

These analyses examine the nutrition and advertising of sugary drinks and energy drinks, including nutrition and ingredient information for advertised products; total advertising spending and exposure to TV advertising by preschoolers, children, and teens; and advertising targeted to Hispanic and Black youth. We report results by category, company, and brand.

The drink categories examined in this report include sugary drinks (regular soda, fruit drinks, flavored water, sports drinks, and iced tea) and energy drinks and shots (including products with and without added sugar). The sugary drink and energy drink brands analyzed each spent over \$100,000 on advertising in 2018. These analyses exclude children's sugary

drinks (fruit drinks and flavored water) that were previously reported in the Rudd Center's 2019 Children's Drink FACTS report.¹ Diet soda and other diet drinks are not included in the nutrition analyses, but advertising data are reported for comparison purposes.

SUGARY DRINK MARKET

Product terms	Definition
Company	The company listed on the product package or that owns the official website for the product.
Brand	The main marketing unit for the product (e.g., Sprite, 5-hour Energy).
Sub-brand	A subset of products within a brand, including variations of brand names (e.g., Mtn Dew original and Mtn Dew Kickstart); and/or products that differ by product category (e.g., Snapple Iced Tea, Snapple Fruit Drinks) and/or nutrition content (e.g., Coke Classic, Coke Life). Products with significant amounts of advertising spending are also included as separate sub-brands (e.g., Sprite Cranberry).
Category	The type of beverage (e.g., regular soda, fruit drink).
Variety	Each specific flavor and package size for each sub-brand.
Drink categories	Definition
Sugary drinks	Drinks that contain added sugar in any amount. These drinks may contain zero-calorie sweeteners, in addition to added sugar.
- Flavored water	Non-carbonated drinks that are described as "water beverage" on the product packaging or that include "water" in the product name. Children's flavored water brands are excluded from this report.
- Fruit drinks	Fruit-flavored drinks with added sugar that may or may not contain some juice. These products are also referred to by manufacturers as juice drinks, juice beverages, fruit cocktails, nectars, and fruit flavored drinks/beverages. Children's fruit drinks are excluded from this report.
- Iced tea	Ready-to-serve drinks and drink mixes that are primarily described as "tea" on the product package and typically served cold.
- Regular soda	Carbonated soft drinks with any amount of added sugar.
- Sports drinks	Drinks marketed as intended to accompany physical activity and/or to improve hydration or performance. They may contain the phrase "sport drink" on product packaging or in promotion materials.
Energy drinks	Caffeinated beverage products labeled by the manufacturer as "energy drink" or "energy supplement." This category includes carbonated varieties in cans, with or without added sugar, as well as concentrated energy shots sold in 1.93 ounce containers.
Diet soda	Carbonated soft drinks that contain zero-calorie sweeteners and no added sugar.
Other diet drinks	Fruit drink, flavored water, sports drink, and iced tea products that do not contain added sugar. They often contain zero-calorie sweeteners, but not always.

A total of 48 brands of sugary drinks and energy drinks from 24 companies each spent more than \$100,000 in total advertising in 2018 to qualify for inclusion in this analysis. Seven companies advertised sugary drink brands in more than one drink category (see **Table 1**). Three companies—Coca-Cola, PepsiCo, and Dr Pepper Snapple Group—were responsible for 44% of all brands and 52% of all sub-brands analyzed. Coca-Cola had the most brands (n=10), including four regular soda brands, and was the only company with drink brands in every category. PepsiCo had the greatest number of sub-brands (n=17). Of

note, two energy drink brands also advertised regular soda products in 2018 (Monster Mutant Super Soda and Red Bull Organics), although Monster Mutant Super Soda has since been discontinued.

The remaining 17 companies advertised brands in just one drink category (see **Table 2**). They include seven energy drink, five regular soda, two iced tea, two fruit drink, and one sports drink company. Among the single-category companies, Rockstar energy drink had the most sub-brands (n=4).

Table 1. Companies with brands in multiple categories

Company	# of brands (sub-brands)	Brands (sub-brands) by category					
		Regular soda	Flavored water	Iced tea	Energy drink *	Sports drink	Fruit drink
Coca-Cola	10 (16)	Coke (Classic, Life), Fanta, Mello Yello, Sprite (Original, Cranberry)	Glacéau Vitaminwater	Gold Peak (Iced Tea, Slightly Sweet), Honest Tea (Iced Tea, Just a Tad Sweet)	NOS (Original, Sugar Free)	Powerade (Ion4)	Simply (Fruit Drink, Light)
PepsiCo	5 (17)	Mtn Dew (Original, ICE, Kickstart, Spiked), Pepsi (Original, True), Sierra Mist				Gatorade (Original, Flow, Frost, G2, Original Powder, G2 Powder, Endurance Formula Powder)	Tropicana (Fruit Drink, Premium, Trop50 Lemonade)
Dr Pepper Snapple Group	6 (13)	7-Up, Canada Dry (Ginger Ale, Ginger Ale & Lemonade, Ginger Ale & Orangeade, Fruit Flavored Soda), Dr Pepper (Original, Cherry, Ten), Penafiel (Mineral Spring Water, Twist)		Snapple (Iced Tea, Straight Up Tea)			Snapple (Fruit Drink)
Pepsi Lipton	4 (7)			Brisk, Lipton (Iced Tea, Splash of Juice, Iced Tea Mix), Pure Leaf (Iced Tea, Organic Tea House Collection)			Brisk
Hansen Beverage	2 (6)	Monster (Mutant Super Soda) **			Monster (Original, Lo-Carb, Zero, Juice, Rehab)		
Red Bull	2 (3)	Red Bull (Organics)			Red Bull (Original, Sugar Free)		
Kill Cliff	2 (2)				Kill Cliff (Ignite)	Kill Cliff (Endure)	

*Includes zero-sugar products

**Product has been discontinued

Source: Product analysis (March 2020)

Table 2. Companies with brands in one drink category

Company	Category	Brand (sub-brand)
Anheuser-Busch Inbev	Energy drink*	Hiball
BA Sports Nutrition	Sports drink	BodyArmor
Carolina Beverage	Regular soda	Cheerwine
Celsius	Energy drink*	Celsius
Glanbia	Energy drink*	BSN Endorush
Gosling Brothers	Regular soda	Stormy Ginger Beer
Innovation Ventures	Energy drink*	5-hour Energy (Original, Tea)
Interstate Beverage	Regular soda	Jarritos
Milo's Tea	Iced tea	Milo's (Iced Tea, M59)
National Beverage Corp	Regular soda	Faygo
Nestle	Fruit drink	Sanpellegrino (Fruit Beverage, Momenti, Organic)
Ocean Spray Cranberries	Fruit drink	Ocean Spray (Fruit Drink, Light)
Rockstar	Energy drink*	Rockstar (Original, Sugar-Free, Pure Zero, Xduration)
Snow Beverages	Regular soda	Snow**
Sunshine Beverages	Energy drink	Sunshine
Wonderful	Iced tea	Pom Wonderful (Antioxidant Super Tea)
Zevia	Energy drink*	Zevia

*Includes zero-sugar products

**Product was discontinued

Source: Product analysis (March 2020)

NUTRITION CONTENT

Nutrition content	Definition
Serving size	For each variety of each sub-brand in our analysis, we report nutrition for a 12-ounce serving (when sold in 12-oz single-serve containers), or for the available single-serve container size closest to 12 ounces. If varieties were only available in multi-serve containers, we report nutrition for a 12-ounce serving.
Nutrition information	Information analyzed includes calories (kcal) and sugar (g) per serving, as reported on nutrition facts panels. Median and range per serving are reported by brand/sub-brand and category.
Ingredient information	When available, juice (%), caffeine (mg), and zero-calorie sweeteners (whether or not the product contains them) are reported. Zero-calorie sweetener information was obtained from the product ingredient lists. Caffeine and percent juice were obtained from additional information provided by manufacturers on labels and/or websites.
Zero-calorie sweeteners	All nonnutritive sweeteners, including artificial sweeteners (acesulfame potassium, aspartame, sucralose, and neotame), natural sweeteners (stevia, also called rebiana or Reb A, and Luo Han Guo [monk fruit] extract), and sugar alcohols (erythritol).

In this section, we report calories, total sugar, caffeine, and juice content of sugary drinks and energy drinks and indicate products with zero-calorie sweeteners when information was available. We analyze nutrition content by sub-brand and summarize by drink category.

Obtaining nutrition and ingredient information

Beverage company websites provided nutrition and ingredient information for the majority of drink products. PepsiCo, Coca-Cola, and Dr Pepper Snapple Group all maintained websites with complete nutrition and ingredient information for almost all

Nutrition and ingredient information about specific varieties and sizes of sugary drink and children's drink brands are available [online](#).

products. The majority of other companies provided nutrition facts panel information on their websites, with a few exceptions. The websites for regular soda brands Faygo and Jarritos did not have any nutrition information for any products. Energy drink brands Monster, Red Bull, and Rockstar listed caffeine amount and in some cases minimal ingredient information, but did not provide nutrition facts panels or full ingredient lists. A number of companies did not provide ingredient lists, percent juice, and/or caffeine content for all brands, including Ocean Spray, Wonderful, and Carolina Beverage.

When information was missing from company websites, researchers obtained the nutrition facts panel information from product packages in local stores. Some products had to be ordered online because they could not be found in local stores. If researchers could not locate product packages, they contacted company customer service representatives via telephone to obtain the necessary information. However, we could not locate nutrition information for all varieties of some sub-brands. In those instances, we report medians for the available varieties.

Nutrition content by sub-brand

Ranking Table 1 ranks each sub-brand first by median sugar content, then by median calorie content, then by maximum sugar content. Median percent juice and caffeine content are also reported, as well as whether any products contained zero-calorie sweeteners. Medians and ranges were calculated based on available single-serve containers for each variety within each sub-brand, using the 12-ounce container or the container that was closest to 12 ounces. If a single-serve container was not available for a variety, then nutrition for a 12-ounce serving was reported based on the information from the multi-serve container. (See Methods for details on how reported serving size was determined.)

Nutrition content by drink category

Table 3 summarizes the nutrition content for sugary drinks and energy drinks by category. The energy drink category was

divided into sugar-sweetened and zero-sugar sub-brands. Energy drinks and regular soda had the most calories, with a median of 43.5 and 37 grams of sugar per serving, respectively (approximately 11 and 9 teaspoons). Most regular soda sub-brands were available in 12-ounce cans, while the majority of energy drinks came in 16-ounce cans. Flavored water and iced tea sub-brands had somewhat less sugar, a median of 27 and 25.5 grams respectively. These products also tended to come in larger single-serve containers, a median of 20 ounces for flavored water and 16.9 ounces for iced tea. Fruit drinks and sports drinks had the lowest median sugar content at 23 and 21 grams per 12-ounce serving.

Energy drinks. Sugar-sweetened energy drinks with the most calories and sugar included Rockstar (260 kcal, 61.5 g sugar/16 oz), Monster (230 kcal, 54 g sugar/16 oz), and NOS Original (210 kcal, 53 g sugar/16 oz). Although some energy drinks offered their products in smaller-sized containers (for example, Red Bull and Sunshine were available in 8.4-oz containers), the smallest single-serve container for the majority of these products was 16 ounces. Of note, some energy drinks listed nutrition information for 8 ounces on 16-ounce non-resealable cans of carbonated drinks.

Despite their high sugar content, 88% of sugar-sweetened energy drink sub-brands also contained zero-calorie sweeteners. Only Red Bull original did not contain zero-calorie sweeteners. Most zero-sugar energy drinks also contained zero-calorie sweeteners (92%). However, one brand, Hiball Energy Drink, marketed the product as a “sparkling energy water” and had no added sweeteners (but 160 mg of caffeine per 16-oz serving).

The median caffeine content across all energy drink sub-brands was 160 milligrams. The product with the highest caffeine content in our analysis was BSN Endorush with 350 milligrams of caffeine in a 16-ounce serving. This product has since been discontinued. Other highly caffeinated energy drinks include Rockstar Xduration (300 mg/16 oz), Rockstar Pure Zero (240 mg/16 oz), Rockstar Punched (240 mg/16 oz), and 5-hour Energy Extra Strength (230 mg/1.93 oz).

Table 3. Sugary drink nutrition by category

Category	# of brands (sub-brands)	Serving size (oz)		Calories (kcal)		Sugar (g)		Caffeine (mg)		Zero-calorie sweeteners
		Median	Range	Median	Range	Median	Range	Median	Range	% of sub-brands
Energy drink (sugar-sweetened)	5 (8)	16	8.4-16	182.5	20-260	43.5	4-62	159	50-200	88%
Regular soda	16 (28)	12	8.4-20.3	140	10-310	37	2-81	0	0-92	29%
Flavored water	1 (1)	20	--	100	100-120	27	26-32	0	0-50	0%
Iced tea	8 (15)	16.9	12-20	100	25-240	25.5	5-64	33	0-94	40%
Fruit drink	6 (12)	12	6.75-20	102.5	35-230	23	7-54	0	--	33%
Sports drink	4 (10)	12	12-20	80	30-140	21	7-34	0	--	30%
Energy drink (zero-sugar)	10 (13)	16	1.93-16	0	0-30	0	--	160	100-350	92%

Source: Nutrition analysis (March 2020)



16-ounce cans of Monster, Rockstar Punched, and NOS energy drinks contain 210 or more calories and over 50 grams of sugar, plus zero-calorie sweeteners, caffeine, and other stimulants.

Regular soda. Although regular soda products had lower median sugar content than energy drinks, some regular soda sub-brands had more calories and sugar than energy drinks, including Mello Yello (290 kcal, 77 g sugar/20-oz) and Canada Dry fruit-flavored soda varieties (270 kcal, 72 g sugar/20-oz). Canada Dry Island Lime Soda had the most calories and sugar of any product in our analysis —310 calories and 81 grams of sugar in one 20-ounce container. Stormy Ginger Beer (180 kcal, 47 g sugar/12-oz) and Mtn Dew (170 kcal, 46 g sugar/12-oz) also had higher than average sugar content.

Of the 28 regular soda sub-brands analyzed, 29% contained zero-calorie sweeteners plus added sugar. These products ranged from 2 grams of sugar in Dr Pepper Ten (12-oz serving) to 41 grams of sugar in orange-flavored Faygo (12-oz serving). In addition, 15 regular soda sub-brands offered varieties that contained caffeine, in amounts ranging from 9 to 54 milligrams per 12-ounce serving. Mtn Dew Kickstart was unique with up to 69 milligrams of caffeine per 12-ounce container, 15 grams of sugar, zero-calorie sweeteners, and 5 to 10% juice.

Flavored water and iced tea. Only one brand of flavored water was advertised in 2018: Glaceau Vitaminwater. These products had 26 to 32 grams of sugar per 20-ounce container and did not contain zero-calorie sweeteners or juice. Two varieties contained caffeine.

Iced tea sub-brands had some of the largest reported serving sizes (16-, 16.9- and 18.5-ounce containers were common). Although they tended to be somewhat lower in calories and sugar, some iced tea products had comparable amounts of sugar to regular soda. For instance, Pure Leaf Extra Sweet Tea contained 240 calories and 64 grams of sugar per 18.5-ounce serving, and Snapple Half 'N Half contained 210 calories and 51 grams of sugar per 16-ounce serving.

In addition, 40% of iced tea sub-brands had products with zero-calorie sweeteners plus added sugar. The majority of

iced tea products contained moderate amounts of caffeine (median 33 mg). Honest Tea Honey Green Tea had the most caffeine (94 mg/16.9-oz) in any iced tea product.

Fruit drinks. Fruit drinks had lower median sugar content than other categories, but most contained very little juice. Median percent juice for all sub-brands in this category was 12% and ranged from 1 to 27.5%. Roughly 40% had 10% juice or less. Fruit drink sub-brands with the highest median calories and sugar were Tropicana Fruit Drink (195 kcal, 45 g sugar/15.2-oz, 27.5% juice) and Snapple Fruit Drink (190 kcal, 46 g sugar/16-oz, 10% juice).

One-third of fruit drink sub-brands offered products that contained both zero-calorie sweeteners and added sugar, including Trop50 Lemonade, Ocean Spray Light, and Simply Light. Brisk fruit drinks had zero-calorie sweeteners and only 1 to 5% juice, but were not labeled as a light product. Sanpellegrino Momenti was the lowest-sugar sugary drink in our analysis (7 g/11.15-oz) that did not contain zero-calorie sweeteners.

Sports drinks. Although sports drinks had the lowest median calories of any sugary drink category, many contained substantial amounts of sugar, up to 34 grams in 20 ounces of Gatorade Frost and Gatorade Flow. In addition, 30% of sports drink sub-brands had products with zero-calorie sweeteners plus added sugar. Gatorade G2 was the lowest-calorie sports drink in our analysis (7 g sugar/12-oz container), but it also contained zero-calorie sweeteners.



Some single-serve bottles of iced tea and fruit drinks contained more sugar and calories than most cans of regular soda.

Nutrition content summary

Sugar-sweetened energy drinks and regular soda had the highest median sugar content in our analysis at 43.5 grams per 16-ounce serving and 37 grams per 12-ounce serving, respectively. Canada Dry Island Lime Soda had the most calories and sugar of all products analyzed, with 310 calories and 81 grams of sugar in a 20-ounce container. Products in other categories had somewhat less sugar, including flavored water (27 g/20 oz), iced tea (25.5 g/16.9-oz), fruit drinks (23 g/12 oz), and sports drinks (21 g/12 oz). A number of sub-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.

This analysis identified some unusual products. Two energy drink companies advertised regular soda brands in 2018 (Monster Mutant Super Soda and Red Bull Organics), but Monster Mutant Super Soda has since been discontinued. Hiball Energy Drink described itself as a “sparkling energy water.” It contained 160 milligrams of caffeine per 16 ounces, but no added sugar or zero-calorie sweeteners.

ADVERTISING

In this section, we report 2018 advertising data by category, company, and brand for products in the drink categories included in this report: regular soda, sports drinks, energy drinks, iced tea, fruit drinks, and flavored water (excluding children’s drinks). We also assess changes from 2010 and 2013 (reported in Sugary Drink FACTS 2014²) when data were available. For comparison purposes, some analyses also include advertising for diet and unsweetened drinks. We first report advertising spending results and then exposure to TV advertising by preschoolers (2-5 years), children (6-11 years), and teens (12-17 years).

The advertising analyses include two additional categories: soda brand and drink brand ads. Soda brand advertising promoted a brand of soda but did not specify a regular or diet product. In some cases, soda brand ads only promoted a brand logo, while others featured both regular and diet varieties of the brand in the same ad. Drink brand ads featured a brand in one of the other drink categories that was available in both sugar-sweetened and diet varieties. These ads featured both sugar-sweetened and diet varieties or did not specify a variety. Drink brand ads also include company-level ads that promoted more than one brand from a company (e.g., Coca-Cola company brands).

Advertising spending

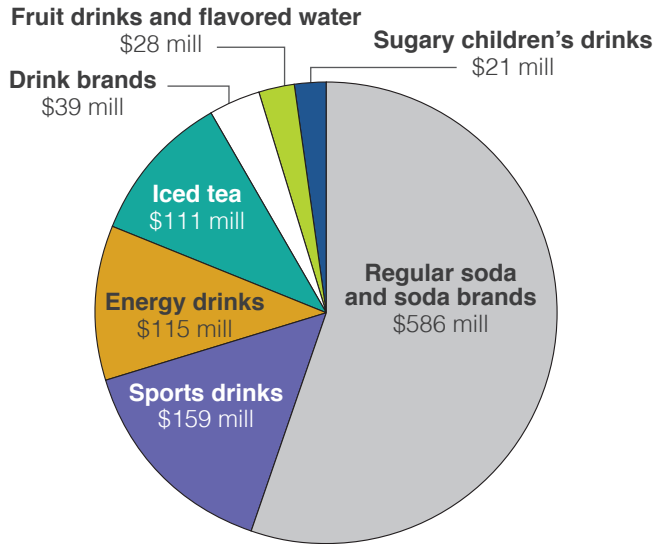
Advertising spending	Definition
Advertising spending	Amount spent on all advertising in measured media, including TV, magazines, digital (i.e., internet and mobile), radio, newspapers, free standing insert (FSI) coupons, and outdoor advertising.
Soda brand ads	These ads promote a brand of soda, but do not specify a regular or diet variety. This category also includes ads that promote both regular and diet varieties together.
Drink brand ads	These ads promote a sugary drink brand, but do not specify a sugar-sweetened or diet variety (e.g., Snapple ads). This category also includes brand-level ads that feature both regular and diet varieties and company-level ads that feature multiple brands.

In 2018, 24 beverage companies spent \$1,038 million – more than \$1 billion – to advertise sugary drinks and energy drinks, excluding children’s drinks (see **Figure 1**). As reported previously, advertising for children’s sugary drinks (fruit drinks and flavored water) totaled \$21 million in 2018, less than 5% of total sugary drink advertising expenditures.³ More than one-half of sugary drink ad expenditures promoted regular soda and soda brands (\$586 mill), while sports drinks, energy drinks and shots, and iced tea each spent more than \$100 million. Fruit drinks and flavored water combined (excluding children’s

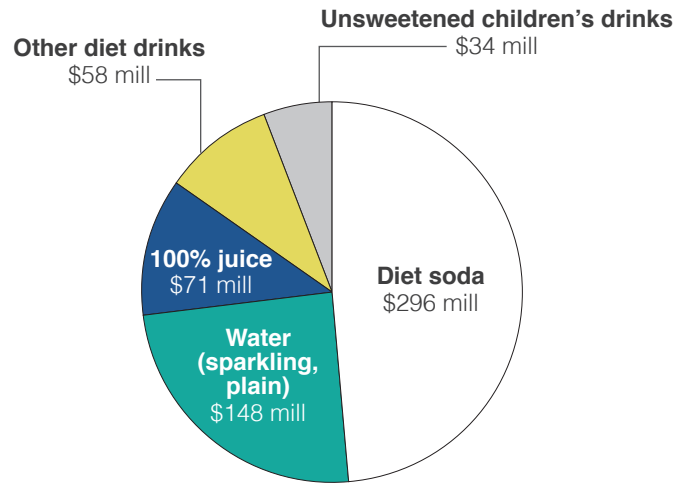
drinks) spent just \$28 million. Companies also spent \$39 million in drink brand ads (e.g., Snapple brand ads or Coca-Cola ads for multiple company brands).

In comparing all categories of refreshment beverages (including diet and unsweetened drinks), sugary drinks represented approximately two-thirds (64%) of total ad spending. Companies spent \$607 million to advertise diet and unsweetened drinks, including diet soda and other diet drinks, unsweetened water (plain and sparkling), and 100% juice.

Figure 1. Total ad spending by category: 2018



All sugary drink categories: \$1,059 million*



Diet and unsweetened drink categories: \$607 million

*Includes children's sugary drinks
Source: Analysis of 2018 Nielsen data

Diet soda represented approximately one-half (49%) of ad expenditures in these categories, followed by unsweetened (plain and sparkling) water at 24%. However, regular soda outspent diet soda by 78%. In addition, sports drinks spent slightly more than unsweetened water.

From 2013 to 2018, total advertising spending for the sugary drink and energy drink categories in this report increased by 26%, following a 3% decline from 2010 to 2013. However, changes in ad spending varied widely by category (see **Figure 2**). From 2013 to 2018, regular soda/soda brand advertising increased by 41%, following a slight decline from 2010 to 2013. Of note, diet soda advertising also increased by 41% from 2013 to 2018

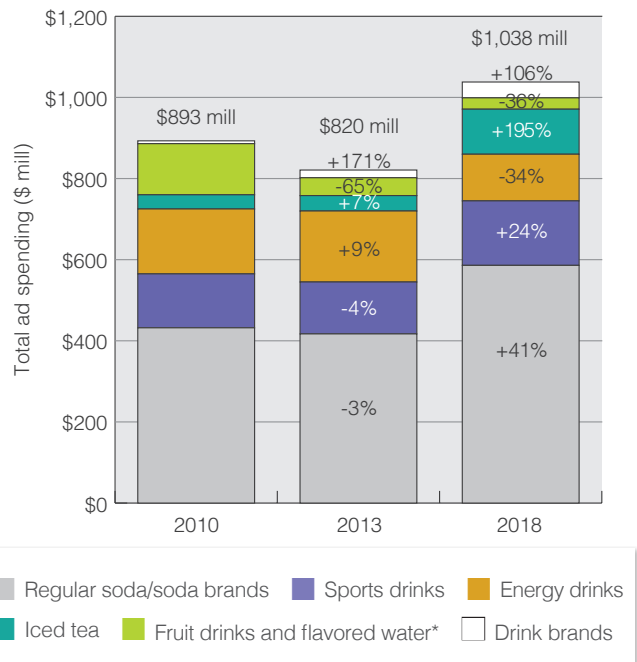
Advertising spending for iced tea had the biggest increase, almost tripling from 2013 to 2018, while sport drink ads increased by 24%. On the other hand, energy drink ad spending declined by 34%, and fruit drink ad spending went down 5% (totaling \$27 million in 2018). Sugar-sweetened flavored waters spent just \$1.4 million to advertise in 2013, compared to \$16 million in 2018. As previously reported, advertising for sweetened children's drinks also declined by 42% during this same time.⁴

Spending by media type

TV remained the primary type of media used to promote sugary drinks and energy drinks in 2018. Companies devoted 84% of total advertising expenditures to TV (see **Figure 3**). This proportion was similar to TV expenditures in 2013 (85% of total ad spending).⁵ Digital, magazine, outdoor, and radio ads each represented 3 to 4% of total ad spending in 2018.

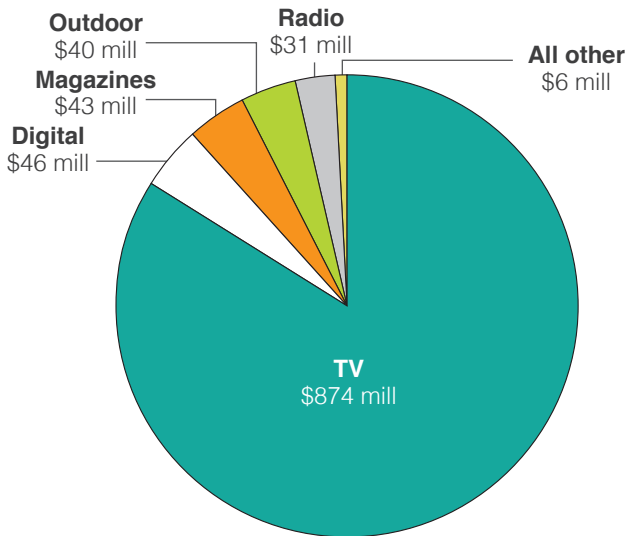
However, the distribution of ad spending across media types differed by category (see **Table 4**). Regular soda, energy drinks, and fruit drinks each allocated approximately 90% or more of their advertising to TV, followed by sports drinks and

Figure 2. Changes in ad spending by category: 2010-2018



*Excluding children's drinks
Source: Analysis of 2018 Nielsen data, Sugary Drink FACTS 2014

Figure 3. Ad spending by media type: 2018



Source: Analysis of 2018 Nielsen data

iced tea (approximately 80%), and soda brands and drink brands (over 60%). The majority of flavored water advertising occurred in magazines, and sports drinks and iced tea also allocated almost 15% of expenditures to magazine ads. Regular soda also spent \$26 million on radio advertising and \$16 million on outdoor ads. Both soda brands and drink brands spent more than 25% of their budgets on outdoor advertising. Digital advertising represented a significant expenditure for all categories except iced tea and flavored water, including approximately 25% of soda brand and drink brand ad spending and 9% for energy drinks.

Advertising spending by company

The two largest beverage companies – Coca-Cola and PepsiCo – were responsible for 69% of advertising expenditures for all categories of sugary drinks and energy drinks in 2018, including 80% of regular soda/soda brand advertising. Dr Pepper Snapple Group was responsible for another 13% of expenditures. The remaining 21 companies in our analysis combined represented



5-hour Energy spent over \$5 million in digital advertising and Gatorade spent \$22 million in magazine advertising, the most highly advertised brands in these media.

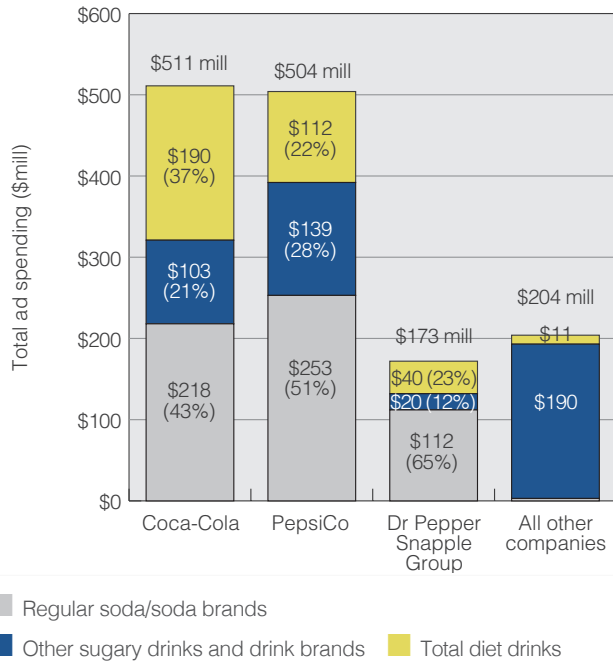
19% of sugary drink and energy drink advertising spending in 2018, including \$60 million by Innovation Ventures (5-hour Energy shots), \$54 million by Pepsi Lipton (a joint venture between PepsiCo and Unilever for tea brands), and \$47 million by Red Bull (energy drinks and regular soda).

Table 4. Ad spending by drink category and media type: 2018

Category	Ad spending in 2018 (\$000)					
	TV	TV % of spending	Digital	Magazine	Radio	Outdoor
Regular soda	\$469,176	90%	\$11,253	\$1,118	\$26,427	\$16,118
Sports drink	\$127,731	81%	\$7,500	\$22,783	\$191	\$409
Energy drink	\$102,004	89%	\$9,575	\$750	\$1,653	\$1,157
Iced tea	\$89,840	81%	\$650	\$16,347	\$798	\$2,906
Soda brand	\$36,558	61%	\$8,985	\$211	\$898	\$13,452
Drink brand	\$23,496	64%	\$5,970	\$383	\$784	\$6,027
Fruit drink	\$25,425	94%	\$1,486	\$0	\$0	\$0
Flavored water	\$169	12%	\$126	\$885	\$0	\$248

Source: Analysis of 2018 Nielsen data

Figure 4. Ad spending by company: 2018



Source: Analysis of 2018 Nielsen data



Both Coke Classic and Pepsi spent more than \$10 million in radio ads and more than \$7 million in outdoor advertising, in addition to over \$100 million in TV ads.

Companies varied in the proportion of expenditures devoted to sugary drinks versus diet drinks (see **Figure 4**). Both Coca-Cola and PepsiCo spent just over \$500 million to advertise sugary drinks and diet drinks combined. However, PepsiCo devoted 78% of expenditures to sugary drinks, compared to 63% for Coca-Cola. Similar to PepsiCo, Dr Pepper Snapple Group allocated 76% of its spending to sugary drinks. Therefore, PepsiCo and Dr Pepper Snapple Group spent more than three times as much to advertise sugary drinks compared to diet drinks (3.5 and 3.3), while Coca-Cola spent 1.7 times

as much on sugary drinks. PepsiCo spent more to advertise sugary drinks (\$390 million) than any other company.

From 2013 to 2018, the three major beverage companies all increased their spending on sugary drink advertising (see **Table 5**). Coca-Cola had the biggest spending increase overall (+81%), while PepsiCo and Dr Pepper Snapple Group increased their total spending by 21% and 16%, respectively. Pepsi Lipton tripled its advertising spending on sugary drinks during this time. In contrast, advertising for Innovation Ventures declined by 39% and Red Bull spending did not

Table 5. Changes in ad spending by company and sugary drink category: 2010-2018

Company	Category	Total advertising spending (\$000)			% change 2013-2018
		2010	2013	2018	
PepsiCo	Regular soda and soda brands	\$95,104	\$195,870	\$252,771	29%
	Other sugary drinks and drink brands	\$118,526	\$125,695	\$137,890	10%
Coca-Cola	Regular soda and soda brands	\$202,545	\$133,010	\$217,820	64%
	Other sugary drinks and drink brands	\$49,216	\$44,645	\$102,986	131%
Dr Pepper Snapple Group	Regular soda and soda brands	\$111,302	\$86,040	\$112,190	30%
	Other sugary drinks and drink brands	\$8,766	\$28,194	\$20,236	-28%
Innovation Ventures	Energy drink	\$107,006	\$98,842	\$60,452	-39%
Pepsi Lipton	Iced tea and drink brands	\$17,284	\$18,004	\$54,056	200%
Red Bull	Energy drink and regular soda	\$25,974	\$47,773	\$47,057	-1%

Source: Analysis of 2018 Nielsen data

change. PepsiCo was the only top-three company that had also increased advertising spending on sugary drinks from 2010 to 2013 (+51%); both Coca-Cola and Dr Pepper Snapple Group reduced their spending during that time.

From 2013 to 2018, PepsiCo increased ad spending on regular soda/soda brands at a greater rate than its other sugary drink brands, while Dr Pepper Snapple Group increased spending on soda and reduced spending on its other brands. In contrast, Coca-Cola increased spending on soda by 64% and more than doubled spending on other sugary drink advertising. Changes in spending on regular soda and soda brands since 2010 are also notable. PepsiCo spent 2.7 times more to advertise regular soda and soda brands in 2018 than in 2010. In contrast, both Coca-Cola and Dr Pepper Snapple Group decreased spending on these categories from 2010 to 2013 and then increased spending from 2013 to 2018. As a result, advertising expenditures for regular soda and soda brands were just slightly higher in 2018 than in 2010: +8% for Coca-Cola and +1% for Dr Pepper Snapple Group.



Vitaminwater Zero and Simply Light were the only diet or low-calorie drinks with more advertising than full-calorie varieties of the brand.

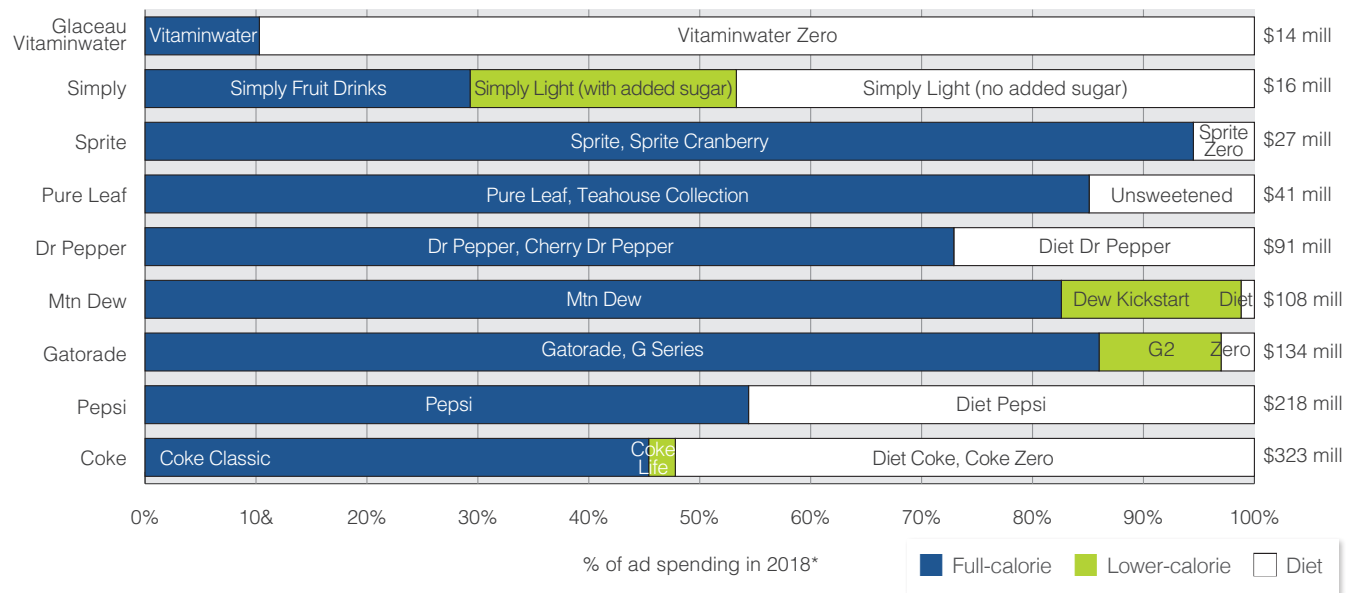
Advertising spending by brand

Ranking Table 2 details advertising spending for all sugary drink and energy drink brands analyzed. Three regular soda and one sports drink brand dominated sugary drink advertising in 2018. Each spent more than \$100 million and together they represented 49% of all sugary drink advertising expenditures: Coke (\$154.4 million), Gatorade (\$133.6 mill), Pepsi (\$118.3 mill), and Mtn Dew (\$106.6 mill). Four additional brands spent

more than \$30 million: Dr Pepper regular soda (\$66.8 mill), 5-hour Energy and Red Bull energy drinks (\$60.5 and \$47.1 mill, respectively), and Pure Leaf iced tea (\$35.3 mill). Nine additional brands spent from \$10 to \$30 million in advertising in 2018.

Some energy drink brands advertised new varieties that were not traditional energy drinks. Both Red Bull and Monster advertised regular soda drinks (Red Bull Organic and Monster Mutant Super Soda), although Monster has since discontinued its soda brand. 5-hour Energy also advertised 5-hour Tea

Figure 5. Proportion of ad spending on lower-calorie and diet sub-brands: 2018*



*Brands that spent more than \$1 million on advertising for diet and/or low-calorie sub-brands and more than \$10 million in total. Excludes brand-level and company-level spending.

Source: Analysis of 2018 Nielsen data

energy shots, with “caffeine derived from green tea leaves.” Snapple was the only other major brand to advertise products in more than one category (iced tea and fruit drinks).

Four of the most-advertised brands (those spending \$10 million or more) advertised lower-calorie sub-brands with less sugar (plus zero-calorie sweeteners) than their full-calorie varieties (Coke Life, Gatorade G2, Mtn Dew Kickstart, and Simply Light). These sub-brands are included in sugary drink brand spending numbers. Many brands also offered diet (i.e., zero-sugar) varieties, and 5-hour Energy shot is only available without sugar.

Three Coca-Cola brands were the only brands to allocate more than 50% of their advertising to low-calorie and/or diet versions (see **Figure 5**): Coke devoted 55% of advertising to its diet varieties (Coke Zero and Diet Coke); Simply devoted 24% of advertising to Simply Light fruit drinks that contained added sugar (e.g., Simply Lemonade) and 47% to Simply Light fruit drinks with zero-calorie sweeteners and no added sugar (e.g., Simply Orange); and Glaceau Vitaminwater devoted 90% of advertising spending to Vitaminwater Zero. Of PepsiCo sugary drink brands with diet and/or low-calorie varieties, Diet Pepsi had the highest proportion of brand spending, representing 46% of Pepsi expenditures. All other sugary drink brands with \$10 million or more in total spending devoted 70% or more of their advertising spending to full-calorie products.

The numbers in Figure 5 do not include brand-level advertising, but Coke, Pepsi, Mtn Dew, Dr Pepper, and Sprite also spent more than \$1 million to advertise their brands. These ads featured images of both regular and diet varieties of the brand or just the brand logo (which is consistent across all varieties).

In comparing ad spending in 2013 to 2018, 19 sugary drink brands increased their advertising by \$1 million or more (see **Table 6**). Six of these brands had not advertised in 2013, including Honest Tea iced tea, which spent \$10.9 million in 2018. Three energy drink brands (BodyArmor, Monster, and Celsius) and one regular soda offered by an energy drink brand also advertised in 2018 but not in 2013.

An additional seven brands (five regular soda and two iced tea) increased their advertising spending by \$10 million or more during this time, led by Mtn Dew and Coke regular soda (+\$65.5 million and +\$54.0 million, respectively).

A similar number of brands decreased their advertising spending by \$1 million or more from 2013 to 2018 (see **Table 7**). Nine of these brands advertised in 2013 but not in 2018. SK Energy had spent more than \$20 million to advertise in 2013, but the product is no longer available. However, only three brands reduced their advertising spending by \$10 million or more from 2013 to 2018. 5-hour Energy and Pepsi regular soda had the biggest reductions in dollars spent (\$38 million and \$20 million, respectively), while Glaceau Vitaminwater flavored water reduced its advertising spending by 91%.

Table 6. Brands with the greatest increase in ad spending: 2013-2018*

Company	Brand	Category	Total ad spending (\$000)		\$ (%) change 2013-2018
			2013	2018	
<i>Brands that advertised in 2018 but not 2013</i>					
Coca-Cola	Honest Tea	Iced tea	\$0	\$10,897	
Coca-Cola	Simply	Fruit drink	\$0	\$8,682	
BA Sports Nutrition	BodyArmor	Energy drink	\$0	\$3,607	
Hansen Beverage	Monster	Energy drink	\$0	\$3,280	
Hansen Beverage	Monster	Regular soda	\$0	\$1,365	
Celsius	Celsius	Energy drink	\$0	\$1,016	
<i>Brands with increases in advertising of \$10 million or more</i>					
PepsiCo	Mtn Dew	Regular soda	\$41,112	\$106,613	\$65,500 (159%)
Coca-Cola	Coke	Regular soda	\$100,466	\$154,425	\$53,959 (46%)
Pepsi Lipton	Pure Leaf	Iced tea	\$3,261	\$35,263	\$32,002 (981%)
Coca-Cola	Gold Peak	Iced tea	\$369	\$29,566	\$29,197 (7916%)
Coca-Cola	Sprite	Regular soda	\$4,746	\$25,690	\$20,944 (441%)
Dr Pepper Snapple Group	Canada Dry	Regular soda	\$9,047	\$29,737	\$20,691 (229%)
Dr Pepper Snapple Group	Dr Pepper	Regular soda	\$54,286	\$66,753	\$12,467 (23%)

*Excludes brand-level and company-level spending
Source: Analysis of 2018 Nielsen data

Table 7. Brands with the greatest decrease in ad spending: 2013-2018

Company	Brand	Category	Total ad spending (\$000)		\$ (%) change 2013-2018
			2013	2018	
<i>Brands that advertised in 2013 but not 2018*</i>					
SK Energy Shots	SK Energy	Energy drink	\$20,408	\$0	
Coca-Cola	Seagram's	Regular soda	\$7,651	\$0	
PepsiCo	Sierra Mist	Regular soda	\$6,581	\$0	
Coca-Cola	Fuze	Iced tea	\$6,220	\$0	
Dr Pepper Snapple Group	Sun Drop	Regular soda	\$4,606	\$0	
Campbell Soup Company	V8 Fusion (Refreshers)	Fruit drink	\$3,635	\$0	
Houchens Industries	Tampico	Fruit drink	\$3,411	\$0	
PepsiCo	Manzanita Sol	Regular soda	\$2,364	\$0	
Nestle	Poland Spring (Natures Blends)	Fruit drink	\$1,532	\$0	
<i>Brands with decreases in advertising of \$10 million or more</i>					
Innovation Ventures	5-hour Energy	Energy drink	\$98,842	\$60,452	-\$38,390 (-39%)
PepsiCo	Pepsi	Regular soda	\$139,310	\$118,331	-\$20,979 (-15%)
Coca-Cola	Glaceau Vitaminwater	Flavored water	\$15,603	\$1,429	-\$14,174 (-91%)

*Excludes brand-level and company-level spending

Source: Analysis of 2018 Nielsen data

TV advertising exposure

TV advertising exposure

Definition

Gross ratings points (GRPs)	Measure of the per capita number of TV advertisements viewed by a specific demographic group over a period of time across all types of programming. GRPs for specific demographic groups are also known as targeted rating points (TRPs).
Average advertising exposure	GRPs divided by 100. Provides a measure of the number ads viewed by individuals in a specific demographic group, on average, during the time period measured.
Targeted ratios (vs. adults)	A measure of relative exposure by youth versus adults, calculated by dividing GRPs for preschoolers (2-5 years), children (6-11 years), or teens (12-17 years) by GRPs for adults (18-49 years).

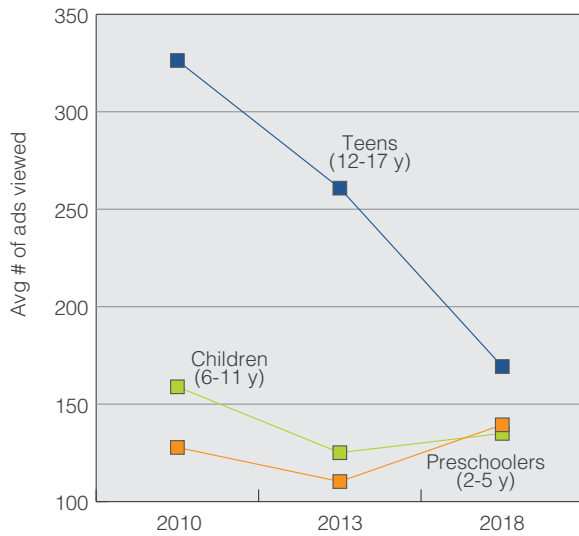
In 2018, just eight companies advertised 23 different sugary drink and energy drink brands (excluding children's drinks) on TV. Preschoolers (2-5 years) and children (6-11 years) viewed on average 139.4 and 135.0 TV ads, respectively, for these brands. As reported in Children's Drink FACTS, they viewed an additional 38.3 and 45.4 ads for children's sugary drinks (fruit drinks and flavored water).⁶ Therefore children saw more than three times as many TV ads for the sugary drink categories in this report, even though brands in these categories did not target their advertising to children directly. Teens (12-17 years) viewed 169.3 TV ads for sugary drinks and energy drinks, in addition to 43.4 ads for children's sugary drinks.

Examination of trends in sugary drink TV advertising reveals an increase in sugary drink and energy drink TV ads viewed by preschoolers (+26%) and children (+8%) from 2013 to

2018, following a decline from 2010 to 2013 (see **Figure 6**). In contrast, TV ads seen by teens declined by 35% from 2013 to 2018, continuing a decline from 2010 to 2013.

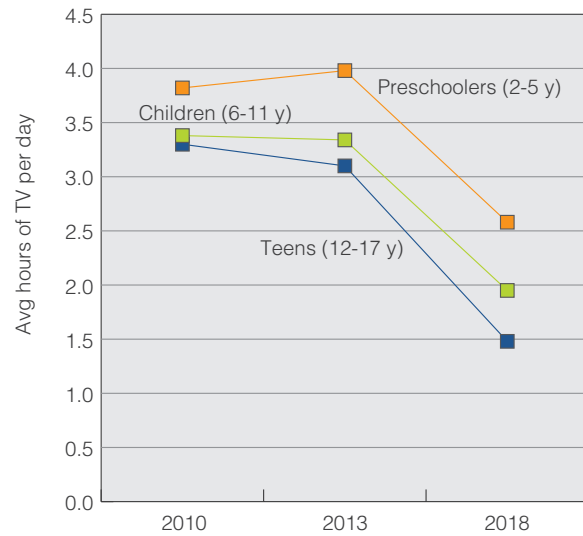
These changes in exposure to TV ads should be examined in the context of large declines in the amount of time that young people spent watching TV from 2013 to 2018 (see **Figure 7**). On average, preschoolers and children spent 35% and 42% less time watching TV in 2018 than they did in 2013, while teens' TV viewing times declined by 52%. As a result, the number of TV ads viewed should have decreased at a similar rate. However, despite these significant reductions in time spent watching TV, the number of sugary drink TV ads viewed by preschoolers and children increased from 2013 to 2018. Moreover, sugary drink TV ads viewed by teens declined at a lower rate than the decline in TV viewing times.

Figure 6. Trends in youth exposure to TV advertising: 2010-2018



Source: Analysis of 2018 Nielsen data; Sugary Drink FACTS 2014

Figure 7. Trends in TV viewing times: 2010-2018



Source: Analysis of Nielsen data for average hours of TV viewed

Preschooler and child exposure to TV advertising by category

In examining exposure to TV advertising by category in 2018, regular soda/soda brands made up 51% of sugary drink and energy drink ads viewed (see **Table 8**). Preschoolers and children viewed even more ads for regular soda/soda brands than for children’s fruit drinks and flavored water combined.⁷ They also viewed approximately 25 ads for iced tea and 15 to 17 ads for energy drinks and sports drinks. Fruit drinks and

flavored water combined (excluding children’s drinks) made up approximately 5% of TV ads viewed in 2018.

However, brands in these categories did not directly target their TV advertising to preschoolers and children. In 2018, targeted ratios for total sugary drink and energy drink ads viewed by preschoolers and children compared to adults were 0.40 and 0.39, respectively, indicating that preschoolers and children saw less than half the number of these ads than adults saw. Flavored water had the highest ratios of ads viewed (0.59 and

Table 8. TV advertising exposure for preschoolers and children by category: 2010-2018

Category	Avg # of TV ads viewed								Targeted ratios: 2018*	
	Preschoolers (2-5 years)				Children (6-11 years)				Preschoolers	Children
	2010	2013	2018	% change 2013-2018	2010	2013	2018	% change 2013-2018		
<i>Sugary drinks and energy drinks</i>										
Regular soda/soda brand	48.7	39.5	72.1	78%	62.8	43.6	69.2	55%	0.40	0.38
Iced tea	6.3	9.1	25.3	178%	7.9	10.0	25.0	150%	0.41	0.40
Energy drink	45.8	34.5	17.2	-50%	55.1	40.1	16.6	-58%	0.39	0.38
Sports drink	10.8	14.1	15.7	11%	14.3	17.6	15.3	-13%	0.39	0.38
Fruit drink	11.1	6.4	7.3	14%	12.9	6.1	7.0	15%	0.42	0.41
Drink brand	0.3	3.4	1.6	-52%	0.3	4.1	1.7	-59%	0.38	0.39
Flavored water	4.8	3.3	0.2	-94%	5.6	3.5	0.2	-95%	0.59	0.49
Total sugary drinks**	127.8	110.3	139.4	26%	158.9	125.1	135.0	8%	0.40	0.39
<i>Diet drinks</i>										
Diet soda	20.8	27.5	31.2	14%	24.9	28.2	29.0	3%	0.39	0.36
Other diet drink	3.8	7.0	12.6	80%	4.0	7.0	11.9	71%	0.39	0.37
Total diet drinks	24.6	34.5	43.8	27%	28.9	35.2	41.0	16%	0.40	0.36

*TV viewing time ratios in 2018 were 0.87 for preschoolers vs. adults and 0.66 for children vs. adults

**Excluding children’s drinks

Source: Analysis of 2018 Nielsen data; Sugary Drink FACTS 2014

0.49 for preschoolers and children, respectively). In contrast, targeted ratios for children's sugary drink ads viewed in 2018 were approximately 2.0, indicating that preschoolers and children saw twice as many TV ads for children's sugary drinks than adults saw.⁸

From 2013 to 2018, TV ads viewed by preschoolers and children increased for three of the seven categories examined. Iced tea had the highest percent increase: ads viewed increased by 2.5 times or more for both age groups. Regular soda/soda brand ads viewed increased by 78% for preschoolers and 55% for children. Regular soda/soda brands also contributed the biggest increase in number of TV ads viewed (+32.6 ads for preschoolers and +25.6 ads for children). Fruit drink ads (excluding children's drinks) also increased for both preschoolers and children, while sports drink ads increased for preschoolers, but declined for children. Energy drink and brand-level ads both declined by 50% or more for preschoolers and children. Flavored water had the greatest reductions in ads viewed from 2013 to 2018 (by more than 90%).

Although companies did not target children under age 12 with TV ads for these categories, preschoolers and children viewed 3.6 and 3.0 times as many ads for these sugary drinks and energy drinks compared to ads viewed for children's sugary drinks in 2018 (see **Figure 8**). Furthermore, ads viewed for children's drinks declined by more than one-half from 2010 to 2018. As a result, children's sugary drinks represented a smaller proportion of all sugary drink ads viewed in 2018 than in 2010: approximately 40% in 2010 versus one-quarter of ads in 2018.

Teen exposure to TV advertising by category

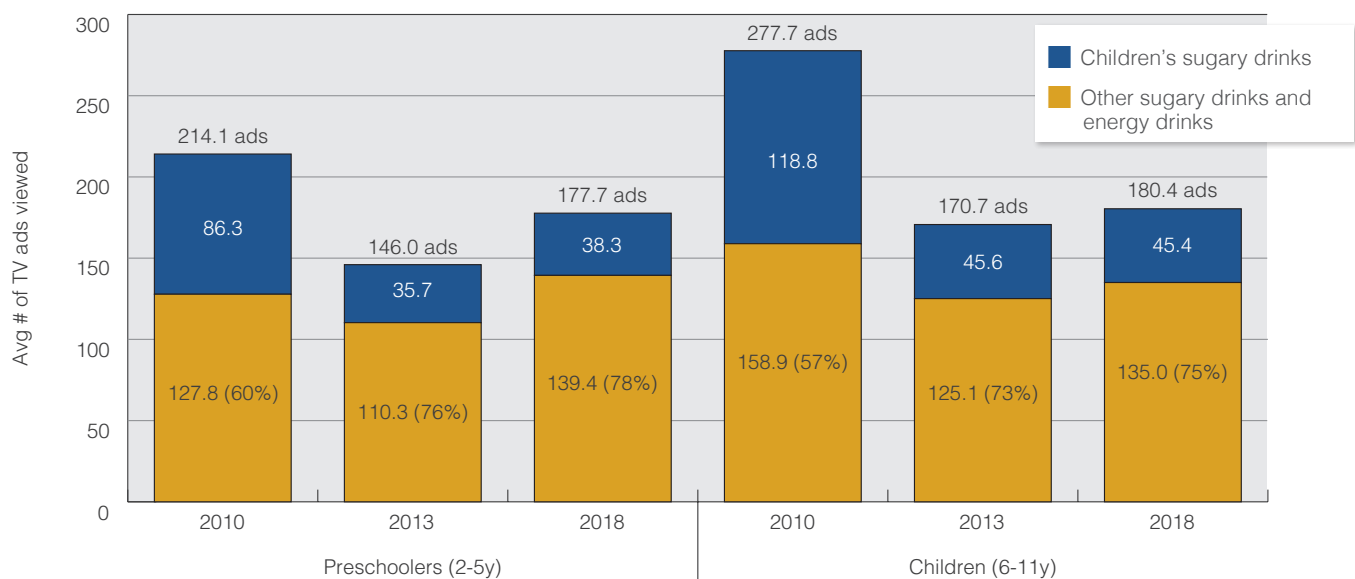
As with younger age groups, TV ads for regular soda/soda brands contributed more than 50% of sugary drink and energy drink ads viewed by teens in 2018 (see **Table 9**). Iced tea, energy drinks, and sports drinks represented another 43% of ads viewed. Fruit drinks and flavored water combined (excluding children's drinks) contributed approximately 4% of TV ads for sugary drinks viewed by teens.

The targeted ratio of total sugary drink and energy drink ads viewed by teens compared to adults was 0.49 in 2018, which indicates that teens saw approximately one-half as many TV ads for these products as adults saw. This difference was comparable to the ratio of time spent watching TV for teens versus adults (0.50). However, some categories appeared to target their advertising directly to teens as evidenced by higher teen-targeted ratios. Flavored water had the highest teen-targeted ratio (0.60), followed by energy drinks (0.53) and sports drinks (0.52). Fruit drinks and drink brands had the lowest teen-targeted ratios (0.42 and 0.41, respectively).

Despite an overall 52% decline in average TV viewing times for teens from 2013 to 2018, teens viewed 68% more TV ads for iced tea in 2018 than in 2013 and approximately the same number of ads for regular soda/soda brands. Ads viewed for sports drinks and fruit drinks declined at lower rates than declines in TV viewing times (38% and 11%, respectively). Flavored water had the highest decline (98%), followed by drink brands (77%) and energy drinks (76%).

Teens saw approximately three times as many TV ads for sugary drinks and energy drinks than for diet drinks in 2018.

Figure 8. TV ads viewed by preschoolers and children, including children's drinks: 2010-2018



Source: Analysis of 2018 Nielsen data, Children's Drink FACTS, Sugary Drink FACTS 2014

Table 9. TV advertising exposure for teens by category: 2010-2018

Category	Teens (12-17 years)				Targeted ratio*
	Avg # of TV ads viewed			% change 2013-2018	
	2010	2013	2018		2018
<i>Sugary drinks and energy drinks</i>					
Regular soda/soda brand	122.6	86.1	86.7	1%	0.48
Iced tea	12.3	17.3	29.0	68%	0.47
Energy drink	126.3	97.7	23.3	-76%	0.53
Sports drink	32.5	34.0	21.1	-38%	0.52
Fruit drink	17.3	8.2	7.3	-11%	0.42
Drink brand	0.5	7.6	1.8	-77%	0.41
Flavored water	14.9	9.9	0.2	-98%	0.60
Total sugary drinks**	326.3	260.8	169.3	-35%	0.49
<i>Diet drinks</i>					
Diet soda	46.1	56.2	34.6	-38%	0.43
Other diet	6.5	10.7	15.1	41%	0.47
Total diet drinks	52.6	66.9	49.7	-26%	0.44

*TV viewing time ratio for teens vs. adults was 0.50 in 2018

**Excluding children's drinks

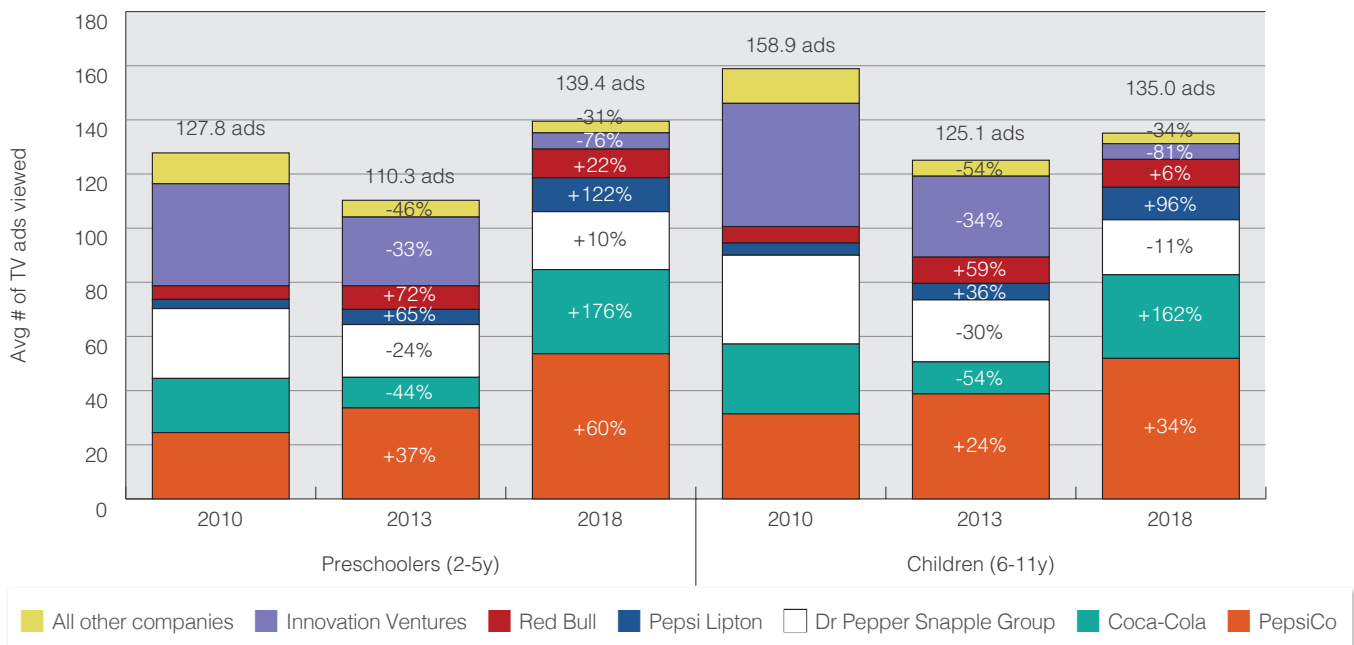
Source: Analysis of 2018 Nielsen data; Sugary Drink FACTS 2014

Teen-targeted ratios for diet categories (0.44 combined) were also lower than TV viewing time ratios, indicating that these products were not targeted directly to teens. However, there was a substantial increase (+41%) in the number of ads that teens viewed for other diet drinks in 2018 compared to 2013.

TV advertising exposure by company

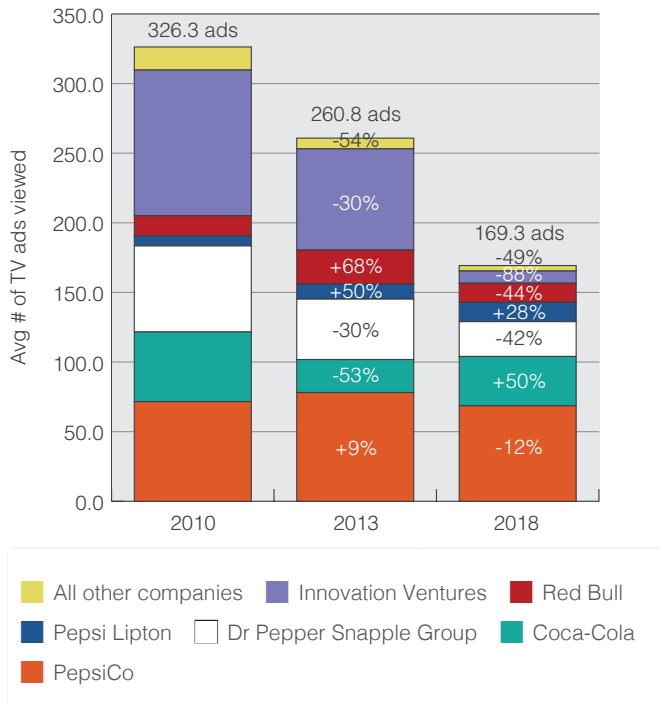
Three companies dominated TV advertising for sugary drinks and energy drinks viewed by youth. PepsiCo was responsible for 38% to 40% of ads viewed by preschoolers, children, and teens, while Coca-Cola and Dr Pepper Snapple Group were responsible for approximately 20% and 15%, respectively.

Figure 9. Changes in TV ad exposure by company for preschoolers and children: 2010-2018



Source: Analysis of 2018 Nielsen data; Sugary Drink FACTS 2014

Figure 10. Changes in TV ad exposure by company for teens: 2010-2018



Source: Analysis of 2018 Nielsen data; Sugary Drink FACTS 2014

Pepsi Lipton, Innovation Ventures, and Red Bull each contributed another 4% to 9% of ads viewed.

As noted earlier, preschoolers' and children's total exposure to TV advertising for sugary drinks increased from 2013 to 2018, but changes varied substantially by company (see **Figure 9**). Coca-Cola had the highest percent change in ads viewed for both preschoolers and children, almost tripling sugary drink ads viewed by these age groups. Pepsi Lipton had the second-highest percent increase; preschoolers and children

saw about twice as many ads in 2018 than in 2013. PepsiCo ads also increased by 60% and 34%, respectively; and Red Bull ads increased for both age groups. Dr Pepper Snapple Group increased its advertising to preschoolers by 10%, but advertising to children decreased by 11%. Innovation Ventures was the only top-advertiser to reduce TV advertising to both preschoolers and children.

Despite a 35% decline in total sugary drink TV ads viewed by teens, both Coca-Cola and Pepsi Lipton increased the number of ads viewed by teens, by 50% for Coca-Cola and 28% for Pepsi Lipton (see **Figure 10**). The decline in PepsiCo sugary drink ads (12%) was lower than the total decline, while ads for both Innovation Ventures and Dr Pepper Snapple Group sugary drinks had higher than average declines (88% and 42%, respectively).

TV advertising exposure by brand

Ranking Table 3 presents the total number of TV ads viewed by brand for preschoolers and children in 2010, 2013, and 2018, and **Ranking Table 4** presents the same information for teens. Three regular soda, one sports drink, and one energy drink brand ranked in the top-five brands in this report with the most TV advertising to preschoolers, children, and teens in 2018. Mtn Dew had the highest number of ads viewed in 2018 by all age groups, followed by Gatorade, Red Bull, Coke, and Pepsi.

Only 2 of the 10 sugary drink brands with the most TV advertising viewed by children and preschoolers in 2018 were children's drinks (see **Table 10**). Although the regular soda, sports drink, energy drink, and iced tea brands on this list did not target their advertising directly to children (as evidenced by low targeted ratios), preschoolers and children saw large numbers of ads for all these brands.

Table 10. Top-10 sugary drink brands (including children's drinks) advertised to children: 2018

Company	Brand	Category	Preschoolers (2-5 years)		Children (6-11 years)	
			Avg # ads viewed	Targeted ratio	Avg # ads viewed	Targeted ratio
Kraft Heinz	Kool-Aid Jammers	Fruit drink	23.2	3.86	27.4	4.56
PepsiCo	Mtn Dew	Regular soda	24.7	0.38	23.8	0.37
PepsiCo	Gatorade	Sports drink	15.3	0.39	15.0	0.38
Kraft Heinz	Capri Sun Roarin' Waters	Flavored water	9.5	3.94	12.6	5.22
Red Bull	Red Bull	Energy drink	10.6	0.42	10.3	0.37
Coca-Cola	Coke	Regular soda	10.1	0.43	9.4	0.43
PepsiCo	Pepsi	Regular soda	9.0	0.38	8.6	0.37
Pepsi Lipton	Pure Leaf	Iced tea	7.2	0.40	6.9	0.38
Dr Pepper Snapple Group	Snapple	Iced tea	6.7	0.40	6.7	0.40
Coca-Cola	Sprite	Regular soda	6.0	0.43	6.0	0.43

Shading indicates a children's sugary drink brand
 Source: Analysis of 2018 Nielsen data; Children's Drink FACTS

Table 11. Sugary drink sub-brands* targeted to teens: 2018

Company	Brand (sub-brand)	Category	Teens (12-17 years)	
			Avg # ads viewed	Teen-targeted ratio
Coca-Cola	Fanta	Regular soda	3.3	0.73
PepsiCo	Mtn Dew (Kickstart)	Regular soda	7.3	0.60
Dr Pepper Snapple Group	Dr Pepper (Cherry)	Regular soda	4.9	0.56
Coca-Cola	Sprite	Regular soda	7.5	0.55
Innovation Ventures	5-hour Energy (regular shots)	Energy drink	8.8	0.55
PepsiCo	Gatorade (excluding G2)	Sports drink	13.9	0.55
Red Bull	Red Bull	Energy drink	13.7	0.54
Dr Pepper Snapple Group	Snapple (including Straight Up Tea)	Iced tea	8.6	0.52

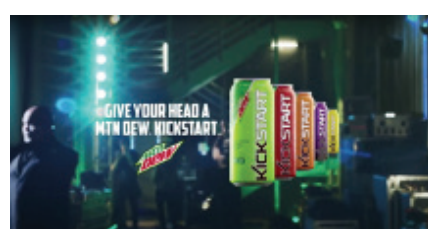
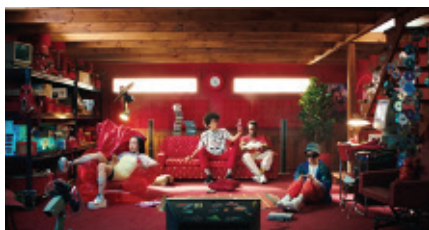
*Of the 20 sub-brands with the highest number of ads viewed by teens
Source: Analysis of 2018 Nielsen data

A number of sub-brands did appear to target their TV advertising to teens as evidenced by teen-targeted ratios greater than 0.50 (see **Table 11**). Of the 20 sub-brands with the most TV advertising to teens, targeted sub-brands included four regular soda, two energy drink, one sports drink, and one iced tea. Fanta regular soda from Coca-Cola had the highest targeted ratio of all brands (0.73), followed by Mtn Dew Kickstart (0.60).

From 2013 to 2018, changes in the number of TV ads viewed varied greatly by brand. Three sugary drink brands advertised on TV in 2018 that had not advertised in 2013 and contributed approximately two or more ads viewed by children and teens (see **Table 12**). Another seven brands increased their TV

advertising to children and teens, with a 30% or more increase for at least one age group. Mtn Dew had the greatest increase in number of ads viewed by children and teens (more than 15 ads), followed by Pure Leaf iced tea, Sprite regular soda, and Gold Peak iced tea. Fanta increased its advertising to children and teens by more than 3000%.

In contrast, four brands that had advertised on TV in 2013 no longer advertised in 2018, but just one was responsible for more than 1 ad viewed on average by children or teens in 2013 (see **Table 13**). Another four brands reduced their TV advertising to teens by more than 52% from 2013 to 2018 (i.e., greater than the reduction in time that teens spent watching TV during that time). 5-hour Energy had the biggest declines



Examples of ads for regular soda brands disproportionately targeted to teens

Table 12. Brands with the greatest increase in TV ad exposure: 2013-2018*

Company	Brand	Category	Avg # of ads viewed						
			Children (6-11 years)			Teens (12-17 years)			
			2013	2018	# of ads (%) change 2013-2018	2013	2018	# of ads (%) change 2013-2018	
<i>Brands that advertised on TV in 2018 but not 2013</i>									
Dr Pepper Snapple Group	7-Up	Regular soda	0.0	3.0			0.0	3.6	
Coca-Cola	Simply	Fruit drink	0.0	3.0			0.0	3.3	
Coca-Cola	Honest Tea	Iced tea	0.0	2.2			0.0	1.8	
<i>Brands with the greatest increase in ads viewed by children</i>									
PepsiCo	Mtn Dew	Regular soda	7.2	23.8	16.6 (230%)		17.2	32.2	15.0 (87%)
Pepsi Lipton	Pure Leaf	Iced tea	0.3	6.9	6.6 (2048%)		0.6	7.8	7.2 (1292%)
Coca-Cola	Sprite	Regular soda	1.0	6.0	5.0 (499%)		2.6	7.5	4.9 (192%)
Coca-Cola	Gold Peak	Iced tea	0.2	4.2	4.0 (2443%)		0.2	4.7	4.5 (2104%)
Dr Pepper Snapple Group	Snapple	Iced tea	3.8	6.7	2.9 (75%)		3.3	6.7	3.4 (75%)
Coca-Cola	Coke	Regular soda	5.6	7.9	2.3 (40%)		8.6	10.4	1.8 (21%)
Coca-Cola	Fanta	Regular soda	0.1	2.3	2.2 (3297%)		0.1	3.3	3.2 (4197%)

*Excludes brand-level and company-level ads

Source: Analysis of 2018 Nielsen data; Sugary Drink FACTS 2014

Table 13. Brands with the greatest decrease in TV ad exposure: 2013-2018*

Company	Brand	Category	Avg # of ads viewed						
			Children (6-11 years)			Teens (12-17 years)			
			2013	2018	# of ads (%) change 2013-2018	2013	2018	# of ads (%) change 2013-2018	
<i>Brands that advertised in 2013 but not 2018**</i>									
Dr Pepper Snapple Group	Sun Drop	Regular soda	5.3	0.0			11.3	0.0	
<i>Brands with the greatest decrease in ads viewed by teens</i>									
Innovation Ventures	5-hour Energy	Energy drink	29.9	5.8	-24.1 (-81%)		72.7	8.8	-63.9 (-88%)
PepsiCo	Pepsi	Regular soda	13.7	8.6	-5.1 (-37%)		26.8	10.2	-16.6 (-62%)
Coca-Cola	Glaceau Vitaminwater	Flavored water	3.5	0.2	-3.3 (-95%)		9.9	0.2	-9.7 (-97%)
Ocean Spray	Ocean Spray	Fruit drink	5.8	3.8	-2.0 (-35%)		7.9	3.7	-4.2 (-53%)

*Excludes brand-level and company-level ads

**Brands with more than 1 ad viewed in 2013

Source: Analysis of 2018 Nielsen data; Sugary Drink FACTS 2014

in number of ads viewed (-24 ads for children and -64 ads for teens), while Glaceau Vitaminwater had the highest percent decline (more than 95%).

Advertising summary

In 2018, beverage companies spent \$1,038 million – over \$1 billion – to advertise sugary drinks (excluding children's drinks) and energy drinks, which represented two-thirds of advertising spending for all refreshment beverages (including diet drinks, unsweetened water, and 100% juice). Eighty-four percent of total ad spending was devoted to TV advertising. Companies increased sugary drink ad spending by 26% from 2013 to 2018. Categories with substantial increases include iced tea

(+195%), regular soda/soda brands (+41%), and sports drinks (+24%). Energy drinks was the only category to reduce ad spending from 2013 to 2018 (-34%).

Two companies – PepsiCo and Coca-Cola – were responsible for 69% of all sugary drink and energy drink advertising spending; each spent more than \$320 million in 2018. Dr Pepper Snapple Group spent \$133 million (13% of the total), and another three companies – Innovation Ventures, Pepsi Lipton, and Red Bull – each spent \$54 to \$60 million. Of the top-six companies, only Innovation Ventures reduced its spending from 2013 to 2018 (-39%). Red Bull spending remained flat, while the other four companies increased their sugary drink ad spending by 16% (Dr Pepper Snapple Group) to 200% (Pepsi Lipton).

Four individual brands spent more than \$100 million each in 2018 – Coke, Gatorade, Pepsi, and Mtn Dew – and four additional brands spent more than \$30 million – Dr Pepper, 5-hour Energy, Red Bull, and Pure Leaf. Of the brands that offered diet and/or low-calorie varieties in addition to full-calorie sugary drinks, most devoted three-quarters or more of their ad spending to full-calorie varieties. Three Coca-Cola brands – Coke, Simply fruit drinks, and Glaceau Vitaminwater – were the only major sugary drink brands that devoted more than 50% of their ad spending to low-calorie and/or diet drinks.

Preschoolers (2-5 years) and children (6-11 years) saw 26% and 8% more TV ads, respectively, for sugary drinks and energy drinks in 2018 than in 2013, despite significant declines in the average amount of time they spent watching TV during this time. Teens' exposure to these ads declined by 35%, which was less than declines in the average amount of time they spent watching TV. Therefore, increased advertising spending by sugary drink and energy drink brands offset reductions in ads viewed due to declines in time spent watching TV. In 2018, preschoolers, children, and teens viewed on average 139.4, 135.0, and 169.3 TV ads, respectively, for sugary drinks and energy drinks. Preschoolers and children saw more than twice as many ads for these categories than they saw for children's sugary drinks.

Approximately 51% of TV ads viewed for the categories examined in this report were for regular soda/soda brands,

followed by iced tea, sports drinks, and energy drinks (each representing more than 10% of the total). From 2013 to 2018, ads viewed for regular soda/soda brands and iced tea increased for all youth. Fruit drink ads viewed also increased for preschoolers and children, and sports drink ads increased for preschoolers. Flavored water and energy drink ads had the biggest declines for all age groups. Targeted ratios for preschoolers and children indicate that sugary drinks and energy drinks (excluding children's drinks) were not directly targeted to these age groups. However, disproportionately high numbers of ads viewed by teens compared to adults indicate that flavored water, energy drinks, and sports drinks appeared to target teens with their TV advertising.

PepsiCo, Coca-Cola, and Dr Pepper Snapple were responsible for three-quarters of sugary drink and energy drink ads viewed by youth in all age groups in 2018. Preschoolers and children saw more ads for PepsiCo, Coca-Cola, and Pepsi Lipton sugary drinks and Red Bull energy drinks in 2018 compared to 2013, while teens saw more ads for Coca-Cola and Pepsi Lipton sugary drinks. Innovation Ventures (5-hour Energy) was the only company that reduced its advertising to all age groups from 2013 to 2018. Among sugary drink brands, Mtn Dew, Coca-Cola, and Pepsi regular soda, as well as Gatorade sports drink and Red Bull energy drink, were responsible for the most advertising to youth in 2018.

ADVERTISING TO HISPANIC AND BLACK YOUTH

In this section we present TV advertising for sugary drinks and energy drinks targeted to Hispanic preschoolers, children, and teens on Spanish-language TV. We also compare exposure to TV advertising for Black versus White preschoolers, children, and teens.

Advertising on Spanish-language TV

TV advertising to Hispanic youth

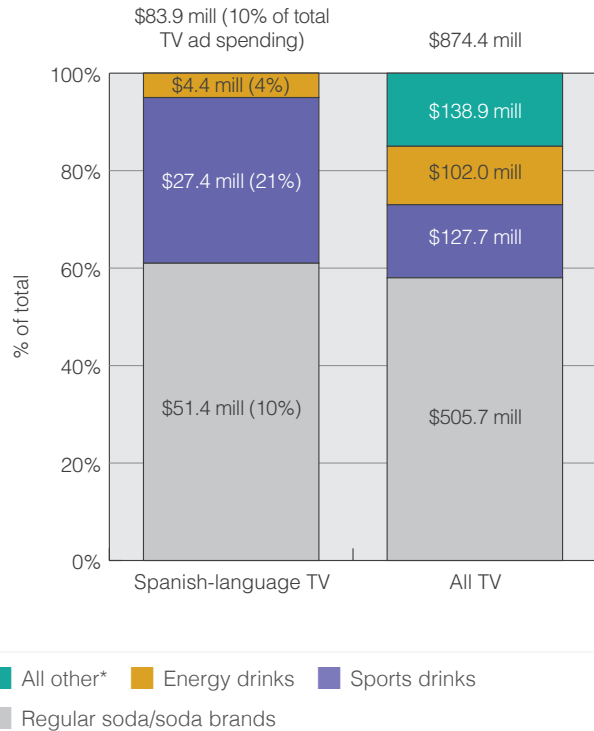
Definitions

Spanish-language TV	TV programming presented on Spanish cable and broadcast networks (e.g. Univision, Telemundo).
Spanish-language TV ads viewed	Ads on Spanish-language TV viewed by preschoolers (2-5 years), children (6-11 years), and teens (12-17 years) living in Hispanic households.

Spanish-language TV advertising spending on sugary drinks and energy drinks in 2018 totaled \$83.9 million (see **Figure 11**). Over 60% of this spending promoted regular soda and soda brands, and 33% was for sports drinks. Another 5% of Spanish-language TV ad spending promoted energy drinks, while the balance (<1%) was for drink brands and iced tea. None of the fruit drink or flavored water brands in our analysis advertised on Spanish-language TV in 2018. As reported previously, two children's fruit drinks (Capri Sun and Sunny D)

also spent \$1.6 million to advertise on Spanish-language TV (those numbers are not included in these totals).⁹

On average, sugary drinks and energy drinks allocated 10% of their total TV ad spending (\$874 million) to Spanish-language TV. Regular soda/soda brands also allocated 10% of total TV ad spending to Spanish-language TV. Sports drinks allocated 21%, the highest proportion of any category. Energy drinks spent 4% of their TV budgets on Spanish-language TV, while iced tea and drink brands allocated the least (<1% combined).

Figure 11. Spanish-language and total TV ad spending by category: 2018

*All other includes drink brand, iced tea, fruit drink, and flavored water categories

Source: Analysis of 2018 Nielsen data

From 2013 to 2018, total spending on Spanish-language TV increased by 8%, due to a 745% increase in sports drink advertising (see **Table 14**). During the same time, Spanish-language TV ad spending for regular soda/soda brands stayed relatively flat (-3%), while energy drinks and iced tea spending decreased by more than 75%. These decreases followed sizeable increases in these categories from 2010 to 2013. Total ad spending on Spanish-language TV increased by 80% from 2010 to 2018.

Ads viewed by Hispanic youth on Spanish-language TV

In 2018, Hispanic preschoolers viewed on average 49 ads for sugary drinks and energy drinks on Spanish-language TV, more ads than either Hispanic children (42 ads) or teens (33 ads) viewed (see **Figure 12**). Approximately 75% of the ads viewed by all age groups were for regular soda/soda brands, and another 20% for sports drinks.

Despite the increase in sugary drink and energy drink ad spending on Spanish-language TV, from 2013 to 2018 the number of Spanish-language TV ads viewed declined for Hispanic preschoolers (-15%), children (-5%), and teens (-26%). These declines can be explained by substantial decreases in the amount of time that Hispanic youth spent watching Spanish-language TV. In 2018, Hispanic preschoolers/children (ages 2-11) and teens spent 42% and 56% less time, respectively, watching Spanish-language TV than they did in 2013. Nonetheless, relative to 2010 both Hispanic preschoolers and children viewed more ads on Spanish-language in 2018 (+36% and +59%, respectively), while ad exposure for teens decreased by just 5% over the same time period.

In addition, Spanish-language TV ads viewed for sports drinks increased 10-fold or more from 2013 to 2018 for Hispanic youth of all ages. Exposure to regular soda/soda brand ads also increased for Hispanic preschoolers (+13%) and children (+25%), but slightly decreased for teens (-7%). In contrast, ads viewed for energy drinks decreased by 94% across all age groups.

Spanish-language TV advertising by company

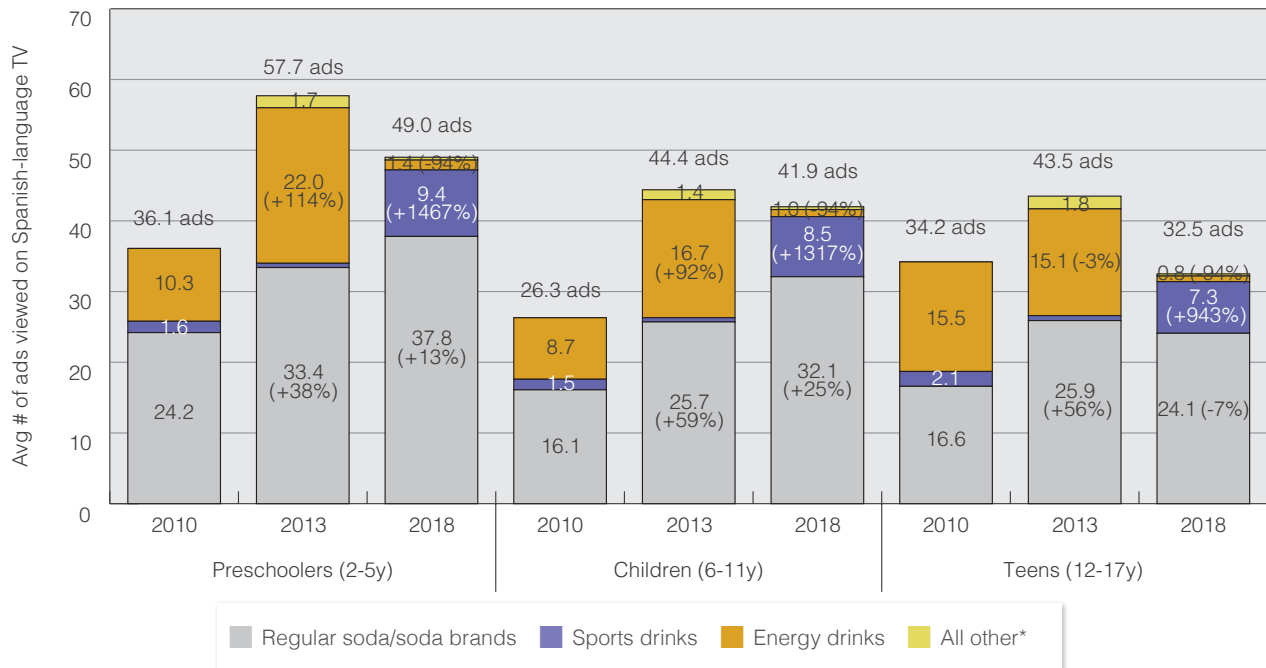
In 2018, just six of the 24 companies in our analysis advertised sugary drinks and energy drinks on Spanish-language TV (see **Figure 13**). Moreover, two companies – PepsiCo and Coca-Cola - were responsible for 84% of all Spanish-language ad spending. Dr Pepper Snapple Group accounted for 10% and Innovation Ventures for another 5%. Hansen Beverage and Interstate Beverage together accounted for just <1%.

Table 14. Spanish-language TV ad spending by category: 2010-2018

Category	Spanish-language TV ad spending (\$000)			\$ (%) change 2013-2018
	2010	2013	2018	
Regular soda/soda brand	\$30,107	\$53,124	\$51,438	-\$1,686 (3%)
Sports drink	\$6,030	\$3,244	\$27,422	+\$24,178 (745%)
Energy drink	\$10,390	\$20,490	\$4,418	-\$16,072 (78%)
Drink brand	\$0	\$0	\$407	--
Iced tea	\$0	\$900	\$193	-\$707 (79%)
Flavored water	\$0	\$240	\$0	-\$240 (100%)
Total	\$46,527	\$77,998	\$83,878	+\$5,880 (8%)

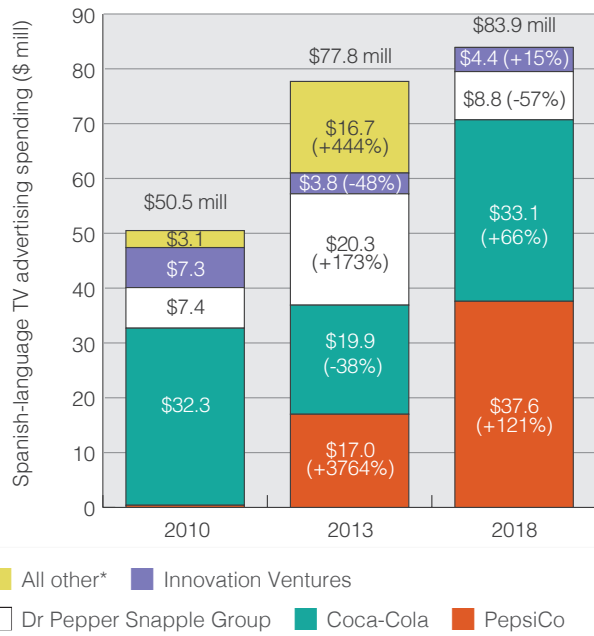
Source: Analysis of 2018 Nielsen data; Sugary Drink FACTS 2014

Figure 12. Ads viewed by Hispanic youth on Spanish-language TV by category: 2010-2018



*All other includes drink brand and iced tea categories in 2018 and iced tea and flavored water categories in previous years
 Source: Analysis of 2018 Nielsen data; Sugary Drink FACTS 2014

Figure 13. Changes in Spanish-language TV ad spending by company: 2010-2018



*All other companies includes SK Energy and Red Bull in 2010 and 2013
 Source: Analysis of 2018 Nielsen data; Sugary Drink FACTS 2014

The 8% total increase in sugary drink advertising spending on Spanish-language TV from 2013 to 2018 was primarily due to large increases in spending by PepsiCo (+121%) and Coca-Cola (+66%). Notably, in 2010 PepsiCo had spent only \$400,000 on Spanish-language TV advertising, and it was the only company to increase its Spanish-language TV advertising during both time periods (2010-2013 and 2013-2018). From 2013 to 2018, Innovation Ventures spending on Spanish-language TV also increased by 15%, despite a 78% decrease in total advertising spending during that time. Dr. Pepper Snapple Group was the only large beverage company to decrease ad spending on Spanish-language TV from 2013 to 2018.

Advertising on Spanish-language TV by brand

Eleven brands advertised on Spanish-language TV in 2018 (see **Table 15**). Coke spent the most (on Coke Classic and brand-level ads), followed by two PepsiCo brands (Gatorade and Pepsi). These three brands were responsible for 75% of all Spanish-language sugary drink advertising spending. Dr Pepper, Powerade, and 5-hour Energy each spent more than \$4 million. The remaining brands spent \$400,000 or less. In addition to spending almost \$22 million on ads for Coke Classic and \$3.8 million to promote the Coke brand, Coca-Cola spent \$30.6 million to advertise Diet Coke on Spanish-language TV. No other diet drink brand advertised on Spanish-language TV in 2018.

Table 15. Advertising spending on Spanish-language TV by brand: 2018

Company	Category	Brand (sub-brand)	Ad spending on Spanish-language TV		
			2018 (\$000)	% change 2013-2018	% of brand's total TV ad spending 2018
Coca-Cola	Regular soda	Coke (Classic)	\$21,799	38%	17%
PepsiCo	Sports drink	Gatorade	\$20,528	*	19%
PepsiCo	Regular soda	Pepsi	\$16,952	3%	17%
Dr Pepper Snapple Group	Regular soda	Dr Pepper	\$8,781	-9%	14%
Coca-Cola	Sports drinks	Powerade	\$6,895	113%	32%
Innovation Ventures	Energy drink	5-hour Energy	\$4,418	15%	8%
Coca-Cola	Soda brand	Coke	\$3,815	*	23%
Coca-Cola	Drink brand	Coca-Cola	\$407	*	2%
Coca-Cola	Iced tea	Honest Tea	\$193	*	2%
PepsiCo	Regular soda	Mtn Dew	\$88	-84%	<1%
Hansen Beverage	Regular soda	Monster (Mutant Super Soda)	\$1	*	<1%
Interstate Beverage	Regular soda	Jarritos	\$0.5	*	100%

*Brand did not advertise in 2013.

Source: Analysis of 2018 Nielsen data; Sugary Drink FACTS 2014

Powerade sports drink was notable for dedicating 32% of its TV ad dollars to Spanish-language TV, more than any other brand. Similarly, Coke (brand-level ads) allocated nearly one-quarter of TV ad dollars to Spanish-language TV. Gatorade, Pepsi, and Dr Pepper each dedicated 14% to 19% of their TV advertising budgets to Spanish-language TV. 5-hour Energy and all other brands with Spanish-language TV advertising allocated 8% or less, lower than the 10% average for sugary drinks overall.

Ranking Table 5 presents ads viewed by Hispanic youth on Spanish-language TV in 2018 by company and brand, including changes versus 2013. Pepsi, Dr Pepper, Gatorade, and Coke together accounted for more than 90% of sugary drink ads viewed on Spanish-language TV by Hispanic youth across all age groups. PepsiCo contributed more than one-half of all ads viewed. Coca-Cola and Dr Pepper Snapple Group each represented over 20%, and Innovation Ventures



Youth-targeted Spanish-language TV ads for Pepsi and Powerade

accounted for approximately 3% of ads viewed. Hansen Beverage and Interstate Beverage together comprised less than 1% of ads viewed.

Of note, contributing more ad dollars to Spanish-language TV did not necessarily translate to more ads viewed by Hispanic youth. Both Pepsi and Dr Pepper spent less than Gatorade or Coke in advertising on Spanish-language TV in 2018, but Hispanic youth viewed twice as many ads for Pepsi and more ads for Dr Pepper than they viewed for Gatorade or Coke. As with ad spending, Powerade ranked fifth in ads viewed.

From 2013 to 2018, exposure to Spanish-language TV ads by Hispanic preschoolers and children increased for the top five

brands: Pepsi, Dr Pepper, Gatorade, Coke, and Powerade. Ads viewed by teens also increased for these brands, with the exception of Dr Pepper (which declined by 10%). Pepsi ads viewed increased by 44% and 61% for preschoolers and children and by 17% for teens. Powerade ads increased by 59% for preschoolers, 73% for children, and 53% for teens. Gatorade did not advertise on Spanish-language TV in 2010 or 2013, but ranked third in ads viewed in 2018. The decrease in energy drink ad exposure from 2013 to 2018 was due to one brand (SK Energy) being discontinued and a reduction in ad exposure for 5-hour Energy of 70% or more.

Exposure to TV advertising by Black youth

TV advertising to Black youth

Definitions

Black preschooler-, child-, and teen-targeted ratios

Measure relative exposure to TV ads by Black versus White preschoolers, children, and teens, calculated by dividing GRPs for Black preschoolers, children, or teens by GRPs for White preschoolers, children, or teens.

In 2018, Black preschoolers (2-5 years) and children (6-11 years) saw on average 256 ads for sugary drinks and energy drinks, approximately double the number of ads that White preschoolers and children viewed. Black teens saw 331 of these ads, which was 2.3 times more ads than White teens saw.

Differences between ads viewed by Black and White youth can be explained partially by differences in the average amount of time spent watching TV (see **Figure 14**). In 2018, on average Black preschoolers watched 39% more hours of TV than White preschoolers watched, Black children watched 69% more than White children, and Black teens watched 78% more than White teens. However, differences in sugary drink and energy drink ads viewed for Black versus White youth in all age groups were higher than would be expected given these differences in TV viewing times. Therefore, sugary drinks and energy drinks appeared to continue targeting Black youth by purchasing ads during programming with disproportionately more Black youth in the audience.

From 2013 to 2018, total exposure to TV ads for sugary drinks and energy drinks by Black preschoolers and children increased by 12%. These increases occurred despite an approximately 34% decline in average TV viewing times during the same period. However, increases in ads viewed by White preschoolers and children over the same time period were higher (31% and 24%, respectively).

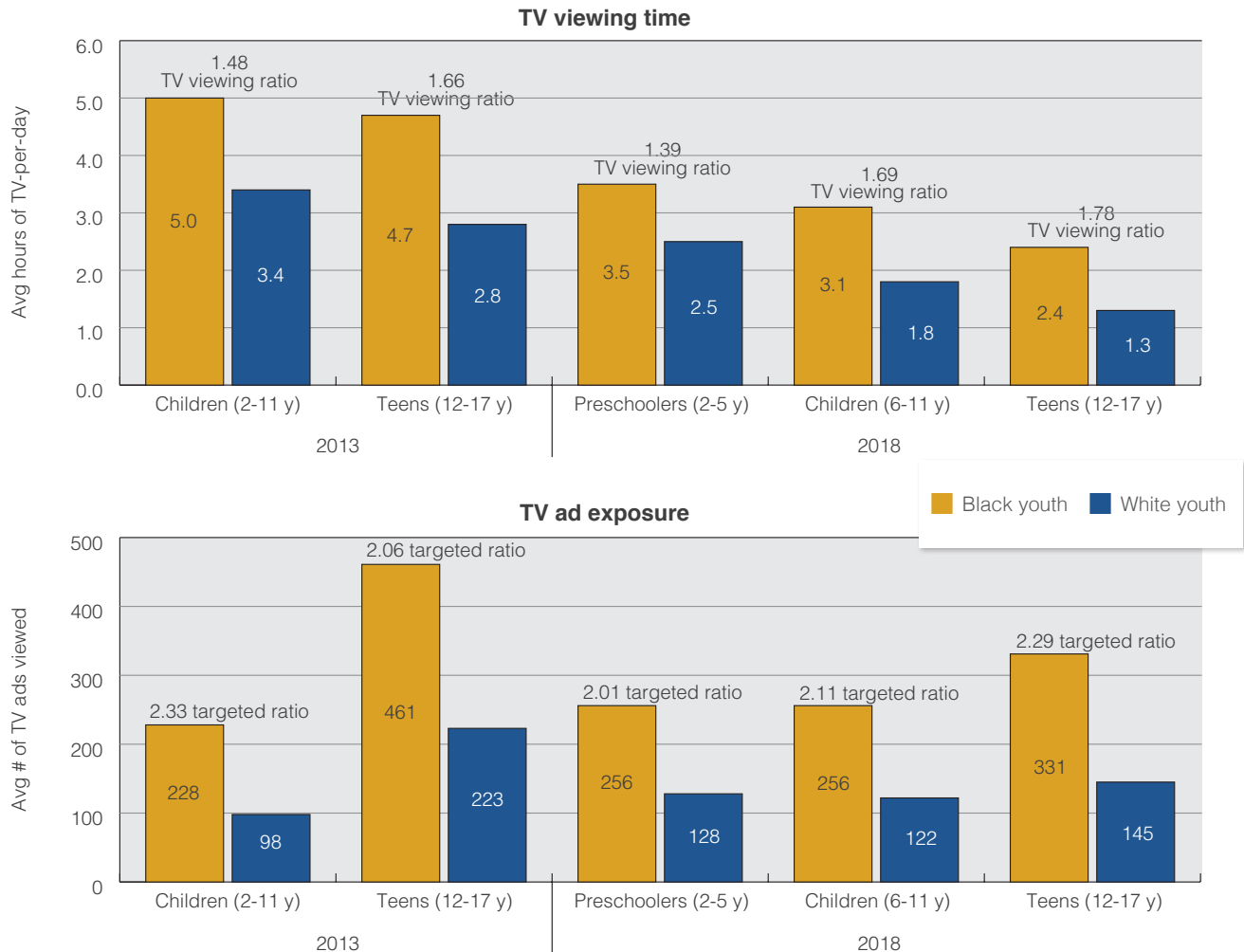
Both Black and White teens viewed fewer ads for sugary drinks in 2018 than in 2013. This decline was slightly greater for

White teens (-35%) than for Black teens (-28%). Moreover, the decline in sugary drink ads viewed by Black teens was less than expected given declines in their average TV viewing time, which decreased by 49% from 2013 to 2018. Therefore, from 2013 to 2018 disparities in exposure to sugary drink ads between Black and White preschoolers and children improved somewhat (from 2.33 in 2013 to 2.01 and 2.11 in 2018), whereas disparities in exposure for Black teens increased (from 2.06 to 2.29).

Ad exposure by category

As found in overall youth exposure to TV ads for sugary drinks and energy drinks, regular soda/soda brands accounted for approximately one-half of TV ads viewed by Black youth in all age groups, and iced tea, sports drinks and energy drinks together comprised more than 40% of ads viewed. Fruit drinks, drink brands, and flavored water (excluding children's drinks) represented 5% or less of total ads viewed.

Given differences in TV viewing times in 2018, a Black child-targeted ratio of 1.8 or higher would clearly indicate that companies purchased advertising during programming viewed disproportionately more by Black children than by White children. In 2018, five of the seven drink categories examined had Black child-targeted ratios higher than 1.8 (see **Table 16**). Flavored water and sports drinks had the highest targeted ratios: Black preschoolers and children saw more than 2.5 times as many ads for sports drinks and more than 4 to 5 times as many ads for flavored water than White preschoolers and children saw. Regular soda/soda brands, energy drinks,

Figure 14. TV viewing time and TV ad exposure for Black and White youth: 2013-2018

Source: Analysis of 2018 Nielsen data; Sugary Drink FACTS 2014

and iced tea brands also appeared to target Black children as evidenced by targeted ratios of approximately 2.0 or higher.

From 2013 to 2018, Black children's exposure to TV ads increased for three categories: sports drinks (+16%), regular soda/soda brands (+79%), and iced tea (+137%). Exposure declined for another three categories: flavored water (-94%), energy drinks (-60%), and drink brands (-73%). Exposure to fruit drink ads remained the same (+1%). Changes in some categories differed for Black and White preschoolers and children. From 2013 to 2018, exposure to sports drink ads by White preschoolers and children declined by 4%, in contrast to a 16% increase in ads viewed by Black preschoolers and children. In addition, increases in exposure to ads for iced tea (+185%) and fruit drinks (+37%) were higher for White preschoolers and children than for their Black peers. Total sugary drink ad exposure for White children and teens

increased by 27%, compared to a 12% increase for Black preschoolers and children.

As with Black children, Black teens viewed more than twice the number of ads that White teens viewed for iced tea, energy drinks, and regular soda/soda brands (see **Table 17**). They also viewed more than 2.5 times as many ads for sports drinks and nearly 5 times the number of flavored water ads. Given differences in TV viewing times, a targeted ratio of 2.0 or higher for Black teens clearly indicates that TV ads for these categories were placed on programming disproportionately viewed by Black teens versus White teens. In contrast, Black teens' exposure to ads for fruit drinks and drink brands were less than expected given differences in viewing times in 2018. Targeted ratios for diet soda, but not other diet drinks, were comparable to differences in amount of TV viewing time.

Table 16. Black children's exposure to TV advertising by category: 2013-2018

Category	2013*		2018			
	Black children (2-11y)		Black preschoolers (2-5y)		Black children (6-11y)	
	Avg # of ads viewed	Targeted ratio	Avg # of ads viewed	Targeted ratio	Avg # of ads viewed	Targeted ratio
<i>Sugary drinks</i>						
Flavored water	8.7	3.77	0.6	5.71	0.5	4.22
Sports drink	29.3	2.08	33.9	2.47	34.1	2.59
Regular soda/soda brand	74.4	2.15	134.8	2.08	132.0	2.15
Energy drink	79.6	2.63	31.3	1.94	31.7	2.09
Iced tea	18.9	2.30	43.9	1.84	45.8	1.99
Fruit drink	9.8	1.89	9.9	1.35	10.0	1.45
Drink brand	7.4	2.43	2.0	1.15	2.1	1.22
Total sugary drinks	228.2	2.33	256.4	2.01	256.2	2.11
<i>Diet drinks</i>						
Diet soda	46.2	1.84	48.2	1.59	46.5	1.67
Other diet drinks	2.3	2.00	19.9	1.66	20.0	1.79
Total diet drinks	48.5	1.85	68.1	1.61	66.5	1.70

Bold numbers indicate a disproportionately high Black-targeted ratio in 2018 (>1.8)

*2013 numbers for Black preschoolers and children are combined

Source: Analysis of 2018 Nielsen data; Sugary Drink FACTS 2014

From 2013 to 2018, Black teens' exposure to ads for regular soda/soda brands (+17%) and iced teas (+74%) increased, but the number of ads viewed declined for flavored water (-97%), sports drinks (-18%), energy drinks (-75%), fruit drinks (-17%), and drink brands (-84%). Exposure to diet drinks also decreased by 7%. Targeted ratios for all categories except fruit drinks and drink brands increased from 2013 to 2018.

The magnitude of these changes in some categories differed for White and Black teens. The decline in Black teens' exposure to sports drink ads was less than the decline for White teens

(-18% vs. -42%), and White teens' exposure to regular soda/soda brand ads remained the same, whereas Black teens' exposure increased by 17%. In contrast, Black teens' exposure to fruit drinks ads declined by 17%, while White teens' exposure did not change (-3%).

Targeted advertising by company

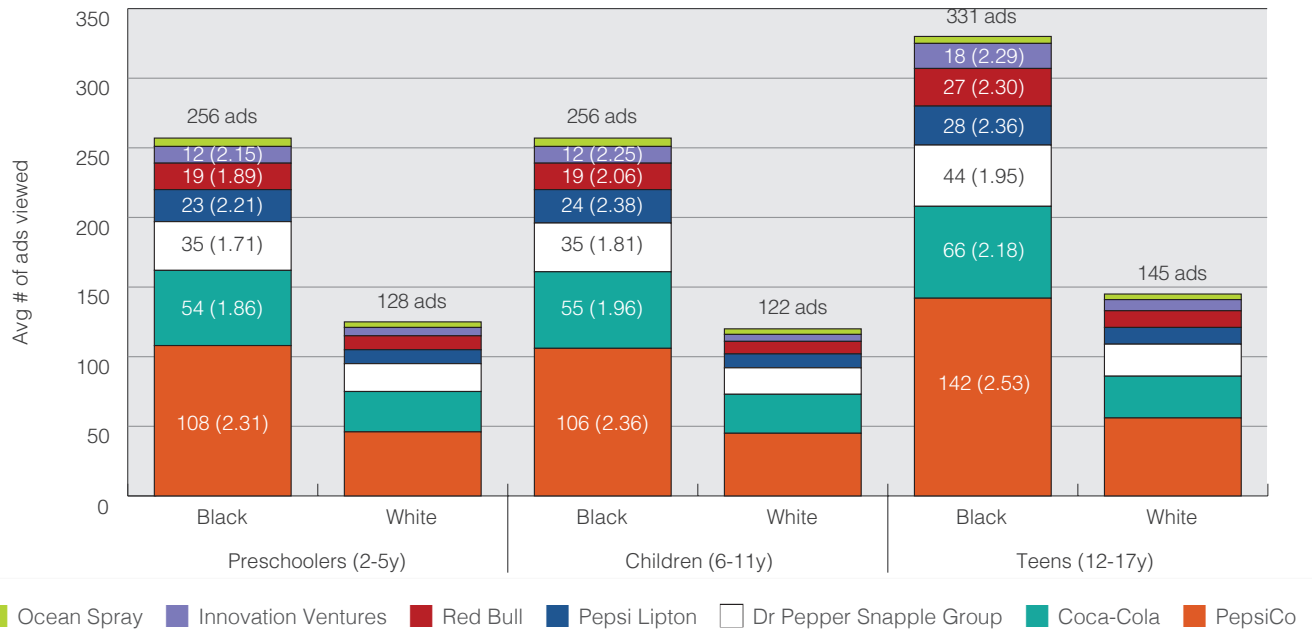
PepsiCo contributed approximately 42% of sugary drink and energy drink ads viewed by Black children and preschoolers,

Table 17. Black teens' exposure to TV advertising by category: 2013-2018

Category	Black teens (12-17y)				
	2013		2018		
	Avg # of ads viewed	Targeted ratio	Avg # of ads viewed	% change 2013-2018	Targeted ratio
<i>Sugary drinks</i>					
Flavored water	19.6	2.50	0.6	-97%	4.82
Sports drink	57.6	1.94	47.2	-18%	2.73
Regular soda/soda brand	145.9	2.00	170.7	+17%	2.35
Energy drink	180.3	2.15	45.5	-75%	2.25
Iced tea	31.6	2.08	54.8	+74%	2.17
Fruit drink	12.0	1.62	9.9	-17%	1.39
Drink brand	13.5	2.18	2.2	-84%	1.20
Total sugary drinks	460.5	2.06	330.9	-28%	2.29
<i>Diet drinks</i>					
Diet soda	85.3	1.65	54.7	-36%	1.71
Other diet drinks	3.4	1.80	27.6	+712%	2.06
Total diet drinks	88.7	1.65	82.3	-7%	1.81

Bold numbers indicate a disproportionately high Black teen-targeted ratio in 2018 (>2.0)

Source: Analysis of 2018 Nielsen data; Sugary Drink FACTS 2014

Figure 15. Black and White youth exposure to TV advertising by company: 2018

Targeted ratios of ads viewed by Black vs. White youth in parentheses
 Source: Analysis of 2018 Nielsen data; Sugary Drink FACTS 2014

while Coca-Cola and Dr Pepper Snapple Group together contributed one-third (see **Figure 15**). Pepsi Lipton, Red Bull, and Innovation Ventures contributed another 21%. Notably, Black preschoolers and children viewed 2.2 to 2.4 times more ads for PepsiCo, Pepsi Lipton, and Innovation Ventures brands than their White peers. Targeted ratios for the remaining companies were less than 2.1.

Results for Black teens were similar. Two beverage companies accounted for two-thirds of all sugary drink and energy drink TV ads viewed by Black teens: PepsiCo (43%) and Coca-Cola (20%). Dr Pepper Snapple Group was responsible for 13%. PepsiCo and Pepsi Lipton had the highest Black teen-targeted ratios (2.53 and 2.36, respectively), followed by two energy drink companies: Red Bull (2.30) and Innovation Ventures (2.29). Dr Pepper Snapple Group and Ocean Spray were the only companies with Black teen-targeted ratios less than 2.0.

Targeted advertising by brand

Ranking Table 6 presents the number of sugary drink and energy drink ads viewed by Black preschoolers and children in 2013 and 2018 by brand, including targeted ratios, and **Ranking Table 7** presents these numbers for Black teens. As with all youth, Mtn Dew and Gatorade ranked first and second in number of ads viewed by Black youth in 2018. These two brands contributed approximately one-third of sugary drink ads viewed by all age groups. Red Bull and Coke ranked third and fourth for preschoolers and children. Two additional

regular soda brands (Sprite and Pepsi) ranked fifth and sixth in ads viewed by Black children and fourth and eighth for Black teens. Another energy drink brand (5-hour Energy) and three iced tea brands (Pure Leaf, Snapple, and Lipton) rounded out the top-10 brands advertised to Black preschoolers, children, and teens.

A number of brands appeared to target their advertising to Black youth (see **Table 18**). Eight of the top-10 brands in number of ads viewed had Black teen-targeted ratios of 2.1 or greater in 2018. Black youth saw more than four times as many ads for Glaceau Vitaminwater than White youth saw (although the number of ads viewed was low). They also saw approximately three times as many ads for Sprite and Fanta. Gatorade and Mtn Dew also had high targeted ratios, with Black youth viewing approximately 2.5 to 3 times as many ads as White youth viewed. Pepsi and Coke regular soda were the only top-10 brands that did not appear on this list, with somewhat lower-than-average targeted ratios of 1.9.

Targeted advertising summary

These analyses demonstrate that a small number of sugary drink and energy drink companies disproportionately targeted their advertising to Hispanic and Black youth. On Spanish-language TV, six companies spent \$83.9 million to advertise sugary drinks, 8% more than spending in 2013. This growth was primarily due to large increases in spending by two companies – PepsiCo (+121%) and Coca-Cola (+66%) – who

Table 18. Brands with the highest Black teen-targeted ratios:* 2018

Company	Brand	Category	Black Children (6-11y)		Black Teens (12-17y)	
			Avg # of ads viewed	Targeted ratio	Avg # of ads viewed	Targeted ratio
Coca-Cola	Glaceau Vitaminwater	Flavored water	0.5	4.22	0.6	4.82
Coca-Cola	Sprite	Regular soda	14.8	2.98	19.7	3.59
Coca-Cola	Fanta	Soda brand	5.6	2.90	8.8	3.42
PepsiCo	Gatorade	Sports drink	33.7	2.62	46.9	2.78
PepsiCo	Mtn Dew	Regular Soda	50.7	2.50	69.2	2.68
Pepsi Lipton	Lipton	Iced tea	10.7	2.38	13.4	2.66
BA Sports Nutrition	BodyArmor	Sports drink	0.1	4.24	0.1	2.47
Red Bull	Red Bull	Energy drink	19.0	2.06	26.6	2.30
Innovation Ventures	5-hour Energy	Energy drink	11.9	2.25	17.9	2.29
Dr Pepper Snapple Group	Snapple	Iced tea	12.1	2.00	16.6	2.25
Pepsi Lipton	Pure Leaf	Iced tea	13.0	2.00	14.8	2.15

*Black teen-targeted ratios >2.0

Shading indicates top-10 brand in number of TV ads viewed

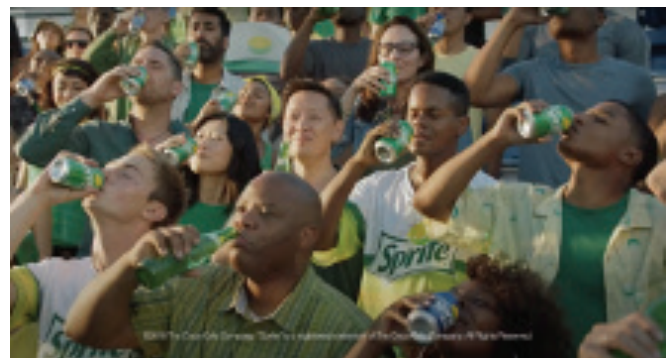
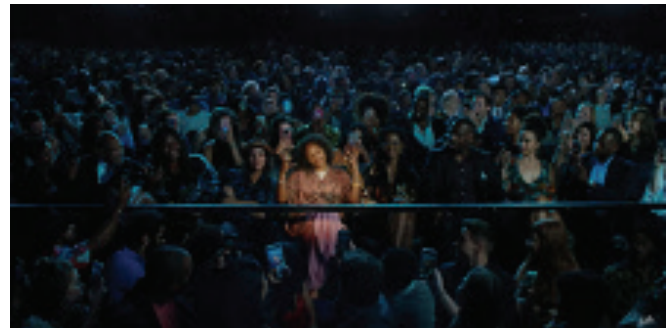
Source: Analysis of 2018 Nielsen data

were responsible for 84% of all Spanish-language ad dollars in 2018. PepsiCo was the only company that also increased spending on Spanish-language TV from 2010 to 2013.

In 2018, regular soda/soda brands accounted for over 60% of spending and 75% of sugary drink and energy drink ads viewed by Hispanic youth on Spanish-language TV. Exposure to regular soda/soda brands by Hispanic children and preschoolers also increased from 2013 to 2018. Pepsi ranked first in Spanish-language ads viewed, while Coke (soda brand ads) allocated nearly one-quarter of its TV ad dollars to Spanish-language TV. Another one-third of total Spanish-language TV ad spending was for sports drinks. Powerade sports drink was notable for dedicating 32% of its TV ad dollars to Spanish-language TV, more than any other brand. Gatorade did not advertise in 2010 or 2013, but ranked third in ads viewed in 2018.

While Hispanic youth across all age groups spent less time watching Spanish-language TV in 2018 than in 2013, by 42% for preschoolers/children and 56% for teens, the decline in ads viewed was much lower: -15% for preschoolers, -5% for children, and -26% for teens. As in 2013, Hispanic preschoolers viewed the most ads on Spanish-language TV in 2018: approximately 50% more ads than Hispanic teens saw and 16% more than Hispanic children.

Disparities between Black and White youth exposure to sugary drink and energy drink ads also persisted. In 2018, Black youth viewed more than twice the number of ads than White youth viewed, although they watched just 40% to 80% more TV than their White peers. A 12% increase in ads viewed by Black preschoolers and children occurred despite an approximately 34% decline in TV viewing time from 2013 to 2018. Black teens' exposure to sugary drink ads declined by 28%, while their TV viewing time declined by 49%.



Sprite ads targeting Black teens with hip hop and sports celebrities



Gatorade ads targeting Black teens featured inspirational Black celebrity athletes

From 2013 to 2018, Black youth exposure to regular soda/soda brand ads increased, accounting for one-half the total ads viewed by Black youth in 2018. Exposure to iced tea ads increased by 74% for Black teens and more than doubled for preschoolers and children in the same time period. Black preschoolers and children exposure to sports drink ads increased by 16% in contrast to a decrease in sports drink ad exposure among White preschoolers and children of 4%. Similarly, regular soda/soda brand ad exposure increased for Black teens by 17%, but remained the same for White teens. Energy drink ads viewed by Black youth decreased from 2013

to 2018, but Red Bull ranked third in number of ads viewed for Black youth, and 5-hour Energy ranked in the top-10.

PepsiCo was responsible for more than 40% of sugary drink and energy drink ads viewed by Black youth in 2018, followed by Coca-Cola and Dr Pepper Snapple Group. Notably, Black preschoolers and children viewed approximately 2.3 times more ads for PepsiCo and Pepsi Lipton brands than White youth viewed. Black teens also saw more than three times as many ads for Sprite and Fanta and more than twice as many ads for Gatorade and Mtn Dew than White teens saw.