 10 of the 11 brands with advertising targeted to Black teens, as evidenced by Black teen-targeted ratios higher than 2.1.

- Glaceau Vitaminwater, Sprite, and Fanta (Coca-Cola); Gatorade and Mtn Dew (PepsiCo); and Lipton Iced Tea (Pepsi Lipton) had the highest Black teen-targeted ratios, ranging from 2.66 to 4.82.
- At the company level, PepsiCo, Pepsi Lipton, Red Bull, Innovation Ventures, and Coca-Cola had disproportionately high Black teen-targeted ratios, with Black teens seeing 2.2 to 2.3 times as many ads for sugary drink and energy drink brands from these companies compared to White teens.

Discussion

These analyses of the nutrition content and advertising of sugary drinks and energy drinks demonstrate that beverage company advertising of sugary drinks to young people has worsened in recent years despite public health concerns.

- The American Heart Association (AHA) recommends children and teens consume no more than 25 grams of added sugar daily.¹⁹ However, the median sugar content in a single-serve container of advertised products in all categories of sugary drinks exceeded or approached this level.
- Despite major beverage companies' pledges to increase marketing of lower-calorie drinks, sugary drinks continue to represent the vast majority of brands' advertising expenditures.

Furthermore, most major beverage companies substantially increased their advertising of sugary drinks from 2013 to 2018.

- Advertising spending for regular soda/soda brands, iced tea, and sports drinks all increased, and youth exposure to these ads increased accordingly. It appears companies have attempted to offset the substantial declines in amount of time young people spend watching TV by placing more ads during programming that preschoolers, children, and teens view.²⁰
- Given declines in regular soda sales and consumption, beverage companies may be using advertising to attempt to counteract changing consumer preferences and increased awareness of the health consequences associated with consuming these products.
- The increase in advertising for sports drinks could be a contributing factor in increasing consumption of sports drinks. This advertising capitalizes on consumer perceptions that sports drinks are healthier than regular soda.
- Although studies have examined changes in consumption of sugary drinks by category, they have not documented sugar-sweetened iced tea consumption separately. Substantial increases in advertising for brands in this category indicate that companies view this relatively small category as an opportunity for future sales growth.
- Energy drinks was the only major category with a decline in advertising from 2013 to 2018. However, two large energy drink companies (Innovation Ventures and Red Bull) continued to rank among the top-six advertisers in 2018.

Continued advertising of sugary drinks and energy drinks targeted to teens also raises concerns due to the unique developmental vulnerabilities of this age group.

- Unhealthy food and drink advertising targeted to teens (including sugary drinks) takes advantage of their

vulnerabilities as teens tend to focus more on immediate rewards and have fewer concerns about the long-term consequences of their behaviors.²¹ They also present enormous potential as long-term loyal customers.

- Energy drinks had higher than average teen-targeted ratios, yet the American Academy of Pediatrics (AAP) recommends against any energy drink consumption by youth under age 18 due to health risks from intake of high levels of caffeine and other stimulants in these drinks.²² Energy drink marketing, in particular, may have greater appeal to teens as it often portrays these products as cool and a bit risky.²³
- The AAP also recommends children and teens should not consume sports drinks due to their sugar content, but sports drink brands continue to target their advertising to teens and to Hispanic and Black youth.

Sugary drink advertising targeted to Hispanic and Black youth contributes to health disparities affecting communities of color, and it appears that some companies have increased their investments in targeted advertising.

- Ad spending on Spanish-language TV for sugary drinks increased from 2010 to 2013 and again from 2013 to 2018. Sports drink brands increased their investment in advertising to Hispanic consumers, while regular soda/soda brands represented the majority of sugary drink advertising on Spanish-language TV.
- Relative to Hispanic children and teens, Hispanic preschoolers continued to view more sugary drink ads on Spanish-language TV in 2018 than older children or teens.
- Disparities between Black and White youth exposure to sugary drink and energy drink ads persist. In 2018, Black youth viewed more than twice the number of sugary drink ads than White youth viewed, although they watched just 40% to 80% more TV than their White peers.
- Apparent increases in targeted advertising for regular soda/soda brands and sports drinks raise concerns due to disproportionately high consumption of sugary drinks overall and sports drinks in particular by Hispanic and Black youth.

Recommendations

This report highlights potential actions key stakeholders – including industry leaders, policymakers, advocates, and healthcare providers – should take to support public health efforts to reduce consumption of sugary drinks, especially among youth and in communities of color.

Beverage manufacturers, retailers, and media companies must reduce marketing of sugary drinks and support public health efforts to make healthier choices the easiest, most affordable, and most socially acceptable options for young people:

- Current industry self-regulatory initiatives – including the American Beverage Association’s Guidelines on Marketing to Children and the Children’s Food and Beverage Advertising Initiative (CFBAI) – should expand their pledges to restrict sugary drink advertising to children up to at least age 14.
 - Energy drink companies must discontinue marketing and sales to children under 18 due to the dangers these products pose to young people’s health and wellbeing.²⁴
 - Companies participating in the Balance Calories Initiative²⁵ must devote the majority of their advertising expenditures to healthier beverages.
 - Industry commitments to increase sales and marketing of healthier products should address marketing of sugary drinks in Black- and Hispanic-targeted media and in communities of color.
 - Media companies that own programming with large audiences of teens, including Black and/or Hispanic youth, should reduce sugary drink advertising during targeted programming.
 - All corporate responsibility initiatives to promote nutrition and/or health and wellness should also address targeted marketing of sugary drinks to communities of color. These initiatives are even more urgent now given the disproportionate effects of COVID-19 on Black and Latino communities.
- Federal, state, and local policy actions are necessary to further reduce sugary drink consumption by children and teens and counteract excessive sugary drink advertising:
- States and localities should enact excise taxes on sugary drinks and invest the resulting revenue in community-defined programs and services to reduce health and socioeconomic disparities.
 - State and local governments should enact further limits on sugary drink marketing in schools and other youth-oriented settings.²⁶
 - The U.S. Food and Drug Administration (FDA) should establish regulations to address unclear labeling practices, such as requiring disclosures of added sugars, zero-calorie sweeteners, juice, and caffeine content on the front of product packages.
 - States and local municipalities should prohibit the sales of energy drinks and shots to children under age 18 and require they be placed in low-visibility locations (such as behind counters).
 - Health warnings on sugary drink products would also increase consumer awareness and understanding about the health consequences of consuming added sugars and help address misperceptions about the healthfulness of

some sugary drink categories (e.g., sports drinks, flavored water).

- The U.S. federal government should eliminate unhealthy food and beverage marketing to children as a tax-deductible corporate expense.
- Public health campaigns to reduce sugary drink consumption should highlight that sports drinks, iced tea, flavored water, and fruit drinks are also sugary drinks, and that these products can contain as much or more sugar than soda. Campaigns should also inform youth and parents about the dangers of consuming energy drinks.

Public health advocates and health practitioners also play an important role:

- Grassroots and other advocacy groups should develop campaigns to highlight excessive advertising of sugary drinks, especially advertising that disproportionately targets teens and communities of color. Advocates should also work with young people to create counter-marketing campaigns to expose predatory sugary drink marketing practices.
- Healthcare professional organizations should develop campaigns aimed at children and teens to raise awareness about these harms, especially for sugary drinks that are

perceived to be healthier than soda (e.g., sports drinks, iced tea, and flavored water) and energy drinks.

- Pediatricians, dentists, registered dietitians, and other healthcare professionals should assess sugary drink and energy drink consumption by their patients and counsel them about the harmful effects of consuming these products.

Conclusions

Reducing sugary drink consumption is a key public health strategy to address the epidemic of diet-related diseases that threaten young people's health and contribute to health disparities in communities of color. However, beverage companies have substantially increased their advertising of sugary drinks, primarily full-calorie regular soda, sports drinks, iced tea, and energy drinks – exceeding \$1 billion in advertising in 2018. Furthermore, companies continue to target much of this advertising to teens and Hispanic and Black youth. Sugary drink advertising continues to undermine public health. To demonstrate that they are committed to addressing the negative impact of sugary drink consumption, beverage companies must do more than market low-calorie drinks. They must discontinue extensive marketing of sugary drinks that encourages consumption by children and teens and contributes to long-term negative impacts on their health.

Additional resources

- Nutrition and ingredient information about specific varieties and sizes of sugary drinks, energy drinks, and children's drinks are available [here](#).
- Examples of social media campaigns sponsored by sugary drink brands using common techniques that appeal to youth are available [here](#).