

# Sugary drink marketing to youth: Some progress but much room to improve 

## Sugary Drink FACTS 2014 <br> Some progress but much room for improvement in marketing to youth

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Sugary drinks are the leading single source of empty calories in young people's diets ${ }^{12}$ and directly contribute to diet-related diseases, including obesity and diabetes. ${ }^{3}$ Each 8-ounce serving of a sugary drink added to a child's diet increases his or her risk of obesity by $60 \%$. ${ }^{4}$ Advertising exposure for these unhealthy drinks is associated with increased consumption, ${ }^{5}$ and exposure during childhood can create a lasting bias towards advertised brands into adulthood. ${ }^{6}$

In 2011, the Rudd Center for Food Policy and Obesity issued the first Sugary Drink FACTS. ${ }^{7}$ That report found that beverage companies extensively market sugary drinks and energy drinks to children and teens almost everywhere they spend their time, including on TV, the internet, social and mobile media, local retailers, and community events.

In recent years, key actors have taken steps to reduce young people's consumption of sugar-sweetened soda and other types of sugary drinks. Local communities have launched public health campaigns to increase awareness of the negative health effects of sugary drinks and reduce their availability in public settings. Policy makers have proposed legislation and regulation to limit consumption and raise awareness of the dangers of minors consuming highly caffeinated energy drinks. Through the Children's Food and Beverage Advertising Initiative (CFBAI), some major beverage manufacturers have pledged to promote healthier beverages and refrain from advertising highsugar beverages to children ages 11 and younger in media where they represent $35 \%$ or more of the audience. ${ }^{8}$

At the same time, beverage companies continue to extensively market their unhealthy products - including sugar-sweetened soda, fruit drinks, sports drinks, iced tea, and flavored water, as well as energy drinks and shots - in a wide variety of marketing venues where children and teens are exposed to these messages daily. Objective and transparent data are necessary to measure companies' actual marketing practices and evaluate their commitment to reducing young people's consumption of drinks with high levels of sugar and/or caffeine that can harm their health.

Three years after our first report - using the same methods Sugary Drink FACTS 2014 examines the current status of the nutritional content and marketing of sugary drinks to children and teens, documenting changes over the past three years.

## Methods

We used a variety of data sources and methods to provide a comprehensive analysis of the sugary drink market in the United States. Through publicly available data, we document and evaluate the nutritional content of sugary drinks and the marketing practices of 23 different beverage companies.

When the data are available, we measure changes over the past three years.

The report includes the following analyses:

- Sales of sugary drinks and other drink products, using syndicated data from IRI;
- Nutritional content of sugary drinks, as well as diet energy drinks and children's drinks and energy shots;
- Nutrition-related claims and child-directed messages on product packaging;
- Advertising spending in all measured media, using Nielsen syndicated data;
- Exposure to all TV advertising and brand appearances in prime-time TV programming (beyond only those shown during programming regulated by the CFBAI) by preschoolers (2-5 years), children (6-11 years), and teens (12-17 years), and comparisons to adults' exposure, using syndicated data from Nielsen;
- Child and teen visitors to beverage company websites and sugary drink advertising viewed on websites popular with children and teens, using syndicated data from comScore;
- Quantitative and qualitative evaluation of marketing in social media and mobile apps; and
- Disproportionate exposure to advertising on TV and the internet for black and Hispanic youth, using syndicated data from Nielsen and comScore.

We supplement these analyses with information collected from company websites, monitoring of business and consumer press, and numerous visits to retail establishments and calls to beverage company consumer helplines. Of note, our evaluation covers a broader range of marketing practices than those currently included in industry self-regulation of advertising to children through the CFBAI and ABA member voluntary guidelines on advertising to children.

We did not have access to food industry proprietary documents, including privately commissioned market research, media and marketing plans, or other strategic documents. Therefore, we do not attempt to interpret beverage companies' goals or objectives for their marketing practices. Rather, we provide transparent documentation of the range of marketing practices to which children and teens are exposed daily.

## Results

In 2013, U.S. households spent $\$ 14.3$ billion to purchase sugary drinks, compared with $\$ 10.7$ billion spent on $100 \%$ juice, plain bottled water, diet soda, and other diet drinks. Regular soda represented $45 \%$ of sales and $18 \%$ of brands examined in our analysis, followed by fruit drinks, which accounted for $18 \%$ of sales and $47 \%$ of products. Although gallon sales of soda (including regular and diet) declined
by 7\% and fruit drinks went down by 3\% from 2010 to 2013, gallons sold of other drink categories (flavored water, sports drinks, and ready-to-drink coffee and tea) increased by $7 \%$ to $21 \%$. At the same time, volume of energy drinks sold increased $41 \%$. From 2010 to 2013, there were few changes in the number of products offered by category or company.

## Nutrifional confent of sugary drinks and energy drinks

We examined the nutritional content of 914 different products offered by 106 brands from 47 different companies. As in 2011, researchers' experiences collecting nutrition information varied widely by company. In 2014, the largest beverage companies (Coca-Cola Co., Dr Pepper Snapple Group, and PepsiCo) maintained websites that generally provided complete and easily accessible nutrition information, including lists of ingredients. In contrast, it was difficult to obtain nutrition information, especially lists of ingredients, from many of the other companies in our analysis. Of note, two energy drink companies (Monster Energy and Rockstar) provided comprehensive nutrition information on their websites in 2011, but this information was no longer available when we collected our data in 2014. Positively, nearly all energy drinks and regular soda products did report their exact caffeine content in 2014, whereas many only reported that caffeine was present in 2011.

In comparing sugary drink categories, regular soda, fruit drinks, and energy drinks continued to have the highest median sugar content at 24 to 29 grams (totaling 100 to 110 kcal) per 8-ounce serving, while flavored water, sports drinks, and iced tea/coffee had the least sugar at 10 to 14 grams. Minute Maid Cranberry Juice Cocktail had the highest sugar content of all products in our analysis with 57 grams per serving. Our analysis found 135 reduced-sugar products (i.e., 40 kcal or less per 8 -oz serving), which represented $15 \%$ of all products. The flavored water category had the most reducedsugar products at $62 \%$, compared with $5 \%$ of regular soda products. Products that did not qualify as reduced-sugar drinks often contained zero-calorie sweeteners in addition to high levels of sugar, including approximately one-quarter of energy drinks and $15 \%$ of fruit drinks and iced teas or coffees.

## Children's drinks

Our analyses also identified 162 products marketed specifically for children, representing $18 \%$ of products examined. Fruit drinks made up the majority of children's drinks, but the category also included two flavored water brands (Capri Sun Roarin' Waters and Apple \& Eve Waterfruits). Median sugar for sugar-sweetened children's brands ranged from 2 grams (Mondo Fruit Squeezers and Little Hug Fruit Barrels) per 8-ounce serving to 30 grams (Welch's Chillers). One recently introduced children's product, Capri Sun Big Pouch, contained 33 grams of sugar and 130 calories in one 11.2-ounce single-serving package.

Although median calories in children's fruit drinks were lower than the median for other fruit drinks ( 60 kcal vs. 110 calories), $36 \%$ of children's products also contained zero-calorie sweeteners (vs. 22\% of other drinks). Even some higher-sugar children's products, such as Sunny D and Hawaiian Punch, contained artificial sweeteners. However, information about sweeteners was only available by examining the ingredient lists under nutrition facts panels on product packages. Apple \& Eve Waterfruits and Vita Coco Kids were the only reducedsugar children's drink in our analysis that did not contain zerocalorie sweeteners. Further, just 38\% of children's fruit drinks reported containing juice, compared with two-thirds of other fruit drinks, and the median juice content was just 5\%.

## on-package markefing messages

Nutrition-related messages appeared on nine out of ten sugary drink packages, averaging 4.2 messages per package. The majority of these messages promoted specific ingredients in the drinks, including vitamin C, minerals, electrolytes, antioxidants, and novelty ingredients. Approximately twothirds of packages featured statements about natural or real ingredients. Positively, 61\% of packages contained labels indicating calories-per-serving or container outside of the nutrition facts panel, a notable increase compared with 2011. Flavored water, iced tea, and children's drinks featured the most nutrition-related messages on product packages (4.9, 4.7, and 4.5 per package, respectively), whereas regular soda packages contained the fewest (84\% of packages averaged 3.5 messages each). Brands with the most onpackage nutrition messages included Apple \& Eve Waterfruits (children's flavored water) with eight messages per package, and V8 Fusion Refreshers (fruit drink), Minute Maid Coolers and Fruit Falls (children's drinks), and Sierra Mist regular soda, each averaging seven messages per package.

Child features were present on 29\% of sugary drink packages across all categories, and $30 \%$ of packages included at least one promotion. Although children's drinks were most likely to include child features, child-friendly cartoon images also appeared on other fruit drink, iced tea, and regular soda packages. Roughly one-third of other fruit drink (i.e., not children's drinks) and iced tea packages and one out of five regular soda, sports drink, and flavored water packages featured promotions. However, children's drinks were most likely to include promotions, which appeared on $57 \%$ of children's fruit drink packages. Child-oriented promotions also appeared on other types of sugary drinks, including a school soccer ball giveaway by Coca-Cola, a Teenage Mutant Ninja Turtles movie promotion on Crush soda, and Let's Play promotions on most Dr Pepper Snapple Group products.

## AdVerfising spending

Beverage companies spent $\$ 866$ million to advertise sugary drinks and energy drinks in all measured media in 2013. Companies also spent $\$ 465$ million to advertise other
beverages, including diet drinks, $100 \%$ juice, and plain water. Overall, $31 \%$ of advertising spending for all drink categories in 2013 promoted regular soda and soda brands and 18\% promoted energy drinks, while $35 \%$ promoted other non-sugar-sweetened drinks. Advertising for 100\% juice and plain water represented just $10 \%$ and $4 \%$ of total advertising spending respectively. Excluding brand-level advertising, sugary drinks outspent water and $100 \%$ juice by 4.2 to 1 .

From 2010 to 2013, advertising spending for sugary drinks, energy drinks, and sugary drink brands declined by $7 \%$, while spending for diet drinks, $100 \%$ juice, and plain water went down 3\%. However, changes in advertising spending varied considerably by category. Spending to advertise both regular soda and energy drinks increased 9\%, and diet soda spending increased 17\%. Advertising for light juices (i.e., juice with water and zero-calorie sweeteners) more than tripled. In contrast, advertising spending for all other drink categories decreased, ranging from small reductions for plain water ( $-3 \%$ ) and sports drinks ( $-5 \%$ ), to substantial reductions for $100 \%$ juice (-29\%), fruit drinks (-40\%), and other diet drinks (-45\%).

The three largest beverage companies (Coca-Cola, Dr Pepper Snapple Group, and PepsiCo) were responsible for $70 \%$ of advertising spending on unhealthy drinks in 2013, and two energy drink companies (Innovation Ventures [5-hour Energy] and Red Bull) contributed another 17\%. Change in advertising spending from 2010 to 2013 varied greatly by company. Coca-Cola and Dr Pepper Snapple Group both reduced advertising for sugary drinks in 2013 relative to 2010, by $35 \%$ and $13 \%$, respectively. In contrast, PepsiCo increased spending to advertise its sugary drink brands by $32 \%$ and overtook Coca-Cola as the company with the most sugary drink advertising in 2013. Four individual brands dominated advertising spending in 2013: Pepsi (\$139 million, +181\%), Gatorade (\$108 million, -4\%), Coca-Cola (\$100 million, -24\%), and 5-hour Energy (\$99 million, -8\%). Snapple advertising (including both iced tea and brand-level advertising) was also notable for a 213\% increase in spending over 2010. Kraft Foods' Kool Aid was the only children's drink among the ten brands with the most advertising spending (\$29 million, +19\%); however, approximately one-half was devoted to magazine advertising, a medium typically targeted to parents and not children.

## TV adVertising exposure and brand appearances on prime-fime TV

In 2013, there was a notable decline in youth exposure to TV advertising for sugary drinks and energy drinks; teens viewed $30 \%$ fewer of these ads relative to 2010, children viewed 39\% fewer, and preschoolers viewed 33\% fewer. Yet preschoolers, children, and teens continued to see 144, 169, and 287 TV ads, respectively, for these products. Exposure to advertising for children's drinks decreased the most, by approximately $60 \%$ for all age groups. Youth exposure also fell for regular soda, energy drinks, other fruit drinks, and
flavored water advertising, as well as for $100 \%$ juice, plain water, and other diet drinks (not diet soda). However, relative to 2010, preschoolers and children saw $31 \%$ and $23 \%$ more sports drinks ads, respectively, and teens saw $15 \%$ more iced tea ads. Young people also saw more TV advertising for diet soda and light juice in 2013 than in 2010.

Of all drink categories, preschoolers and children saw the most TV ads for $100 \%$ juice (approximately one out of five ads viewed). However, children's drinks, regular soda and soda brands, and energy drinks each made up at least $15 \%$ of drink ads viewed by children. Together, sugary drinks and energy drinks contributed approximately two-thirds of all beverage ads viewed by children. For teens, energy drinks followed by regular sodas were the most viewed categories (at 23\% and $20 \%$ of drink ads viewed, respectively), while $100 \%$ juice and plain water combined contributed just $16 \%$ of total beverage ad exposure. Further, children and teens saw $30 \%$ to $70 \%$ fewer TV ads for diet drinks, $100 \%$ juice, and plain water than adults saw.

At the brand level, 5-hour Energy was the most advertised product to all age groups on TV, and Gatorade and Pepsi ranked in the top-five. Capri Sun Roarin' Waters and Sunny D also ranked in the top-five brands advertised to preschoolers and children, while Red Bull and Mtn Dew rounded out the top-five sugary drink brands viewed by teens. Notably, PepsiCo and Red Bull were the only companies to increase sugary drink advertising to children and teens in 2013 versus 2010. On TV, preschoolers and children saw $39 \%$ and $25 \%$ more TV ads for PepsiCo sugary drinks, respectively, and Red Bull advertising to all youth increased by $59 \%$ or more. Not surprisingly, advertising for two children's brands (Capri Sun and Sunny D) appeared to target their advertising to children directly as evidenced by the higher number of these ads viewed by children relative to adults. Several brands also appeared to target TV advertising to teens, including Sun Drop, Sprite, and Mtn Dew Kickstart sodas, Red Bull and 5-hour Energy, Vitamin Water, and Gatorade. Teens saw more ads for these products than adults saw, even though they watch $30 \%$ less television. Of note, just one 100\% juice product (Capri Sun Super V) was targeted to children.
One-third of the beverage brands included in this report appeared within prime-time TV programming in 2013, totaling 2,102 appearances and 900 minutes of screen time. Children and teens viewed 21 and 33 of these appearances, respectively. Although the number of appearances viewed by children did not change from 2010 to 2013, appearances viewed by teens increased 12\%. As in 2010, regular soda and soda brands appeared most frequently in prime-time TV. Snapple and Coca-Cola featured as the major brands in 2013, together accounting for $73 \%$ of appearances viewed by children and $60 \%$ of those viewed by teens for brands in our analysis. The primary venues for sugary drink appearances viewed by children and teens were product placements on talent shows (American Idol and America's Got Talent in 2013, as well as The X Factor in 2011 and 2012), followed by The

Big Bang Theory. These programs accounted for over threequarters of all appearances viewed by children and teens.

## Beverage company websifes

From 2010 to 2013, there was a notable decline in the number of young visitors to approximately $60 \%$ of the websites evaluated both years, and four of the top-20 websites in 2010 were discontinued or did not have enough youth visitors to report in 2013. In general, child visitors to websites declined at a greater rate than teen visitors. However, youth visitors to eight sites increased by $20 \%$ or more from 2010 to 2013, and five of the top-20 websites in 2013 were new or did not have enough visitors to measure in 2010. Websites with the greatest increase in youth visitors from 2010 to 2013 included 5-hour Energy.com (+113,000 child and teen visitors per month), RedBullUSA.com (+25,000 youth visitors), RedBull. com (+23,000 youth visitors), and Pepsi.com (+18,000 youth visitors). Although youth visitors to MyCokeRewards.com declined by $58 \%$ from 2010 to 2013, the site continued to attract the most child visitors (almost 13,000 per month in 2013). MyCokeRewards.com and Coca-ColaScholars.com also had the highest youth engagement, averaging seven minutes or more per visit.

Twenty of the 50 websites in this analysis attracted a disproportionately high number of teens compared with visits to the internet overall, including six energy drink sites and six Coca-Cola Co. sites, and much of their content appeared to be aimed at a youth audience. TumETummies.com was the only website to offer content designed specifically for children. However, the most popular energy drink, soda, and other sugary drink websites featured extreme sports, popular entertainment, promotions, and other content (e.g., scholarships) with youth appeal. In addition, most websites featured social media content (e.g., Facebook and Twitter posts, YouTube videos) and links to brands' social media pages, including Facebook, Twitter, Google+, and YouTube.

## Display adverfising on third-party websifes

From 2010 to 2013, the number of sugary drink and energy drink display ads placed on third-party youth websites declined by $72 \%$ ( 94.7 million per month in 2010 vs. 26.8 million in 2013). Ads for regular soda and soda brands, sports drinks, and flavored waters declined more than $50 \%$. My Coke Rewards eliminated virtually all ads on youth websites (compared with 40 million ads per month in 2010). The proportion of ads placed on youth websites also declined from $11 \%$ in 2010 to $5 \%$ in 2013. Despite this overall decline, children's brands such as Capri Sun, Hawaiian Punch, and Tum E Yummies increased ad placements on youth websites by $15 \%$, with $18 \%$ of ads for Capri Sun and $50 \%$ of Tum E Yummies ads appearing on children's websites. Further, CFBAI companies placed more than 46 million ads for sugary drinks that were not approved for advertising to children on children's websites in 2013, including Coca-Cola, Powerade,

Pepsi NEXT, and NOS energy drink. Other brands placing a high proportion of their ads on websites visited relatively more often by youth under 18 included Hawaiian Punch (45\%), Jarritos (34\%), Crush (27\%), and Powerade (12\%).

Advertising on social media sites YouTube and Facebook appears to have replaced much of the advertising on youth websites, representing $31 \%$ of all display ads for the sugary drink and energy drink brands in our analysis. Although young people visit these websites at similar rates as adults, they are among the most popular sites for youth. 5-hour Energy, CocaCola, and Capri Sun placed the most ads on these sites (55 million, 31 million, and 10 million, respectively). Gatorade and Sunkist also had a particularly strong presence on Facebook, with over $50 \%$ of their ads viewed on this one site, and 5-hour Energy placed $73 \%$ of its display ads on YouTube.

## Social media and mobile markefing

In 2014, energy drinks and regular soda brands dominated social media marketing, representing $84 \%$ of the 300 million Facebook likes for brands in our analysis, 89\% of 11 million Twitter followers, and $95 \%$ of 1.8 billion YouTube views. As in 2011, Red Bull and Coca-Cola were the leaders in social media marketing in 2014. Pepsi also ranked among the topthree brands on Facebook, Twitter, and YouTube in 2014 due to increases of $600 \%$ on Facebook and 30 -fold on Twitter from 2011, and 196 million video views on YouTube in 2014. Two additional energy drink brands - Monster Energy and Rockstar - ranked among the most active brands on all social media platforms, and 5-hour Energy ranked fourth in YouTube video views at 129 million. Coca-Cola, Red Bull, and Pepsi also were the top-three sugary drink brands on Instagram, and Coca-Cola and Red Bull ranked in the top-five sugary drink brands on Vine.

Overall, the popularity of energy drinks and regular soda brands on social media increased exponentially from 2011 to 2014. Total Facebook followers tripled for regular soda and doubled for energy drinks, and Twitter followers increased by over 90\% for both categories. Individual brands in our analysis increased their presence on social media in different ways. Brands added 53 new Instagram accounts and 21 active Vine accounts since 2011. Coca-Cola, Red Bull, Mtn Dew, and Rockstar expanded by creating new social media accounts for sponsored music, sports, and arts activities and establishing new accounts for these promotions on Facebook, Twitter, YouTube, and even Vine and Instagram.

Another social media trend across many brands was the use of celebrities. Pepsi, Sprite, Gatorade, Lipton, Arizona, and Brisk utilized well-known music and sports celebrities, while Fanta and Red Bull used young digital-media celebrities. Brands also engaged users to virally increase their social media reach, with retweets, regrams, and revines, as well as teen-targeted contests inviting users to post videos and photos on various platforms. Brands tended to use consistent messaging across platforms, with similar content on their

Facebook, Twitter, Instagram, and Vine posts. In addition, links within posts commonly directed users to other social media platforms or the brand's website, introducing users to new platforms as they became popular.

We also identified 39 smartphone applications available for US-based iPhone users offered by nine of the companies in our analysis. These apps promoted 14 different sugary drink brands. Red Bull had 15 applications - the most from any company - followed by PepsiCo and Coca-Cola Co., which offered nine and seven apps each. The majority of apps were for gaming ( $n=16$ ) or entertainment ( $n=7$ ) purposes. One-third ( $n=13$ ) had child-targeted elements, such as cartoon-style graphics, child characters, or simple game play appropriate for children. Most of the apps $(n=36)$ were free to download, although eight featured in-app purchases. Red Bull Racers and Red Bull Kart Fighter 3 both had child-targeted elements and in-app purchases of up to $\$ 39.99$ and $\$ 29.99$, respectively.

## Marketing to Hispanic and black youth

Seven companies spent $\$ 83$ million to advertise sugary drinks and energy shots on Spanish-language TV in 2013, an increase of $44 \%$ versus 2010 and on average 14\% of their total TV advertising budgets. By comparison, companies spent just $\$ 9$ million to advertise diet drinks, $100 \%$ juice, and water combined. Both PepsiCo and Dr Pepper Snapple Group substantially increased their Spanish-language advertising spending for sugary drinks by $\$ 17$ million and $\$ 13$ million, respectively. A new product, SK Energy, also spent $\$ 17$ million in 2013. Of note, SK Energy and 7UP only advertised on Spanish-language TV. Both Dr Pepper Snapple Group and Sunny D devoted a relatively high one-third of their total TV advertising budgets to Spanish TV. In contrast, Coca-Cola Co. reduced its Spanish-language TV advertising by $38 \%$ (although the company continued to rank second in Spanish-language advertising spending), while Red Bull and Kraft Foods virtually eliminated their Spanish-language TV advertising.

Hispanic preschoolers and children saw $23 \%$ and $32 \%$ more Spanish-language TV ads for sugary drinks and energy shots in 2013 than in 2010. As in 2010, Hispanic preschoolers saw more of these ads than either Hispanic children or teens saw. However, Hispanic teens' exposure did not increase from 2010 to 2013. As a result, in 2013 Hispanic children saw more Spanish-language ads for sugary drinks and energy shots than Hispanic teens saw.

On English-language TV, black children and teens saw more than twice as many ads for sugary drinks and energy drinks compared with white children and teens in 2013. Further, this gap increased compared with 2010 as advertising to white youth declined at a greater rate than advertising to black youth. Although black children and teens also watch more television than their white peers, this difference does not explain the entire difference in number of ads viewed. Black teens saw four times as many ads for Sprite and three times as many Coca-Cola
regular soda ads, compared with white teens, indicating that these brands targeted their advertising to a black audience. Other brands with relatively high ratios of ads viewed by black compared with white youth included Vitamin Water (2.5), 5-hour Energy (2.2), and Red Bull (2.1). In contrast, black teens saw just $70 \%$ more ads for plain water, $60 \%$ more diet soda ads, and $50 \%$ more ads for $100 \%$ juice, comparable to differences in amount of TV viewing between black and white teens.

As found in our analysis of all youth visitors to beverage company websites, 5HourEnergy.com and MyCokeRewards. com attracted the most Hispanic and black youth visitors. However, some websites also attracted disproportionately high numbers of Hispanic or black youth visitors. For example, 7UP.com and Sprite.com had the highest Hispanic targeted indices; Hispanic youth were approximately six times more likely to visit these sites compared with all youth. In addition, Welchs.com had a high targeted index for black youth, who were 2.5 times as likely to visit the site compared with all internet visitors, and black youth were $62 \%$ more likely to visit Gatorade.com. Overall, Hispanic youth were 93\% more likely to visit the beverage company websites in our analysis compared with all youth, and black youth were $34 \%$ more likely to visit.

Beverage companies spend more to promote events and sponsorships specifically aimed at youth than companies in any other food category. ${ }^{9}$ PepsiCo, Coca-Cola Co., and Dr Pepper Snapple Group also have publicized their strategies to appeal to multicultural youth. ${ }^{10-12}$ For example, Coca-Cola estimates that $86 \%$ of its growth through 2020 will come from multicultural youth. ${ }^{13}$ PepsiCo and Dr Pepper Snapple Group have noted their focus on sponsorships and events to attract multicultural youth and the "crossover" appeal of this strategy in reinforcing the "coolness" of their products. ${ }^{14}$ Celebrity spokespersons with crossover appeal include Beyonce (Pepsi), ${ }^{15}{ }^{16}$ Nicki Minaj (Pepsi), ${ }^{17}$ and Pitbull (Dr Pepper). ${ }^{18}$ Sponsorships of soccer clubs and events, ranging from Coca-Cola's sponsorship of the Brazilian World Cup to the Dr Pepper Dallas Cup (a youth soccer tournament), ${ }^{1920212223}$ also appeal to multicultural audiences. Although we could not comprehensively track these typically locally based marketing efforts, examination of the business press highlights many examples of events and sponsorships that appear to be aimed specifically at Hispanic and black youth, primarily for the companies' regular soda brands.

## Discussion

Beverage companies have made some progress in improving sugary drink marketing to youth. Notably, children and teens saw approximately one-third fewer total TV ads for sugary drinks in 2013 than in 2010, and ads for fruit drinks declined by $50 \%$. Sugary drink ads placed on youth websites (e.g., Roblox.com, FanPop.com) went down by three-quarters, and companies placed just 5\% of their ads on these sites in 2013 compared with $11 \%$ of ads in 2010. Some companies have also made nutrition information about their products
more accessible, and the largest beverage companies now provide calories-per-serving on the front of most product packages. Further all energy shots and $92 \%$ of energy drinks now disclose their caffeine content.

However, despite the introduction of some reduced-sugar sodas, there were no changes in the overall nutritional content of products offered by sugary drink brands from 2011 to 2014. In addition, the majority of children's drinks remained high in sugar and their packaging featured nutrition-related messages that could mislead parents into believing that these products are healthier choices for children. Further, children's fruit drinks are less likely to contain juice and more likely to contain artificial sweeteners than other fruit drinks, even though the majority of parents do not want to serve their children products with artificial sweeteners. ${ }^{24}$

In addition, we found considerable evidence of increased marketing directly to children or teens for some sugary drink brands and energy drinks overall. Many brands also increased their non-traditional forms of marketing that appeal to young consumers, including brand appearances in primetime TV programming, marketing in social media, and mobile marketing. These types of marketing raise additional concerns as they are more difficult for young people to recognize as marketing and for parents to monitor. Evidence of increased marketing of some sugary drink brands directed to black and Hispanic youth is especially troubling due to the increased risk of obesity, diabetes, hypertension, and other diet-related diseases for communities of color.

## Recommendations

Beverage companies should do more to ensure that youth consume fewer of the sugary drinks and energy drinks that can harm their health:

- Stop marketing sugary drinks and energy drinks to children and teens;
- Do not target sugary drink marketing to communities that suffer disproportionately from diet-related diseases, including Hispanic and black youth;
- Strengthen the CFBAI self-regulatory pledges to cover children up to age 14, ensure that companies' selfregulatory policies cover all media; expand definitions of child-directed marketing, and increase the number of companies participating in the program;
- Discontinue marketing practices that disproportionately appeal to teens, including product placements and youthoriented social media, celebrities, and sponsored events;
- Further improve transparent product labeling and consumer access to ingredient information; and
- Replace marketing of high-sugar and highly caffeinated beverages to youth with marketing of reduced-sugar drinks, plain water, and 100\% juice.

Government regulation and legislation can help counteract marketing by lessening the appeal of sugary drinks to youth and leveling the playing field among companies:

- Require straightforward and easy-to-understand labeling, including disclosing calories, added sugars, and artificial sweetener content on the front of all packaging;
- Require products that feature nutrition-related claims on packages to meet minimum nutrition standards;
- Provide funding to regularly update the Federal Trade Commission's reporting of food and beverage industry expenditures on marketing directed to children and adolescents;
- Monitor and enforce children's privacy protections under the Children's Online Privacy and Protection Act (COPPA), including in social and mobile media; and
- Prohibit the sale and marketing of highly caffeinated energy drinks and shots to minors under age 18.

Advocates, researchers and parents can also make a difference:

- Advocates can support policy measures to help reduce consumption and marketing of sugary drinks, educate policymakers and shareholders about the negative impact of sugary drink marketing, and lead campaigns to pressure beverage companies to improve their marketing practices.
- Researchers can help build critical evidence to support policy maker and advocacy actions.
- Parents can check ingredient lists on packages of children's drinks for added sugars, juice content, and artificial sweeteners; and contact beverage companies to let them know they are unhappy with marketing of unhealthy products directly to their children.

In 2011, we asked beverage companies to reduce the enormous amount of marketing for unhealthy sugary drinks and energy drinks that children were exposed to daily. The facts presented in this report confirm that some companies have improved some marketing practices. However they also show that significantly more improvements are necessary and that any one company may not be able to sustain progress if the entire industry does not follow. Policy makers, advocates, and parents should demand that beverage companies do the right thing for the health of our children.

The research is clear. Sugary drinks are the leading single source of empty calories in young people's diets ${ }^{1}$ and directly contribute to dietrelated diseases, including obesity and diabetes. ${ }^{2}$ In 2011, the first Sugary Drink FACTS documented how beverage companies market sugary drinks virtually everywhere young people spend their time - including on TV, the internet, social and mobile media, local retailers, and community events. ${ }^{3}$

In recent years, key actors have taken steps to reduce youth consumption of sugar-sweetened soda and other types of sugary drinks. Local communities have launched public health campaigns to increase awareness of the negative health effects of sugary drinks and reduce their availability in public settings. Policy makers have proposed legislation and regulation to limit consumption and raise awareness of the dangers of minors consuming highly caffeinated energy drinks. Major beverage manufacturers have also pledged to develop and promote healthier beverages through industry-led initiatives.

At the same time, beverage companies continue to extensively market their unhealthy products, including sugar-sweetened soda, fruit drinks, sports drinks, iced tea, and flavored water, as well as energy drinks and shots. Three years after the first Sugary Drink FACTS report - using the same methods - Sugary Drink FACTS 2014 examines the current status of the nutritional content of sugary drinks and their marketing to children and teens, documenting changes over the past three years.

## Sugary drink nutrition and marketing in 2011

In 2011, the Rudd Center for Food Policy and Obesity at Yale University issued the first Sugary Drink FACTS. ${ }^{4}$ The report examined the nutritional quality of sugary drinks, advertising through traditional, digital, and social media, and marketing in stores and through community events. The report analyzed over 600 sugary drink products from 14 companies and highlighted marketing to children, teens, and black and Hispanic youth. The results documented the poor nutrition quality of sugary drinks, as well as the extensive array of sophisticated marketing tactics used to enhance their appeal among children and teens (see Table 1).

Table 1. Sugary Drink FACTS 2011: Key findings

## Sugary drink nutrition quality

- An 8 -ounce serving of a full-calorie fruit drink, soda, and energy drink contained 110 calories and 7 teaspoons of sugar. One 12-ounce can of soda contained approximately 10.5 teaspoons of sugar.
- Full-calorie iced teas, sports drinks, and flavored waters typically contained 3 to 5 teaspoons of sugar per 8 -ounce serving.
- Sugary drinks and energy drinks often featured positive nutrition messages, including "all-natural" or "real" ingredient claims on $64 \%$ of packages.
- Parents believed that drinks like Capri Sun, Sunny D, Gatorade, and Vitamin Water were healthful products to serve their children, despite the high sugar content in these products. ${ }^{5}$ Parents also expressed concerns about artificial sweeteners in drinks for their children, but these ingredients were not highlighted on product packaging.
- High levels of caffeine in energy drinks and shots can be dangerous for children and teens, ${ }^{6}$ yet caffeine content often was not disclosed on product packages.
Traditional advertising to children and teens
- Sugary drinks were heavily promoted to young people on television and radio.
- From 2008 to 2010, children's and teens' exposure to full-calorie soda ads on TV doubled.
- However, changes varied by company. Children's exposure to TV ads for Coca-Cola Co. and Dr Pepper Snapple Group sugary drinks nearly doubled, while children were exposed to $22 \%$ fewer ads for PepsiCo products.
- Two-thirds of radio ads for sugary drinks heard by teens promoted high-sugar sodas.
- Two-thirds of the brands analyzed appeared within prime-time programming, totaling almost 2,000 appearances in 2010. Coca-Cola accounted for three-quarters of brand appearances seen by children and teens.
- Sixty-three percent of all full-calorie soda and energy drink ads on national TV included sponsorship of an athlete, sports league or team, or an event or cause.
Digital marketing to children and teens
- MyCokeRewards.com was the most-visited beverage company website with 170,000 unique youth visitors per month ( 42,000 children and 129,000 teens); Capri Sun's website was the second-most viewed site, attracting 35,000 children and 35,000 teens per month.
- Twenty-one sugary drink brands had YouTube channels in 2010 with more than 229 million views, including 158 million views for the Red Bull channel alone.
- Coca-Cola was the most popular of all brands on Facebook, with more than 30 million fans; Red Bull and Monster ranked 5th and 15th, with more than 20 and 11 million fans, respectively.


## Marketing to black and Hispanic youth

- Black children and teens saw $80 \%$ to $90 \%$ more TV ads compared with white youth, including more than twice as many ads for Sprite, Mtn Dew, 5-hour Energy, and Vitamin Water.
- From 2008 to 2010, advertising on Spanish-language TV increased. Hispanic children saw $49 \%$ more ads for sugary drinks and energy drinks in 2010 than in 2008 and teens saw 99\% more.
- Hispanic preschoolers saw more ads for Coca-Cola Classic, Kool-Aid, 7UP, and Sunny D than did Hispanic older children and teens.

As reported in 2011, one 8-ounce serving of the typical fullcalorie soda, energy drink, or fruit drink contained over 1.6 times the recommended amount of sugar that most children and teens should consume in an entire day. ${ }^{78}$ The beverage industry spent $\$ 948$ million to advertise sugary drinks and energy drinks in all measured media, and spending increased by $5 \%$ from 2008 to 2010. Even though children and teens should rarely, if ever, consume the drinks analyzed in the report, advertising for many of these products was targeted directly to youth audiences. Moreover, all forms of marketing commonly used strategies to increase their appeal among young people, including celebrity spokespeople, popular music and extreme sporting event tie-ins, and promotions that rewarded young people for purchasing the products. The report also documented aggressive marketing of energy drinks and shots to youth, much of it targeted directly to teens under age 18.

## Continued concerns about sugary drinks and marketing to youth

Since 2011, there has been some evidence of declining sugary drink consumption, but also further evidence of the harmful effects of consuming sugar-sweetened beverages on young people's health. Heavy consumption of sugary drinks among teens (i.e., individuals consuming more than 500 calories per day) has declined, while heavy consumption by children increased somewhat. ${ }^{9}$ An estimated 60\% of American girls and $70 \%$ of boys aged 2 to 19 continue to consume at least one sugary drink per day, ${ }^{10}$ and more than one in three high school students consume at least two per day. ${ }^{11}$ Although the Dietary Guidelines recommend limiting discretionary calories (including both added sugars and fat) to no more than $15 \%$ of total daily caloric intake, ${ }^{12}$ approximately $16 \%$ of children's and adolescents' total caloric intake comes from added sugars alone, ${ }^{13}$ and sugary drinks are the number one single source of added sugars in young people's diet. ${ }^{14}$ Children who drink sugary beverages regularly are at risk of becoming overweight ${ }^{15}$ and obese, ${ }^{16}$ and weekly consumption in kindergarten more than doubles the odds of developing severe obesity. ${ }^{17}$

Recent research also demonstrates further potentially harmful effects from young people's exposure to sugary drink advertising. A recent study used functional MRI to assess brain responses to Coca-Cola advertising. Youth who watched Coca-Cola advertisements versus non-food control ads showed increased activity in reward and taste regions of the brain, indicating that watching these ads may lead to increased desire for the advertised products at a neural level. ${ }^{18}$ Enhanced response to unhealthy food ads also predicts adolescents' weight gain in the following year. ${ }^{19}$ Another recent study showed that exposure to food advertising in childhood (under age 13) can create a lasting bias towards these products or brands into adulthood, despite adults' greater capacity to counteract advertising effects. ${ }^{20} \mathrm{~A}$ recent study of adolescents' self-reported exposure to sugary
drink advertising showed higher exposure among blacks and those with less educated parents, ${ }^{21}$ populations that also face greater risks for obesity and other diet-related diseases. ${ }^{22}$ Further, research has identified the reduction of sugary drink consumption as one of the potentially most impactful means to improve population health, with the greatest health benefits for racial, ethnic, and low-income sub-groups. ${ }^{23}$

Also troubling is evidence that consumption of energy drinks continues to grow, including among youth. Energy drink sales are forecasted to increase from $\$ 8.1$ billion in 2011 to $\$ 13.5$ billion in $2015 .{ }^{24}$ A recent study showed that nearly $15 \%$ of adolescents (grades 6-12) consumed energy drinks at least once a week, ${ }^{25}$ and the proportion of caffeine intake by children and teens from coffee and energy drinks has increased. ${ }^{26}$ The high levels of caffeine and other stimulants in energy drinks raise significant concerns about their potentially dangerous effects when consumed by youth. ${ }^{27} 28$ Consumption by young people has resulted in life-threatening arrhythmias and increased blood pressure, ${ }^{29}$ and emergency room visits associated with energy drink consumption doubled from 2007 to 2011.30 The American Academy of Pediatrics concluded that because of these potential dangers, highly caffeinated energy drinks "have no place in the diet of children and adolescents." ${ }^{31}$ U.S. Senators ${ }^{32}$ and state attorneys general ${ }^{33}$ have also raised concerns about the health risks of energy drink consumption by minors and marketing practices that target vulnerable youth.

## Policy and advocacy actions to reduce sugary drink consumption

To address concerns about marketing and consumption of sugary drinks, policy makers have taken action. Public health departments have launched campaigns to educate consumers about the health impact of consuming sugary drinks, ${ }^{34}$ including New York City's Pour on the Pounds initiative ${ }^{35}$ and Philadelphia's Department of Public Health Food Fit Philly. ${ }^{36}$ Procurement policies to limit sales of sugary drinks in government-owned facilities and provide healthier beverage choices in vending machines have been enacted around the country as a strategy to improve public health and change social norms regarding beverage choices. ${ }^{3738}$ Sugary drink taxes have been proposed across the country, and Berkeley, California recently passed the first tax in the United States, adding a penny per ounce tax on all sugary drinks sales. Proponents believe that taxes will improve public health by increasing the cost to make sugary drinks less attractive to youth, reducing consumption, preventing obesity and other diet-related diseases, ${ }^{39} 40$ and raising revenues to fund health care coverage and obesity prevention programs. ${ }^{41}$ Similarly, New York City sought to limit sales of large-sized sugary drinks (more than 16 ounces) as another strategy to reduce consumption. 4243

To reduce consumption of sugary drinks specifically by children and teens, the Healthy Hunger-Free Kids

Act of 2010 required that the United States Department of Agriculture (USDA) set standards for all foods and beverages sold in schools. In response, the USDA released the Smart Snacks Standards, which limits the sales of beverages in schools to plain water, fat free and low-fat milk, 100\% (diluted or undiluted) fruit and vegetable juice, and flavored and/or carbonated drinks with less than 5 calories per 8 ounces or up to 10 calories per 20 ounces. ${ }^{44} 45$ High schools may also sell calorie-free flavored water and other beverages with up to 40 calories per 8 ounces or up to 60 calories per 12 ounces. ${ }^{46}$ In 2014, the USDA proposed that all foods and beverages marketed to children in schools must also meet the nutrition standards for those sold in schools. ${ }^{47}$

Public health advocates and scientists have also taken steps to raise awareness of the harmful effects of consuming sugary drinks. Healthy Eating Research (HER), a program of the Robert Wood Johnson Foundation, convened a national panel of experts to recommend nutrition standards for healthier beverages for children and adolescents. ${ }^{48}$ The Center for Science in the Public Interest (CSPI) asked the U.S. Food and Drug Administration (FDA) in 2013 to determine a "safe level of added sugars for beverages" 49 and hosted the National Soda Summit in 2014 to discuss strategies to reduce soda consumption and related diseases. ${ }^{50}$ The group also called on the Surgeon General to issue a report on the health impacts of sugary drinks, with a call to action to spur national efforts to reduce consumption. ${ }^{51}$ Public health leaders have also called for continued research on the health impact of sugary drinks, warning labels on sugary drink packaging, and removal of sugary drinks from restaurant kids' meals.

## Beverage industry response

In the Rudd Center's 2011 Sugary Drink FACTS report, we also recommended several industry actions to improve sugary drink marketing to youth (see Table 2).

## Table 2. Sugary Drink FACTS 2011: Recommendations

- Instead of sugary drinks, develop and market child-friendly products with less added sugar and no artificial sweeteners.
- To ensure that consumers know what's inside the drinks they buy, make nutrition and ingredient information easily accessible, including disclosing caffeine content online and on product packages, and indicating sugar content and artificial sweeteners on the front of packages.
- Discontinue the potentially misleading practice of highlighting nutrition-related claims on the front of packages, without similarly disclosing information about nutrients to limit (including sugar) and other less desirable ingredients.
- Remove all sugary drinks, including sports drinks, from sale in elementary, middle, and high schools, as well as other locations visited disproportionately more often by children and teens.
- Stop targeting teens with marketing for sugary drinks and other caffeinated products.

Recent industry initiatives position beverage companies as partners in solving the obesity crisis. ${ }^{52}$ For example, in 2013

Coca-Cola placed a full-page article in the New York Times with the headline "Beating obesity will take all of us." ${ }^{53}$ The company committed to taking action globally, including offering "low or no calorie beverage options in every market," providing "transparent nutrition information, featuring calories on front of all packages," and marketing responsibly, "including no advertising to children under 12 anywhere in the world (including TV, radio and print, internet and mobile)." The American Beverage Association (ABA) notes a number of positive changes in recent years. ${ }^{54}$ For example, all major beverage companies now offer smaller 7.5 - or 8 -ounce size cans to reduce portion sizes, and they have committed to be "clear on calories," adding calorie labels to the front of packages sized 20 ounces or smaller. ${ }^{55}$ The ABA launched a Calories Count vending program in 2013 in Chicago and San Antonio to remind consumers (via a large label on vending machines and selection buttons with calorie information) that "Calories COUNT: Check then choose." ${ }^{56}$ In September 2014, the ABA announced a nationwide pledge, in partnership with the William J. Clinton Foundation and its Alliance for a Healthier Generation, that by 2025, the soda industry will reduce beverage calories consumed per person nationally by $20 \% .{ }^{57} 58$ They pledged to accomplish this objective by offering more low- and no-calorie drinks and smaller portions, and using promotional tactics to educate and encourage consumers to reduce their calorie consumption.

In support of these promises, major soda brands have introduced new lower-sugar products with fewer calories (i.e. mid-calorie sodas). ${ }^{59}$ For example, Dr Pepper Snapple Group introduced its "Ten" line of sodas in 2012, including Dr Pepper Ten, 7UP Ten, and Sunkist Ten, which contain a blend of caloric and non-caloric sweeteners. ${ }^{60}$ PepsiCo introduced Pepsi NEXT in 2012, with approximately half the calories of regular Pepsi61 and sweetened with a blend of sugar, stevia, and sucralose. ${ }^{62}$ In 2014, Coca-Cola introduced Coca-Cola Life, which contains sugar and stevia and onethird less calories than regular Coke. ${ }^{63}$ Beverage industry analysts question whether these products will succeed given consumers' taste preferences. ${ }^{64}$ Further, it is not clear how much marketing support companies have dedicated to these products or whether they intend to market them to youth in place of full-calorie sodas.

The ABA also has promised to improve beverage marketing to youth. Prior to implementation of the USDA guidelines for beverages sold in schools, the ABA together with the Alliance for a Healthier Generation established nutrition standards for beverages sold in elementary, middle and high schools. ${ }^{6566}$ ABA companies have committed to only advertise juice, water, and milk-based drinks to children under the age of 12. ${ }^{67}$ Coca-Cola Co., PepsiCo, Kraft Foods, and Campbell Soup Company belong to the Children's Food and Beverage Advertising Initiative (CFBAI) and pledge to market only healthier dietary choices in child-directed media. ${ }^{68}$ In 2014, Coca-Cola Co. and PepsiCo pledged that they would not market any beverages to children under 12,69 70 while Kraft Foods has pledged to only market Capri Sun Roarin' Waters,

## Introduction

Capri Sun 100\% juice, and Kool-Aid Singles drink mix to children. ${ }^{71}$ Further, ABA companies have donated money to improve neighborhoods, schools, and communities they serve and participate in anti-obesity initiatives, including promotion of healthy lifestyles through efforts such as building playgrounds or providing access to safe play-spaces. ${ }^{72}$ They have also promised to support First Lady Michelle Obama and the Partnership for a Healthier America's Drink Up campaign to increase water consumption. ${ }^{73}$

## Measuring progress

At the same time, beverage companies continue to extensively market their unhealthy products. In response to investor concerns about PepsiCo's profits and declining market share following a period of investment in new healthier products, the company announced in 2012 that it would spend another \$500 to $\$ 600$ million in marketing, including on its core brands. ${ }^{74}$ In 2014, Coca-Cola Company followed with a pledge to invest \$1 billion in "media spending and brand-building initiatives" to support declining soft drink sales. ${ }^{75}$

Independent evaluation of industry's promises to the public health community versus promises to their shareholders is necessary. The purpose of this report is to quantify changes in the nutrition content and marketing of sugary drinks to children and teens over the past three years, highlight companies' progress, and identify opportunities for further improvement.

As in 2011, we examined sugar-sweetened soda, fruit drinks, sports drinks, energy drinks, flavored waters, and iced teas, as well as diet children's drinks and diet energy drinks and shots. We have expanded our nutrition content analyses to include brands with the highest U.S. sales in 2013: 106 brands from 47 companies, totaling more than 900 different products. Product nutrition was obtained in March through

June 2014. Marketing analyses examine brands from 23 different companies that purchased advertising in measured media in 2013 and/or promoted their products on the internet and in social media. These analyses primarily evaluate data through 2013.

Utilizing the same methods as the first Sugary Drink FACTS report, we examine differences by drink category, company, and brand, and changes in the past three years when possible. Analyses include:

- Sales of sugary drinks, energy drinks, and non-sugarsweetened drinks;
- Nutrition content of sugary drinks, including comparisons between children's and other drinks;
- Marketing messages on product packages;
- Advertising spending and TV advertising exposure, including advertising targeted to children and teens;
- Brand appearances on prime-time TV programming;
- Child and teen visits to beverage company websites;
- Advertising on third-party websites, including children's sites, youth websites, Facebook, and YouTube;
- Social media marketing on Facebook, Twitter, YouTube, Vine, and Instagram;
- Smartphone apps offered by beverage companies; and
- Marketing to black and Hispanic youth, including Spanishand English-language TV advertising and beverage company websites.

The findings in this report serve to evaluate beverage companies' commitment to reducing consumption of unhealthy beverages that can harm young people's health and improving the marketing environment that surrounds today's children and teens.

## Sugary drink market

| Sugary drink market | Definition |
| :--- | :--- |
| Company | The company that produces the product, typically the company listed on the product package or <br> that owns the official website for the product. |
| Brand | The marketing unit for each beverage. Brands may include products in multiple categories (e.g., <br> Snapple iced teas and Snapple fruit drinks). |
| Product | Each specific flavor of a brand. |
| Any beverage product containing at least one gram of added sugar per 8-ounce serving. In addition |  |
| to added sugar, sugary drinks may also contain naturally-occurring sugar (e.g., from fruit juice) and/ |  |
| or zero-calorie sweeteners. |  |

In this section, we present information about total sales of sugary drinks by category in 2013 and compare them to sales of other categories of drinks that do not contain added sugar. We then describe the companies, brands, and products
included in our analyses of sugary drink and energy drink nutrition and marketing. Our analyses of unhealthy drinks also include diet energy drinks and shots and diet children's drinks that contain artificial sweeteners but no added sugar.

| Drink categories | Definition |
| :--- | :--- |
| Regular soda | Carbonated soft drinks that contain two or more grams of added sugar per 8-ounce serving. |
| Fruit drinks | Fruit-flavored drinks with added sugar that contain no more than 50\% fruit juice. These products are <br> also referred to by manufacturers as juice drinks, juice beverages, fruit cocktails, nectars, and fruit- <br> flavored drinks. |
| Flavored water | Non-carbonated drinks described as "water beverage" on the product packaging, or drinks that <br> include water in the product name. Flavored waters in this analysis all contain added sugar. |
| Sports drinks | Drinks marketed as intended to accompany physical activity. They contain the phrase "sport drink" <br> on product packaging. Sports drinks in this analysis all contain added sugar. |
| Iced tea/coffee | Includes ready-to-serve drinks that are primarily described as "iced tea" or "coffee beverage" and <br> typically served cold. Coffee products are new to the 2014 analysis. Iced tea and coffee products in <br> this analysis contain added sugar. |
| Caffeinated beverage products labeled by the manufacturer as "energy drink" or "energy <br> supplement." This category includes carbonated, canned varieties, with or without added sugar. as <br> well as concentrated energy shots (sold in 2- to 2.5-ounce containers). |  |
| Other drink categories | For comparative purposes in some analyses, we also provide data for drinks that do not contain <br> added sugar, including plain bottled water, 100\% juice (including fruit and vegetable juice blends), <br> diet soda and other diet drinks, and light fruit juices. |
| Diet drinks | Diet drinks contain zero-calorie sweeteners and zero grams of added sugar. These drinks may <br> contain minimal calories from other carbohydrate sources, but most have no calories. Unsweetened <br> zero-calorie products are not included in this category (e.g., flavored seltzer). |
| These drinks contain juice diluted with water, as well as zero-calorie sweeteners, but no added sugar (e.g., <br> V8 Fusion Light, Trop 50). These products are typically advertised as reduced-calorie juice drinks. |  |

## Drink subcategories

Children's drinks

## Definition

Products that are marketed as intended primarily for children, often sold in 6- to 6.8-ounce drink pouches or boxes. Powdered and liquid children's drink mixes and diet children's products that contain only zero-calorie sweeteners and/or juice as a sweetener, but no added sugar, are also included in this report.
Full-calorie Full-calorie drinks contain more than 40 calories per 8-ounce serving. Most, if not all, of the sweeteners in these products is added sugar, but they may also contain naturally occurring sugar from fruit juice, as well as zero-calorie sweeteners.
Reduced-sugar Reduced-sugar drinks are lower-sugar, reduced-calorie drinks with 40 or fewer calories per 8-ounce serving. They often contain zero-calorie sweeteners in addition to added sugar. The drink name may contain the words "light" or "diet," or it may give no indication that the drink is lower in calories.

## Beverage sales by category

In 2013, $\$ 14.3$ billion of sugary drinks were sold in the United States at supermarkets, convenience stores, drug stores, and mass merchandisers, approximately $\$ 124$ spent per household. Regular soda continued to contribute almost one-half of sugary drink sales (see Figure 1), followed by fruit drinks, energy drinks, sports drinks, and iced tea/coffee, ranging from $9 \%$ to $18 \%$ of sugary drink sales. Flavored water made up just $2 \%$ of all sugary drink sales.

Figure 1. Sugary drink sales in 2013 (\$ billion)


Source: Rudd Center analysis of IRI data (2014)

By comparison, U.S. households spent $\$ 10.7$ billion on $100 \%$ juice, plain bottled water, diet soda, and other diet drinks in 2013. Soda category sales were split approximately onethird diet versus two-thirds regular soda (see Figure 2). This proportion is comparable to the $33 \%$ of soda sales for diet products found in 2010. ${ }^{1}$ In contrast, dollar sales of $100 \%$ juice surpassed fruit drink sales by approximately $35 \%$ (although juice also costs more per ounce than fruit drinks). Sales of plain water and diet drinks combined were slightly higher than sales of other non-carbonated sugary drinks (including sports drinks, iced tea/coffee, and flavored water).

Figure 2. Sales of sugary drinks vs. comparison drinks in 2013


Source: Rudd Center analysis of IRI data (2014)

Compared with 2010, total gallons of soda sold (regular and diet combined) declined by $7 \%$ in 2013, and gallons of fruit drinks sold went down $3 \% .{ }^{2}$ In contrast, gallons sold of other drink categories increased from 2010 to 2013 (for sugary drinks and diet products combined). Flavored water sales increased $7 \%$, sports drinks went up $12 \%$, and ready-to-drink tea and coffee sales increased $21 \%$. Energy drinks had the highest growth, with $41 \%$ more gallons sold in 2013 versus 2010. Compared with 2010, gallon sales of bottled water also increased 15\%, while fruit juice sales went down 11\% in 2013.

## Sugary drink products

Our nutrition and marketing analyses examine brands that include sugary drink products, as well as energy drinks and shots and children's products with zero-calorie sweeteners but no added sugar. All brands in these analyses met the following criteria: 1) \$5 million or more in U.S. sales in 2013; 2) children's
drinks with $\$ 1$ to $\$ 5$ million in U.S. sales in 2013; and/or 3) all brand spending \$250,000 or more on advertising in 2013.
In total, 106 brands and 914 different sugary drink, energy drink, and diet children's drink products from 47 different
companies qualified for our analysis. An overview of companies, brands, products, and 2013 dollar sales by drink category is provided in Table 3. Overall, these brands contributed $92 \%$ of category sales in 2013, ranging from $83 \%$ of fruit drink sales to $99 \%$ of flavored water sales.

Table 3. Sugary drink category overview

|  | \# of companies <br> with products <br> in category | \# of <br> brands | \# of <br> products | Average\# of <br> products <br> per brand | 2013 sales <br> (\$ million) | \% of total <br> category <br> sales |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Fruit drinks* | 30 | 43 | 434 | 10.1 | $\$ 2,166.8$ | $83 \%$ |
| Regular soda | 10 | 37 | 167 | 4.5 | $\$ 5,977.7$ | $93 \%$ |
| Iced tea/coffee | 11 | 16 | 162 | 10.1 | $\$ 1,261.9$ | $94 \%$ |
| Energy drinks** | 11 | 15 | 84 | 5.6 | $\$ 1,836.9$ | $95 \%$ |
| Sports drinks | 2 | 2 | 41 | 20.5 | $\$ 1,601.2$ | $98 \%$ |
| Flavored water* | 4 | 4 | 26 | 6.5 | $\$ 340.1$ | $99 \%$ |
|  |  |  |  |  |  |  |
| Children's drinks** | 14 | 18 | 162 | 9.0 | $\$ 850.5$ |  |
| Reduced-sugar products | 17 | 26 | 135 | 5.2 |  |  |

*Includes children's drinks
**Includes diet drinks
Source: Product analysis (August, 2014) and Rudd Center analysis of IRI data (2014)
Table 4. Companies with brands in multiple categories*

| Company | $\begin{array}{r} \text { \# of } \\ \text { brands } \end{array}$ | products | Regular soda | Fruit drinks | Energy drinks | Iced tea/ coffee | Sports drinks | Flavored water |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Coca-Cola | 22 | 125 | Barq's, CocaCola, Fanta, Mello Yello, Pibb Xtra, Seagram's, Sprite | Bright \& Early, Calypso, Fuze, $\mathrm{Hi}-\mathrm{C}$, Minute Maid, Minute Maid Coolers, Minute Maid Fruit Falls, Simply | Full Throttle, NOS | Fuze, Gold Peak, Honest Tea | Powerade | Vitamin Water |
| Dr Pepper Snapple Group | 18 | 106 | 7UP, A\&W, Big Red, Cactus Cooler, Canada Dry, Crush, Dr Pepper, IBC, RC Cola, Schweppes, Squirt, Stewart's Fountain Classics, Sundrop, Sunkist, Tahitian Treat, Vernors | Hawaiian Punch, Snapple |  | Snapple |  |  |
| PepsiCo | 9 | 106 | Manzita Sol, Mtn Dew, Mug, Pepsi, SoBe, Tropicana | SoBe, Tropicana | AMP Energy | Lipton, SoBe | Gatorade | SoBe |
| Monster Beverage Corporation | 5 | 54 |  | Huberts | Monster, Monster Energy, Java Monster | Peace Tea |  |  |
| Nestle | 4 | 27 |  | Poland Springs |  | Nestea, Sweet Leaf, Tradewinds |  |  |
| Goya | 2 | 6 | Malta | Nectars |  |  |  |  |
| Kraft Foods | 2 | 54 |  | Kool-Aid, Capri Sun |  |  |  | Capri Sun |
| Starbucks | 2 | 38 |  |  | Starbucks | Starbucks, Taz |  |  |
| Arizona | 1 | 43 |  | Arizona |  | Arizona |  | Arizona |
| Johanna Foods | 1 | 9 |  | Ssips |  | Ssips |  |  |
| Unilever | 1 | 20 |  | Lipton |  | Lipton |  |  |

*Children's brands noted in bold
Source: Product analysis (August, 2014)

Fruit drinks comprised the largest category with 47\% of all products in this analysis ( $n=434$ ) spanning 30 different companies. Sports drinks and flavored water were the smallest categories, with just $4 \%$ ( $n=41$ ) and $3 \% ~(n=26$ ) of all products, respectively. The fruit drink category also had the most brands ( $n=44$ ), while regular soda came in a close second with 37 brands. Sports drinks had the most products per brand, with an average of 20.5 , compared to just 4.5 and 6.5 products on average for regular soda and flavored water brands, respectively. Of the products analyzed in this report, 162 (18\%) were marketed as specifically intended for children (i.e., children's drinks). The majority of children's drinks (94\%) were fruit drinks, while flavored waters contributed the remaining $6 \%$. Fourteen companies offered 17 children's brands.

Eleven companies had brands in more than one drink category (see Table 4). They represent 23\% of the companies, but 64\% of the products ( $n=585$ ) in our analysis. Three companies -Coca-Cola, Dr Pepper Snapple Group, and PepsiCo - were responsible for $46 \%$ of brands (22, 18, and 9, respectively) and $37 \%$ of the products ( 125,106 , and 106 , respectively) examined. It was not uncommon for brands to offer products in multiple drink categories, such as Arizona (fruit drinks, iced tea, and flavored water), Snapple (fruit drinks and iced tea), and Lipton (fruit drinks and iced tea). However, only CocaCola Co. and PepsiCo offered products in every sugary drink category. Notably, Dr Pepper Snapple Group had the most brands ( $n=18$ ), including 16 regular soda brands. Only two other companies had more than 50 products in this analysis: Kraft Foods and Monster Beverage Corporation.

Table 5. Companies with products in one drink category*

| Category | Company | Brand \# | \# of products |
| :---: | :---: | :---: | :---: |
| Regular soda | Jones Soda Co. | Jones | 16 |
| Regular soda | Polar Beverages | Polar | 15 |
| Regular soda | National Beverage Corp | Faygo, Shasta | 14 |
| Regular soda | Reed's | Reed's, Virgil's | 13 |
| Regular soda | Novamex | Jarritos | 6 |
| Regular soda | Carolina Beverage Corporation | Cheerwine | 1 |
| Energy drinks | Rockstar | Rockstar | 13 |
| Energy drinks | Innovation Ventures | 5-hour Energy | 7 |
| Energy drinks | SK Energy Shots | SK Energy | 4 |
| Energy drinks | Red Bull | Red Bull | 3 |
| Energy drinks | Novartis | NoDoz | 2 |
| Energy drinks | NVE Pharmaceuticals | Stacker 2 Xtra | 2 |
| Energy drinks | Joseph Co. Intl LLC | West Coast Chill | 1 |
| Fruit drinks | Ocean Spray | Ocean Spray | 34 |
| Fruit drinks | Langers Juice Company | Langers | 30 |
| Fruit drinks | Welch Foods Inc. | Welch's, Welch's Chillers | 28 |
| Fruit drinks | Campbell Soup Company | Bolthouse Farms, V8 Fusion, V8 Splash | 16 |
| Fruit drinks | Jel Sert Company | Hawaiian Punch (Singles to Go), Mondo Fruit Squeezers | 18 |
| Fruit drinks | Sunny Delight Beverages | Sunny D | 13 |
| Fruit drinks | Alamance Foods | Happy Drinks | 11 |
| Fruit drinks | Houchens Industries | Tampico | 10 |
| Fruit drinks | Royal Wessanen | Little Hug Fruit Barrels | 10 |
| Fruit drinks | J.M. Smucker Company | RW Knudsen, Santa Cruz Organics | 7 |
| Fruit drinks | Jumex Group | Jumex | 7 |
| Fruit drinks | BYB Brands, Inc. | Tum E Yummies | 5 |
| Fruit drinks | S. Martinelli \& Company | Martinelli's | 5 |
| Fruit drinks | Turkey Hill Dairy | Turkey Hill | 5 |
| Fruit drinks | Vita Coco | Vita Coco Kids | 5 |
| Fruit drinks | Newman's Own | Newman's Own | 4 |
| Fruit drinks | Stremick's Heritage Foods | Kern's | 4 |
| Fruit drinks | Tuscan Dairy Farms | Fruit Rush | 4 |
| Fruit drinks | Britvic | Robinsons Fruit Shoot | 3 |
| Fruit drinks | Bug Juice | Bug Juice | 3 |
| Iced tea/coffee | Karhl Holdings LLC | Two If By Tea | 4 |
| Iced tea/coffee | XINGtea | XINGtea | 3 |
| Flavored water | Apple \& Eve | Apple \& Eve Waterfruits | 3 |

*Children's brands noted in bold
Source: Product analysis (August, 2014)

Figure 3. Distribution of products by company within drink category


Source: Product analysis (August, 2014)

The remaining 35 companies offered products in just one drink category, including 21 companies with one or more fruit drink brands, seven energy drink companies, six soda companies, two companies with iced tea or coffee brands, and one flavored water company (see Table 5). Among these single-category companies, Ocean Spray and Langers Juice Company had the most products (34 and 30 fruit drinks,
respectively). Nearly one-half of the fruit drink brands (11 of 26) from single-category companies were children's brands.

The distribution of products by company within drink category is shown in Figure 3. Some categories were dominated by a small number of companies. For example, PepsiCo (Gatorade brand) comprised $80 \%$ of products in the sports drink category. In the regular soda and flavored water categories, more than

Figure 4. Number of products per category in 2011 and 2014*

*Includes only brands analyzed in both 2011 and 2014
Source: Product analysis (August, 2014)
$50 \%$ of products came from just one or two of the three large beverage companies (i.e., Coca-Cola, Dr Pepper Snapple Group, and/or PepsiCo). In contrast, iced tea/coffee and fruit drinks were more diverse categories, with no single company contributing more than one-quarter of products.

From 2011 to 2014, there were few changes in the number of products in each category (see Figure 4). Among the companies and brands examined in both years, the number of regular soda, iced tea, and sports drink products increased slightly, while fruit drink, energy drink, and flavored water products declined marginally.

## Sugary drink markef

## Signs of progress

- From 2010 to 2013, gallon sales of soda and fruit drinks (including sugar-sweetened and diet products) declined by $7 \%$ and $3 \%$, respectively.
- Gallon sales of bottle water increased by 15\% to \$3.0 billion in 2013.


## Continued reasons for concern

- Gallon sales of other beverage categories (including both regular and diet products) also increased: flavored water (+7\%), sports drinks (+12\%), and ready-to-drink tea and coffee (+21\%). Sugary drink sales in these categories totaled $\$ 3.3$ billion.
- Sugary drinks continued to comprise the majority of sales in most beverage categories. U.S. households spent $\$ 6.4$ billion on regular soda in 2013, compared with $\$ 3.5$ billion on diet soda, and the proportion of diet versus regular soda sales has not increased since 2010. Spending on sugary sports drinks, flavored water, and iced tea exceeded the amount spent on diet versions of these products by 5.5 times.
- Energy drink sales totaled $\$ 1.9$ billion in 2013, and sales continued to climb with a $41 \%$ increase in gallons sold versus 2010.


## Nutritional content and on-package marketing

In this section, we report sugar, sodium, caffeine, and juice content of sugary drinks and energy drinks and note the inclusion of zero-calorie sweeteners, when information was available. Nutritional content is analyzed by category, brand,
and company. We also examine changes from 2011 to 2014. In addition, we report nutrition-related messages, child features, and promotions appearing on sugary drink packaging.

## Obtaining nutrition and ingredient information

| Nutritional content | Definition |
| :--- | :--- |
| Nutrition information | Nutrition information analyzed includes calorie, sugar, and sodium content reported on nutrition <br> facts panels. Median and range per serving are reported by brand and category. Nutrition in an <br> 8-ounce serving is reported, unless the product was only available in another size single-serving <br> package (e.g., children's fruit drink pouches, energy shots). |
| Ingredient information | When available, \% juice, caffeine, and zero-calorie sweetener content are reported. This information <br> was obtained from the list of ingredients reported under nutrition facts panels and other information <br> provided by manufacturers on labels and/or websites. |
| Zero-calorie sweetenersAll nonnutritive sweeteners, including artificial sweeteners (acesulfame potassium, aspartame, <br> sucralose, and neotame), as well as Stevia (also called rebiana or Reb A and described as a <br> natural sweetener). |  |

As in 2011, obtaining nutrition and ingredient information was sometimes difficult and transparency varied greatly by company (see Table 6). While all brands examined provided product information on their websites several websites contained no nutrition information. Others gave only basic information such as calories and sugar content, but did not provide ingredient lists, caffeine content, or percent juice information. Further, as in 2011, customer service representatives were often unable or unwilling to provide information over the phone. Thus, the task of gathering
nutrition information was laborious and at times frustrating. Research assistants made numerous calls to companies and several visits to supermarkets, convenience stores, and gas stations to obtain missing information. We also used Gigwalk mobile work marketplace to obtain information on brands that were not available at local stores.

As in 2011, websites for the largest beverage companies contained full nutrition and ingredient information for most of their products. PepsiCo and Coca-Cola maintained

Table 6. Obtaining nutrition information*

| Nutrition information obtained easily |  |
| :---: | :---: |
| Coca-Cola | Most nutrition information was available on the website. |
| Dr Pepper Snapple Group | Most nutrition information was available on the website. However, when information was missing, customer service representatives were the most forthright of all companies in providing information over the phone. |
| PepsiCo | Most nutrition information was available on the website. |
| Jones Soda Co. | No nutrition information was available on the website, but customer service representatives were very helpful in providing information to researchers. |
| Alamance Foods (Happy Drinks) | The representative was very helpful, sending nutrition information via e-mail with no questions asked. |
| Nestle (Nestea) | Most nutrition information was available on the website. |
| Nutrition information difficult to obtain |  |
| Campbell Soup Company | Nutrition information about V8 products was very difficult to obtain. Ingredient information was not available on the website, and researchers had to make multiple calls for information. Customer service representatives asked many questions about why the information was needed and who needed it. One representative informed us that information should be obtained from the website for liability issues (even though it was not available on the site). |
| Coca Cola Company (Fanta, Fuze, Minute Maid) | Missing information for these few brands required calls to customer service, where representatives repeatedly told researchers that information was online. Some representatives did check the website themselves, found otherwise, and promised to send questions "to research" for a 7 - to 10-day turnaround (but information was never sent). One representative called back insisting all information was online, but could not direct researchers to the appropriate page. |
| Coca Cola Company (Calypso) | Nutrition information was not available online. Researchers contacted customer service for information, but representatives would only provide information for a few products. |
| Kraft Foods | Researchers contacted Kraft for information on Kool-Aid and other brands. Representatives stated that product information was not available to them and the best source was the product package itself because formulations may change. |
| Bug Juice | Nutrition information was not available online. A representative refused to give information over the phone, directing the researcher to three convenience stores in the area. Two stores did not contain the products, and one was no longer in business. A researcher filled out an inquiry form online, but never received the requested information. |
| Monster Beverage Corporation (Monster Energy) | Comprehensive nutrition and ingredient information was no longer available on the company website (although it had been in 2011). Researchers made many calls to customer service, but representatives were reluctant to share information and made comments such as, "Too much information is being requested" and "Go look at the cans." Representatives also asked researchers many questions, such as who was calling, where from, and why the information was needed. |
| Rockstar | Comprehensive nutrition and ingredient information was no longer available on the company website (although it had been in 2011). Researchers made various calls to customer service but representatives were difficult to get on the phone. We left messages, yet calls were not returned. Researchers were also told to "check the cans." |
| National Beverage Corp (Faygo, Shasta) | Representatives insisted that their products were in the stores and would not give information over the phone. However, researchers were unable to find any products during local store visits. This information was eventually obtained for Shasta products by commissioning someone through Gigwalk to visit stores in another state and send pictures of the packages. |

* Experiences with specific brands, not the entire company, are denoted in parentheses.
separate nutrition websites with very accessible and detailed information for nearly all products. Dr Pepper Snapple Group customer service representatives were the most forthright in providing information over the phone, a positive change from 2011 when information was requested repeatedly from the company and never provided. However, researchers experienced increased challenges acquiring information about energy drinks. In 2011, Monster Energy and Rockstar had websites that provided complete nutrition and ingredient information about their products. Yet at the time of our analysis in 2014, this information had been removed from their websites. Customer service representatives were largely unhelpful, and information was only gathered after many attempts to speak with different representatives. Further, it was difficult to obtain ingredient information for most fruit drink brands.


## Nutritional content by category

In this report, we present nutrition information for 914 drink products (see Appendix B for nutrition by product). Ranking Table 1 provides nutrition information by brand and drink
category. We also analyzed changes in nutritional content for 541 products from brands included in our 2011 analysis, including new products and some products that were not included in our 2014 product list due to low brand sales.

Table 7 summarizes calorie and sweetener content of drinks in each category in 2014. Sugar-sweetened regular soda, fruit drinks, and energy drinks had the highest median calorie content at 100 to 110 calories and 24 to 29 grams of sugar per 8-ounce serving. In contrast, flavored water, sports drinks, and iced tea/coffee products contained a median of 10 to 14 grams of sugar and 40 to 66 calories per serving. In addition to added sugar, a large number of products also contained zero-calorie sweeteners, ranging from $10 \%$ of regular soda products to $50 \%$ or more of flavored water and sugarsweetened energy drinks.

## Regular soda

Median sugar for the majority of soda brands ranged from 27 to 31 grams. Jones full-calorie sodas had the most sugar of all brands in this report, with a median of 43 grams sugar

Table 7. Sugary drink nutritional content by category in 2014*

| Category | \# of <br> products | Median <br> calories (kcal) | Median <br> sugar $(\mathbf{g})$ | $\%$ reduced-sugar <br> products | $\%$ of full-calorie products <br> with 0-calorie sweeteners** |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Regular soda | 167 | $110(30-190)$ | $29(8-48)$ | $5 \%$ | $10 \%$ |
| Energy drinks | 50 | $106(7-148)$ | $23(1-43)$ | $24 \%$ | $20 \%$ |
| Fruit drinks | 418 | $100(5-217)$ | $24(1-57)$ | $15 \%$ | $33 \%$ |
| Iced tea/coffee | 162 | $66(17-169)$ | $14(2-28)$ | $15 \%$ | $0 \%$ |
| Sports drinks | 41 | $50(20-53)$ | $14(5-14)$ | $29 \%$ | $0 \%$ |
| Flavored water | 26 | $40(30-48)$ | $10(8-13)$ | $62 \%$ |  |

*Includes only products with added sugar
**\% of products reported by companies
Source: Nutritional content analysis (August, 2014)
(and 165 calories) in an 8-ounce serving. Two additional soda brands had a median sugar content of 42 grams per serving (Virgil's and Cheerwine), and four brands had median sugar of 32 grams per serving or more (Reed's, Tahitian Treat, Big Red, and Fanta). Some full-calorie sodas also contained zerocalorie sweeteners, such as Faygo soda with sucralose plus 23 to 28 grams of sugar per serving.

Jones, Reed's, and PepsiCo also offered reduced-sugar sodas ( $n=8$ ) with 2 to 10 grams of sugar. Two recently introduced PepsiCo products, Pepsi NEXT and Mtn Dew Kickstart, each contained 40 calories per 8-ounce serving. In 2011, Sprite offered a reduced-calorie soda called Sprite Green, which has since been discontinued, and 7UP Plus, a reduced-sugar soda with 1 gram of sugar, was also discontinued. However, Dr Pepper Snapple Group introduced other reduced-calorie sodas after 2011: the company's "Ten" products were 10-calorie versions of popular brands, including 7UP, Dr Pepper, Sunkist, A\&W, Canada Dry, and RC Cola. These products were artifically sweetened and contained two grams of sugar per serving. We have classified them as diet products due to their very low sugar content relative to other sugar-sweetened
soda products. Eight soda products in 2014 were also sweetened with $1 \%$ to $5 \%$ juice.
Nearly all soda brands reported their caffeine content in 2014, and $65 \%$ were caffeine-free. Of those containing caffeine, the median was 29 milligrams. Two Mtn Dew products - Mtn Dew Game Fuel Citrus Cherry and Mtn Dew Game Fuel Electrifying Berry - had the highest caffeine in the regular soda category with 49 milligrams per 8-ounce serving. Mtn Dew Kickstart products also had 46 milligrams of caffeine.

Nearly all soda brands (95\%) from the companies examined in 2011 remained in distribution in 2014 (see Table 8). Just one CocaCola brand - Vault, the most-caffeinated soda in the 2011 report - was discontinued. Compared with 2011, calories, sugar, and sodium content of these products remained virtually unchanged. Positively, there was an increase in the percentage of products reporting exact caffeine content, increasing from approximately one-half in 2011 to $95 \%$ of products in 2014 . The median caffeine in these products dropped from 36 to 28 milligrams, primarily due to the discontinuation of Vault products. One notable subbrand introduced in 2013 was Mtn Dew Kickstart (two products), a combination of reduced-sugar Mtn Dew and 5\% juice.

Table 8. Regular soda nutrition*

|  | $\mathbf{2 0 1 1}$ |  |
| :--- | ---: | ---: |
| Company | \# of brands (products) | \# of brands (products) |
| Coca-Cola | $5(16)$ | $4(11)$ |
| Dr Pepper Snapple Group | $9(34)$ | $9(43)$ |
| PepsiCo | $5(19)$ | $5(23)$ |
| Nutrition | $\%$ or median (range) | \% or median (range) |
| Reduced-sugar products | $1 \%$ | $4 \%$ |
| Calories | $110(10-133) \mathrm{kcal}$ | $110(40-130) \mathrm{kcal}$ |
| Sugar | $30(1-35) \mathrm{g}$ | $29(10-35) \mathrm{g}$ |
| Sodium | $37(17-70) \mathrm{mg}$ | $40(20-70) \mathrm{mg}$ |
|  |  |  |
| Caffeine | $36(15-49) \mathrm{mg}$ | $28(6-49) \mathrm{mg}$ |
| Products reporting that they contain no caffeine | $19 \%$ | $61 \%$ |
| Products reporting that they contain some caffeine (but do not specify amount) | $4 \%$ | $0 \%$ |
| Products reporting specific caffeine content | $29 \%$ | $38 \%$ |

*Analysis of changes over time for brands that were included in the 2011 report, including new products introduced since 2011 and products that are not necessarily included in our 2014 product list (due to low sales)
Source: Nutritional content analysis $(2011,2014)$

## Energy drinks and shofs

We analyzed three categories of energy drinks: full-calorie ( $n=39$ ), reduced-sugar ( $n=11$ ), and diet drinks ( $n=19$ ); as well as energy shots (which do not contain sugar) ( $n=15$ ). In 2014, Rockstar was the only energy drink company with a median caffeine content greater than 80 milligrams per 8-ounce serving, although the caffeine in energy drink products varied widely. Starbucks Refreshers had the least caffeine with 33 milligrams, while two Rockstar Recover varieties had the most at 160 milligrams. Although energy shots have a smaller serving size ( $2-$ to 2.5 oz ), they contained as much or more caffeine (up to 200 mg ) per container (see Table 9).

Although most sugar-sweetened energy drinks contained less sugar than regular soda, some energy drinks contained equivalent amounts. Rockstar also had the highest sugar content of all energy drink brands, with a median of 31 grams per 8 ounces, followed by Full Throttle and AMP Energy with 29 grams per serving. Further, 58\% of energy drinks contained zero-calorie sweeteners, as well as sugar. Although this category also had a relatively high proportion of reduced-sugar products, which typically contain zerocalorie sweeteners, many full-calorie energy drinks contained
sweeteners as well. For example, NOS, Java Monster, and Rockstar Super Sours contained zero-calorie sweeteners plus 15 to 33 grams of sugar per serving.
Changes in energy drink nutrition from 2011 and 2014 are summarized in Table 9. In 2014, the proportion of reducedcalorie energy drinks increased from $10 \%$ to $25 \%$, contributing to the reduction in median sugar and calories for this category. Median caffeine content did not change. A positive change was a notable increase in percentage of products reporting exact caffeine content. In 2011, 57\% of products specified caffeine per serving, while the remainder only indicated that they contained caffeine. In contrast, 92\% reported exact caffeine content in 2014.

Three brands of energy shots are included in the 2014 analysis: 5-hour Energy, Stacker 2 XTRA, and SK Energy. Introduced since 2011, SK Energy was the most highly caffeinated product in this report with 250 milligrams in a single 2.5-ounce container. However, three of the four companies in our report that sold energy shots in 2011 have since discontinued their energy shot lines in the United States: Red Bull, Rockstar, and Arizona. Only 5-hour Energy was examined in both 2011 and 2014.

Table 9. Energy drinks and shots nutrition*

| Company | Energy drinks |  | Energy shots |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2011 | 2014 | 2011 | 2014 |
|  | \# of brands (products) | \# of brands (products) | \# of brands (products) | \# of brands (products) |
| Arizona | 1 (7) | 1 (5) | 1 (3) | 0 |
| Coca-Cola | 2 (10) | 2 (10) | 0 | 0 |
| Dr Pepper Snapple Group | 1 (4) | 1 (4) | 0 | 0 |
| Monster Beverage Corporation+ | 1 (23) | 3 (22) | 0 | 0 |
| Innovation Ventures | 0 | 0 | 1 (7) | 1 (7) |
| PepsiCo | 1 (9) | 1 (9) | 0 | 0 |
| Red Bull | 1 (4) | 1 (2) | 1(2) | 0 |
| Rockstar | 1 (18) | 1 (7) | 1 (2) | 0 |
| Nutrition | \% or median (range) | \% or median (range) | \% or median (range) | \% or median (range) |
| Diet products | 13\% | 14\% | 100\% | 100\% |
| Reduced-sugar products | 10\% | 25\% | 0\% | 0\% |
| Products with 0-calorie sweeteners | 64\% | 69\% | 79\% | 100\% |
| Calories** | 110 (10-144) kcal | 105 (7-148) kcal | 4 (2-27) kcal | 4 (4) kcal |
| Sugar** | 26 (1-35) g | $21(1-31) \mathrm{g}$ | $0(0-6) \mathrm{g}$ | 0 (0) g |
| Sodium | 130 (5-340) mg | 113 (0-280) mg | 18 (0-35) mg | 18 (18) mg |
| Caffeine | 81 (71-167) mg | 80 (68-160) mg | 80 (6-200) mg | 200 (6-200) mg |
| Products reporting that they contain caffeine (but do not specify amount) | 41\% | 8\% | 57\% | 0 \% |
| Products reporting specific caffeine content | t 57\% | 92\% | 36\% | 100\% |

[^0]
## Fruif drinks

Of all products evaluated in this report, one fruit drink had the most calories: Minute Maid Cranberry Juice Cocktail from Coca-Cola with a staggering 57 grams of sugar per serving, nearly twice the category median. Goya Nectars had the highest median sugar content for a brand overall ( 35 grams per serving), followed by Welch's and Bolthouse Farms, both with 32 grams. More than one-quarter (27\%) of all fruit drinks reported zero-calorie sweeteners, although the number may be higher due to the lack of available ingredient information for this category. Ingredient information could not be obtained for $30 \%$ of fruit drinks. A large proportion of fruit drinks (35\%) were children's drinks (described in the following section).

As with other sugary drink categories, nutrition for nonchildren's fruit drinks showed little change from 2011 to 2014 (see Table 10). However, there was a notable reduction in the number of products providing ingredient information outside of product packages. We were able to obtain this information for $81 \%$ of these products in 2011, but only $55 \%$ of products in 2014. There was a drop in the percentage of reduced-calorie drinks, from $20 \%$ to $7 \%$ over the last three years, matched by a decline in the percentage of products reporting that they contained zero-calorie sweeteners.

## ofher sugary drink Categories

Iced tea and coffee products tended to contain less sugar and fewer calories than regular soda or fruit drinks, but there were some exceptions. Of the iced tea brands examined, Snapple and Gold Peak had the highest median sugar content at 31 grams per 8-ounce serving (comparable to most regular sodas). One coffee brand (Starbucks) is also included in this
report. The median calories in Starbucks coffee products was more than twice the median for tea products (112 kcal vs. 50 kcal, respectively), but sugar content was similar. Higher calories for coffee products was due primarily to calories from fat and protein; they were the only drink products in this analysis containing a meaningful amount of macronutrients (i.e., fat, protein) in addition to carbohydrates from sugar. Coffee drinks also had a high median caffeine content of 77 milligrams, exceeded only by energy drinks, while median caffeine in iced tea products was 17 milligrams.

Information for iced tea nutrition over time is shown in Table 11 (we did not analyze coffee drinks in 2011). As found with the other categories, there were no noteworthy changes in nutrition for products in this category. There was a slight drop in median caffeine content from 15 milligrams to 10 milligrams, and a slight increase in the number of products reporting exact caffeine content.

Sports drinks had the second-lowest median calorie and sugar content, but they were second highest in sodium ( 110 mg per serving) after energy drinks (113 mg per serving). Nearly onethird of sports drinks were classified as reduced-sugar products due to Gatorade's reduced-calorie G2 subbrand. G2 products contained 5 grams of sugar and 20 calories per serving (as well as the zero-calorie sweeteners sucralose and acesulfame potassium), compared to 14 grams of sugar and 50 calories in regular Gatorade products. Powerade (the other major sports drink brand) did not offer reduced-sugar products, but did offer Powerade Zero (a zero-calorie diet product not included in this analysis). Full-calorie Gatorade and Powerade had equivalent median sugar content, with 14 grams of sugar per 8-ounce serving. As shown in Table 12, the nutrition content of products in the sports drink category did not change from 2011 to 2013.

Table 10. Fruit drink nutrition*

|  | 2011 | 2014 |
| :---: | :---: | :---: |
| Company | \# of brands (products) | \# of brands (products) |
| Arizona | 1 (7) | 1 (10) |
| Campbell Soup Company | 1 (8) | 1 (10) |
| Coca-Cola | 4 (51) | 3 (23) |
| Dr Pepper Snapple Group | 3 (32) | 2 (32) |
| Ocean Spray | 1 (32) | 1 (36) |
| PepsiCo | 3 (34) | 2 (33) |
| Welch Foods Inc. | 1 (25) | 1 (23) |
| Nutrition | \% or median (range) | \% or median (range) |
| Reduced-sugar products | 20\% | 10\% |
| Products with 0-calorie sweeteners | 22\% | 11\% |
| Calories | 110 (5-210) kcal | 110 (5-217) kcal |
| Sugar | 27 (1-54) g | 26 (1-57) g |
| Sodium | 20 (0-120) mg | 20 (0-125) mg |
| Juice content | 10\% (1-56) | 10\% (2-42) |

*Analysis of changes over time for brands that were included in the 2011 report, including new products introduced since 2011 and products that are not necessarily included in our 2014 product list (due to low sales)
Children's products are not included in this table.
Source: Nutritional content analysis $(2011,2014)$

Table 11. Iced tea nutrition*

|  | 2011 | 2014 |
| :--- | ---: | ---: |
| Company | \# of brands (products) | \# of brands (products) |
| Arizona | $1(29)$ | $1(32)$ |
| Coca-Cola | $1(3)$ | $1(9)$ |
| Dr Pepper Snapple Group | $1(14)$ | $1(7)$ |
| Unilever | $1(15)$ | $1(18)$ |
| Nutrition | $\%$ or median (range) | \% or median (range) |
| Reduced-sugar products | $2 \%$ | $3 \%$ |
| Products with 0-calorie sweeteners | $11 \%$ | $30 \%$ |
| Calories | $70(10-110) \mathrm{kcal}$ | $18(2-28) \mathrm{g}$ |
| Sugar | $20(0-80) \mathrm{mg}$ | $67(40-110) \mathrm{kcal}$ |
| Sodium | 15 mg | $17(10-26) \mathrm{g}$ |
|  | $0 \%(0-105) \mathrm{mg}$ |  |
| Caffeine | $0 \%$ |  |
| Products reporting that they contain no caffeine | $310(0-30) \mathrm{mg}$ |  |
| Products reporting that they contain some caffeine (but do not specify amount) | $6 \%$ |  |
| Products reporting specific caffeine content | $0 \%$ |  |

*Analysis of changes over time for brands that were included in the 2011 report, including new products introduced since 2011 and products that are not necessarily included in our 2014 product list (due to low sales)
Source: Nutritional content analysis (2011, 2014)

Two of the flavored water brands in this analysis are children's brands: Apple \& Eve Waterfruits and Capri Sun Roarin' Waters. In 2014, Capri Sun Roarin' Waters and SoBe Lifewater contained zero-calorie sweeteners, while Apple \& Eve Waterfruits and Vitamin Water did not. The range of calories for all full-calorie flavored waters was relatively small (35-48 kcal per serving), and the majority of flavored waters qualified as reduced-sugar products, with 40 calories or less per 8 -ounce serving. However, there was one notable exception. Vitamin Water had the highest median calorie content, with 48 calories and 14 grams of sugar per eight ounces. Table 13 shows changes over time for the category. Vitamin Water from Coca-Cola continued to dominate the category with ten products. PepsiCo's Propel Zero, with two grams of sugar per serving, was discontinued after 2011.

## Summary of nufrifional confenf by cafegory

As in 2011, researchers' experiences collecting nutrition information varied widely by company. In 2014, the large beverage companies (Coca-Cola, Dr Pepper Snapple Group and PepsiCo) maintained websites that generally provided complete and easily accessible nutrition information, including lists of ingredients. In contrast, many other companies did not provide complete nutrition information on their websites, especially ingredient lists, and customer service representative often were unhelpful. Of note, two energy drink companies (Monster Energy and Rockstar) provided comprehensive nutrition information on their websites in 2011, but this information was no longer available when we collected our data in 2014. Positively, nearly all energy drinks and regular soda products did report their exact caffeine

Table 12. Sports drink nutrition*

|  | 2011 | 2014 |
| :--- | ---: | ---: |
| Company | \# of brands (products) | \# of brands (products) |
| Arizona | $1(3)$ | $1(2)$ |
| Coca-Cola | $1(12)$ | $1(8)$ |
| PepsiCo | $1(35)$ | $1(42)$ |
|  | $\%$ or median (range) | \% or median (range) |
| Nutrition | $24 \%$ | $23 \%$ |
| Reduced-sugar products | $26 \%$ | $23 \%$ |
| Products with 0-calorie sweeteners | $50(20-67) \mathrm{kcal}$ | $5(20-53) \mathrm{kcal}$ |
| Calories | $14(5-15) \mathrm{g}$ | $14(5-14) \mathrm{g}$ |
| Sugar |  |  |

[^1]Table 13. Flavored water nutrition*

|  | 2011 | 2014 |
| :--- | ---: | ---: |
| Company | \# of brands (products) | \# of brands (products) |
| Arizona | $1(4)$ | $1(5)$ |
| Coca-Cola | $1(12)$ | $1(10)$ |
| PepsiCo | $2(13)$ | $1(7)$ |
|  | $\%$ or median (range) | \% or median (range) |
| Nutrition | $59 \%$ | $55 \%$ |
| Reduced-calorie products | $45 \%$ | $32 \%$ |
| Products with 0-calorie sweeteners | $40(10-50) \mathrm{kcal}$ | $40(25-48) \mathrm{kcal}$ |
| Calories | $10(2-13) \mathrm{g}$ | $10(8-13) \mathrm{g}$ |
| Sugar | $0(0-30) \mathrm{mg}$ | $6(0-62) \mathrm{mg}$ |
| Sodium |  |  |

*Analysis of changes over time for brands that were included in the 2011 report, including new products introduced since 2011 and products that are not necessarily included in our 2014 product list (due to low sales)
Children's products are not included in this table.
Source: Nutritional content analysis (2011, 2014)
content in 2014, whereas many only reported that caffeine was present in 2011.

Regular soda, fruit drinks, and energy drinks continued to have the highest median sugar content at 24 to 29 grams (totaling 100 to 110 kcal ) per 8-ounce serving, while flavored water, sports drinks, and iced tea/coffee had the least sugar at 10 to 14 grams. Minute Maid Cranberry Juice Cocktail had the highest sugar content of all products analyzed with 57 grams per serving. The flavored water category had the most reduced-sugar products (i.e., 40 kcal per serving or less) at $62 \%$, compared with $5 \%$ of regular soda products. However, products that did not qualify as reduced-sugar products often contained zero-calorie sweeteners in addition to high levels of sugar, including approximately one-quarter of energy drinks and $15 \%$ of fruit drinks and iced teas or coffees.

Notable new products introduced since 2011 include Mtn Dew Kickstart, a reduced-sugar variety of Mtn Dew with 5\% juice; Pepsi NEXT reduced-calorie soda; and SK Energy, the most highly caffeinated product in this report ( 250 mg in a 2.5-oz container).

## Children's drinks

In this report, we analyzed 17 children's brands from 14 companies totaling 162 products (see Table 14). Nutrition content is reported for an 8-ounce serving, with the exception of seven brands only available in smaller-sized pouches or boxes ( $6-6.75 \mathrm{~g}$ ) and four Capri Sun products offered in 11.2-ounce pouches. The median serving size for this category was 8 ounces. We analyzed two children's flavored water brands, but the majority of children's brands (88\%) were fruit drinks. There were 60 median calories in children's fruit drinks, versus 30 in children's flavored waters. Median calories per serving for individual brands of sugary drinks ranged from 10 (Little Hug Fruit Barrels) to 130 (Welch's Chillers). It was difficult to obtain ingredient information for products in this category, with seven out of 17 brands not readily providing lists of ingredients.

One in ten children's drinks examined were diet (i.e., contained no added sugar), 29\% were reduced-sugar, and $61 \%$ were full-calorie. However, six out of ten products for brands reporting ingredients contained zero-calorie sweeteners, including full-calorie Sunny D and Hawaiian Punch products. To our knowledge, Apple \& Eve Waterfruits and Vita Coco Kids were the only reduced-sugar children's brands that did not contain zero-calorie sweeteners. Further, many children's product names did not indicate that they were reduced-sugar or diet products. For instance, Tum E Yummies, Little Hug Fruit Barrels, and Mondo Fruit Squeezers all contained 40 or fewer calories per 8-ounce serving, but only disclosed zerocalorie sweeteners on the ingredient list under the nutrition facts panel (and only indicated the sweeteners' chemical name, not the more easily recognized brand name).

## Changes over fime

Table 15 provides an overview of children's products examined in both 2011 and 2014. As with other sugary drink categories, median calories, sugar, and sodium remained virtually the same. Similarly, the proportion of products with zero-calorie sweeteners did not change: four in ten products reported containing zero-calorie sweeteners in both 2011 and 2014. Notably, the percentage of products reporting juice content increased from $32 \%$ to $45 \%$. However, the median and range of juice content in children's products did not change from 2011 to 2014 (5\% to 11\%).

There were some changes in products offered by popular children's brands. Kool-Aid discontinued its zero-calorie dissolvable drink tablets (Kool-Aid Fun Fizz), but added a diet liquid water enhancer (Kool-Aid Liquid Drink Mix). Capri Sun also added a novel product: an 11.2-ounce Capri Sun "Big Pouch" line aimed at older children. This product was the largest singleserving children's product examined, with 130 calories, 33 grams of sugar, and just 10\% juice. Fewer single-serve drink pouches and boxes were offered as a proportion of the category, resulting in an increase in the median serving size from 6.8 to 8 ounces.

Table 14. Nutritional content of children's brands

| Brand | Category | Subcategory | $\begin{array}{r} \text { \# of } \\ \text { products } \end{array}$ | Serving size (oz) | Calories (kcal): median (range) | Sugar (g): | 0-calorie sweeteners (Yes/No) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Welch's Chillers | Fruit drinks | Full-calorie | 5 | 8 | 130 (120-140) | 30 (28-33) | * |
| Happy Drinks | Fruit drinks | Full-calorie | 11 | 8 | 120 (120) | 27 (27) | N |
| Robinsons Fruit Shoot | Fruit drinks | Full-calorie | 3 | 8 | 119 (119) | 29 (25-29) | N |
| Bug Juice | Fruit drinks | Full-calorie | 3 | 8 | 110 (110-120) | 26 (26-29) | N |
| Minute Maid Coolers | Fruit drinks | Full-calorie | 6 | 6.75 | 100 (90-100) | 25 (24-27) | N |
| Hi-C | Fruit drinks | Full-calorie | 3 | 6 | 80 (80-90) | 22 (22-23) | N |
| Capri Sun | Fruit drinks | Full-calorie | 18 | 6-11.2 | 60 (60-130) | 16 (16-33) | N |
| Hawaiian Punch | Fruit drinks | Full-calorie | 15 | 8 | 60 (60-110) | 15 (13-29) | Y |
| Kool-Aid (Jammers, Twists, packets) | Fruit drinks | Full-calorie | 17 | 6.75-8 | 60 (60-80) | 16 (16-20) | N |
| Sunny D | Fruit drinks | Full-calorie | 13 | 8 | 60 (50-60) | 14 (13-15) | Y |
| Fruit Rush | Fruit drinks | Full-calorie | 4 | 8 | 60 (60) | 14 (14) |  |
| Apple \& Eve Waterfruits | Flavored water | Reduced-calorie | 3 | 6.75 | 40 (40) | 10 (10) | N |
| Tum E Yummies | Fruit drinks | Reduced-calorie | 5 | 8 | 40 (40) | 10 (10) | Y |
| Kool-Aid (Bursts, Singles) | Fruit drinks | Reduced-calorie | 9 | 6.75-8 | 35 (30-35) | 9 (7-9) | Y |
| Vita Coco Kids | Fruit drinks | Reduced-calorie | 5 | 6 | 35 (35) | 8 (8) | N |
| Capri Sun (Roarin' Waters) | Flavored water | Reduced-calorie | 6 | 6 | 30 (30) | 8 (8) | Y |
| Mondo Fruit Squeezers | Fruit drinks | Reduced-calorie | 8 | 6.75 | 20 (20) | 4 (4) | Y |
| Little Hug Fruit Barrels | Fruit drinks | Reduced-calorie | e 10 | 8 | 10 (10) | 2 (2) | Y |
| Hawaiian Punch (Fruit Juicy Red Light) | Fruit drinks | Diet | 1 | 8 | 10 (10) | 2 (2) | Y |
| Minute Maid (Fruit Falls) | Flavored water | Diet | 2 | 8 | 6 (6) | 1 (1) | Y |
| Hawaiian Punch (Singles to Go) | Fruit drinks | Diet | 10 | 8 | 5 (5) | 0 (0) | Y |
| Kool-Aid (Liquid Drink Mix) | Fruit drinks | Diet | 4 | 8 | 0 (0) | 0 (0) | Y |

*Information not reported
Source: Nutritional content analysis (2014)
Table 15. Children's drinks in 2011 and 2014*

|  | 2011 | 2014 |
| :--- | ---: | ---: |
| Company | \# of brands (products) | \# of brands (products) |
| Arizona | $1(2)$ | $1(2)$ |
| Coca-Cola | $3(14)$ | $3(11)$ |
| Dr Pepper Snapple Group | $1(9)$ | $1(13)$ |
| Kraft Foods | $3(59)$ | $2(54)$ |
| Sunny Delight Beverages | $1(11)$ | $1(13)$ |
|  |  |  |
| Nutrition** | $\%$ or median (range) | \% or median (range) |
| Reduced-calorie products | $21 \%$ | $19 \%$ |
| Products with 0-calorie sweeteners | $40 \%$ | $41 \%$ |
| Serving size | $6.8(6-8)$ oz | $8(6-11.2)$ oz |
| Calories | $60(10-120) \mathrm{kcal}$ | $60(10-130) \mathrm{kcal}$ |
| Sugar | $16(2-29) \mathrm{g}$ | $16(2-33) \mathrm{g}$ |
| Sodium | $15(0-190) \mathrm{mg}$ | $15(0-170) \mathrm{mg}$ |
| Products containing juice | $32 \%$ | $45 \%$ |
| Juice content (of those reporting \% juice) | $5 \%(5-11 \%)$ | $5 \%(5-11 \%)$ |

*Analysis of changes over time for brands that were included in the 2011 report, including new products introduced since 2011 and products that are not necessarily included in our 2014 product list (due to low sales)
**Excludes diet drinks
Source: Nutritional content analysis $(2011,2014)$

Some brands also reduced their sugar content. In 2011, Hawaiian Punch products contained 26 to 29 grams of sugar per serving, with one light product (containing 2 grams of sugar). In 2014, just two Hawaiian Punch products had 29 grams of sugar, while the rest contained 14 to 17 grams (the product with 2 grams of sugar also remained). This reduction was accompanied by the addition of zero-calorie sweeteners to all but two products. Sunny $D$ also decreased the sugar content of its products, from 18 to 20 grams of sugar per serving in 2011 to 13 to 15 grams in 2014. In both 2011 and 2014, all but one Sunny D product contained zero-calorie sweeteners.

## comparison of Children's fruif drinks with of her fruif drinks

An overview of the 137 children's fruit drinks versus 289 other fruit drinks in our 2014 analysis is provided in Table 16. Median calories of children's drinks were $45 \%$ lower than other fruit drinks ( 60 kcal for children's products vs. 110 kcal for other products). However, this difference was accompanied by a higher proportion of children's drinks with zero-calorie sweeteners. More than one-third (36\%) of children's fruit drink products reported containing zero-calorie sweeteners, compared to $23 \%$ of other fruit drinks. Sodium was very low for all fruit drinks, at 15 to16 milligrams per serving, with one notable exception. Sunny D children's products contained 130 to 170 milligrams of sodium, and Sunny D Smooth was the highest sodium fruit drink with 170 milligrams per serving. Of note, non-children's drinks were more likely to report containing juice ( $63 \%$ versus $38 \%$ of children's fruit drinks), and their median juice content was $12 \%$, compared with $5 \%$ for children's products.

## Summary of Children's produc $\dagger$ s nutritional content

Fruit drinks made up the majority of children's drinks in this analysis, but the category also included two flavored water brands (Capri Sun Roarin' Waters and Apple \& Eve Waterfruits).

Table 16. Children's versus other fruit drinks*

|  | Children's fruit drinks | Other fruit drinks |
| :--- | ---: | ---: | ---: |
| \# of products | \% or median <br> (range) | \% or median <br> (range) |
| Nutrition | $8(6-11.2) \mathrm{oz}$ | $8(6-8) \mathrm{oz}$ |
| Serving size (oz) | $60(6-140) \mathrm{kcal}$ | $110(5-217) \mathrm{kcal}$ |
| Calories | $20(1-33) \mathrm{g}$ | $26(1-57) \mathrm{g}$ |
| Sugar | $16(0-170) \mathrm{mg}$ | $15(0-125) \mathrm{mg}$ |
| Sodium | $28 \%$ | $10 \%$ |
| Reduced-sugar products | $36 \%$ | $22 \%$ |$|$| Products with 0-calorie <br> sweeteners |
| :--- |
| Products reporting juice <br> content |
| Juice content <br> (of those reporting \% juice) |

*Information for sugar-sweetened children's products only Source: Nutritional content analysis (2014)

Median sugar in these products ranged from 2 grams (Mondo Fruit Squeezers and Little Hug Fruit Barrels) per 8-ounce serving to 30 grams (Welch's Chillers). One recently introduced children's product, Capri Sun Big Pouch, contained 33 grams of sugar and 130 calories in one 11.2-ounce single-serving package. Although median calories in children's fruit drinks was 60, compared with 110 calories in other fruit drinks, $36 \%$ of children's products also contained zero-calorie sweeteners (versus $22 \%$ of other drinks). Even some full-calorie children's products, such as Sunny D and Hawaiian Punch, contained artificial sweeteners. However, for many products, sweetener information was only available by examining ingredient lists under nutrition facts panels on the product packages. Apple \& Eve Waterfruits and Vita Coco Kids were the only reducedsugar children's drink in our analysis that did not contain zerocalorie sweeteners. Further, just 38\% of children's fruit drinks reported containing juice, compared with two-thirds of other fruit drinks, and the median juice content was just 5\%.

## On-package marketing

| On-package marketing | Definition |
| :--- | :--- |
| Nutrition-related <br> messages | All messages about product nutrition appearing on the product package, including claims about <br> ingredients, natural messages, calorie labels, and other health-related messages. |
| Ingredient claim | Any claim regarding micronutrients (vitamins and minerals), antioxidants, and electrolytes, as well <br> as sugar, artificial flavors, colors, and sweeteners, gluten-free, and caffeine contained in the product. |
| Natural claim | Any message about natural products or ingredients (including natural flavors or sugar), in addition <br> to real, organic, and GMO references. |
| Calorie labels | Calorie counts (per serving or per container) indicated on the product package (in addition to the <br> nutrition facts panel). |
| Other health-related | Other messages that imply health-related benefits from consuming the products, including <br> hydration, exercise performance, and energy. |
| Child feature | Indicates that a product may be intended for children, including cartoon brand and licensed <br> characters and any reference to kids/family, fun, or child-targeted promotions on the package. |
| Reference to a specific event, program, sports team or athlete, celebrity, sweepstakes, or <br> philanthropic organization. |  |

We analyzed 214 containers and packages for 58 sugary drink brands (excluding energy drinks) to assess the types and quantity of marketing messages on product packaging. Products were coded for nutrition-related messages, including ingredient and natural claims, calorie labels, and other health-related messages, as well as child features and promotions present on the packages. Ranking Table 2 ranks all brands and companies by number of nutrition-related messages and child features.

## Nufrifion-relafed messages

All companies featured nutrition-related messages on their products; appearing on $92 \%$ of packages with on average 4.2 messages per package (see Table 17). Ingredient claims represented the majority of nutrition-related messages on packages; 75\% of packages contained on average 2.3 ingredient claims. Common ingredient claims referenced artificial ingredients, flavors, colors, and sweeteners (appearing on $86 \%$ of packages); low or no sodium (49\%); vitamin C (41\%); and caffeine or caffeine-free (37\%). In addition, natural claims appeared on nearly two-thirds of packages, including variations of the statements, "all natural," "naturally flavored with other natural flavors," and "natural and artificial flavors," as well as references to real or organic ingredients and no GMO claims. Six out of ten packages featured calorie labels listing the number of calories per container on the front of the can or package.

Flavored water packages had the most nutrition-related messages of all types, with an average of 4.9 messages appearing
on all product packages. In addition, all flavored water packages featured natural claims and nearly all included calorie labels. Children's fruit drinks also featured nutrition-related messages and ingredient claims on all packages, averaging 4.5 messages per package, while other fruit drinks featured nutrition-related messages on $88 \%$ of packages. Sports drinks had the highest percentage of packages with calorie labels, but the lowest proportion of packages with ingredient claims. Regular soda packages had the fewest nutrition-related messages per package, while nearly all iced tea packages featured such messages, although they were least likely to contain calorie labels.

Regular soda. Nutrition-related messages on regular soda packages most often described the "low sodium" content of the drink or highlighted a specialty ingredient (e.g., Mtn Dew Voltage "charged with raspberry and ginseng" claim). Although regular soda packages featured relatively few ingredient claims compared with other categories, there was a notable increase in the number of packages with these claims: $74 \%$ in 2014, up from $3 \%$ in 2011. The majority of regular soda packages included natural claims. Similarly, over half of packages featured calorie labels that provided calories per package or serving.

Among soda brands, Sierra Mist featured more nutrition-related messages than any other soda brand at 7.0 messages per package, ranking number four among all products examined. For example, Sierra Mist packages touted its real sugar, 100\% natural flavors, other natural flavors, very low sodium, and caffeine-free. Multipacks for another lemon lime soda, Sprite, featured a special on-package message to families stating,

Table 17. Nutrition-related messages by category

| Category | \# of brands <br> (packages) | Nutrition-related messages |  | Ingredient claims |  | $\begin{gathered} \text { Natural } \\ \text { claims } \\ \% \text { of } \\ \text { packages } \end{gathered}$ | $\begin{array}{r} \text { Calorie } \\ \text { labels } \\ \% \text { of } \\ \text { packages } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{array}{r} \text { \% of } \\ \text { packages) } \end{array}$ | Avg \# per package | $\begin{array}{r} \hline \% \text { of } \\ \text { packages } \end{array}$ | Avg \# per package |  |  |
| Regular soda | 16 (73) | 84\% | 3.5 | 74\% | 1.9 | 59\% | 55\% |
| Children's fruit drinks | 8 (17) | 100\% | 4.5 | 100\% | 2.8 | 49\% | 41\% |
| Other fruit drinks | 13 (39) | 88\% | 4.1 | 75\% | 2.9 | 51\% | 39\% |
| Sports drinks | 3 (37) | 99\% | 4.4 | 61\% | 1.8 | 61\% | 97\% |
| Iced tea | 14 (30) | 95\% | 4.7 | 75\% | 2.6 | 80\% | 21\% |
| Flavored water | 4 (18) | 100\% | 4.9 | 83\% | 2.1 | 100\% | 94\% |
| Total | 58 (214) | 92\% | 4.2 | 75\% | 2.3 | 63\% | 61\% |

Source: On-package marketing analysis (July 2014)


## WHAT'SIN A SPRITE? IT'S PERFECTLY CLEAR.

Simple ingredients, no caffeine and natural flavors. Feel good about the choice you've made for your family.

LEMON LME Sops Sxumbunimes

Nutrition-related claims on Sierra Mist and Sprite packages

## Results

"What's in a Sprite? It's perfectly clear. Simple ingredients, no caffeine and natural flavors. Feel good about the choice you've made for your family." Dr Pepper Snapple Group soda brands often featured the natural claim, "naturally flavored with other natural flavors." Coca-Cola placed calorie labels on most of its soda packages (86\%), while Dr Pepper Snapple Group and PepsiCo did so less systematically (appearing on $64 \%$ and $40 \%$ of packages, respectively).

Fruit drinks. All fruit drinks featured nutrition-related messages on most packaging, with an average of 4.3 messages per package. However, ingredient claims appeared on 100\% of children's fruit drinks. Approximately half of all fruit drinks contained some form of natural claim, while children's fruit drinks were 50\% more likely to include calorie labels.

Five children's fruit drinks ranked in the top-20 brands for number of nutrition-related messages per package, including Minute Maid Coolers and Fruit Falls ( 7.0 messages per package), Little Hug Fruit Barrels and Tum E Yummies (6.0 messages each), Hawaiian Punch (5.9), and Hi-C (5.0). The most frequent ingredient claims on these products highlighted vitamin C and other vitamins and minerals. Little Hug Fruit Barrels packaging featured a comparative claim, " $33 \%$ more fruit drink than leading pouch drinks," touting its bigger size. Hawaiian Punch packaging for its Fruit Juicy Red Light variety stated that it had "90\% fewer calories than leading brands," while the Mixed Berry Citrus variety claimed, " $40 \%$ less sugar than leading brands." Four other varieties of Hawaiian Punch claimed " $50 \%$ less sugar than leading fruit drinks," and KoolAid multipacks packaging promoted " $75 \%$ less sugar than other leading soda brands." Of note, all these products contained artificial sweeteners, but did not provide that information on the product package. Children's fruit drinks also often carried messages that the drinks did not contain artificial flavors, preservatives, or high fructose corn syrup.


A non-children's fruit drink, V8 Fusion Refreshers, ranked second in nutrition-related messages, averaging 7.0 statements per package. Langers and V8 Splash also ranked in the top-20, each with 5.4 messages per package. On the other hand, some fruit drink brands featured relatively few nutrition-related messages. Goya had no such messages on its packages. Ocean Spray, Jumex, Mondo Fruit Squeezers, and Santa Cruz Organics packages averaged just two nutrition messages per package.

Sports drinks. Although sports drinks had the lowest proportion of packages with nutrition-related messages, packages that did feature them averaged 4.4 messages, slightly more than the average for all sugary drinks. Sports drink claims most often promoted electrolyte complexes, and one-third featured vitamin and mineral claims. Sports drinks carried natural claims on $61 \%$ of packages, most often highlighting "naturally flavored," "naturally flavored with other natural flavors," or "naturally and artificially flavored." In addition, 99\% of packages featured other health-related messages, typically promising to improve hydration after physical activity. Nearly all (97\%) of sports drinks packages also featured calorie labels, compared with 0\% of packages in 2010.

Powerade sports drink ranked third of all brands with 6.7 nutrition-related messages per package, promoting its 4-electrolyte complex in the product name (ION 4), along with a "replenish electrolytes" message on the label. In contrast, the other major sports drink brand (Gatorade), featured half as many nutrition-related messages (averaging 3.6 per package).

Iced tea. Iced tea brands had the second highest number of nutrition-related messages per package (4.7), and nearly all packages contained at least one message. Eight out of ten packages contained at least one statement that the ingredients in the iced tea were natural or real, and low sodium claims were common. Calorie labels on iced tea packages were infrequent, appearing on one-fifth of packages.

Lipton iced tea products were most likely to contain ingredient claims, such as "sodium free," "no preservatives," and "no added color," with an average of 6.1 nutrition-related messages per package. SoBe brands also featured many nutrition-related messages, averaging 6.0 per package. In addition, Honest Tea, Gold Peak, and Fuze (from Coca-Cola)


Nutrition-related messages on children's fruit drink packages


Nutrition-related claims on children's flavored water packages
and XINGtea ranked in the top-20 brands averaging 5.0 to 5.8 nutrition-related messages per package.

Flavored water. Vitamin C was the most common ingredient claim on flavored water packages, as most drinks contained $100 \%$ of the daily value. Every product in the category also featured a claim about natural ingredients, most often describing its natural flavors. In addition, the two children's flavored water brands, Apple \& Eve Waterfruits and Capri Sun Roarin' Waters, contained hydration claims.

Apple \& Eve Waterfruits was the top ranking brand in number of nutrition-related messages across all product categories, averaging eight messages on all packages. Waterfruits packaging highlighted "more good stuff," such as pure fruit juice and coconut water, and "no bad stuff," such as artificial colors and sweeteners. Capri Sun Roarin' Waters featured an average of 4.8 messages on all products. The two remaining flavored water brands in this analysis also featured nutrition-related messages on 100\% of products, averaging 6.4 messages-per-package for Vitamin Water (ranking sixth overall) and 3.6 for SoBe Lifewater.

## Child feafures and promotions

Overall, 29\% of sugary drink packages included child features, such as cartoon brand characters and references to "kids," and 30\% of packages featured promotions, including sweepstakes, giveaways, and tie-ins with promotional partners (see Table 18). Not surprisingly, children's fruit drinks and
flavored water (which also included a high proportion of children's products) were most likely to include child features on the package. However, $12 \%$ of iced tea packages, $6 \%$ of other fruit drink packages, and $3 \%$ of regular soda packages also included child features. Of note, children's fruit drinks were more likely to feature promotions, appearing on the majority of product packages (57\%). Approximately one-third of iced tea and other fruit drink packages also featured promotions.

Child features. Child features on children's drink packages typically appeared in the form of cartoon drawings and brand characters, such as the fruit characters on Hi-C and the Kool Aid Man on multipack boxes, as well as references to fun, play, and family. Hi-C, Capri Sun, and Kool Aid (Jammers and Bursts) had the most child features (2.0 to 4.0) on their packages. Of note, some children's fruit drink packages included relatively few child features per package, including Tum E Yummies, Little Hug Fruit Barrels, and Hawaiian Punch. Langers drink packages were unusual, typically featuring company stories referencing family and kids. In the flavored water category, child features on packaging ranged from one per package on Apple \& Eve Waterfruits to 2.5 on Capri Sun Roarin' Waters. Both brands featured cartoon images of children playing sports and the taglines, "a fun way for kids to hydrate" (Roarin' Waters) or "a delicious way to drink more water" (Waterfruits).

Child features on products that did not qualify as children's products in our analysis were found most often in the regular soda category. Cartoon images, such as fruit or brand characters, appeared on four non-children's soda brands: 7UP,

Table 18. Child features and promotions on product packages by category

| Category | \# of brands | \# of packages | Child features <br> (\% of packages) | Promotions <br> (\% of packages) |
| :--- | ---: | ---: | ---: | ---: |
| Regular soda | 16 | 73 | $3 \%$ | $21 \%$ |
| Children's fruit drinks | 8 | 17 | $92 \%$ | $57 \%$ |
| Other fruit drinks | 13 | 39 | $6 \%$ | $30 \%$ |
| Sports drinks | 3 | 37 | $0 \%$ | $19 \%$ |
| Iced tea | 14 | 30 | $12 \%$ | $33 \%$ |
| Flavored water | 4 | 18 | $61 \%$ | $22 \%$ |
| Total | 58 | 214 | $29 \%$ | $30 \%$ |

Source: On-package marketing analysis (July 2014)

## Results

Stewart's Fountain Classics, Polar, and Mug. On the front of the package, 7UP products featured cartoon lemon and limes wedges; Stewart's Fountain Classics featured cartoon orange popsicles and lime wedges; Polar varieties featured cartoon ice cream soda floats and the brand's polar bear; and Mug featured the brand's mascot - a cartoon bulldog. Additionally, SoBe beverages in both iced tea and fruit drinks categories featured a branded cartoon lizard on packaging that might appeal to children.

Promotions. The most common promotions on children's products featured school fundraising or other promotions for a good cause. Several brands highlighted children's book promotions, including a Hi-C comic book and Langers' Hungry Caterpillar book and snack box giveaway. The Terra Cycle recycling program was featured on Capri Sun Roarin' Waters (flavored water) and Capri Sun (fruit drinks) packages. Terra Cycle encouraged children to recycle their drink pouches to earn money for their schools. Additionally, a promotion on Roarin' Waters multipacks encouraged consumers to register online for the chance to win a trip to Orlando, Florida and attend the "Kids versus Pros MLS Soccer Showdown," along with the chance to win other prizes. This promotion featured a child and professional soccer player, Brad Evans, standing next to each other with a soccer ball. Little Hug Fruit Barrels packaging featured a sweepstake to "instantly win a barrel full of cash" and directed consumers to open the package to determine if they won $\$ 5,000$.

Brands that did not qualify as children's products also featured promotions that appeared to be aimed at children and families. Nearly all Dr Pepper Snapple Group beverages, across all brands and categories, featured the company's Let's Play promotion, described as a community partnership that allows the company to support programs and environments that encourage active lifestyles. Through Let's Play, Dr Pepper Snapple Group pledged to donate $\$ 15$ million to build or fix up 2,000 playgrounds. In addition, several varieties of Crush soda (also from Dr Pepper Snapple Group) featured a Teenage Mutant Ninja Turtles movie promotion - offering free or discounted movie tickets redeemed through on-package codes. Other short-term promotions included a FIFA World Cup 2014 promotion on Coca-Cola multipacks and Powerade products. On the Coca-Cola multipack, the FIFA promotion also encouraged consumers to "give a ball to a local school" by using the code inside to donate a soccer ball, while also getting the chance to win FIFA and soccer prizes.

Other ongoing company-wide promotions also commonly appeared on sugary drink packaging. The My Coke Rewards program was highlighted on most packaging for Coca-Cola products. This long-standing program instructs consumers to find a code inside the package and enter it online at MyCokeRewards.com; the "rewards" can be converted into points redeemable for items such as gifts cards, movie tickets, sports equipment, and magazine subscriptions. Newman's Own Lemonade promoted the company's philanthropic activities through on-package messaging that highlighted
over $\$ 3$ million given to 1,000 charities. Honest Tea varieties contained an environmental appeal, offering consumers who buy four or more bottles a redeemable code to plant a tree in a deforested region of the world. Arnold Palmer varieties of iced tea from Arizona naturally contained a celebrity tie-in, often including pictures of Arnold Palmer in action with his golf gear. Novamex featured its Club Jarritos reward program on soda packages, which encourages consumers to collect points by purchasing Jarritos drinks and then redeeming them online. Some 23-ounce Arizona iced teas also featured a price promotion on product packages, touting its 99-cent price. Jones sodas featured a contest that encouraged consumers to submit their photos for a chance to appear on bottles in the future.

## on-package markefing messages overview

Nutrition-related messages appeared on nine out of ten sugary drink packages, averaging 4.2 messages per package. The majority promoted specific ingredients in the drinks, including vitamin C, minerals, electrolytes, antioxidants, and novelty ingredients. In addition, approximately two-thirds of packages featured statements about natural or real ingredients. Positively, 61\% of packages contained labels indicating calories per serving or container, a noticeable increase


Child-targeted promotions on regular soda and a children's fruit drink
compared with 2011. Flavored water, iced tea, and children's product packages featured the most nutrition-related messages (4.9, 4.7, and 4.5 per package, respectively), whereas regular soda packages contained the fewest ( $84 \%$ of packages averaging 3.5 messages). Brands with the most onpackage nutrition messages included Apple \& Eve Waterfruits (children's flavored water) with eight messages per package, and V8 Fusion Refreshers (fruit drink), Minute Maid Coolers, and Fruit Falls (children's fruit drinks), and Sierra Mist regular soda, each averaging seven messages per package.

Child features were present on $29 \%$ of sugary drink packages across all categories, and $30 \%$ of packages included at
least one promotion. Although children's drinks were most likely to include child features, we also found child-friendly cartoon images on other fruit drink, iced tea, and regular soda packages. Roughly one-third of other fruit drink and iced tea packages and one out of five regular soda, sports drink, and flavored water packages featured promotions. However, packaging for children's products was most likely to include promotions, which appeared on $57 \%$ of children's fruit drink packages. Child-oriented promotions also appeared on other sugary drink packages, including a school soccer ball giveaway by Coca-Cola, a Teenage Mutant Ninja Turtles movie promotion on Crush soda, and Let's Play promotions on most Dr Pepper Snapple Group products.

## Nutritional confent and on-package markefing

## Signs of progress

- The largest beverage companies (Coca-Cola, Dr Pepper Snapple Group, and PepsiCo) have made it easier to obtain nutrition information for most of their products. Both nutrition and ingredient information were generally available on company websites. In addition, exact caffeine and calories per serving were disclosed on the majority of product packages.
- Some sugary drink brands introduced new reduced-sugar products with 40 calories or less per 8-ounce serving, including PepsiCo's Pepsi NEXT and Mtn Dew Kickstart sodas and Dr Pepper Snapple Group's "Ten" products (including 7UP Ten, Dr Pepper Ten, and Sunkist Ten).
- Overall, $62 \%$ of flavored water products with added sugar had 40 calories or less, as well as $29 \%$ of sugar-sweetened sports drinks and $15 \%$ of iced teas.
- Seven of the children's drinks in our analysis also contained 40 calories or less per serving, and some children's fruit drinks reduced their sugar content from 2011 to 2014, including Sunny D and Hawaiian Punch.


## Continued reasons for concern

- Obtaining nutrition information became more difficult for some product categories. Fruit drink manufacturers (including Campbell Soup Company [V8 brand products], Ocean Spray, and Welch's) often provided nutrition facts panel information about their products online, but not ingredient lists. They were also less likely to indicate calories per serving on product packages. Major energy drink companies (Monster Energy and Rockstar) did not provide nutrition information on their websites in 2014 at the time of our analysis (although they had in 2011).
- From 2011 to 2014, there were no notable changes in median sugar or calories in regular soda, fruit drinks, sports drinks, iced tea, or flavored water sugary drink products.
- Children's fruit drinks contained a median of 60 calories and 20 grams of sugar per serving. Although other fruit drinks tended to be higher in calories and sugar, children's drinks were more likely to contain zero-calorie sweeteners ( $36 \%$ of products) and less likely to contain juice ( $38 \%$ of products). Some high-sugar children's drinks also contained artificial sweeteners, including Hawaiian Punch and Sunny D. Although lower-sugar claims often appeared on packaging for children's drinks that contained artificial sweeteners, the only indication of these sweeteners was found in the list of ingredients under the nutrition facts panel (listed under their chemical names).
- Children's fruit drinks were also more likely than other fruit drinks to include nutrition-related messages on product packaging (averaging 4.5 messages per package). The majority of children's drinks also featured promotions on the packages, appearing on children's products more often than any other drink category.
- New product introductions since 2011 that raise concerns include Capri Sun Big Pouch fruit drinks with 130 calories and 33 grams of sugar per 11.2-ounce serving; highly caffeinated Mtn Dew products (Game Fuel and Kickstart) with 43 to 46 milligrams of caffeine per 8-ounce serving; and SK Energy with 250 milligrams of caffeine per 2.5 -ounce shot.


## Traditional media advertising

In this section, we compare traditional advertising by beverage category in 2013 versus 2010. We first present advertising spending in measured media, including TV, magazines,
radio, outdoor, and the internet. We then provide data on child and teen exposure to TV advertising in total and by drink category, as well as advertising that appears to be specifically targeting youth. We also provide data on brand appearances in prime-time television programs.

Advertising spending

| Advertising spending | Definition |
| :--- | :--- |
| Advertising spending | Amount spent on all advertising in measured media, including TV, magazines, internet, radio, <br> newspapers, free standing insert coupons, and outdoor advertising. |
| Soda brand advertising | In addition to advertising one specific product, soda brands sometimes advertise both regular and <br> diet versions of the brand in the same advertisement, or they advertise the brand (e.g., Coca- <br> Cola) but not a specific product (e.g., Coca-Cola Classic or Diet Coke). In these instances, Nielsen <br> classifies the category as "soft drink" or "drink products." In this analysis, we assign these brand- <br> level advertisements to the "soda brand" category as they cannot be classified as either regular or <br> diet soda advertising. |
| Other sugary drink | Brand-level advertising is also used to promote products in other drink categories. For example, <br> brand advertising |
| some Snapple brand-level advertising is classified by Nielsen as "drink products." This advertising <br> supports Snapple products in multiple categories, including fruit drinks, regular iced tea, and diet <br> iced tea products. We assign these brand-level advertisements to the "other sugary drink brand" <br> category. |  |
| Company advertising | Beverage company ads that do not specify an individual brand are categorized as "drink products" <br> by Nielsen. We assign these to the "company advertising" category. |

Advertising spending for sugary drink and energy drink (including energy shots) categories totaled $\$ 814.3$ million in 2013, a decline of 3\% versus 2010 (see Figure 5). As in 2010, almost one-half of this spending was for regular soda, followed by energy drinks (21\%), and sports drinks (16\%). Fruit drinks, iced tea, and flavored water together represented just $11 \%$ of total advertising spending for sugary drinks. Advertising spending for children's fruit drinks totaled \$44.9
million, representing 60\% of total fruit drink category spending In addition, children's flavored water (a new category that was not advertised in 2010) represented $27 \%$ of 2013 advertising spending on all flavored waters. Companies also spent $\$ 51.8$ million on brand-level advertising for soda and other sugary drink brands. Coca-Cola and PepsiCo spent a further $\$ 4.9$ and $\$ 1.1$ million, respectively, on advertisements promoting their companies.

Figure 5. Advertising spending on sugary drink categories and brands


Source: Rudd Center analysis of Nielsen data (2014)

Table 19. Advertising spending by category and medium in 2013

| Category | Advertising spending by medium (\$000) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | TV |  | Radio |  | Outdoor |  | Internet |  | Magazines |  |
|  | 2013 | Change vs. 2010 | 2013 | Change vs. 2010 | 2013 | Change vs. 2010 | 2013 | Change vs. 2010 | 2013 | Change vs. 2010 |
| Regular soda | \$321,273 | 8\% | \$21,924 | -19\% | \$15,022 | -55\% | \$14,274 | -74\% | \$9,943 | -2\% |
| Energy drinks | \$164,116 | 13\% | \$5,914 | 134\% | \$1,578 | -64\% | \$954 | -86\% | \$627 | -80\% |
| Sports drinks | \$109,329 | 21\% | \$297 | -91\% | \$42 | -87\% | \$462 | -95\% | \$13,936 | -51\% |
| Children's fruit drinks | \$29,231 | -35\% | \$0 | -99\% | \$0 | * | \$946 | 100\% | \$14,170 | 35\% |
| Other fruit drinks | \$22,521 | -69\% | \$61 | -97\% | \$406 | 24\% | \$40 | -63\% | \$5,385 | -54\% |
| Iced tea | \$22,792 | -5\% | \$2,103 | 41\% | \$717 | 40\% | \$314 | 145\% | \$5,493 | -25\% |
| Children's flavored water | \$5,890 | * | \$0 | * | \$0 | * | \$35 | * | \$57 | * |
| Other flavored water | \$15,196 | -49\% | \$487 | 51\% | \$383 | -48\% | \$24 | -100\% | \$0 | -100\% |
| Total | \$690,349 | -2\% | \$30,787 | -16\% | \$18,147 | -54\% | \$17,050 | -78\% | \$49,611 | -33\% |

*Not advertised in 2010
Source: Rudd Center analysis of Nielsen data (2014)

Changes in advertising spending from 2010 to 2013 varied by category. Both regular soda and energy drinks increased spending by $9 \%$. In contrast, advertising for sports drinks and iced tea declined slightly (5\% and 7\%, respectively), and advertising for fruit drinks and flavored water decreased by more than $40 \%$. Of note, advertising spending for children's fruit drinks declined by $23 \%$, whereas advertising for other fruit drinks declined at a higher rate (by 55\%). Excluding children's flavored waters (which were not advertised in 2010), spending on other flavored waters declined by $59 \%$. Brand-level advertising for soda (i.e., ads for soda brands that did not specify a regular or diet soda product) decreased by $59 \%$, but brand-level spending for other sugary drinks (i.e., ads for brands with drinks in multiple categories) saw the biggest percentage increase of $165 \%$.

Table 19 provides the amount spent on different types of advertising by category in 2013 and changes versus 2010. Nearly all spending was allocated to TV advertising (85\%) in 2013, compared to $74 \%$ of spending in 2010. However, there were differences by category. Energy drinks and flavored water advertised almost exclusively on TV, but regular soda utilized a variety of media, including radio, outdoor, internet, and magazines. Fruit drinks and iced tea both dedicated a higher than average proportion of advertising to magazines, including $11 \%$ of sports drink and $26 \%$ of fruit drink advertising. Although total spending on TV advertising remained relatively flat in 2013 versus 2010 (-2\%), TV spending increased substantially for regular soda, energy drinks, and sports drinks. Of note, TV advertising for children's fruit drinks declined by one-third, but internet advertising for this category doubled and magazine ads increased $35 \%$.

## Advertising spending on other beverage Całegories

Beverage companies also spent $\$ 465$ million in 2013 to advertise non-sugar-sweetened drinks (including diet drinks, $100 \%$ juice, and plain water), reflecting a 3\% reduction compared with 2010 (see Figure 6). Almost one-half of

Figure 6. Advertising spending on other beverage categories


Source: Rudd Center analysis of Nielsen data (2014)
advertising spending for these categories promoted diet soda, followed by $100 \%$ juice. Just $\$ 53$ million was spent to advertise plain water. A further $\$ 2.3$ million was spent on brand-level advertising for drinks without added sugar (primarily juice brands).

There were also notable shifts in spending from 2010 to 2013 for the non-sugary drink categories. Advertising for diet soda increased by $17 \%$, while spending on other diet drinks (e.g., iced tea, sports drinks) decreased by $48 \%$. Spending to advertise 100\% juice declined 29\%, yet light juice advertising

Figure 7. Advertising spending on all beverage categories in 2013 (\$ million)


Source: Rudd Center analysis of Nielsen data (2014)
increased almost four-fold (up 265\%). Plain water advertising spending was flat from year to year at just over $\$ 50$ million.

In total, companies spent $\$ 1.3$ billion to advertise all categories of non-alcoholic refreshment beverages in 2013 (see Figure 7). Two-thirds (65\%) of all beverage advertising supported sugary drinks and energy drinks. Companies spent over $\$ 4.20$ to advertise these unhealthy drinks for every $\$ 1$ they spent advertising $100 \%$ juice and plain water.

## Advertising spending by company

Just 14 of the 47 companies in our analysis advertised in measured media in 2013. Three companies were responsible for $70 \%$ of advertising spending on sugary drink and energy drink brands in 2013 (totaling \$609 million): PepsiCo, CocaCola, and Dr Pepper Snapple Group (see Ranking Table 3). Two energy drink companies (Innovation Ventures [5hour Energy] and Red Bull) spent another $\$ 147$ million, representing $17 \%$ of the total.

From 2010 to 2013, changes in total advertising spending on sugary drinks and energy drinks varied widely by company. PepsiCo increased its advertising by $32 \%$, overtaking CocaCola Co. as the number one advertiser of sugary drinks. In contrast, Coca-Cola and Dr Pepper Snapple Group reduced sugary drink advertising spending by $35 \%$ and 13\%, respectively. Three additional companies increased their advertising: Red Bull (+84\%), Kraft Foods (+5\%), and Campbell Soup Company (from $\$ .3$ million in 2010 to $\$ 5.1$ million in 2013), and one new company (SK Energy Shots) spent $\$ 20$ million in 2013. In contrast, five companies reduced advertising spending on sugary drinks by $40 \%$ or more (Ocean

Spray, Sunny Delight Beverages, Unilever, Welch Foods Inc., and National Beverage Company).

In 2013, Coca-Cola Co. Dr Pepper Snapple Group, and PepsiCo all continued to spend more to advertise their regular soda products than products in any other drink category, ranging from $41 \%$ of spending for PepsiCo and Coca-Cola to $46 \%$ for Dr Pepper Snapple Group (see Figure 8). Coca-Cola and Dr Pepper Snapple Group also dedicated an additional 7\% and 4\% of advertising budgets to brand-level advertising for soda. In addition, PepsiCo spent 23\% of its total beverage advertising budget on sports drinks, and Dr Pepper Snapple Group spent $16 \%$ of its budget on other sugary drinks (primarily Snapple). For all three companies, diet drinks, 100\% juice, and plain water represented approximately one-third of their beverage advertising spending.

There were notable shifts in spending within the portfolios of the top three companies. From 2010 to 2013, PepsiCo more than doubled advertising spending on its regular soda brands, while advertising for sports drinks (its most advertised category in 2010) declined slightly. PepsiCo increased advertising spending on its brands that do not contain added sugar by even more (+57\%). In contrast, Coca-Cola Co. reduced advertising for its regular soda products by $24 \%$ and brandlevel advertising by 63\%, but increased advertising for sports drinks (+19\%), energy drinks (+114\%), and iced tea (+210\%). Coca-Cola also reduced advertising for its drinks without added sugar by $26 \%$. Dr Pepper Snapple Group reduced advertising spending for its regular sodas and non-sugar drinks, but tripled advertising for other sugary drinks.

Figure 8. Total advertising spending by beverage category for the top-three advertisers


Source: Rudd Center analysis of Nielsen data (2014)

## Advertising spending by brand

Ranking Table 3 presents total advertising spending as well as spending on TV, magazines, radio, outdoor and internet advertising for all sugary drink and energy drink brands with at least $\$ 1$ million in advertising spending in 2013. A total of 58 brands, slightly more than half of the 106 brands in our analysis, advertised at this level. Five brands spent more than $\$ 50$ million in advertising: Pepsi regular soda, Gatorade sports drink, Coca-Cola regular soda, 5-hour Energy energy shots, and Dr Pepper regular soda. These five brands accounted for almost $60 \%$ of advertising spending for all sugary drinks and energy drinks in 2013. However, from 2010 to 2013, changes in advertising spending varied widely by brand.

Regular soda. Three PepsiCo regular soda brands increased advertising spending in 2013 versus 2010. Pepsi overtook Coca-Cola as the most advertised sugary drink in 2013, spending $\$ 139$ million in advertising, almost three times its 2010 spending. Of note, Pepsi NEXT - the reduced-sugar version of the brand - represented $24 \%$ of this spending ( $\$ 33.1$ million). Brand-level advertising for Pepsi also increased $10 \%$ to $\$ 5$ million. In addition, PepsiCo more than doubled spending on Mtn Dew totaling $\$ 41$ million. Just under $\$ 20$ million of this spending promoted its new Mtn Dew Kickstart reduced-sugar soda, marketed as an alternative breakfast beverage. PepsiCo spent a further $\$ 2$ million to advertise Manzanita Sol, a Hispanic-targeted soda that was not advertised in 2010. In contrast, PepsiCo reduced spending on Sierra Mist by 64\%, including brand-level advertising.

Coca-Cola and Dr Pepper ranked second and third in advertising for regular soda brands in 2013 at $\$ 100$ million and $\$ 54$ million, with declines of $24 \%$ and $5 \%$, respectively,
versus 2010. Other top-ten regular soda brands with declines in advertising spending from 2010 to 2013 included 7UP and Canada Dry from Dr Pepper Snapple Group (-58\% and -16\%, respectively) and Sprite from Coca-Cola (-63\%). However, Dr Pepper and 7UP each spent an additional $\$ 1.7$ to $\$ 1.9$ million in brand-level advertising (which did not specify regular or diet soda). Three additional regular soda brands spent more than $\$ 1$ million in advertising in 2010 but not in 2013: Fanta from Coca-Cola (\$6.3 vs. $\$ 0.9$ million, -85\%); Sunkist from Dr Pepper Snapple Group ( $\$ 10.6$ million vs. $\$ 0$ in 2013); and Shasta from National Beverage Corp ( $\$ 1.9$ million vs. $\$ 0$ in 2013). In contrast, in 2013 Coca-Cola began advertising Seagrams regular soda (\$7.7 million) and Dr Pepper Snapple Group greatly expanded advertising for Sun Drop regular soda ( $\$ 4.6$ million).
Although most regular soda brands spent $80 \%$ or more of their advertising budgets on TV, there were some notable exceptions. Mtn Dew had by far the highest spending on internet advertising at $\$ 11.8$ million ( $29 \%$ of its total budget). Pepsi regular soda ranked a distant second on the internet at $\$ 2.1$ million. Coca-Cola spent the most in outdoor advertising ( $\$ 19.2$ million, including $\$ 13.3$ million in brandlevel advertising and $\$ 5.9$ million for Coca-Cola regular soda), followed by Pepsi ( $\$ 8.9$ million, including $\$ 4.7$ million in brand advertising). Other soda brands with more than $\$ 1$ million in outdoor advertising included Dr Pepper (regular soda) and 7UP (brand-level ads). Regular soda brands were also the highest spenders in radio advertising, including Pepsi (\$8.4 million), Coca-Cola ( $\$ 8.1$ million), Sierra Mist ( $\$ 2.7$ million in brand and regular soda ads), Mtn Dew ( $\$ 1.7$ million), and Dr Pepper brand-level ads ( $\$ 1.4$ million). Seagrams was the only soda brand with more than $\$ 1$ million in magazine advertising, devoting almost the entirety of its $\$ 7.7$ million budget to the medium.

Energy drinks. Four energy drink brands spent more than $\$ 1$ million in advertising in 2013. 5-hour Energy (Innovation Ventures) remained the most advertised energy drink product in 2013 at $\$ 98.8$ million, although spending declined somewhat (-8\%) versus 2010. Red Bull increased its advertising spending by $84 \%$ to $\$ 47.8$ million in 2013, making it the sixth most advertised product in our analysis. A new energy shot, SK Energy, was introduced in 2011 (as Street King, and rebranded in 2012 as SK Energy) and spent $\$ 20.4$ million in 2013, ranking number nine in advertising spending of all products in our analysis. In addition, Coca-Cola increased spending on its NOS energy drink by $152 \%$, totaling $\$ 4.6$ million in 2013 . On the other hand, two energy drinks from our 2010 analysis ceased virtually all advertising in 2013. AMP Energy from PepsiCo, which spent $\$ 13.6$ million in 2010; and Celsius, which spent $\$ 9.7$ million. Some energy drinks devoted a relatively high proportion of advertising spending to non-TV media. Notably, SK Energy spent $\$ 3.4$ million on radio advertising, and Red Bull spent $\$ 1.1$ million in outdoor advertising.

Children's drinks. Three children's brands spent more than \$1 million in advertising in 2013, including two from Kraft Foods (Kool-Aid fruit drink and Capri Sun Roarin' Waters flavored water) and Sunny D fruit drink. Kool-Aid ranked eighth in advertising spending in 2013 at $\$ 28.8$ million, an increase of $19 \%$ versus 2010. Of note, almost one-half of this budget ( $\$ 13.5$ million) was spent on magazine advertising. Kraft Foods' Capri Sun Roarin' Waters did not advertise in 2010, but was supported by $\$ 6.0$ million in advertising in 2013. In contrast, Kraft Foods spent only $\$ 0.7$ million to advertise Capri Sun fruit drinks in 2013, compared with $\$ 9.9$ million in 2010. Advertising for Sunny D declined 40\% to \$13.8 million in 2013. Little Hug Fruit Barrels fruit drink brand had spent $\$ 1.1$ million in advertising in 2010, but spent just \$0.5 million (-58\%) in 2013.

Other sugary drink categories. There were substantial changes in advertising spending for fruit drink brands not targeted at children. The most-advertised fruit drink brand in 2010 (Ocean Spray) reduced its spending by $42 \%$ to $\$ 18.8$ million in 2013. In contrast, three fruit drink brands spent more than $\$ 1$ million in 2013 that had very low or no advertising in 2010, including V8 Fusion Refreshers from Campbell Soup Company (\$3.6 million, almost entirely on magazine advertising); Tampico, a Hispanictargeted product from Houchens Industries (\$3.4 million); and Poland Spring Nature's Blends from Nestle ( $\$ 1.5$ million). However, five additional fruit drinks with large advertising budgets in 2010 eliminated virtually all advertising in 2013, including three Coca-Cola products: Minute Maid fruit drinks (\$18.5 million in 2010), Simply Lemonade (\$2.7 million), and Fuze fruit drinks ( $\$ 2.7$ million), as well as Welch's and Old Orchard fruit drinks ( $\$ 5.5$ million and $\$ 1.7$ million, respectively).

As in 2010, Gatorade from PepsiCo remained the secondmost advertised sugary drink brand at $\$ 108.2$ million, although spending declined slightly (-4\%). Gatorade was also the highest spending sugary drink advertiser in magazines at $\$ 13.6$ million. Its main competitor in the category (Powerade from Coca-Cola) increased spending by $19 \%$ to $\$ 17.8$ million.


Red Bull TV ad featuring celebrity athletes including skateboarder Ryan Sheckler

No other sports drink spent more than $\$ 1$ million in advertising in 2013. The two other flavored water brands (i.e., not children's products) spent considerably less in 2013 than in 2010. CocaCola reduced advertising spending for Vitamin Water by 50\% to $\$ 15.6$ million, and PepsiCo stopped advertising its SoBe flavored water (the company spent $\$ 7.4$ million in 2010).

In contrast, Dr Pepper Snapple Group dramatically increased its advertising for Snapple iced tea ( $\$ 11.7$ million, $+166 \%$ ) and the Snapple brand ( $\$ 15.6$ million in 2013, +262\%). Of note, the Snapple brand also includes fruit drinks, but the company did not advertise these products separately. In addition, two iced tea brands were advertised in 2013 that had not advertised in 2010: Fuze iced tea (from Coca-Cola) spent $\$ 6.2$ million and Lipton Pure Leaf (from PepsiCo) spent $\$ 3.3$ million. However, Unilever greatly reduced advertising spending on Lipton iced tea ( $\$ 9.2$ million, $-46 \%$ ), and Coca-Cola reduced advertising for Gold Peak iced tea by 68\%. Two iced tea brands from smaller companies (Swiss Premium and Turkey Hill) eliminated virtually all advertising in 2013 (spending \$6.4 and \$3.9 million, respectively, in 2010). The only iced coffee brand in our analysis (Starbucks) did not advertise in measured media in 2010 or 2013. As with the regular soda category, some iced tea brands spent disproportionately more of their budgets on non-TV advertising. For example, Fuze iced tea devoted $85 \%$ of its advertising to magazines (\$5.3 million). In addition,

Table 20. Brands with spending increases of $\$ 5$ million or more in 2013 versus 2010*

|  |  |  | Advertising spending (\$000) |  |
| :--- | :--- | :--- | ---: | ---: |
| Company | Brand | Category | 2010-2013 increase | \% change |
| PepsiCo | Pepsi | Regular soda and soda brand | $\$ 90,214$ | $167 \%$ |
| Red Bull | Red Bull | Energy drink | $\$ 21,799$ | $84 \%$ |
| PepsiCo | Mtn Dew | Regular soda and soda brand | $\$ 21,433$ | $109 \%$ |
| SK Energy Shots | SK Energy | Energy drink | $\$ 20,408$ | $* *$ |
| Dr Pepper Snapple Group | Snapple | Iced tea and other sugary drink brand | $\$ 18,606$ | $213 \%$ |
| Coca-Cola | Seagrams | Regular soda | $\$ 7,651$ | $* *$ |
| Coca-Cola | Fuze | Iced tea and other sugary drink brand | $\$ 6,731$ | $4926 \%$ |

*Also includes brand-level advertising spending when noted
**Not advertised in 2010
Source: Rudd Center analysis of Nielsen data (2014)

Table 21. Brands with spending decreases of $\$ 5$ million or more in 2013 versus 2010*

|  |  |  | Advertising spending (\$000) |  |
| :--- | :--- | :--- | :--- | :--- |
| Company | Brand | Category | 2010-2013 decrease | \% change |
| Coca-Cola | Coca-Cola | Regular soda and soda brand | $-\$ 57,598$ | $-33 \%$ |
| Coca-Cola | Minute Maid | Fruit drink | $-\$ 18,467$ | $-100 \%$ |
| Dr Pepper Snapple Group | 7UP | Regular soda and soda brand | $-\$ 17,582$ | $-56 \%$ |
| Coca-Cola | Vitamin Water | Flavored water | $-\$ 15,668$ | $-50 \%$ |
| PepsiCo | Sierra Mist | Regular soda and soda brand | $-\$ 14,334$ | $-64 \%$ |
| Coca-Cola | Sprite | Regular soda and soda brand | $-\$ 14,273$ | $-73 \%$ |
| Ocean Spray | Ocean Spray | Fruit drink and other sugary drink brand | $-\$ 13,680$ | $-42 \%$ |
| PepsiCo | Amp Energy | Energy drink | $-\$ 13,608$ | $-100 \%$ |
| Dr Pepper Snapple Group | Sunkist | Regular soda and soda brand | $-\$ 11,108$ | $-100 \%$ |
| PepsiCo | SoBe | Other sugary drink brand | $-\$ 9,750$ | $-98 \%$ |
| Celsius Holdings** | Celsius | Energy drink | $-\$ 9,705$ | $-99 \%$ |
| Sunny Delight Beverages | Sunny D | Fruit drink | $-\$ 9,062$ | $-40 \%$ |
| Innovation Ventures | $5-h o u r ~ E n e r g y ~$ | Energy drink | $-\$ 8,165$ | $-8 \%$ |
| Unilever | Lipton | Iced tea | $-\$ 7,969$ | $-46 \%$ |
| Swiss Premium | Swiss Premium | Iced tea | $-\$ 6,314$ | $-98 \%$ |
| Coca-Cola | Sans | Regular soda and soda brand | $-\$ 5,353$ | $-85 \%$ |
| PepsiCo | Fanta | Sports drink | $-\$ 5,040$ | $-4 \%$ |

*Also includes brand-level advertising spending when noted
**Companies not included in our 2014 analysis
Source: Rudd Center analysis of Nielsen data (2014)

Snapple spent $\$ 3.0$ million in brand-level advertising on radio and $\$ 1.4$ million in outdoor ads.

Brands with the greatest change in advertising spending. From 2010 to 2013, just seven brands across all drink categories increased their total advertising spending by $\$ 5$ million or more (see Table 20). The $\$ 90$ million increase in Pepsi spending far surpassed any other brand. Four additional brands increased advertising spending by more than $\$ 15$ million, including one other PepsiCo brand (Mtn Dew), two energy drink brands (Red Bull and SK Energy), and Snapple.

In contrast, many more sugary drink brands reduced advertising spending by $\$ 5$ million or more (see Table 21). Coca-Cola had the biggest reduction of $\$ 58$ million, and 7 UP and Vitamin Water both reduced their spending by $\$ 15$ million or more. In addition, six brands that spent more than $\$ 5$ million on advertising in

2010 eliminated virtually all advertising in 2013 (Minute Maid fruit drink, AMP Energy, Sunkist regular soda, SoBe, Celsius energy drink, and Swiss Premium iced tea).

## Summary of adverfising spending

Beverage companies spent $\$ 814$ million to advertise sugary drinks and energy drinks in 2013, a decline of $3 \%$ versus 2010. Further, companies spent $\$ 52$ million in brand-level advertising for sugary drinks. In contrast, they spent \$465 million to advertise other beverages, including diet drinks, 100\% juice, and plain water, 3\% less than spent in 2010. Although overall spending declined for sugary drinks as well as non-sugar drinks, there was considerable variation across categories. Spending on both regular soda and energy drink advertising increased 9\%, and diet soda spending increased

17\%. In addition, advertising for light juices (i.e., juice with water and zero-calorie sweeteners) more than tripled. In contrast, advertising for all other drink categories decreased, ranging from small reductions for plain water (-3\%) and sports drinks ( $-5 \%$ ) to substantial reductions for $100 \%$ juice ( $-29 \%$ ), fruit drinks (-40\%), and other diet drinks (-48\%). Overall, $31 \%$ of advertising spending for all drink categories in 2013 promoted regular soda and soda brands and $13 \%$ promoted energy drinks, while $35 \%$ promoted other non-sugarsweetened drinks. The healthiest drinks (i.e., $100 \%$ juice and plain water) represented just $10 \%$ and $4 \%$ of total advertising spending, respectively. Excluding brand-level advertising, sugary drinks outspent water and 100\% juice by 4.2 to 1.

The three largest beverage companies (Coca-Cola, Dr Pepper Snapple Group, and PepsiCo) were responsible for 70\% of advertising spending on sugary drinks in 2013, and two energy drink companies (Innovation Ventures [5-hour Energy]
and Red Bull) were responsible for another 17\%. Change in advertising spending from 2010 to 2013 varied greatly by company. Coca-Cola and Dr Pepper Snapple Group both reduced advertising for sugary drinks in 2013 relative to 2010, by $35 \%$ and $-13 \%$, respectively. In contrast, PepsiCo more than doubled spending on regular soda and overtook CocaCola as the company with the most sugary drink advertising spending in 2013.

Four brands dominated advertising spending in 2013: Pepsi (\$139 million, +181\%), Gatorade (\$108 million, -4\%), CocaCola (\$100 million, -24\%), and 5-hour Energy (\$99 million, $-8 \%$ ). Snapple advertising (including both iced tea and brand-level advertising) was also notable for a $213 \%$ increase in spending over 2010. Kraft Foods' Kool Aid was the only children's product in the advertising spending top-ten brands (\$29 million, +19\%), with approximately one-half devoted to magazine advertising.

## TV advertising exposure

## TV advertising exposure Definition

Gross rating points Measure of the per capita number of TV advertisements viewed by a specific demographic group (GRPs) 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 GRPs divided by 100. Provides a measure of the number of ads viewed by individuals in a specific exposure demographic group, on average, during the time period measured.
Targeted ratios: Preschooler to adult Child to adult 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 Teen to adult

From 2010 to 2013, there was a marked decline in TV advertising for sugary drinks (including brand-level advertising) and energy drinks viewed by all age groups. Preschoolers viewed 33\% fewer of these ads in 2013 than they had in 2010, children viewed $39 \%$ fewer, and teens viewed $30 \%$ fewer. TV ads viewed by adults also went down by $22 \%$. However, young people continued to view these ads multiple times per week, ranging from 2.8 and 3.2 ads per week for preschoolers and children on average, to 5.5 ads per week for teens. Of note, in 2010 teens saw $12 \%$ more ads for sugary drinks and energy drinks compared to adults (407.8 for teens vs. 365.5 for adults), whereas in 2013 teens and adults had equivalent levels of exposure ( 286.7 vs . 283.8).

Examination of TV advertising to youth for sugary drinks and energy drinks over the past six years also shows positive long-term trends (see Figure 9). For children, TV ads viewed increased from 2008 to 2010, but then declined steadily from 2010 to 2013. Compared with 2008, preschoolers and children viewed $28 \%$ and $32 \%$ fewer ads, respectively, in 2013. TV ads viewed by teens also grew steadily from 2008 to 2010, but remained at the same level from 2010 to 2012. However, TV advertising to teens then dropped substantially from 2012 to 2013 (-28\%). Compared with 2008, teens viewed 13\% fewer ads in 2013.

Figure 9. Trends in exposure to TV ads for sugary drinks and energy drinks by age


Source: Rudd Center analysis of Nielsen data (2014)

Table 22. TV advertising exposure for children by sugary drink and energy drink category

| Category | Average \# of ads viewed |  |  |  |  |  | 2013 targeted ratios |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Preschoolers (2-5 years) |  |  | Children (6-11 years) |  |  |  |  |
|  | 2010 | 2013 | Change | 2010 | 2013 | Change | Preschooler: adult | Child: adult |
| Children's drinks | 86.3 | 35.7 | -59\% | 118.8 | 45.6 | -62\% | 2.0 | 2.5 |
| Regular soda | 48.3 | 39.0 | -19\% | 62.2 | 43.0 | -31\% | 0.4 | 0.4 |
| Energy drinks | 45.8 | 34.5 | -25\% | 55.1 | 40.1 | -27\% | 0.4 | 0.5 |
| Sports drinks | 10.8 | 14.1 | +31\% | 14.3 | 17.6 | +23\% | 0.4 | 0.5 |
| Iced tea | 6.3 | 7.2 | +14\% | 7.9 | 8.0 | +2\% | 0.4 | 0.4 |
| Other fruit drinks | 11.1 | 6.4 | -43\% | 12.9 | 6.1 | -52\% | 0.3 | 0.3 |
| Other sugary drink brands | 0.3 | 3.4 | 1098\% | 0.3 | 4.1 | 1128\% | 0.4 | 0.5 |
| Other flavored water | 4.8 | 3.3 | -31\% | 5.6 | 3.5 | -37\% | 0.5 | 0.5 |
| Soda brands | 0.4 | 0.5 | +17\% | 0.6 | 0.6 | -10\% | 0.5 | 0.5 |
| Total | 214.1 | 144.1 | -33\% | 277.7 | 168.7 | -39\% | 0.5 | 0.6 |

Disproportionately high targeted ratios in bold
Source: Rudd Center analysis of Nielsen data (2014)

## TV adverfising by drink Cafegory

In 2013, children's drinks (including fruit drinks and flavored water) represented approximately one-quarter of TV ads for sugary drinks and energy drinks viewed by preschoolers and children (see Table 22). Regular soda and energy drinks each contributed another one-quarter of ads viewed. Of note, preschoolers saw slightly more ads for regular soda than for children's drinks. Sports drinks followed at approximately 10\% of ads viewed, and then iced tea and other fruit drinks (5\% and $4 \%$ of ads viewed, respectively). The remaining 5\% of ads viewed consisted of brand-level ads for soda and other sugary drinks and ads for flavored water. Not surprisingly, preschoolers and children saw twice and 2.5 times as many ads for children's drinks compared with adults. In contrast, they viewed half as many (or fewer) ads for all other sugary drink and energy drink categories.

Compared with 2010, preschoolers and children saw fewer ads for most sugary drink and energy drink categories in 2013. The most dramatic decline was for children's drinks, with a reduction of more than half. Ads viewed for other fruit drinks and flavored water (not children's drinks) were reduced by approximately one-third to one-half the amount seen in 2010. Regular soda and energy drink ads also went down, but at a somewhat lower rate ( $19 \%$ to $31 \%$ ). On the other hand, children saw more TV ads for sports drinks and iced tea in 2013 than in 2010. There was also a large increase in brandlevel ads viewed for other sugary drink brands, although these ads accounted for a small (2\%) share of sugary drink and energy drink ads viewed overall.

In contrast, children's drinks represented just 10\% of ads viewed by teens, whereas energy drinks were the most viewed category ( $34 \%$ of ads viewed), followed by regular soda (30\%) (see Table 23). Sports drinks contributed $12 \%$ of ads viewed, also ahead of children's drinks. All other categories, including brand-level ads, represented 5\% or less of ads viewed by

Table 23. TV advertising exposure for teens by sugary drink and energy drink category

|  | Average \# of ads viewed |  |  | 2013 ratios |
| :---: | :---: | :---: | :---: | :---: |
|  | Teens (12-17 years) |  |  |  |
|  | 2010 | 2013 | Change | Teen:adult |
| Energy drinks | 126.3 | 97.7 | -23\% | 1.2 |
| Regular soda | 121.5 | 85.3 | -30\% | 0.9 |
| Sports drinks | 32.5 | 34.0 | +5\% | 1.0 |
| Children's products | 81.4 | 29.1 | -64\% | 1.6 |
| Iced tea | 12.3 | 14.1 | +15\% | 0.7 |
| Other flavored water | 14.9 | 9.9 | -34\% | 1.4 |
| Other fruit drinks | 17.3 | 8.2 | -52\% | 0.4 |
| Other sugary drink brand | ds 0.5 | 7.6 | +1504\% | 0.9 |
| Soda brands | 1.1 | 0.8 | -32\% | 0.7 |
| Total | 407.7 | 286.7 | -30\% | 1.0 |

Disproportionately high targeted ratios in bold
Source: Rudd Center analysis of Nielsen data (2014)
teens. Further, for all categories except iced tea, teens saw disproportionately more of these ads compared with adults. As teens spend $30 \%$ less time watching TV than adults do, ${ }^{3}$ a teen to adult targeted ratio of 0.9 or higher indicates that companies purchased advertising in media viewed more often by teens relative to adults. Of note, teens viewed 20\% more energy drink ads compared with adults and $40 \%$ more ads for flavored waters (excluding children's products).

From 2010 to 2013, changes in teens' exposure to TV ads for sugary drink categories and energy drinks were similar to changes in children's exposure. Ads for children's drinks and other fruit drinks went down by one-half to two-thirds, while advertising for energy drinks and regular soda declined by $23 \%$ and $30 \%$, respectively. On the other hand, ads for sports drinks and iced tea increased, and brand-level ads for other sugary drinks showed a very large increase.

Table 24. TV advertising exposure for other drink categories

| Category | Average \# of ads viewed |  |  |  |  |  |  |  |  | 2013 targeted ratios |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Preschoolers (2-5 years) |  |  | Children (6-11 years) |  |  | Teens (12-17 years) |  |  |  |  |  |
|  | 2010 | 2013 | Change | 2010 | 2013 | Change | 2010 | 2013 | Change | Preschooler: adult | Child: adult | Teen: adult |
| 100\% juice | 62.1 | 50.8 | -18\% | 76.8 | 54.7 | -29\% | 101.6 | 63.4 | -38\% | 0.5 | 0.6 | 0.7 |
| Diet soda | 20.8 | 27.5 | +32\% | 24.9 | 28.2 | +13\% | 46.1 | 56.2 | +22\% | 0.4 | 0.4 | 0.7 |
| Light juice | 1.6 | 7.0 | +328\% | 1.8 | 7.0 | +278\% | 2.4 | 10.7 | +352\% | 0.3 | 0.3 | 0.5 |
| Plain water | 4.1 | 7.9 | +93\% | 4.7 | 4.4 | -6\% | 6.5 | 5.4 | -17\% | 0.7 | 0.4 | 0.5 |
| Other diet drinks | 3.8 | 0.0 | -100\% | 4.0 | 0.0 | -100\% | 6.5 | 0.0 | -100\% |  |  |  |
| Total | 92.5 | 93.2 | +1\% | 112.2 | 94.3 | -16\% | 163.1 | 135.8 | -17\% | 0.5 | 0.5 | 0.7 |

Source: Rudd Center analysis of Nielsen data (2014)

## TV advertising for ofher drink Categories

In addition to sugary drinks and energy drinks, children saw approximately 1.8 TV ads per week for diet drinks, $100 \%$ juice, and plain water, and teens saw 2.6 of these ads per week. Approximately one-half promoted 100\% juices, followed by diet soda (see Table 24). Plain water was the least advertised drink category. On average, children and teens viewed less than one TV ad for water every month. Notably, children and teens saw 30\% or fewer ads for all other drink categories compared with adults. These findings contrast with the high teen to adult targeted ratios for sugary drink and energy drink categories.
Overall declines in TV advertising for diet and healthy drink categories from 2010 to 2013 were lower than declines in sugary drink and energy drink ads. Children and teens viewed $16 \%$ to $17 \%$ fewer TV ads for these drinks, while preschoolers saw $1 \%$ more ads in 2013 than in 2010. Most of this decline was due to fewer ads for $100 \%$ juice in 2013, but ads for plain water viewed by children and teens also declined. On the other hand, preschoolers viewed almost twice as many ads for plain water in 2013 compared with 2010. In addition, diet soda ads increased $13 \%$ for children and $32 \%$ for preschoolers, while ads for light juices increased up to four-fold.

Figure 10 provides the proportion of TV ads viewed by children and teens in 2013 for each drink category (including sugary drinks, energy drinks, and other drink categories). In 2013, preschoolers and children saw more ads for $100 \%$ juice than for any other drink category, while children's products (fruit drinks and flavored water) ranked second or third. This finding contrasts sharply with 2010, when children saw 55\% more ads for fruit drinks compared with $100 \%$ juice. However, the number of soda ads combined (including regular, diet, and brand-level ads) exceeded $100 \%$ juice ads viewed by approximately $30 \%$. As a proportion of TV advertising for all drink categories, $100 \%$ juice and plain water represented just $25 \%$ of ads viewed by preschoolers and $22 \%$ of ads viewed by children in 2013. For teens, these drink categories contributed just $16 \%$ of all beverage TV ads viewed in 2013. Teens saw more ads for energy drinks ( $23 \%$ of all beverage ads viewed), and ads for soda (including regular, diet, and brand-level ads) represented $34 \%$ of beverage ads viewed by teens.

## TV adVerfising by company

Despite the overall decline in TV advertising for sugary drinks and energy drinks from 2010 to 2013, there was substantial variation by company (see Figure 11). For both children and teens, PepsiCo was responsible for more sugary drink advertising than any other company in 2013. The company overtook Kraft Foods, 5-hour Energy, and Dr Pepper Snapple Group, which each advertised more to children in 2010 than did PepsiCo. In total, PepsiCo increased TV advertising viewed by teens by 10\% from 2010 to 2013, and advertising to preschoolers and children by 39\% and 25\%, respectively (see Ranking Tables 4 and 5). Red Bull was the only other company to increase TV advertising to youth, with increases in ads viewed of $68 \%$ for teens, $59 \%$ for children, and $72 \%$ for preschoolers.

In contrast, Kraft Foods advertising to youth declined approximately two-thirds from 2010 to 2013 for all age groups. The company had ranked first in advertising to preschoolers and children in 2010, but fell to second in 2013. Most other companies in our analysis reduced sugary drink TV advertising to children and teens by $30 \%$ or more. Of note, Coca-Cola Co. advertised approximately 50\% less to youth on TV in 2013 than in 2010. Only Unilever's advertising remained relatively stable, showing declines of $3 \%$ and $16 \%$ in ads viewed by teens and children, respectively.

## TV adVerfising by brand

Ranking Tables 4 and $\mathbf{5}$ also present children's and teens' exposure to TV advertising for individual drink brands. From 2010 to 2013, there were substantial changes in the brands advertised most to children and teens. Of the 20 brands advertised most in 2013, two were not advertised in 2010 (Capri Sun Roarin' Waters and Sun Drop soda), and another five increased their advertising to children and teens by $25 \%$ or more (Gatorade, Pepsi, Red Bull, Mtn Dew, and Snapple). However, the majority of the top brands substantially reduced their TV advertising to children and teens in 2013 versus 2010.

Figure 10. Child and teen exposure to TV advertising for all drink categories
Average \# of ads viewed by children (6-11 years) in 2013


Average \# of ads viewed by teens (12-17 years) in 2013


Source: Rudd Center analysis of Nielsen data (2014)

## Children's drinks

Three children's brands advertised on TV in 2013: Capri Sun and Kool-Aid from Kraft Foods and Sunny D fruit drink. Two children's drinks - Capri Sun Roarin' Waters and Sunny D - ranked second and fourth respectively in advertising exposure for children. On the other hand, Kraft virtually discontinued TV advertising to children for both Kool-Aid and Capri Sun fruit drinks, with declines of more than $90 \%$ in ads viewed by children in 2013 versus 2010. Of note, these two brands ranked first and third in TV advertising to children in 2010. Sunny D advertis-
ing also declined over 40\% in 2013 versus 2010. In addition, Kraft Foods advertised another Capri Sun product in 2013: Capri Sun Super V 100\% juice blend, although children saw 25\% fewer ads for Super V relative to Capri Sun Roarin' Waters.

## Energy drinks

Two energy drink brands made the top-ten list of brands advertised to both children and teens. In 2013, youth viewed more TV advertising for 5-hour Energy than any other brand in this analysis: preschoolers viewed 25 5-hour Energy ads,

Figure 11. Sugary drink and energy drink TV advertising viewed by youth by company


Source: Rudd Center analysis of Nielsen data (2014)
children viewed 30 ads, and teens viewed 73 ads. 5-hour Energy also ranked number one in ads viewed by teens in 2010, and number two for children. In addition, Red Bull energy drinks made the top-ten list, ranking number six in TV advertising to children and number four for teens. NOS (from Coca-Cola) was the only other energy drink with TV advertising in 2013, but on average children and teens viewed less than one ad for this product. From 2010 to 2013, 5-hour Energy reduced its TV advertising to youth by approximately one-third. However, as noted, Red Bull TV advertising viewed by children and teens increased by approximately two-thirds.

## Regular soda

Three regular soda brands ranked in the top-ten brands advertised to both children and teens on TV in 2013: Pepsi, Mtn Dew, and Dr Pepper. Coca-Cola ranked tenth for children and eleventh for teens.

From 2010 to 2013, Pepsi regular soda advertising to children almost tripled, and Pepsi advertising to teens increased by 146\%. Further, Mtn Dew (another PepsiCo brand) increased advertising by approximately two-thirds for children and teens. Of note, Pepsi TV advertising in 2013 promoted both Pepsi
and Pepsi NEXT. The reduced-calorie Pepsi NEXT product comprised $46 \%$ and $47 \%$ of Pepsi ads viewed by children and teens. In addition, two-thirds of Mtn Dew advertising to youth promoted Mtn Dew Kickstart. In contrast, TV advertising for Dr Pepper and Coca-Cola regular soda declined by $24 \%$ to $56 \%$ for children and teens. Coca-Cola promoted its 9-ounce "mini" cans in 2013, but these ads represented approximately $1 \%$ of all Coca-Cola TV ads viewed by youth. TV advertising to children and teens also declined for two lemon-lime regular sodas: Coca-Cola's Sprite (by approximately 80\%) and PepsiCo's Sierra Mist (by approximately 90\%).

There were also some additions and deletions in regular soda brands that advertised on TV in 2013. Sun Drop from Dr Pepper Snapple Group did not advertise in 2010, but ranked ninth in TV advertising to teens in 2013. On the other hand, Dr Pepper Snapple Group did not advertise 7UP or Sunkist on English-language TV in 2013, whereas both products had been in the top-ten in TV advertising in 2010.

## other sugary drinks

PepsiCo's Gatorade sports drink was also in the top-ten list of brands advertised to children in 2013, while Ocean Spray


A Snapple ad focused on natural ingredients, claiming the best stuff on earth just got better
fruit drinks and Coca-Cola's Vitamin Water were among the top-ten brands advertised to teens. Ocean Spray fruit drinks ranked number nine for children and number 12 for teens, while Coca-Cola's Vitamin Water ranked number 15 for children and number 10 for teens. Of note, Gatorade TV advertising to children increased by 26\% from 2010 to 2013, compared to a $6 \%$ increase in advertising to teens during the same period. In addition, Gatorade did not advertise its reduced-calorie G2 product on TV in 2013, although it had in 2010. Advertising for
other top-ten brands went down, including Vitamin Water (by $14-24 \%$ ) and Ocean Spray (by 21-27\%).
One additional sugary drink brand - Snapple - dramatically increased its TV advertising from 2010 to 2013. Dr Pepper Snapple Group more than doubled Snapple TV advertising (including both brand-level and iced tea ads) to children and more than tripled advertising to teens. When combined, Snapple brand and iced tea ads ranked seventh in advertising to both children and teens 2013, outranking the company's Dr Pepper regular soda.

Youth-targeted TV advertising. Not surprisingly, children saw many more TV ads for Capri Sun and Sunny D children's products compared with adults (see Table 25). Capri Sun fruit drink and Roarin' Waters flavored water had the highest child to adult targeted ratios in our analysis: children saw almost ten times as many ads for Capri Sun fruit drink and seven times as many ads for Capri Sun Roarin' Waters than adults saw, indicating that most of this advertising appeared on children's television. Targeted ratios for Capri Sun Super V (100\% juice blend) and Sunny D were lower; children saw 50\% to $75 \%$ more ads for these products compared with adults. However, Kraft Foods appears to have stopped advertising Kool-Aid directly to children on TV as they saw approximately one-half the number of ads for this product compared with adults.

TV advertising for several sugary drinks and energy drinks also appeared to be targeted to teen viewers, evidenced by high teen to adult targeted ratios. Sun Drop regular soda had the highest teen-targeted ratio for any non-children's product. Teens saw more than twice as many of these ads compared to adults, and children also saw $10 \%$ more ads than adults. In addition, teens saw $40 \%$ more ads for Vitamin Water compared with adults. Of note, these two products also had higher teen to adult targeted ratios than Capri Sun Super V and Sunny D children's products. Both energy drink brands with high levels

Table 25. Child- and teen-targeted brands

| Brand | Category | Preschoolers (2-5 years) |  | Children (6-11 years) |  | Teens (12-17 years) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Avg \# ads viewed in 2013 | $\begin{array}{r} \text { Targeted } \\ \text { ratio } \\ \text { (vs adults) } \end{array}$ | $\begin{aligned} & \hline \text { Avg \# ads } \\ & \text { viewed } \\ & \text { in } 2013 \end{aligned}$ | $\begin{array}{r} \hline \text { Targeted } \\ \text { ratio } \\ \text { (vs adults) } \end{array}$ | Avg \# ads viewed in 2013 | $\begin{array}{r} \text { Targeted } \\ \text { ratio } \\ \text { (vs adults) } \end{array}$ |
| Child-targeted |  |  |  |  |  |  |  |
| Capri Sun | Fruit drink | 0.5 | 7.1 | 0.7 | 9.6 | 0.3 | 3.7 |
| Capri Sun Roarin' Waters | Flavored water | 24.0 | 5.7 | 28.8 | 6.9 | 14.3 | 3.4 |
| Capri Sun Super V | 100\% juice | 17.3 | 1.5 | 21.3 | 1.9 | 15.3 | 1.3 |
| Sunny D | Fruit drink | 9.3 | 1.0 | 14.7 | 1.5 | 12.8 | 1.3 |
| Teen-targeted |  |  |  |  |  |  |  |
| Sun Drop | Regular soda | 3.9 | 0.8 | 5.4 | 1.1 | 11.3 | 2.3 |
| Vitamin Water | Flavored water | 3.3 | 0.5 | 3.5 | 0.5 | 9.9 | 1.4 |
| Red Bull | Energy drink | 8.7 | 0.4 | 9.7 | 0.5 | 24.4 | 1.3 |
| 5-hour Energy | Energy shot | 25.4 | 0.4 | 29.9 | 0.5 | 72.7 | 1.2 |
| Sprite | Regular soda | 0.9 | 0.4 | 1.0 | 0.5 | 2.6 | 1.2 |
| Gatorade | Sports drink | 13.7 | 0.4 | 17.2 | 0.5 | 33.4 | 1.1 |
| Mtn Dew Kickstart | Regular soda | 4.0 | 0.6 | 4.6 | 0.4 | 11.6 | 1.1 |

Source: Rudd Center analysis of Nielsen data (2014)


Capri Sun Super V child-targeted TV ads


Mtn Dew Kickstart TV commercials with youth-oriented themes
of TV advertising in 2014 appeared to target their advertising to teens directly: compared with adults, teens saw $20 \%$ more ads for 5 -hour Energy and 30\% more ads for Red Bull. Sprite regular soda and Gatorade sports drink also appeared to target teens with targeted ratios of 1.2 and 1.1, respectively. Of note, Mtn Dew Kickstart ads had a targeted ratio of 1.1, while teens saw 7\% fewer regular Mtn Dew ads compared with adults.
However, some of the brands with the most TV ads viewed by children and teens did not appear to purchase advertising targeted to them directly, as adults saw even more of these ads. For example, adults saw twice as many ads for Pepsi, Dr Pepper, and Coca-Cola regular sodas than did teens, and more than three times as many ads for Ocean Spray fruit drinks.

## Summary of TV adverfising exposure

In 2013, there was a notable decline in total youth exposure to TV advertising for sugary drinks and energy drinks; teens viewed $30 \%$ fewer of these ads relative to 2010 and children
viewed 39\% fewer. However, preschoolers, children, and teens continued to see 144, 169, and 287 ads, respectively, for unhealthy drinks.

Exposure to advertising for children's drinks decreased the most, by approximately $60 \%$ for all age groups. Exposure also fell for regular soda, energy drinks, other fruit drinks, and flavored water advertising, as well as ads for $100 \%$ juice, plain water, and other diet drinks (not diet soda). However, relative to 2010, youth exposure to ads for sports drinks and iced tea increased. Young people also saw more TV advertising for diet soda and light juice in 2013 than in 2010. Of all drink types, the most viewed category was 100\% juice for preschoolers and children (approximately one out of five ads viewed). However, sugary drinks and energy drinks contributed approximately two-thirds of all beverage ads viewed by children. For teens, energy drinks followed by regular sodas were the most viewed categories, while $100 \%$ juice and plain water contributed just $16 \%$ of total beverage ad exposure.

Among sugary drink and energy drink brands, 5-hour Energy was the most advertised product to all age groups on TV, and Gatorade and Pepsi ranked in the top-five. Capri Sun Roarin' Waters and Sunny D also ranked in the top-five for preschoolers and children, while Red Bull and Mtn Dew rounded out the top-five sugary drink brands viewed by teens. Notably, PepsiCo and Red Bull were the only companies to increase sugary drink advertising to children and teens in 2013 versus 2010. On TV, PepsiCo increased its sugary drink advertising to preschoolers and children by $39 \%$ and $25 \%$, respectively, and Red Bull increased advertising to all youth by $59 \%$ or more.

Not surprisingly, advertising for two children's brands (Capri Sun and Sunny D) appeared to target children, as children viewed at least 50\% more of these ads than adults viewed. However, several products also appeared to be targeted to teens, including Sun Drop, Sprite, and Mtn Dew Kickstart sodas, Red Bull and 5-hour Energy drinks, Vitamin Water, and Gatorade. Of note, one juice product (Capri Sun Super V) also was targeted to children. However, for diet drinks, $100 \%$ juice, and plain water, children and teens saw 30\% to $70 \%$ fewer ads compared with adults.

## Brand appearances on prime-time TV

| TV brand appearances | Definition |
| :--- | :--- |
| Brand appearance | An occasion when a brand or product is conveyed, visually and/or audibly, during the entertainment <br> content of a TV program. To be counted, 50\% or more of a brand logo or product name must be <br> visible. Only prime-time TV programming is included in these analyses. Most brand appearances <br> are product placements, but some appearances may not be the result of paid efforts by advertisers. |
| Number of telecasts | The number of individual telecasts featuring any appearance for a particular company, brand, or <br> product. |
| Total screen time | The cumulative amount of time a brand appeared on prime-time TV. |
| Average length per telecast | Calculated by dividing the total screen time by the number of telecasts. Provides the average length <br> of time given to brand appearances for each telecast. |
| Gross rating points | Measure of the per capita number of prime-time brand appearances viewed by a specific <br> demographic group over a period of time. |
| GRPs) | GRPs divided by 100. Provides a measure of the number of appearances viewed by individuals in a <br> specific demographic group, on average, during the time period measured. |

In addition to traditional TV advertising, sugary drink brands and energy drinks appeared in 2,102 different prime-time TV telecasts in 2013, up $33 \%$ from 2010. The average length of brand appearances was 25.7 seconds per telecast in 2013, more than double the average length in 2010 (12.1 seconds) and comparable to a 30 -second commercial. In total, there were 900 minutes of sugary drink and energy
drink appearances on prime-time TV in 2013, representing an increase of $182 \%$ from 319 minutes in 2010.

As in 2010, regular soda and soda brands predominated accounting for $70 \%$ of telecasts with sugary drink appearances (see Table 26). From 2010 to 2013, the number of telecasts featuring energy drinks almost doubled, accounting for 13\% of telecasts with brand appearances in 2013. Sports drinks

Table 26. Brand appearances on prime-time TV in 2010 and 2013 by drink category

|  | Number of telecasts |  |  |  | Average duration per telecast (sec) |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: |
| Category | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 3}$ | Change | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 3}$ | Change |
| Regular soda and soda brands | 1080 | 1462 | $+35 \%$ | 14.9 | 21.9 | $+47 \%$ |
| Other sugary drinks and brands* | 326 | 365 | $+12 \%$ | 5.9 | 51.7 | $+776 \%$ |
| Energy drinks | 147 | 264 | $+80 \%$ | 5.5 | 11.8 | $+113 \%$ |
| Flavored waters | 25 | 11 | $-56 \%$ | 14.0 | 8.7 | $-38 \%$ |
| Total sugary drinks and energy drinks | 1578 | 2102 | $+33 \%$ | 12.1 | 25.7 | $+112 \%$ |
|  |  |  |  |  |  |  |
| Diet soda | 189 | 227 | $+20 \%$ | 5.8 | 35.9 | $+522 \%$ |
| Plain water | 369 | 363 | $-2 \%$ | 16.1 | 20.3 | $+26 \%$ |
| $100 \%$ juice | 88 | 19 | $-78 \%$ | 5.5 | 6.9 | $+26 \%$ |
| Total other drink categories | 646 | 609 | $-6 \%$ | 11.6 | 25.7 | $+121 \%$ |

[^2] Source: Rudd Center analysis of Nielsen data (2014)

Table 27. Beverage brand appearances viewed by children and teens in 2010 and 2013

| Category | Average \# of appearances viewed |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Children (2-11 years) |  |  | Teens (12-17 years) |  |  |
|  | 2010 | 2013 | Change | 2010 | 2013 | Change |
| Regular soda and soda brands | 18.3 | 12.5 | -32\% | 24.4 | 20.1 | -18\% |
| Other sugary drinks and brands* | 1.2 | 7.4 | +517\% | 2.0 | 10.5 | +411\% |
| Energy drinks | 0.5 | 1.0 | +116\% | 0.8 | 2.6 | +216\% |
| Flavored water | 1.7 | 0.0 | -98\% | 2.4 | 0.1 | -98\% |
| Total sugary drinks and energy drinks | 21.7 | 21.0 | -3\% | 29.6 | 33.2 | +12\% |
|  |  |  |  |  |  |  |
| Diet soda | 0.5 | 2.5 | +395\% | 1.0 | 3.4 | +230\% |
| Plain water | 2.5 | 1.9 | -23\% | 3.7 | 5.5 | +50\% |
| 100\% juice | 0.1 | 0.1 | -55\% | 0.2 | 0.1 | -43\% |
| Total other drink categories | 3.1 | 4.4 | +44\% | 4.9 | 9.1 | +84\% |

*Other sugary drinks and brands include sports drinks, iced teas, fruit drinks, and brands with products in these categories Source: Rudd Center analysis of Nielsen data (2014)
and fruit drinks accounted for $5 \%$ and $6 \%$ of telecasts, respectively. Telecasts featuring flavored water or iced tea/ coffee declined from 2010, each accounting for less than 1\% of sugary drink appearances viewed in 2013. Finally, other sugary drink brands (e.g., Snapple and SoBe with products in multiple drink categories) made up the remaining $13 \%$ of telecasts with sugary drink appearances.

In addition to those featuring sugary drinks, 609 prime-time telecasts featured appearances by beverages in other drink categories (including diet soda, plain water, and 100\% juice) totaling 260.9 minutes of prime-time viewing. Diet soda was the prominent other drink category accounting for $52 \%$ of screen time, and plain (including mineral) water contributed another $47 \%$. Fruit juice made up less than $1 \%$ of screen time. However, regular soda brands alone were featured in over twice the amount of screen time as all non-sugar-sweetened drink categories combined, and sugary drinks and energy drinks as a whole eclipsed other drinks by a factor of 3.5 to 1 .

Children (2-11 years) viewed on average 21 sugary drink appearances in 2013, reflecting a 3\% decrease from 2010 (see Table 27). On the other hand, teens (12-17 years) viewed 33 appearances, up $12 \%$ from 2010. As in 2010, children and teens viewed the most appearances for regular soda and soda brands in 2013, comprising almost half of all beverage appearances viewed. However, there was a reduction in appearances viewed for the soda category, whereas appearances viewed for other drink categories increased substantially. For example, children and teens viewed 12 to 15 times the number of appearances for other categories of sugary drinks (e.g., sports drinks, iced tea) in 2013 versus 2010. These drinks achieved roughly half the amount of appearances viewed as regular soda despite less than one-tenth the number of telecasts. Energy drinks also showed substantial increases in brand appearances viewed. Children saw twice as many appearances for energy drinks in 2013 versus 2010, while teens' exposure tripled. For the remaining beverage categories (sports drinks, fruit drinks,
flavored water, and iced tea/coffee), children and teens saw less than one appearance each.

Diet soda and plain water also had relatively high numbers of appearances viewed by children and teens; both exceeded energy drink appearances viewed. Of note, children viewed more appearances for diet soda than water, while teens viewed more water appearances. Further, appearances viewed for diet soda more than tripled from 2010 to 2013 for children and teens, while plain water appearances increased by $50 \%$ for teens, but declined for children.

## Beverage appearances by company

Thirty-seven brands from 12 companies appeared on primetime TV in 2013; approximately one-third of the brands in our analysis (see Ranking Table 6). In 2010, Coca-Cola brand led in drink appearances on prime-time TV, with $61 \%$ of screen time and over $70 \%$ of appearances viewed by children and teens. However, brand appearances in 2013 were distributed across several companies and brands.

At the company level, Coca-Cola continued to rank first, totaling 401.6 minutes of prime-time TV in 2013, an increase of $92 \%$ over 2010. However, these appearances resulted in just 10 and 16 appearances viewed by children and teens respectively, a reduction of approximately 40\% versus 2010 (see Figure 12). This decline in the number of appearances viewed was due to fewer youth viewers of programs where Coca-Cola appeared (primarily American Idol). Notably, Dr Pepper Snapple Group moved up to second place at 393.6 minutes of prime-time appearances in 2013, an eleven-fold increase over 2010. Children and teens viewed 8 and 12 of these appearances for Dr Pepper Snapple Group products in 2013, six and eight times as many appearances viewed in 2010. PepsiCo accounted for $6 \%$ of total screen time and approximately 2 appearances viewed by children and teens, a small increase of just over 10\%. Monster Beverage Corporation, Kraft Foods, and Red Bull ranked fourth through

Figure 12. Brand appearances viewed by children and teens in 2010 and 2013 by company


Source: Rudd Center analysis of Nielsen data (2014)
sixth in screen time and brand appearances viewed, but each accounted for less than 4\% of total screen time. In 2013, teens viewed slightly more than one for Monster Energy, and less than one appearance each for the remaining companies.

## Beverage appearances by brand

In comparing appearances for individual brands, Snapple had the most screen time, totaling 299.1 minutes of primetime viewing with an average of over 2.5 minutes per telecast. The increased dominance of Snapple was reflected in a 78\% increase in the number of telecasts from 2010 and a 1367\% increase in the average duration per telecast from 10.8 to 158.8 seconds, equivalent to more than five 30 -second TV commercials. Children and teens saw 7 and 9 appearances for Snapple, respectively in 2013, an increase of 16 and 14 times the number of appearances viewed in 2010. CocaCola brand dropped to number two in screen time in 2013. However, children and teens still saw 9 and 11 Coca-Cola brand appearances in 2013, slightly more than for Snapple. Another Coca-Cola brand, Sprite, ranked third in screen time and appearances viewed, followed by 7UP (Dr Pepper

Figure 13. Sugary drink appearances viewed for companies from 2010 to 2013, with proportion of appearances from top programs


Source: Rudd Center analysis of Nielsen data (2014)

Snapple Group) and Pepsi regular soda. On average, teens also saw more than one appearance for Monster Energy and Dr Pepper soda in 2013.

Analysis of the programs where sugary drink brands appeared revealed that reality shows were the major vehicle for appearances viewed by youth. Appearances on American Idol (Coca-Cola), America's Got Talent (Snapple), and The $X$ Factor (Pepsi) accounted for more than half of each company's prime-time brand appearances viewed by teens (see Figure 13), as well as by children. In 2013, 54\% of Coca-Cola appearances viewed by teens occurred on American Idol, down from 78\% in 2010. Dr Pepper Snapple Group's substantial increase in brand appearances was largely attributable to Snapple placements on America's Got Talent, representing $72 \%$ of Snapple appearances viewed by teens in 2013. In 2011 and 2012, Pepsi had significant placements viewed on The X Factor, but teen viewers for this program appeared to decline in 2013. In 2013, appearances


Brand appearances on America's Got Talent, American Idol, and The X Factor
on American Idol and America's Got Talent made up 65\% of all sugary drink appearances viewed by children and $52 \%$ of appearances viewed by teens.
The sitcom, The Big Bang Theory, also contributed a significant number of appearances viewed in 2013. Children and teens saw an average of 3 and 9 appearances for sugary drinks on this one program, which made up a substantial proportion of appearances for several top-ten brands. In 2013, Sprite totaled 2 and 4 appearances viewed for children and teens, and 7UP had almost one and two, respectively. For these two soda brands, The Big Bang Theory made up from $81 \%$ to $92 \%$ of the appearances viewed. In addition, $99 \%$ of Monster Energy appearances viewed by children and teens occurred on The Big Bang Theory. Roughly one-third of appearances viewed for Red Bull energy drinks were also from this program. Appearances for all sugary drink and energy drink brands on the Big Bang Theory made up 15\% of appearances viewed by children and $28 \%$ of appearances viewed by teens.

## Summary of brand appearances on prime-fime TV

One-third of the beverage brands included in this report had prime-time TV appearances in 2013, totaling 2,102 appearances and 900 minutes of screen time. Children and teens viewed 21 and 33 of these appearances, respectively. Although the number of appearances viewed by children declined slightly from 2010 to 2013, appearances viewed by teens increased 12\%. Sugary drink and energy drink appearances greatly outnumbered appearances for diet soda, $100 \%$ juice, and water. As in 2010, regular soda and soda brands were the most prominent drink category. Teens did see 50\% more appearances for plain water in 2013 than in 2010, although children saw fewer. Snapple and CocaCola together accounting for $73 \%$ of appearances viewed by children and $60 \%$ of those viewed by teens in 2013 for the sugary drink brands in our analysis. The primary venues in 2013 for sugary drink appearances viewed by children and teens were product placements on talent shows (American Idol and America's Got Talent, as well as The X Factor from 2011 to 2012) and The Big Bang Theory. These programs accounted for over three quarters of all appearances viewed by children and teens.

## Traditional advertising

## Signs of progress

- From 2010 to 2013, there was a 7\% reduction in advertising spending devoted to sugary drinks and energy drinks (including brand-level spending), and an even greater decline in TV advertising to youth. Preschoolers, children, and teens saw 33\%, $39 \%$, and 30\% fewer of these ads in 2013 than in 2010. For all age groups, advertising exposure also declined versus 2008.
- Especially notable was the decline in exposure to TV advertising for children's drinks (including fruit drinks and flavored water). Compared with 2010, preschoolers and children saw approximately $60 \%$ fewer ads for these products, including reductions for the three children's drinks advertised most in 2010 - Capri Sun fruit drink (-99\%), Kool-Aid (-97\%), and Sunny D $(-41 \%)$. Of note, Kraft Foods also advertised its Capri Sun Super V fruit and vegetable juice blend to children, the only child-targeted 100\% juice product in 2013.
- Two of the largest beverage companies substantially reduced advertising for their sugary drink products in 2013 versus 2010. Coca-Cola's sugary drink advertising spending declined by $35 \%$, a reduction of $\$ 100$ million, and children and teens saw $41 \%$ and $53 \%$ fewer of these ads on TV in 2013. Coca-Cola brands with the greatest declines in TV advertising to youth included Coca-Cola and Sprite regular sodas and Vitamin Water. Dr Pepper Snapple Group also reduced advertising spending for sugary drinks by $13 \%$ in 2013 compared with 2010, and youth exposure to TV advertising for Dr Pepper regular soda declined by approximately one-third.
- Compared with 2013, youth exposure to diet drinks, $100 \%$ juice, and plain water ads on TV remained flat or declined. As a result, the proportion of beverage ads viewed by children on TV devoted to sugary drinks and energy drinks declined from approximately $70 \%$ in 2010 to $62 \%$ for children in 2013. In 2013, preschoolers and children saw more ads for 100\% juice than for any other drink category (approximately one in five beverage ads viewed), while children's fruit drinks were the mostviewed category in 2010. Preschoolers also saw almost twice as many ads for plain water in 2013.


## Continued reasons for concern

- Despite overall declines in advertising of sugary drinks and energy drinks from 2010 to 2013, there were exceptions. Most notably, in contrast with its main competitors, PepsiCo increased advertising spending by $32 \%$ for its sugary drink brands, spending $\$ 90$ million more to advertise Pepsi sugar-sweetened sodas (including regular Pepsi and Pepsi NEXT) alone in 2013 compared with 2010. Youth exposure to TV advertising for Pepsi more than tripled for children and increased 146\% for teens. Children's and teens' exposure to TV advertising for Mtn Dew regular soda (including Kickstart) also increased by $44 \%$ or more, and children's exposure to Gatorade advertising increased by $26 \%$. Gatorade and Pepsi ranked among the five brands advertised most to children and teens, and Mtn Dew also ranked fifth in advertising to teens.


## Continued reasons for concern (continued)

- Advertising of energy drinks to youth also remained a significant concern. Children and teens saw more TV advertising for 5-hour Energy than any other single brand. Red Bull also ranked highly with 9 ads viewed by preschoolers and 24 viewed by teens. While 5-hour Energy reduced its advertising in 2013 versus 2010, Red Bull increased advertising spending by $84 \%$ and TV advertising to youth by $59 \%$ or more. Further, both companies appeared to target their TV advertising to a teen audience, as teens saw $20 \%$ to $30 \%$ more of these ads compared with adults. Although not advertised on English-language TV, SK Energy, a recently introduced energy shot, ranked ninth in advertising spending in 2013 at $\$ 20$ million, including \$3 million on radio.
- Three additional sugary drink brands notably increased their TV advertising to children and teens. Dr Pepper Snapple Group tripled advertising support for its Snapple brand (including iced tea and brand-level advertising) in 2013 versus 2010 (+\$19 million in spending), and Snapple TV advertising to youth increased four-fold. The company also relaunched its Sun Drop regular soda, specifically targeting teens, who saw more than twice as many of these ads compared with adults. In addition, Capri Sun Roarin' Waters, a reduced-sugar flavored water that also contains artificial sweeteners, was the most advertised children's drink, ranking second in TV advertising to children (behind 5-hour Energy).


## Continued reasons for concern (continued)

- TV advertising to youth for $100 \%$ juice declined from 2010 to 2013, by $18 \%$ to $38 \%$. Although preschoolers saw 93\% more ads for plain water in 2013 than in 2010, children and teens saw from $6 \%$ to $17 \%$ fewer of these ads. In contrast, youth viewed $13 \%$ to $32 \%$ more ads for diet soda and three times as many ads for light juice.
- In 2013, Snapple and Pepsi also featured significant numbers of brand appearances in prime-time TV programming, whereas Coca-Cola was the primary sugary drink in this medium in 2010. Brand appearances for all sugary drinks and energy drinks increased by $33 \%$ from 2010 to 2013 and total screen time almost tripled. On average, children viewed 21 of these appearances in 2013 and teens viewed 33. Popular talent shows (American Idol and America's Got Talent) and one sitcom, The Big Bang Theory, were responsible for three-quarters of all appearances viewed by children and teens.


## Digital media marketing

In this section, we examine four types of marketing used to promote sugary drinks and energy drinks in digital media: websites sponsored by beverage companies, display advertising on third-party websites, social media marketing,
and marketing on mobile devices. We evaluated digital marketing practices of the 102 sugary drink brands in our analysis, as well as four brands of energy shots.

## Beverage company websites

| Website exposure | Definition |
| :--- | :--- |
| Average monthly <br> unique visitors | Average number of different individuals visiting the website each month. Data are reported for the <br> following age groups: youth (2-17 years), children (2-11/12 years), and teens (12/13-17 years).* |
| Average visits per month | Average number of times each unique visitor visits the website each month. |
| Average pages per visit | Average number of pages viewed during each visit by each visitor to the website. |
| Average minutes per visit | Average number of minutes each visitor spends on the website each time he or she visits. |
| Targeted index by age | The percent of visitors to the website that are children or teens divided by the percent of child or <br> teen visitors to the internet in total. A targeted index greater than 100 indicates that children or <br> teens are more likely to visit the website compared to other websites. |

*comScore changed its age breaks for children and teens in July 2013. From Jan-June 2013, 12-year-olds were classified as teens, but they were classified as children for the period July-Dec 2013.

In 2013, 12 of the companies in our analysis sponsored 50 different websites with enough youth visitors (ages 2-17 years) to obtain exposure data from comScore (see Ranking
Table 7). At the company level, Innovation Ventures' one website (5HourEnergy.com) attracted the most youth visitors (averaging 128,000 per month). Coca-Cola Co. (with a total of 16 websites in our analysis) and PepsiCo (11 websites) followed with over 120,000 youth visitors monthly to the companies' multiple websites. Among companies, Red Bull's six websites combined ranked fourth, averaging more than 60,000 visitors per month under age 18, and Dr Pepper Snapple Group websites ranked fifth (28,000 youth per month). Coca-Cola websites combined continued to attract the most children under age 12, approximately 19,000 per month. In examining youth visitors to individual websites, three companies were responsible for 13 of the 20 websites with the most unique youth visitors in 2013: Coca-Cola (7 websites), PepsiCo (4 websites), and Red Bull (2 websites).

The number of youth visitors declined by $20 \%$ or more for more than half of the websites evaluated in both 2010 and 2013 (19 of 31). In addition, five of the websites on the top-20 list in 2010 were discontinued or did not have enough youth visitors to measure in 2013, including KraftBrands.com/CapriSun, KraftBrands.com/KoolAid, and PepsiCo's RefreshEverything.com, SoBe.com, and DEWmocracy.com. In general, child visitors to websites declined at a greater rate than teen visitors. In 2010, nine different beverage company websites averaged 5,000 or more child visitors per month, compared with just two websites in 2013 (MyCokeRewards.com and 5HourEnergy.com). However, youth visitors to eight websites increased by 20\% or more from 2010 to 2013, and five of the top-20 websites in 2013 were new or did not have enough visitors in 2010 to measure.

## comparisons by brand

As noted, the most-visited individual website in 2013 was 5HourEnergy.com. MyCokeRewards.com ranked second in 2013 with 72,000 youth visitors per month. Of note, the site had 171,000 youth visitors per month in 2010 and was the most-visited site that year. Four additional websites averaged 20,000 or more youth visitors per month in 2013 - RedBull.com, Pepsi.com, RedBullUSA.com, and Gatorade.com. Additional websites in the 20 sites visited most often by youth included sites promoting energy drink brands (MonsterEnergy.com, RockstarMayhemFest.com, DrinkNOS.com), regular soda brands (DrPepper.com, MountainDew.com, Coca-Cola.com), other sugary drink brands (Gatorade.com, VitaminWater.com, Snapple.com, OceanSpray.com, Welchs.com), and companylevel websites from Coca-Cola and PepsiCo (PepsiCo.com, Coca-ColaCompany.com, Coca-ColaScholars.org, ICoke.com). MyCokeRewards.com and Coca-ColaScholars.com had the highest engagement with youth visitors, averaging seven minutes or more per visit, up from just over five minutes in 2010.

The number of youth visitors to several websites grew substantially from 2010 to 2013. Visitors to 5HourEnergy. com increased almost nine-fold, contributing to its rise from number 15 in 2010 to number one in 2013. Of note, 5HourEnergy.com attracted 260,000 unique youth visitors per month in the third quarter of 2013 alone. Visitors to RedBull. com almost tripled from 2010 to 2013, and visitors to Pepsi. com more than doubled. RedBull.com attracted over 54,000 unique teen visitors per month in the fourth quarter alone, almost double its visitors in other 2013 quarters. In addition, visitors to DrinkNOS.com increased 18-fold, while some top20 sites in 2013 did not exist or did have enough youth visitors to measure in 2010, including RedBullUSA.com (\#5 in 2013), Coca-ColaCompany.com (\#10), VitaminWater.com (\#12), RockstarMayhemFest.com (\#14), and ICoke.com (\#19).

In contrast, child visitors to MyCokeRewards.com declined by over 70\% and teen visitors declined 54\% in 2013 compared to 2010. Other sites with notable declines in youth visitors included DrPepper.com (-58\%), MonsterEnergy.com (-33\%), and MountainDew.com (-31\%).

## Child Visifors to websifes

As in 2010, MyCokeRewards.com continued to attract the most child visitors in 2013 (12,600 children aged 2-11/12 per month). All Coca-Cola websites combined attracted 19,000 child visitors per month. 5HourEnergy.com ranked a close second
to MyCokeRewards.com with 11,400 child visitors per month. However, just six additional sites averaged 1,000 or more child visitors per month in 2013 (PepsiCo.com, Pepsi.com, RedBullUSA.com, DrPepper.com, RedBull.com, and Sprite. com). Of note, child visitors to PepsiCo.com tripled from 2010 to 2013, and child visitors to RedBull.com increased by $41 \%$.

Compared with older internet visitors, relatively few children visited the websites in our analysis, with one exception. Children were equally likely to visit TumEYummies.com compared with all websites (see Table 28). This children's fruit drink website included a "For kids" advergame section with links to "Char-

Table 28. Websites with the highest compositions of child visitors (2-11/12 years)

| Rank | Company | Website | Average unique child visitors <br> per month (000) | Targeted index |
| :---: | :--- | :--- | ---: | :--- |

Source: comScore Media Metrix Key Measures Report (2-11 years for January-June 2013 and 2-12 years for July-December 2013)


Sprite Sound and Sprite Slam on Sprite.com

acters, games, and downloads." Advergames are computer games designed to promote a brand. Children could download pictures to color or save them as desktop wallpaper. Sprite. com had the second highest child targeted index, although children were approximately half as likely to visit the site compared with all websites. This site included youth-oriented messages promoting music, style, and "slam" (i.e., basketball). All other websites had low child-targeted indices of 35 or less.

## Teen visifors fo websifes

In contrast to children, teens made up a relatively high proportion of visitors to 20 of the 50 websites in our analysis, particularly those from Coca-Cola, PepsiCo, and Dr Pepper Snapple Group (see Table 29). Teens were more than three times as likely to visit Coca-ColaScholars.org and almost three times as likely to visit CrushSoda.com compared with the internet overall. They were also $75 \%$ or more likely to

Table 29. Websites with the highest compositions of teen visitors (12/13-17 years)
\(\left.\begin{array}{cllrl}Rank \& Company \& \begin{array}{r}Average monthly unique <br>

teen visitors (000)\end{array} \& Targeted index\end{array}\right]\)| 10.3 |
| :---: |
| 1 |
| 2 |

Source: comScore Media Metrix Key Measures Report (12-17 years for January-June 2013 and 13-17 years for July-December 2013)


Youth-oriented messages on websites visited relatively more often by youth under 18
visit MountainDewGameFuel.com, DrinkArizona.com, and GreenLabelArt.com (another Mtn Dew website).

Further, teens were 20\% to 60\% more likely to visit five energy drink websites compared with all websites (DrinkNOS.com, 5HourEnergy.com, RedBullUSA.com, MonsterEnergy.com, and AmpEnergy.com). Additional soda websites visited disproportionately more often by teens included Fanta.com, ICoke.com, DrPepper.com, GreenLabelSound.com (Mtn Dew), Sprite.com, and Jarritos.com (a Mexican soda brand). Two sports drink websites (Gatorade.com and Powerade. com) and VitaminWater.com completed the list.

## Beverage websife content

Table 30 describes the 20 websites with the most youth visitors in 2013. In addition to product information, these sites commonly featured entertainment, event sponsorships and other promotions, and content from social media, including YouTube videos and Facebook and Twitter feeds. A few sites also provided nutrition information and store locators.

The most-viewed energy drink websites featured content with special appeal to young males. Most were devoted to athletic events and endorsements, posting pictures of motorsports, mountain biking, surfing, skateboarding, and other adventurous activities. Links at the bottom of the pages also connected visitors to social media, including Facebook, Twitter, Google+, and YouTube. The most-visited site, 5HourEnergy.com, featured contests to win concert tickets and references to product
usage, such as "At college? At home? At work? Where do you take your 5-hour Energy shot most often?"
On the most popular Coca-Cola site, MyCokeRewards.com, consumers could enter codes from Coca-Cola products to accumulate virtual points and earn prizes. Nearly every link on the page connected visitors to ways to use their points, including "Sweepstakes," "Instant Win," "Spend Points on Promotions," or "Support a Good Cause." For example, visitors could redeem points for a "1-Month Club Pogo Subscription" and access "100+ games online."

Dr Pepper, Pepsi, Gatorade, and Vitamin Water also provided opportunities for youth engagement on their websites. DrPepper.com encouraged visitors to design and order a personalized Dr Pepper t-shirt, featuring young people striking poses while wearing Dr Pepper apparel. Pepsi.com consisted of a mosaic of continuously rotating pictures. Each picture linked to promotional videos, articles, or specific Instagram posts. Most photos portrayed young people holding a Pepsi, with friends, in an exotic location, or making an amusing face. Gatorade.com engaged youth by highlighting its celebrity athlete endorsements. Consumers could also watch videos, enter contests, purchase Gatorade-sponsored Xbox games, and virtually "tour" professional locker rooms. These sites all included links to YouTube, Twitter, Facebook, and other social media pages. VitaminWater.com featured nutrition information as well as social media platforms. The site also included a section, "Hydrate the Hustle," which invited visitors to view and share live performance videos.

Table 30. Content of beverage company websites with the most youth visitors

| Rank | Company | Website | Type | Content |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Innovation Ventures | 5HourEnergy.com | Lifestyle | Nutrition, online ordering, store locator, <br> entertainment, social media |
| 2 | Coca-Cola | MyCokeRewards.com | Lifestyle | Promotion, advergame, social media |
| 3 | Red Bull | RedBull.com | Events | Entertainment, social media |
| 4 | PepsiCo | Pepsi.com | Lifestyle | Promotion, online order, social media |
| 5 | Red Bull | RedBullUSA.com | Events | Social media |
| 6 | PepsiCo | Gatorade.com | Product | Nutrition, online ordering, store locator, <br> social media |
| 7 | Dr. Pepper Snapple Group | DrPepper.com | Lifestyle | Promotion, entertainment, social media |
| 8 | Monster Beverage Corporation | MonsterEnergy.com | Events | Promotion, entertainment, social media |
| 9 | PepsiCo | PepsiCo.com | Company | Corporate information |
| 10 | Coca-Cola | Coca-ColaCompany.com | Company | Corporate information |
| 11 | Coca-Cola | Coca-ColaScholars.org | Lifestyle | Social media |
| 12 | Coca-Cola | VitaminWater.com | Product | Nutrition, social media |
| 13 | PepsiCo | MountainDew.com | Lifestyle | Promotion, social media |
| 14 | Rockstar | RockstarMayhemFest.com | Event | Social media |
| 15 | Coca-Cola | DrinkNOS.com | Product | Nutrition, store locator, social media |
| 16 | Coca-Cola | Coca-Cola.com | Company | Promotion, social media, link to other <br> Coca-Cola sites |
| 17 | Ocean Spray | OceanSpray.com | Product | Nutrition, promotion, online order, store <br> locator, social media |
| 18 | Dr. Pepper Snapple Group | Snapple.com | Product | Nutrition, promotion, social media |
| 19 | Coca-Cola | ICoke.com |  | Not available in 2014 |
| 20 | Welch Foods Inc. | Welchs.com | Product | Nutrition, promotion, social media |

Source: comScore Media Metrix Key Measures Report (January-December 2013)


Youth-oriented pages from 5HourEnergy.com, RedBull.com, and MonsterEnergy.com


Reward Info
(4) check out our entire catalog

is Pounts
1-Month Club Pogow Subscription
Sian in or Begistet

## मlan

Play it up with a classic. Score points with friends. Set your goals higher.

Promotion on MyCokeRewards.com

## Summary of beverage company websites

From 2010 to 2013, there was a notable decline in the number of youth visitors to approximately $60 \%$ of the websites evaluated both years, and four of the top-20 websites in 2010 were discontinued or did not have enough youth visitors to
report in 2013. In general, child visitors to websites declined at a greater rate than teen visitors. However, youth visitors to eight sites increased by $20 \%$ or more from 2010 to 2013, and five of the top-20 websites in 2013 were new or did not have enough visitors to measure in 2010. Websites with the greatest increase in youth visitors from 2010 to 2013 included 5HourEnergy.com (+113,000 child and teen visitors per month), RedBullUSA.com (+25,000 youth visitors), RedBull. com (+23,000 youth visitors), and Pepsi.com (+18,000 youth visitors). Although youth visitors to MyCokeRewards.com declined by $58 \%$ from 2010 to 2013, the site continued to attract the most child visitors (almost 13,000 per month in 2013). MyCokeRewards.com and Coca-ColaScholars.com also had the highest youth engagement, averaging seven minutes or more per visit.

Twenty of the 50 websites in this analysis attracted a disproportionately high number of teens compared with the internet overall, including six energy drink sites and six Coca-Cola Co. sites, and much of their content appeared to be aimed at a youth audience. TumEYummies.com was the only website to offer content designed specifically for children. However, the most popular energy drink, soda, and other sugary drink websites featured extreme sports, popular entertainment, promotions, and other content (e.g., scholarships) with youth appeal. In addition, most websites featured social media content (e.g., Facebook and Twitter posts, YouTube videos) and links to brands' social media pages, including Facebook, Twitter, Google+, and YouTube.

Display advertising on third-party websites

| Display advertising |  |
| :---: | :---: |
| exposure | Definition |
| Third-party websites | Websites from other companies where sugary drink and energy drink brands place their advertising. |
| Display advertising | Comparable to "banner advertising" (reported in the 2010 analysis), these ads appear on third-party websites as rich media (SWF) files and traditional image-based ads (JPEG and GIF files). They are usually placed in a sidebar or "banner" at the top of a web page. On Facebook, these ads appear on the side of the screen, next to the newsfeed. Text, video, and html-based ads are not included. |
| Children's websites | Third-party websites with over $20 \%$ of visitors who are children (2-11/12 years)* (i.e., twice the percentage of all visitors to the internet who are children). Children's websites with over 1 million display ads for sugary drinks are included in the analysis. |
| Youth websites | Third-party websites defined by comScore as "Family \& Youth" sites for teens, as well as websites with a percent of youth visitors (2-17 years) that exceeds the percent of youth visitors to the total internet during the same time period. |
| Unique visitors per month | Average number of unique visitors exposed to a brand's display advertisements each month. |
| Ads viewed per visitor per month | Average number of display advertisements viewed per unique visitor each month. |
| Total number of ads viewed on children's and youth websites | Total number of display advertisements viewed on each type of website (children's or youth) per year. |
| Average monthly ads viewed on children's and youth websites | Average number of display advertisements viewed on each type of website (children's or youth) per month. |

*comScore changed its age breaks for children and teens in July 2013.

We obtained 2013 data from comScore to measure display ads on third-party websites placed by the companies in our analysis. Ranking Table 8 presents average number of display ads placed monthly on youth websites by brand, noting the product(s) and/or promotional campaigns featured in the ads.

On average, 26.8 million sugary drink and energy drink ads appeared on youth websites per month in 2013. This number represents a decline of $72 \%$ for the brands that were also included in our 2010 analysis. On average, 5\% of all sugary drink ads were placed on third-party youth sites in 2013, down from $11 \%$ of ads in 2010. Almost one-half (44\%) of ads placed on youth websites ( 11.8 million per month) appeared on children's websites. An additional 152 million display ads for these brands appeared on YouTube and Facebook monthly in 2013.

Table 31 compares the average number of display ads per month on youth websites by drink category in 2010 versus 2013. Despite the overall decrease in display ads on youth websites, the number of energy drink ads did not change. In addition, the number of ads placed on youth websites increased substantially for children's drinks. Although the numbers were relatively small, fruit drink ads on youth websites increased more than $800 \%$, the largest increase for any drink category. Conversely, ads for soda (including regular soda and brand-level ads), sports drinks, and flavored water declined $50 \%$ or more. The decrease in soda brand

Table 31. Monthly display ads on youth websites by category

|  | Average \# of banner ads viewed per month <br> on youth websites (000) |  |  |
| :--- | ---: | ---: | ---: |
| Category | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 3}$ | Change |
| Children's drinks | $8,927.2$ | $10,246.6$ | $+15 \%$ |
| Soda brands* | $50,683.6$ | $6,408.5$ | $-87 \%$ |
| Regular soda | $23,011.2$ | $4,679.2$ | $-80 \%$ |
| Sports drinks | $4,750.5$ | $2,187.6$ | $-54 \%$ |
| Energy drinks | $1,790.6$ | $1,811.8$ | $+1 \%$ |
| Iced tea/coffee | 0 | $1,088.9$ |  |
| Fruit drinks** | 31.6 | 290.0 | $+818 \%$ |
| Flavored water** | $5,479.6$ | 62.3 | $\mathbf{- 9 9 \%}$ |
| Total | $94,674.2$ | $26,774.9$ | $\mathbf{- 7 2 \%}$ |

*Includes only ads for soda brands that did not specify a regular or diet product
**Excludes children's drinks
Source: comScore Admetrix Advertiser report (January - December 2013)
ads was primarily due to a substantial reduction in ads for My Coke Rewards. In 2010, on average, 40 million ads for My Coke Rewards were placed on youth websites monthly (more than $75 \%$ of ads for soda brands), compared to just 23,000 per month in 2013.

In comparing companies (see Ranking Table 8), Kraft Foods and Coca-Cola advertised the most on third-party youth websites; both averaged over 9.5 million ads viewed per
month for all their sugary drink brands. In 2013, Kraft Foods increased its advertising on youth websites by 8\% versus 2010 and placed $20 \%$ of its total display advertising on these sites. On the other hand, Coca-Cola advertising on youth websites went down by 85\% from 2010 to 2013 and represented just $5 \%$ of its total display advertising on third-party websites. In addition, Novamex (Jarritos brand), Dr Pepper Snapple Group, and PepsiCo each placed 1.2 to 2.0 million display ads on youth websites in 2013, declines of $73 \%$ to $88 \%$ from 2010. Of the large beverage companies, PepsiCo placed the highest proportion of its ads on youth websites in 2013 (7\%).

## Display adverfising by brand

Comparing individual brands, Capri Sun (including both Capri Sun Roarin' Waters and Capri Sun fruit drink) and Coca-Cola placed the most ads on youth websites in 2013, averaging 9.0 million and 6.4 million ads viewed per month, respectively (see Ranking Table 8). Two brands, Powerade and Jarritos soda, placed more than 1 million ads on youth websites per month, and four additional soda brands placed 800,000 ads or more per month (Dr Pepper, Crush, Pepsi NEXT, and Mtn Dew). This was a decrease from 2010, when nine brands or campaigns placed 1.5 million to 40 million display ads per month on thirdparty youth websites. Three of the top campaigns in 2010 did not advertise at all on youth websites in 2013 (Live Positively Coca-Cola, DEWmocracy, and Fanta Sabor Irresistible).

Another eight brands reduced display ads on youth websites by over 80\% in 2013 versus 2010: Coca-Cola, Dr Pepper, Mtn Dew, Kool-Aid, Sprite, Gatorade, Vitamin Water, and AMP Energy. The proportion of total display ads appearing on youth websites also decreased for these brands. Although Coca-Cola remained one of the top sugary drink advertisers to young people online (\#1 in 2010 and \#2 in 2013), the brand's advertising on youth websites declined by $87 \%$, from 50.7 million average monthly ads viewed in 2010 to 6.4


Powerade ads often appeared on youth websites
million in 2013. When excluding ads for My Coke Rewards, the proportion of total Coca-Cola ads on youth websites increased slightly from 3\% in 2010 to 4\% in 2013.

However, not all brands reduced their display advertising. Ads viewed on youth websites for Capri Sun products more than doubled from 2010 to 2013 (4.4 in 2010 to 9.0 million in 2013). On average, 9.4 million internet visitors saw 3.7 ads for Capri Sun per month in 2013. Yet the proportion of Capri Sun ads appearing on youth websites decreased from $47 \%$ to $23 \%$. Red Bull ads viewed on youth websites more than tripled from 2010 to 2013 (to 863,000 in 2013), but just $1.5 \%$ of their total ads appeared on youth websites. Further, four brands advertised on youth websites in 2013 that had not advertised on these sites in 2010: Fuze, Hawaiian Punch, Snapple, and 7UP.

Of note, three brands increased their display ads on youth websites and increased the proportion of their ads placed on youth websites between 2010 and 2013. For Powerade, the number of ads on youth websites more than tripled to 2.1 million ads per month in 2013, and the proportion of ads on youth websites increased from 4\% in 2010 to 12\% in 2013. Similarly, the number of display ads for Crush soda on youth websites more than doubled, from 390,000 in 2010 to 847,000 in 2013, and the proportion of ads on youth websites increased from $23 \%$ to $27 \%$ (the fourth highest proportion in our analysis). Ocean Spray also increased average monthly ads displayed on youth websites by $345 \%$, from 32,000 in 2010 to 141,000 in 2013, and the proportion of ads on youth websites increased from less than $1 \%$ to almost 5\%. Additional brands with a high proportion of display ads placed on youth websites included Tum E Yummies (50\%), Hawaiian Punch (45\%), Jarritos (34\%), and Tampico fruit drinks (11\%).


Jarritos ad with cartoon action figure

## Display advertising fargefed fo Children

Although just 2.4\% of display ads for the brands in our analysis appeared on children's websites in 2013, on average 11.8 million ads viewed per month or 142 million ads per year, appeared on ten children's websites (see Table 32). Children between the ages of 2 and 11 or 12 make up approximately $10 \%$ of the total internet audience, but these sites averaged at least twice that rate during the quarters examined.

Table 33 presents the number of ads viewed on children's websites in 2013 by brand. Capri Sun ads appeared on children's sites more often than ads for any other sugary drink. Of note, Capri Sun was the only brand advertising on the internet approved by the CFBAI for advertising to children. ${ }^{4}$ Tum E Yummies also placed 50\% of its ads on children's sites in 2013, and Hawaiian Punch (from Dr Pepper Snapple Group) placed about 170,000 ads on children's sites.

However, four of the seven brands with more than 1 million ads on children's websites in 2013 were not children's brands. Coca-Cola Co. placed 38 million display ads for products or promotions that were not approved for advertising to children on children's websites, including Coca-Cola, Powerade, NOS Energy, and Fuze iced tea. Of note, 4\% of Powerade's display

Table 32. Children's websites with the most sugary drink display ads

|  |  | Proportion of total <br> unique visitors |  |
| :--- | ---: | ---: | ---: |
|  | Total sugary |  |  |
| Children's <br> websites | Youth <br> drink ads viewed <br> in 2013 (000) | Children <br> (2-11/12 <br> years) | years) |
| Nickelodeon Kids <br> And Family | $30,903.0$ | $49 \%$ | $32 \%$ |
| Roblox.COM | $28,127.6$ | $35 \%$ | $21 \%$ |
| Disney Online | $25,882.0$ | $34 \%$ | $22 \%$ |
| Cartoon Network Online | $19,616.1$ | $61 \%$ | $46 \%$ |
| Spil Games | $11,261.4$ | $51 \%$ | $33 \%$ |
| MiniClip.com | $10,198.9$ | $46 \%$ | $29 \%$ |
| CoolMath-Games.com | $9,959.3$ | $49 \%$ | $35 \%$ |
| Ganz sites | $3,245.6$ | $53 \%$ | $37 \%$ |
| TotallyHer - Kids | $1,918.9$ | $46 \%$ | $25 \%$ |
| Woozworld.com | $1,018.2$ | $57 \%$ | $31 \%$ |

* In July of 2013 comScore extended the children's age range to 2-12 years (versus 2-11 years prior).
Source: Source: comScore AdMetrix \& Key Measures for children \& youth exposure to websites (January - December 2013). comScore Key Measures for total audience exposure to youth sites (February 2013 - January 2014). comScore Key Measures for total audience exposure to youth sites and total audience exposure to social media sites (March 2013 - February 2014).

Table 33. Sugary drink display ads viewed on children's websites

| Company | Brand | 2013 yearly <br> ads viewed on <br> children's <br> websites (000) | Proportion of <br> ads viewed <br> children's <br> websites |
| :--- | :--- | ---: | ---: |
| Kraft Foods | Capri Sun | $84,912.3$ | $18 \%$ |
| Coca-Cola | Coca-Cola | $28,179.2$ | $2 \%$ |
| Coca-Cola | Powerade | $7,351.9$ | $4 \%$ |
| Kraft Foods | Kool-Aid | $6,434.4$ | $6 \%$ |
| BYB Brands | Tum E Yummies | $4,598.4$ | $50 \%$ |
| PepsiCo | Pepsi NEXT | $2,074.4$ | $1 \%$ |
| Coca-Cola | NOS Energy Drink | $1,177.0$ | $1 \%$ |
| Ocean Spray | Ocean Spray | 979.0 | $3 \%$ |
| Coca-Cola | Fuze | 645.3 | $1 \%$ |
| Houchens <br> Industries | Tampico | 253.9 | $2 \%$ |
| Coca-Cola | My Coke Rewards | 199.4 | $1 \%$ |
| Dr Pepper <br> Snapple Group | Hawaiian Punch | 169.4 | $3 \%$ |
| PepsiCo | AMP Energy | 101.3 | $1 \%$ |

Highlighting indicates children's product
Source: comScore Admetrix Advertiser report (January - December 2013)
ads appeared on children's websites (the highest percentage for any non-children's brand). PepsiCo also placed 2 million display ads for its Pepsi NEXT reduced-calorie soda on children's websites.


Child-directed display ads for Hawaiian Punch, Tum E Yummies, Kool-Aid, and Capri Sun

## Display adVerfising fargefed to youth

We also analyzed other third-party websites where display ads for sugary drinks and energy drinks commonly appeared. In 2013, almost 50 million display ads were placed on six additional youth websites (excluding children's sites) (see Table 34). However, in 2013 these ads appeared most often on Facebook and YouTube: almost 2 billion ads, or 31\% of all ads in our analysis.

As noted earlier, several sugary drink brands placed a higher-than-average proportion of display ads on youth websites, including Jarritos (34\%), Crush (27\%), Powerade (12\%), Starbucks (9\%), and Fuze (8\%), indicating that these brands likely targeted their marketing towards a youth audience. An additional 82.3 million sugary drink and energy drink ads appeared on YouTube per month, or $17 \%$ of all display ads in 2013, and 70 million sugary drink ads per month appeared on Facebook, or $14 \%$ of display ads in 2013. Although Facebook and YouTube were not classified as youth websites according to the proportion of youth visiting the sites, they are very popular with young visitors. Facebook averaged over 14 million monthly visitors ages 2-17, or approximately $10 \%$ of its audience in 2013. ${ }^{5}$ Monthly average youth visitors to YouTube was even greater, reaching 19 million, approximately $15 \%$ of its audience in 2013.

Table 34. Third-party youth and other websites with the most display ads in 2013

| Third-party <br> websites | Total sugary drink <br> ads viewed <br> in 2013 (000) | Youth (2-17 years) <br> proportion of total <br> unique visitors |
| :--- | ---: | ---: |
| YouTube.com | 987,712 | $15 \%$ |
| Facebook.com | 838,874 | $10 \%$ |
| Wikia Sites | 16,629 | $20 \%$ |
| Fanpop.com | 11,678 | $22 \%$ |
| DeviantART.com | 8,024 | $23 \%$ |
| FanFiction.net | 5,099 | $26 \%$ |
| Gamefront.com | 4,558 | $21 \%$ |
| Twitch Interactive Inc. | 3,235 | $21 \%$ |

Source: comScore AdMetrix \& Key Measures for youth exposure to websites (January - December 2013). comScore Key Measures for total audience exposure to youth sites (February 2013 - January 2014). comScore Key Measures for total audience exposure to youth sites and total audience exposure to social media sites (March 2013 February 2014).

Table 35 shows display ads viewed for sugary drink products with more than 1 million average monthly ads viewed on either Facebook or YouTube. As found with youth websites, Coca-Cola and Capri Sun were also the most advertised brands on Facebook. However, both Gatorade and Sunkist

Table 35. Brands with the most display ads on Facebook and YouTube in 2013

|  | Average monthly ads viewed (000) |  | Proportion of total ads viewed |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Brand | Facebook | YouTube | Youth websites | Facebook | YouTube | Youth websites |
| Coca-Cola | $25,557.6$ | $5,476.1$ | $6,409.0$ | $18 \%$ | $4 \%$ | $4 \%$ |
| Capri Sun | $9,426.2$ | 555.7 | $8,968.1$ | $24 \%$ | $1 \%$ | $23 \%$ |
| Dr Pepper | $3,981.0$ | $4,416.8$ | 853.9 | $9 \%$ | $10 \%$ | $2 \%$ |
| Red Bull | $3,653.8$ | $9,767.5$ | 863.0 | $9 \%$ | $24 \%$ | $2 \%$ |
| Gatorade | $3,154.5$ | 145.5 | 66.4 | $59 \%$ | $3 \%$ | $1 \%$ |
| Kool-Aid | $2,957.1$ | 39.7 | 657.0 | $32 \%$ | $0 \%$ | $7 \%$ |
| NOS energy drink | $2,931.0$ | 200.7 | 289.7 | $42 \%$ | $3 \%$ | $4 \%$ |
| Mtn Dew | $2,541.2$ | $4,491.6$ | 800.3 | $14 \%$ | $25 \%$ | $4 \%$ |
| 5-hour Energy | $2,440.1$ | $52,351.2$ | 630.0 | $3 \%$ | $73 \%$ | $1 \%$ |
| Pepsi NEXT | $2,185.1$ | $1,218.6$ | 819.6 | $10 \%$ | $6 \%$ | $4 \%$ |
| Sunkist | $1,831.4$ | 0.0 | 0.0 | $82 \%$ | $0 \%$ | $0 \%$ |
| Fuze | $1,080.0$ | 795.0 | 611.0 | $16 \%$ | $12 \%$ | $8 \%$ |
| Powerade | 778.0 | $1,075.8$ | $2,121.2$ | $4 \%$ | $6 \%$ | $12 \%$ |
|  |  |  |  |  |  |  |

Source: comScore Admetrix Advertiser report (January - December 2013).
soda advertised extensively on Facebook, but not on youth websites. More than one-quarter of display ads for Gatorade, NOS Energy, Kool-Aid, and Sunkist soda appeared on Facebook. In addition, five brands advertised more often on YouTube than on any other website. On average, more than 52 million ads for 5-hour Energy appeared on this one website alone (73\% of the brand's display ads), followed by Mtn Dew ( 4.5 million, $25 \%$ of display ads), and Dr Pepper ( 4.4 million, $10 \%$ of display ads). Powerade and Red Bull also advertised more often on YouTube than on Facebook or youth websites.

## Summary of display advertising on third-party websites

From 2010 to 2013, the number of sugary drink and energy drink display ads viewed on third-party youth websites declined by $72 \%$ ( 94.7 million per month in 2010 vs. 26.8 million in 2013). Ads for regular soda and soda brands, sports drinks, and flavored water declined more than $50 \%$, and My Coke Rewards eliminated virtually all ads on youth websites (compared with 40 million ads per month in 2010). The proportion of ads placed on youth websites also declined from $11 \%$ in 2010 to $5 \%$ in 2013. Despite this overall decline, children's brands such as Capri Sun, Hawaiian Punch, and

Tum E Yummies increased ad placements on youth websites by $15 \%$, with $18 \%$ of ads for Capri Sun and $50 \%$ of Tum E Yummies ads appearing on children's websites. Further, CFBAI companies placed more than 46 million ads for sugary drinks that were not approved for advertising to children on children's websites in 2013, including Coca-Cola, Powerade, Pepsi NEXT, and NOS energy drink. Other brands placing a high proportion of their ads on websites visited relatively more often by youth under 18 included Hawaiian Punch (45\%), Jarritos (34\%), Crush (27\%), and Powerade (12\%).

In addition, advertising on social media sites YouTube and Facebook appears to have replaced much of the advertising on youth websites, representing $31 \%$ of all display ads for the sugary drink and energy drink brands in our analysis. Although young people visit these websites at similar rates as adults, they are among the most popular sites for youth. 5-hour Energy, Coca-Cola, and Capri Sun placed the most ads on these sites ( 55 million, 31 million, and 10 million, respectively). Gatorade and Sunkist also had a particularly strong presence on Facebook, with over 50\% of their monthly ad views on this one site, and 5-hour Energy placed $73 \%$ of its display ads on YouTube.

Social media marketing

| Social media marketing | Definition |
| :---: | :---: |
| Facebook | Brands maintain Facebook pages where they post information about their promotions and products, share links to other sites, and upload photos and videos. A typical brand Facebook page contains multiple tabs with a variety of content (e.g. notes, messages, polls, photos, videos, applications). |
| Facebook likes | Facebook users can "like" a brand and incorporate it into their network of friends (formerly called "fans"). Thumbnail photos of these individuals appear on the brand's Facebook page in the "people who like this" section. When the brand posts new content, a notification may appear on the "newsfeed" (i.e., Facebook home page) of individuals who like the brand. The brand also shows up on these individuals' Facebook pages as something that they "like." |
| Facebook post | A message that a brand posts to its Facebook "timeline." These messages typically incorporate images, videos, polls, links to other pages within Facebook, and links to other websites. Posts also may appear on the "newsfeed" of individuals who like the brand for their friends to see. Individuals may also share brand posts, and they will appear on their friends' newsfeeds. |
| Twitter | Brands maintain Twitter accounts where they publish 140-character messages called "tweets" that are posted on their own profile pages. Individuals can "follow" brands. "Followers" receive copies of brands' tweets on their own Twitter home pages. Followers may also receive tweets on their mobile devices, through text messages, third-party Twitter applications, or Twitter's own mobile platform. |
| YouTube | YouTube enables brands to upload and share videos for the public to view. Brands maintain their own YouTube channels with playlists of videos available for viewing. Any internet user can watch the videos, but users can also "subscribe" to a channel and receive alerts whenever the brand posts a new video. YouTube reports the number of views of uploaded videos. ${ }^{6}$ Since 2011, YouTube changed the way it calculates views, including removing views of deleted videos and creating a mechanism to prevent hacking that artificially increases video view counts. ${ }^{7}$ |
| Instagram | Instagram is an online mobile social networking service that enables brands to share pictures and videos and invite users to post their own brand content. From the "home" tab, Instagram users can view photos from brands they follow in a format similar to Facebook's newsfeed, where they can also "like" and comment on photos. |
| Vine | Vine is a mobile application that enables brands to record and share an unlimited number of short, looping video clips with a maximum length of six seconds. From the "home" tab, Vine users can view videos from brands they follow in a format similar to that of Instagram's newsfeed. On their newsfeeds, brands can share any video on Facebook or Twitter or embed videos on their websites. |
| Hashtag | The hashtag (\#) symbol is used to mark keywords or topics on social media platforms, including Twitter, Facebook, Instagram, and Vine. Users place a \# before a relevant keyword or phrase in their posts to categorize posts and help identify these posts more easily in a search. Clicking on a hashtagged phrase in any message shows the viewer all other messages (including pictures and videos) marked with that keyword or phrase. |

In 2014, virtually all brands in this report had a presence on some form of social media. For our analyses we examined Facebook, Twitter, and YouTube accounts that actively engaged with users through posts, tweets, or video uploads from January 2013 through June 2014 and had 10,000 or more likes, followers, or views. We included account pages that were dedicated to a specific sugary drink or energy drink brand, as well as accounts that featured these drinks on pages with drinks in other categories (e.g. Minute Maid featured both fruit drinks and 100\% fruit juice on its social media pages). These brand pages that did not exclusively promote a sugary drink or energy drink are categorized as "sugary drink brand." We also included social media pages from brands in our analysis that featured promotional activities (e.g., Red Bull X-Fighters, Mtn Dew Green Label) and/or the company (e.g., Coca-Cola Company).

A total of 31 companies sponsored 80 Facebook pages, 68 Twitter accounts, and 44 YouTube channels that met these criteria. These social media pages totaled 307 million Facebook likes, 11 million Twitter followers, and 1.8 billion views on YouTube, including brand, promotional, and company pages.

We also evaluate changes in popularity of social media accounts by brand and company from July 2011 to June 2014. In addition, we analyze the amount and content of activity on Twitter accounts from January through June 2014, as well as the average number of views per video on YouTube as of October 2014. Brands' marketing activity on popular new social media platforms, Instagram and Vine, is also discussed.
By June 2014, the social media presence for sugary drinks and energy drinks increased dramatically, with 69 brands having a
total of 192 accounts (including brand, promotional and company pages) on Facebook, Twitter, and YouTube. Ranking Table 9 includes all pages with 100,000 or more likes on Facebook or followers on Twitter in 2014 and active YouTube accounts.

## facebook

In 2014, we identified 80 Facebook pages totaling over 300 million likes. Of these total Facebook likes, over 60\% were for soda brands and $24 \%$ were for energy drinks (see Figure 14). The remaining categories of flavored water, fruit drinks, iced tea/ coffee, and sports drinks, as well as brand pages (not exclusively promoting sugary drinks or energy drinks) and company-level accounts made up the balance (approximately 14\%). From 2011 to 2014, the number of Facebook likes for all drink categories at least doubled, while likes for soda brands more than tripled from 55 million fans in 2011 to 189 million likes in 2014.

Figure 14. Facebook likes by category in 2011 and 2014

*Includes followers of brand- and company-level pages Source: Rudd Center analysis of Facebook followers (June, 2014)

Coca-Cola Co. dominated likes on Facebook. The company's Facebook pages totaled over 123 million likes and made up $40 \%$ of all likes in this analysis. Four additional companies made up another 50\% of likes on Facebook in 2014: PepsiCo, Red Bull, Dr Pepper Snapple Group, and Monster Beverage Corporation (see Figure 15). From 2011 to 2014, the number of Facebook likes for these five companies' brands more than doubled. PepsiCo's likes increased almost four-fold, the highest growth for any company in our analysis. Unilever (Lipton brands) ranked number six with 7.1 million Facebook likes in 2014, eight times the number of likes in 2011. Four additional companies completed the top-ten list of Facebook likes (Nestle, Kraft Foods, Arizona, and Rockstar), with 2.7 to 4.8 million Facebook likes each.

Differences by brand. As in 2011, regular soda and energy drink brands filled the top-ten brand rankings for Facebook

Figure 15. Facebook likes by company in 2014


Source: Rudd Center analysis of Facebook followers (June, 2014)
likes in 2014, with one sports drink (Gatorade) ranking ninth and one iced tea (Lipton) tenth. The top-ten brands in 2011 remained in the top-ten for 2014 with two exceptions: Vitamin Water fell to thirteenth in 2014 and Fanta entered the topten in seventh place. There were some other notable shifts. In 2014, Coca-Cola regular soda replaced Red Bull as the most popular drink brand on Facebook with more than 80 million likes. Red Bull dropped to second place with over 46 million likes. In addition, Pepsi replaced Monster Energy in the number-three slot with 32 million likes. Sprite, Dr Pepper, and Fanta totaled 14 to 16.8 million likes each, while Mtn Dew, Gatorade, and Lipton had 5 to 8.7 million likes.

The popularity of most Facebook accounts grew dramatically from 2011 to 2014. Among the top-20, Dr Pepper, Mtn Dew, Vitamin Water, Arizona, and Brisk had a relatively modest growth of just $50 \%$ to $66 \%$. However, many brands more than doubled their likes in 2014 versus 2011. Notable increases included Pepsi, Snapple, 7UP, Tropicana, and Fuze (7- to 8 -fold increases), while Sunkist and Sierra Mist increased by more than 30 times. Of the brands examined in 2011, only AMP Energy decreased in number of likes (-87\%). In addition to Fanta (noted above), Lipton, Nestea, Sun Drop, and Jarritos were new to the top-20 brands in 2014 with 2.5 to 5.8 million likes.

Several child- and teen-targeted brands identified in the TV and internet exposure analyses also appeared among the top-20 Facebook brands. For example, Sun Drop soda totaled 3.5 million Facebook likes, ranking number 14; KoolAid ranked eighteenth with 3.1 million likes; and Jarritos soda ranked number 19 with 2.5 million likes.
Examples of popular promotional pages on Facebook included the My Coke Rewards page, which offered ways for users to enter the codes on Coca-Cola products and redeem them for rewards and other prizes, and the Coca-Cola Freestyle page, which helped users locate "Freestyle" machines, announced
events, and asked for users' comments. Red Bull, Rockstar, and Mtn Dew had promotional pages for their music and arts events (Red Bull Music Academy, Rockstar Mayhem Festival, Rockstar Uproar Festival, and Mtn Dew Green Label). Red Bull also maintained pages that focused on extreme sports and provided links to its videos displaying adrenaline-producing feats performed at Red Bull sponsored events or by Red Bull sponsored athletes (Red Bull X-Fighters, Red Bull Air Race, and Red Bull Flugtag). Red Bull X-Fighters was the most popular promotional page in our analysis with over 1.9 million followers, followed by My Coke Rewards, Rockstar Mayhem Festival, Red Bull Air Race, Red Bull Music Academy, and Coca-Cola Freestyle with 200,000 to 400,000 followers. Of note, we excluded nonU.S. pages that some brands also added since 2011.

Engagement devices in Facebook posts. As in 2011, Facebook pages continued to encourage users to engage with the brands in diverse and creative ways. The most salient change from 2011 was Facebook's new "timeline" layout. This format provided a more dynamic and visually appealing page well-suited for advertising. With the timeline layout, brands regularly posted videos, promotions, and news updates for users to like, comment, and share. This feature also facilitated integration with other social media sites (e.g., links to Instagram, YouTube, Twitter, and Vine). In addition, some brands' Facebook pages provided links to mobile game apps for users to download. Users did not have to seek out a brand's page to interact with content. If a user liked a brand, brand content might also appear in the user's own timeline.

In 2014, Facebook posts were highly engaging, with many posts linking to brands' Twitter sites and hashtags related to specific campaigns. For example, Coca-Cola's Facebook posts included

Dr Pepper
THBelenter lithat in
Garrett won $\$ 100,000$ in hation towards roallzing his career as a creative strategist. Erter the 2014 Dr Pepper Tuition Giveaway for your chance.



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Top Comperts -
Dr Pepper Facebook post directing users to enter a tuition giveaway

Excited for Usher's performance at the 2014 MTV IVMAS? Head to Twitter and tweet fusherNOW for access to brand new music \& an exclusive behind-the-scenes reveal into the rnaking of his IVMAS performance, clo Pepsi and MTV.


Pepsal sharsd a link
31 duy wh
Last chance to share why you love Ariana Grande for the chance to meet her at the 2014 MTV \&VMASI Learn more at http://pepsimtv.com/


Have a Real. Big. Summer. - Arlana Grande - Popal Contest I MTV I VH1 wwwinkiogn
Heu could win a trip to see your faviortn artat live!

Live Comment Share
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Pepsi Facebook posts with music celebrities popular with teens

## Results

\#ShareACoke and Sprite's included \#SpriteFilmsChallenge. Some Facebook pages also had embedded videos with links to brands' YouTube pages or a brand website URL. For example, Coca-Cola released a video in March asking consumers to create

Help create the next Coca-Cola commercial!
Want to be in a Coca-Cola TV commercial? Here's your shot. Joe Penna (aka MysteryGuitarMan) is here to tell you all about about it: http://ahh.com thisisahh \#ThislsAhh


Like - Comment - Share
\& 67,627 ■ 316 [075 Shares
Coca-Cola Facebook post inviting users to create their own TV commercial

Kace + Alit
2e ame e
Hey guys, we'e on instagram! Give us a folow \& maybe we'l follow you back. No promises, but there's the a $70 / 30$ chance.
wwe intagram obm/koolaid


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their own Coke TV commercial. Competitions, sweepstakes, and giveaways were other ways brands engaged with followers, directing them to a brand website or asking them to "like" a page to enter the contest. For example, Dr Pepper promoted a tuition giveaway, directing users to its website to enter the contest. Links to celebrities were another way that brands engaged with users, such as Pepsi's posts featuring celebrity endorsements, concert ticket contests, links to behind-the-scenes videos, and interviews with musicians and celebrities popular with teens, including Usher and Ariana Grande.

Although Facebook's terms of agreement do not allow children under 13 to maintain accounts, younger children often visit the site. In 2012, at least 7.5 million Facebook users were under the age of $13 .{ }^{8}$ One Kool-Aid post on Facebook appeared to appeal directly to tweens, linking them to the Kool-Aid Instagram page and offering to "like them back." Children's brands with Facebook pages also focused their posts and content on parents. For example, Minute Maid had a Dadvice campaign, and Kool-Aid promoted their pouches as a way for parents to help their kids "make friends this year."

## Twitfer

We identified over 60 different Twitter profiles for sugary drinks and energy drinks from 26 companies in our analyses. There was also tremendous growth in Twitter followers over the past three years, reaching almost 11 million in 2014, up from

Help your koss make fiends this year Send an exasa kpol-Ald Jammer to schooll


Kool-Aid Facebook posts targeting youth and parents

Figure 16. Twitter followers by category in 2011 and 2014

*Includes followers of brand- and company-level pages Source: Rudd Center analysis of Twitter followers (June, 2014)
less than 1 million in 2011. As with Facebook, regular soda brands dominated with over 6 million Twitter followers in 2014 (57\% of followers). Energy drink followers made up another 3.4 million (29\%), while the balance ( 1.2 million) consisted of accounts for various brands, companies, and other sugary drink categories (see Figure 16).

In contrast to Facebook, fewer companies in our analysis appeared to focus on social media marketing in Twitter. CocaCola Co. and PepsiCo dominated in this medium, with nearly 7 million followers combined, representing 62\% of Twitter followers for the brands in our analysis (see Figure 17). Red Bull and Monster Energy Corporation made up another 3 million followers ( $28 \%$ of the total). Just one additional company had more than 400,000 Twitter followers in 2014: Dr Pepper Snapple Group. The remaining 21 companies with Twitter accounts contributed just $6 \%$ of followers in our analysis. While all companies at least doubled their followers from 2011 to 2014, PepsiCo showed the largest increase (19-fold). Monster Energy and Rockstar followers also increased by approximately 17 times.

Differences by brand. Four individual Twitter accounts dominated in 2014: @Pepsi had the most followers with approximately 2.6 million, closely followed by @CocaCola with just over 2.5 million. @RedBull and @MonsterEnergy had 1.5 and 1.3 million followers, respectively. Most of these top brands added new Twitter promotional pages since 2011 that boosted their total followers. Rockstar ranked considerably lower in followers on Twitter (total of 329,000), but also added new accounts that focused on its music sponsorships (Rockstar Mayhem and Uproar Festivals). Of note, most of these additional Twitter pages (for example @mycokerewards and @redbullairrace) utilized the same names as the brands' new promotional Facebook pages, enabling followers of one page to locate these promotional pages across platforms.

Figure 17. Twitter followers by company in 2014


Source: Rudd Center analysis of Twitter followers (June, 2014)

Of the Twitter brand pages with over 1 million followers in 2014, @Pepsi increased 29-fold, @MonsterEnergy grew 17fold, and @CocaCola and @RedBull showed increases of seven to eight times. Of the brands with 200,000 to 400,000 Twitter followers, Mtn Dew, Dr Pepper, Gatorade, and Rockstar had 6- to 13-fold increases. The 20 most-followed Twitter pages in 2014 also included three new promotional pages: @RBMA (Red Bull Music Academy) with over 88,000 followers, and @mycokerewards and @MayhemFest (Rockstar) with over 60,000 followers, as well as one company page: @COCACOLACO (224,000 followers).
Twitter engagement. We examined the most recent 3,200 tweets over five months (Jan. 1 to June 18, 2014) and calculated average tweets per day. Table 36 presents measures of engagement for the ten Twitter accounts with the most followers in 2014. Three of the top-ten individual pages were also the most active. @CocaCola, @redbull, and @mtn_dew each averaged 20 to 60 tweets per day. However, pages with the most Twitter followers were not necessarily the most active. For example, two of the most popular accounts, @pepsi and @MonsterEnergy, averaged just 4.1 and 4.6 tweets per day, respectively. In contrast, eight of the most active Twitter accounts (averaging 10+ tweets per day) had fewer than 100,000 followers, including @bolthousefarms, @sunnydelight, @RBMA (Red Bull Music Academy), @honesttea, @jonessodaco, @Snapple, @Vitacoco, and @mycokerewards.

Some sugary drink and energy drink brands appeared to focus their activity on direct interactions with Twitter followers by consistently replying to users who tweeted them about their products. For @CocaCola and @mtn_dew, 99\% and $93 \%$ of tweets were direct replies to users. However, there was considerable variation in using replies as an engagement technique. For other accounts, replies ranged from $7 \%$ of tweets by @MonsterEnergy to 89\% of @Gatorade tweets.

Retweeting is another indicator of engagement and highly desirable as it exponentially increases the reach of a

Table 36. Measures of engagement for the top-ten Twitter accounts

| Company | Brand | Category | Handle | Average \# of tweets per day | Followers | Proportion of tweets |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Total tweets analyzed* | Replies other users | Retweeted by other users | Favorited by other users |
| PepsiCo | Pepsi | Regular soda | @pepsi | 4.1 | 2,588,202 | 681 | 33\% | 81\% | 80\% |
| Coca-Cola | Coca-Cola | Regular soda | @ CocaCola | 60.4 | 2,517,586 | 3,200 | 99\% | 45\% | 36\% |
| Red Bull | Red Bull | Energy drink | @ redbull | 45.7 | 1,538,597 | 3,200 | 69\% | 66\% | 74\% |
| Monster Beverage Corporation | Monster Energy | Energy drink | @ monsterenergy | 4.6 | 1,315,717 | 775 | 7\% | 67\% | 68\% |
| PepsiCo | Pepsi | Regular soda | @mtn_dew | 19.9 | 360,434 | 3,200 | 93\% | 46\% | 64\% |
| Dr Pepper Snapple Group | Dr Pepper | Regular soda | @drpepper | 11.3 | 267,022 | 1,897 | 76\% | 57\% | 75\% |
| PepsiCo | Gatorade | Sports drink | @ Gatorade | 13.6 | 260,600 | 2,281 | 89\% | 53\% | 65\% |
| Rockstar | Rockstar | Energy drink | @ rockstarenergy | 7.8 | 235,851 | 1,311 | 50\% | 62\% | 74\% |
| Coca-Cola | Coca-Cola Company | Company | @COCACOLACO | O 8.6 | 224,034 | 1,436 | 36\% | 70\% | 76\% |
| Coca-Cola | Powerade | Sports drink | @POWERADE | 1.1 | 133,915 | 179 | 17\% | 84\% | 85\% |

Source: Twitonomy ${ }^{9}$ (*Jan-June, 2014)
company's Twitter activity. Twitter users can also mark tweets as "favorites." A user's favorites can be viewed by other users, and favoriting a tweet indicates that users find the tweet of interest or value. Our analysis also showed variation between accounts in rates of retweets and favorites, but most top-ten Twitter accounts frequently retweeted and had a high percent of their tweets favorited by others. @POWERADE had a high level of engagement with $85 \%$ of its tweets favorited and $84 \%$ retweeted. @Pepsi also had high engagement, with $80 \%$ of tweets favorited and $81 \%$ retweeted. @CocaCola had the lowest rates of favorited and retweeted tweets ( $36 \%$ and $45 \%$, respectively), though this lower number likely reflects the high proportion of @CocaCola tweets that were replies. Although not a top-ten Twitter account, Rockstar's @MayhemFest had the highest engagement rate of all Twitter accounts analyzed, with a 93\% retweet rate and 94\% favorited. To increase engagement, brands also asked followers directly to retweet. For example, Dr Pepper referenced football in a tweet with "RT if you're hoping for a one of kind season." Vita Coco Kids asked users to retweet to win coupons, prizes, and samples.

The most popular tweets for the four top Twitter accounts in our analysis involved events, sports, and popular social media celebrities. For example, @Pepsi's most popular tweet, with over 30,000 favorites and 23,600 retweets, was a retweet of Bruno Mars' Superbowl tweet: "GAME TIME!" For @CocaCola, a tweet picturing the 2014 World Cup Happiness Flag received more than 7,200 favorites and 8,700 retweets. @RedBull's most popular tweet was a retweet of computer game professional Nadeshot's announcement that he made the finals of the Major League Gaming tournament, where Red Bull followed him behind the scenes. This retweet received over 8,800 favorites and 5,200 retweets. Monster's most popular tweet was a mid-air picture of BMX rider Pat Casey, which received over 3,800 favorites and 6,800 retweets.

## YouTube

Thirty-nine of the sugary drink and energy drink brands in our analysis maintained 44 different YouTube channels. Energy drink brands dominated on YouTube with over 1 billion video views (59\% of the total). Soda accounted for 645 million views (36\%), while various other sugary drinks made up the balance. Among the brands in this analysis, Red Bull dominated with over 840 million views as of June 2014, followed by Coca-Cola (340 million views), Pepsi (196 million views), 5-hour Energy (129 million views), and Monster Energy (82 million views). All other YouTube channels had fewer than 50 million views.

Due to a change in YouTube's methods for counting views, we were unable to directly compare number of views in 2011 versus 2014. However, there were some notable changes in YouTube channel rankings. Sprite and Fanta did not have a presence in the 2011 analysis, but these brands ranked sixth and seventh in number of views, respectively, in 2014. One iced tea brand, Lipton, also made the top-ten most viewed sugary drink and energy drink YouTube channels in 2014. In addition, Mtn Dew, Red Bull, and Rockstar added promotional YouTube channels for their music and arts sponsorships that were not found in 2011. Three of these channels ranked among the top-20 for video views: Mtn Dew Green Label (14 million views), Red Bull Music Academy ( 7 million views), and Rockstar Mayhem Festival (4 million views).

Table 37 presents average views per YouTube video for the ten most-viewed sugary drink and energy drink channels in 2014. On just these ten channels, there were 11,000 different videos available totaling nearly 2 billion views. However, number of available videos and average views per video varied widely. For example, Red Bull had over 4,000 videos available averaging 215,000 views each. In contrast, 5-hour Energy had just 94 videos available, but the highest average views per video at over

## Results

Table 37. Ten most-viewed YouTube channels in 2014

| Main channel | \# of videos <br> available* | Average views <br> per video | Total views <br> (mill)* |
| :--- | ---: | ---: | ---: |
| Red Bull | 4,215 | 215,157 | 906,885 |
| Coca-Cola | 3,385 | 122,671 | 415,240 |
| Pepsi | 924 | 230,171 | 212,678 |
| 5-hour Energy | 94 | $1,430,898$ | 134,504 |
| Monster Energy | 782 | 112,021 | 87,601 |
| Sprite | 701 | 73,192 | 51,308 |
| Fanta | 503 | 91,208 | 45,878 |
| Lipton (Brisk) | 54 | 455,738 | 24,610 |
| Mtn Dew | 215 | 102,257 | 21,985 |
| Lipton | 53 | 351,930 | 18,652 |

*Data collected October, 2014.
Source: Social Baker (2014) ${ }^{10}$
1.4 million each. One 5-hour Energy video had the most views for a single video. This video showed how the energy drink helps increase focus - depicting a cross-section of people engaged in a variety of activities, such as playing chess, giving a speech, rock climbing, and playing football - and was viewed over 46 million times. Lipton (Brisk) with just 54 videos, averaged over 455,000 views per video. Most of the brand's videos uploaded in 2014 showed episodes of Brisk's Bodega chats. These English-language videos took place in Latino neighborhoods and celebrated Latino artists, music, and culture.

YouTube video content. Energy drink companies' YouTube videos often depicted extreme sporting events and athletes. For example, Monster Energy videos featured Adam Kun, a BMX flatland world champion. Red Bull's videos also focused on risky sporting events. One of its most famous videos (over 35 million views) showed Red Bull-sponsored Felix


Lightning Round | Pepsi Rookie of the Week | Pepsi


+ tanie < then ... Wher 941 views


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Pepsi's humorous YouTube video of "tween dynamo" Charlize interviewing NFL player Asa Watson


YouTube video of Muppets showing that Lipton iced tea makes a meal less boring than one with water


YouTube video of LeBron James selecting his favorite Sprite flavor


Red Bull YouTube videos of sponsored sporting events

Baumgartner's parachute descent from 128,100 feet to set a new world record. 5-hour Energy videos featured sponsored athletes, such as a world-famous Italian water skier and racecar driver Clint Bowyer. The brand also utilized humor in many videos, including a "Yummification" contest asking users to enter videos with recipes to mix 5-hour Energy with other drinks to make it more palatable. The winning videos were available to viewers.

Videos on other sugary drink YouTube channels also featured content that appealed to families and youth. Coca-Cola's channel had many videos in different languages, often depicting happy families. Pepsi videos showcased its NFL sponsorship, with a series of videos utilizing "tween dynamos" Charlize and Max interviewing NFL rookies. Fanta's opening YouTube page featured a cartoon video with child-like characters and included Spanish-language videos (one received over 900,000 views). Lipton also had videos appealing to children with the Muppets making their boring meal served with water more exciting with iced tea. Celebrity endorsements were also popular, including Lebron James for Sprite, Kristen Bell for Lipton, and Eminem for Brisk. Monster Energy, Pepsi, and Sprite YouTube channels also offered music playlists with behind-the-scenes interviews and music videos.

## Newer social media plafforms

Sugary drink and energy drink brands have also become active marketers on newer social media platforms, including Instagram and Vine. Although marketing on these platforms is more difficult to track and analyze systematically, they
provide a substantial opportunity for brands to expand the reach of their marketing to younger audiences. These newer social media platforms are popular among teens, with 30\% of teens reporting Instagram as their preferred social network in 2014. ${ }^{11}$

Instagram. Companies use Instagram for marketing by soliciting users' photos and videos for contests or posting them to promote sponsorships, new products, and other promotions. Companies can "regram," which is posting others' content that reflects well on the brand. Regrams acknowledge the source of the original Instagram post by crediting the source's Instagram handle.

There were 53 Instagram pages for the brands in our analysis, but just six brand pages had more than 100,0000 followers (see Table 38). Three energy drinks had the most Instagram followers: Red Bull dominated with 1.4 million followers, Monster Energy had over 900,000, and Rockstar followed with over 230,000. Gatorade ranked a close fourth with 225,000 Instagram followers. Coca-Cola and Arizona came in fifth and sixth with over 100,000 thousand followers. Rockstar Energy Drink Models, Mtn Dew, Red Bull X-Fighters, and Peace Tea each had 36,400 to 64,000 followers.

Energy drink brands often integrated their Instagram content with their content on Facebook, YouTube, and Twitter, showing daring youth-oriented extreme sports videos and pictures. Rockstar also included many posts of sporting activities, as well as posts of Rockstar models in bikinis. Of note, when a user "follows" an Instagram account a list of additional suggested accounts for the user to follow is often presented. Rockstar suggested another Rockstar Instagram account: RockstarEnergyModels. Dedicated to the models who promote the brand, this account had over 74,000 followers (ranking seventh).

Table 38. Followers for the top-ten Instagram accounts

| Rank | Company | Brand | Category | Instagram <br> followers |
| :---: | :--- | :--- | :--- | ---: |
| 1 | Red Bull | Red Bull | Energy drink | $1,408,701$ |
|  | Monster <br> Beverage <br> Corporation | Monster <br> Energy | Energy drink | 906,992 |
| 3 | Rockstar | Rockstar | Energy drink | 232,022 |
| 4 | PepsiCo | Gatorade | Sports drink | 225,323 |
| 5 | Coca-Cola | Coca-Cola | Regular soda | 168,659 |
| 6 | Arizona | Arizona | Other sugary <br> drink brand | 128,228 |
| 7 | Rockstar | Rockstar <br> Energy Drink <br> Models |  | Energy drink |

Source: Rudd Center analysis of Instagram (June, 2014)


Instagram posts of Rockstar models


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Instagram post for Coke \#ShareACoke campaign


- 4.415 lkm

Instagram post for Mtn Dew with animated superhero at a breakfast table

Some brands used celebrity sports figures in their Instagram posts. For example, Derek Jeter appeared in a Gatorade post and Shaquille O'Neal in an Arizona post (promoting the new Arizona 'Shaq' cream soda line with his face on every 23.5 ounce can). The \#ShareACoke campaign featured prominently in Coca-Cola's posts. One post with over 12,000 likes asked users to take a photo when presenting a \#ShareACoke bottle to a friend. Mtn Dew posts promoted its skateboarding Dew Tour and included short videos of an animated character being launched from a toaster or posing on a breakfast table. Pepsi's Instagram posts focused on music sponsorships and ticket giveaways. Both Arizona and Dr Pepper suggested Taco Bell, and Coca-Cola suggested McDonald's and Starbuck's, as additional Instagram accounts to follow.
Vine. Similar to Instagram, companies use Vine for marketing by soliciting users' videos for contests or posting videos

Table 39. Followers for the top-ten Vine accounts

| Rank | Company | Brand | Category | Vine followers |
| :---: | :---: | :---: | :---: | :---: |
| 1 | PepsiCo | Pepsi | Regular soda | 93,857 |
| 2 | Red Bull | Red Bull | Energy drink | 88,459 |
| 3 | Coca-Cola | Coca-Cola | Regular soda | 65,250 |
| 4 | PepsiCo | Mtn Dew | Regular soda | 26,780 |
| 5 | Coca-Cola | Coca-Cola Freestyle | Promotion | 23,533 |
| 6 | Rockstar | Rockstar | Energy drink | 10,142 |
| 7 | Dr Pepper Snapple Group | Dr Pepper | Regular soda | 8,386 |
| 8 | Coca-Cola | Vitamin Water | Flavored water | 6,886 |
| 9 | Red Bull | Red Bull Music Academy | Sponsorship | 4,355 |
| 10 | Coca-Cola | Fanta | Regular soda | 4,137 |

Source: Rudd Center analysis of Vine accounts (October, 2014)
to promote their sponsorships, new products, and other promotions. Companies can also "revine," which is posting others' content that reflects well on the brand. As with regrams, revines acknowledge the source of the original Vine post by crediting the source's Vine handle.

This newest social media platform in our analysis had more limited usage by sugary drink and energy drink brands, with just 21 brands active on Vine. However, three of those brands also had additional promotional accounts: Coca-Cola Freestyle, Red Bull Music Academy, and Red Bull X-Fighters. Of the top-ten most followed Vine accounts in our analysis, nine were for soda and energy drink brands (see Table 39). Pepsi had over 93,000 followers, and Red Bull followed closely at over 88,000. Coca-Cola ranked third with over 65,000, and Mtn Dew and Coca-Cola Freestyle each had over 23,000. Rockstar, Dr Pepper, Vitamin Water, Red Bull Music Academy, and Fanta all had 10,000 or fewer followers.

The content of brands' 6-second looping videos on Vine was similar to content on other social media accounts, and much of it appeared targeted to a youth audience. Pepsi promoted both Pepsi and Pizza Hut with humorous videos. Coca-Cola's posts continued its \#ShareACoke campaign appearing in other social media. Mtn Dew's Vine posts with its animated character were similar to the brand's short videos on Instagram. Of note, Fanta's Vine posts focused on teen engagement. In August 2014, the brand partnered with a team of young, popular multicultural digital influencers to cocreate an all-Vine comedy show for teens. A Fanta executive explained, "'Fanta For The Funny' unites teens around their shared desire for fame and their shared passion for humor, while allowing them to be themselves and to connect their way." 12 Fanta Vine posts asked users to, "Tweet us your vine with @FantaFun and \#FantaForTheFunny for a chance to be on the show."

## Results



Got the best puns? Prove it Tweet us your vine with \&FantaFun and ef artaforthefurvy for a chance to be on the show ec viactrolemint

## ค Q 0 -

\#FantaForTheFunny series Vine posts
4. Coca-Cola


The more arms you have, the more bottles you can share. (And the more friends you can make.) WShareaCoke

## ค \& $\cdot 1$ -

Vine post of youth for \#ShareACoke campaign

## Summary of social media markefing

In 2014, energy drinks and regular soda brands dominated social media marketing. Regular soda and energy drink brands represented $84 \%$ of the 300 million Facebook likes for brands in our analysis, 89\% of 11 million Twitter followers, and $95 \%$ of 1.8 billion YouTube views. As in 2011, Red Bull, and Coca-Cola were the leaders in social media marketing
in 2014. Pepsi also ranked among the top-three brands on Facebook, Twitter, and YouTube in 2014 due to an increase of $600 \%$ on Facebook, a 30-fold increase on Twitter, and 196 million video views on YouTube. Two additional energy drink brands - Monster Energy and Rockstar - ranked among the most active brands on all social media platforms, and 5-hour Energy ranked fourth in YouTube video views at 129 million. Coca-Cola, Red Bull, and Pepsi also were the top-three sugary drink brands on Instagram, and Coca-Cola and Red Bull ranked in the top-five sugary drink brands on Vine.

Overall, the popularity of energy drinks and regular soda brands on social media increased exponentially since 2011. Total Facebook followers tripled for regular soda and doubled for energy drinks, and Twitter followers increased by over 90\% for both categories. Individual brands increased their presence on social media in different ways. They added 53 new Instagram accounts and 21 active Vine accounts since 2011. Coca-Cola, Red Bull, Mtn Dew, and Rockstar also expanded by creating new social media accounts for sponsored music, sports, and arts activities, and established new accounts for these promotions on Facebook, Twitter, and YouTube, and even Vine and Instagram.

Another trend across many brands was the use of celebrities in social media. Pepsi, Sprite, Gatorade, Lipton, Arizona, and Brisk utilized well-known music and sports celebrities, while Fanta and Red Bull used young digital-media celebrities. Brands also engaged users to virally increase their social


Red Bull racing games with cartoon graphics and in-app purchases

## Results

media reach, with retweets, regrams, and revines, as well as teen-targeted contests inviting users to post videos and photos on various platforms. Both Coca-Cola and 5-hour Energy conducted contests encouraging users to create video commercials for their products. Brands tended to use consistent messaging across platforms, with similar content on their Facebook, Twitter, Instagram, and Vine posts. In addition, links within posts commonly directed users to other social media platforms or the brand's website, introducing users to new platforms as they become popular.

## Smartphone applications

We identified 39 smartphone applications (apps) available for US-based iPhone users offered by nine of the companies in our analysis. Smartphone applications are computer programs designed to run on a smartphone or other mobile device. These apps promoted 14 different sugary drink brands (see Table 40). The majority of apps were for gaming ( $n=16$ ) or entertainment $(n=7)$ purposes. One-third ( $n=13$ ) had child-targeted elements, such as cartoon-style graphics, child characters, or simple game play appropriate for children. However, many more of these mobile applications were likely aimed at teens, featuring games with more realistic graphics. As noted in our previous report, as much as 41\% of users of similarly realistic apps from Red Bull were 12
to 17 years of age. ${ }^{13}$ Most of the apps ( $n=36$ ) were free to download, although eight featured in-app purchases. Red Bull Racers and Red Bull Kart Fighter 3 both had child-targeted elements and in-app purchases of up to $\$ 39.99$ and $\$ 29.99$, respectively. Users were also encouraged to earn coins in Kart Fighter by viewing ads, primarily for other apps that have further expensive in-app purchases.

As in 2010, Red Bull had the most mobile applications with 15. Seven of these were highly engaging and immersive games based around topics with youth appeal, including breakdancing, extreme sports, and freestyle soccer. PepsiCo and Coca-Cola Co. offered eight and seven apps, respectively, with the largest category again being games. Coca-Cola was notable for its promotion of Fanta through child-targeted advergame applications, including Fanta Fruit Slam, in which the player throws fruit at young cartoon characters. These characters were also integrated into another app styled on graphic novels, in which the young protagonists must save the world from becoming "playless gray" zombies; vitality and color is restored to the "playless" through play, music, and Fanta. PepsiCo's Mtn Dew picked up on the extreme sports trend with the game Baja or Bust, which featured cartoon "big-headed" motocross riders racing across stereotypically Mexican landscapes to promote Mtn Dew's Baja Blast flavor. Unilever's Lipton brand also sponsored an apparently childtargeted advergame with cartoon ice-cube characters.


Fanta Save the Source mobile app

Table 40 Smartphone applications for sugary drink and energy drink brands

| Company | Brand | Application name | Application type | Price | In-app purchases | Child-targeted features | Description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Coca-Cola | Coca-Cola | (THRED) | Games | Free | Yes |  | Game with proceeds to AIDS (one in-app purchase of \$209.99) Pilot an orb through sci-fi surroundings |
| Coca-Cola | Coca-Cola | Coca-Cola Freestyle | Food and drink | Free |  |  | Find nearest location for Coke Freestyle machines, integrated with Facebook |
| Coca-Cola | Fanta | Fanta Fruit Slam 2 - Food fight game | Games | Free |  | Youthful cartoon characters throwing fruit around | Dodgeball with fruit |
| Coca-Cola | Fanta | Fanta Fun Tap | Games | Free |  | Simplistic gameplay, young cartoon characters | Tap the Fanta bottles to win the game |
| Coca-Cola | Coca-Cola | MCR | Lifestyle | Free |  |  | My Coke Rewards, exclusive rewards and deals with the app |
| Coca-Cola | Fanta | Play Fanta: Saving the Source | Books | Free |  | Youthful characters, anime style, references to play and fun | Graphic novel |
| Coca-Cola | Coca-Cola | World of Coca-Cola Explorer | Travel | Free |  |  | Accompaniment to visiting the World of Coca-Cola, Atlanta |
| Dr Pepper Snapple Group | Snapple | Spiny Lobsters in Snaplantis | Games | Free |  | Underwater cartoon characters and lobsters, stylistically like Spongebob Squarepants | Coordinate a lobster conga line, based on classic 'snake' game |
| Kraft | Capri Sun | Capri-Sun Tattoo | Entertainment | Free |  | Kids Choice Awards, multicolored cat mascot | Augmented reality app, scan Capri Sun to win Kids' Choice Awards content |
| Kraft | Kool-Aid | Kool-Aid | Entertainment | Free |  | Kool-Aid Man | Have the Kool-Aid Man photo-bomb your pictures and share them |
| Monster Beverage Corporation | Monster Energy | Energy Monster Supercross | Entertainment | Free |  |  | Event notifications and results for the supercross |
| Monster Beverage Corporation | Monster Energy | Ricky Carmichael's Motocross Matchup Pro | Games | \$0.99 | Yes |  | Motocross racing game. In-app purchases up to $\$ 49.99$, highly developed graphics and many game options for riders, tracks, and race modes |
| Novamex | Jarritos | Club Jarritos | Food and drink | Free |  |  | Register and redeem Jarritos codes |
| PepsiCo | Mtn Dew | Baja or Bust | Games | Free |  | Cartoon 'big-head' motocross riders | Dirt bike racing game, exchange points for prize draws |
| PepsiCo | Gatorade | Gatorade: Break a Sweat Record | Games | Free |  |  | Set goals to beat personal records |
| PepsiCo | Mtn Dew | Mdew Scan | Entertainment | Free |  |  | Scan special X-Men Mtn Dew cans to unlock content for the latest X-Men movie |
| PepsiCo | Pepsi | Pepsi Goal | Games | Free |  |  | Play a city-wide penalty shootout match |
| PepsiCo | Pepsi | Pepsi Gulf Coast Jam | Entertainment | Free |  |  | Pepsi Gulf Coast Jam, country music festival |
| PepsiCo | Pepsi | Pepsi International Soccer Cup | Sports | \$1.99 |  | App for youth soccer participants | Official app for parents, coaches, and teams in Pepsi International Youth Soccer |
| PepsiCo | Pepsi | Pepsi MTV Indies | Music | Free |  |  | Discover Indian indie music |
| PepsiCo | Sierra Mist | Sierra Mist Must Haves | Entertainment | Free |  | Cartoon games | Holiday-themed games |

continued

Table 40 Smartphone applications for sugary drink and energy drink brands (cont'd)

| Company | Brand | Application name | Application type | Price | In-app purchases | Child-targeted features | Description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Red Bull | Red Bull | RBMA Radio | Music | Free |  |  | Stream exclusive interviews, mixes, and live recordings |
| Red Bull | Red Bull | Red Bull Focus | Games | Free |  |  | Audiovisual game |
| Red Bull | Red Bull | $\begin{aligned} & \text { Red Bull Illume } \\ & 2010 \end{aligned}$ | Photo and video | Free |  |  | Action and adventure sports images |
| Red Bull | Red Bull | $\begin{aligned} & \text { Red Bull Illume } \\ & 2013 \end{aligned}$ | Photo and video | Free |  |  | Action and adventure sports images |
| Red Bull | Red Bull | Red Bull Kart Fighter 3 Unbeaten Tracks | Games | Free | Yes | Cartoon characters and Go Kart racing | Kart racing game, in-app purchases up to $\$ 29.99$ |
| Red Bull | Red Bull | Red Bull Kart Fighter World Tour | Games | Free |  | Go-kart racing cartoon game play | Race kart game |
| Red Bull | Red Bull | Red Bull Racers | Games | Free | Yes | Slot car racing game | Racing game with advanced graphics and multiple game modes, in-app purchases up to \$39.99 |
| Red Bull | Red Bull | Red Bull Signature Series | Sports | Free |  |  | Companion to the extreme sports TV series |
| Red Bull | Red Bull | Red Bull TV | Entertainment | Free |  |  | Red Bull curated content featuring "action, adventure and excitement" for the iPad |
| Red Bull | Red Bull | Red Bull Urban Futbol | Games | Free | Yes |  | Street football game with advanced graphics and urban themes |
| Red Bull | Red Bull | Red Bull <br> X-Fighters 2012 | Games | \$0.99 | Yes |  | Dirt bike game with advanced graphics and multiple game modes |
| Red Bull | Red Bull | Red Bull <br> X-Fighters 2012 <br> Free | Games | Free | Yes |  | Dirt bike game with advanced graphics and multiple game modes |
| Red Bull | Red Bull | RedBull.com | News | Free |  |  | Connects users with stories, images, news, and behind-thescenes content |
| Red Bull | Red Bull | The Red Bulletin - ePaper | Lifestyle | Free |  |  | Monthly updates on sports, travel, art, and music |
| Red Bull | Red Bull | The Red Bulletin US | Lifestyle | Free | Yes |  | Global magazine |
| Rockstar | Rockstar | Official Rockstar Energy Drink Mayhem Festival | Music | Free |  |  | Updates and info on hard rock/ heavy metal music festival |
| Rockstar | Rockstar | Rockstar Energy King of Wake | Sports | Free |  |  | Behind-the-scenes of pro wakeboarding series |
| Unilever | Lipton | COOL CUBES | Games | Free |  | Cartoon ice-cube character | Guide an ice cube through different tracks |

Source: Rudd Center analysis of iPhone apps (July, 2014)


Capri Sun augmented reality tattoo app

Kraft Foods offered mobile apps for its children's products, including an augmented reality child-targeted app for Capri Sun in which children were encouraged to wear temporary Capri Sun tattoos that could be scanned to produce effects on their phones related to the 2014 Kids' Choice Awards. This tattoo app also featured videos of popular Nickelodeon stars, such as Daniella Monet of Victorious. The company also offered a Kool-Aid app that allowed users to have the Kool-Aid
man photo-bomb their pictures.
Two additional energy drink companies (Monster Energy and Rockstar) also offered two apps each. Dr Pepper Snapple Group offered just one app promoting its Snapple brand, which appeared to be child-targeted, featuring a game with animated underwater sea characters. In addition, a Club Jarritos app provided rewards and discounts to users.

## Digital markefing

## Signs of progress

- From 2010 to 2013, youth visitors to approximately $60 \%$ of the websites evaluated both years declined by $20 \%$ or more, and four of the top-20 websites in 2010 were discontinued or did not have enough youth visitors to report in 2013. In general, child visitors declined at a greater rate than teens.
- Total number of display ads for sugary drinks and energy drinks placed on third-party youth websites declined by $72 \%$, from 94.7 million ads per month in 2010 to 26.8 million in 2013. Ads for regular soda and soda brands, sports drinks, and flavored water declined by over 50\%. My Coke Rewards eliminated virtually all ads on youth websites (compared with 40 million ads per month in 2010). In 2013, $5 \%$ of sugary drink display ads were placed on youth websites, down from $11 \%$ in 2010.


## Continued reasons for concern

- From 2010 to 2013, youth visitors to eight websites evaluated both years increased by $20 \%$ or more, and five of the top-20 websites in 2013 were new or did not have enough visitors to measure in 2010. Three energy drink websites had the highest growth in youth visitors - monthly unique visitors under age 18 increased by 113,000 for 5HourEnergy.com, 25,000 for RedBullUSA.com, and 23,000 for RedBull.com. Monthly youth visitors to Pepsi.com increased by 18,000.
- Although youth visitors to MyCokeRewards.com declined, the site continued to attract more children than any other site in our analysis (almost 13,000 per month). MyCokeRewards.com and Coca-ColaScholars.com also had the highest youth engagement, averaging seven minutes or more per visit.
- Twenty of the 50 websites analyzed attracted a disproportionately high number of teens compared with all internet sites, including six energy drink sites and six sites from Coca-Cola Co. Teens were more than three times as likely to visit CocaColaScholars.org and almost three times as likely to visit CrushSoda.com compared with other internet sites.
- Although TumEYummies.com was the only website to offer content designed specifically for children, most of the popular energy drink, soda, and other sugary drink websites featured content with high youth appeal, as well as links to the brands' social media content.
- The number of ads for children's drinks on youth websites increased by $15 \%$ from 2010 to 2013. Capri Sun placed more than 7 million ads on children's websites, such as Roblox.com and other Nickelodeon and Disney sites, more than double the number of 2010 ads. Tum E Yummies also placed 50\% of its ads on children's sites.
- CFBAI companies placed more than 46 million ads for sugary drinks that are not approved for advertising to children on children's websites in 2013, including Coca-Cola, Powerade, Pepsi NEXT, and NOS energy drink.
- Other brands placing a high proportion of their ads on websites visited disproportionately more often by youth under 18 included Hawaiian Punch (45\%), Jarritos (34\%), Crush (27\%), and Powerade (11\%). Further, the number of energy drink display ads appearing on youth websites did not change from 2010 to 2013.
- Almost one-third of display ads for sugary drink and energy drink brands in our analysis appeared on Facebook and YouTube in 2013; advertising on these social media sites appeared to substantially replace much of the advertising on youth websites. 5-hour Energy, Coca-Cola, and Capri Sun placed the most ads on these sites ( 55 million, 31 million, and 10 million, respectively), while Gatorade and Sunkist placed more than $50 \%$ of all their display ads on Facebook, and 5-hour Energy placed $73 \%$ of its ads on YouTube.
- Social media marketing grew exponentially from 2011 to 2014: Facebook likes tripled to over 300 million, Twitter followers increased 11 times to 11 million, and over 40 YouTube channels had 1.8 billion video views. Regular soda and energy drink brands represented $84 \%$ of these Facebook likes, $86 \%$ of Twitter followers, and $95 \%$ of YouTube views.
- As in 2011, Red Bull and Coca-Cola were the leaders in social media marketing. Pepsi also ranked in the top-three brands on Facebook, Twitter, and YouTube in 2014 due to an increase of $600 \%$ on Facebook, a 30-fold increase on Twitter, and 196 million video views on YouTube. Two additional energy drink brands - Monster Energy and Rockstar - ranked among the most active brands on all social media platforms, and 5-hour Energy ranked fourth in YouTube video views at 129 million.
- Sugary drinks were early adopters of new social media platforms. Red Bull, Monster Energy, Rockstar, and Gatorade had over 200,000 Instagram followers, while Pepsi, Red Bull, Coca-Cola, and Mtn Dew had more than 25,000 followers on Vine.
- Promotions with high youth appeal were common across all social media platforms. For example, Coca-Cola, Red Bull, Mtn Dew, and Rockstar maintained separate accounts for their sponsored music, sports, and arts activities on all social media platforms (including Instagram and Vine). The use of celebrities popular with youth was also common, as well as teentargeted contests and frequent reposting of followers' tweets, grams, and vines, to increase engagement
- Kraft Foods offered mobile advergame apps for its Capri Sun and Kool-Aid children's products. Other sugary drink brands offering mobile apps with child-friendly graphics and games included Fanta, Snapple, Mtn Dew, Lipton, and Sierra Mist. Red Bull offered 15 different mobile apps, including youth-oriented games.


## Marketing to Hispanic and black youth

This section documents Hispanic and black youth exposure to sugary drink advertising and compares it to exposure for other youth. We first examine Hispanic-targeted advertising on Spanishlanguage TV and then examine exposure to TV advertising for
black children and teens and their white peers. We also examine website exposure for black and Hispanic youth compared with all youth. Finally, we discuss sugary drink marketing to multicultural youth through local events and sponsorships.

## Advertising on Spanish-language TV

TV advertising to
Hispanic youth Definition
Spanish-language TV
TV programming presented on Spanish cable and broadcast networks (e.g., Univision, Telemundo). GRPs for Spanish-language TV advertising are calculated based on the number of Hispanic persons in Nielsen's viewer panel.

Seven companies advertised sugary drinks and energy shots on Spanish-language TV in 2013 (see Figure 18). Spanishlanguage advertising for these products totaled $\$ 82$ million, on average $14 \%$ of companies' TV advertising budgets. The three largest beverage companies (Coca-Cola Co., Dr Pepper Snapple Group, and PepsiCo) were responsible for $70 \%$ of Spanish-language advertising spending, followed by SK Energy Shots (a company that did not advertise in 2010). These four companies each spent $\$ 16$ to $\$ 20$ million to advertise their products to Hispanic audiences. Sunny Delight Beverages and Innovation Ventures (5-hour Energy) each spent approximately $\$ 4$ to $\$ 5$ million each.

Compared with 2010, spending on Spanish-language TV advertising for sugary drinks and energy shots increased $44 \%$. Two of the large beverage companies substantially increased their Spanish-language advertising: PepsiCo had advertised minimally on Spanish-language TV in 2010 but spent $\$ 17$ million in 2013, and Dr Pepper Snapple Group almost tripled its Spanish-language advertising, overtaking Coca-Cola Co. as the beverage company with the most spending in this medium. Sunny Delight also increased its Spanish-language advertising by $18 \%$. In contrast, CocaCola reduced its spending by $38 \%$. Innovation Ventures also substantially reduced spending, while Kraft Foods and Red Bull eliminated virtually all Spanish-language advertising.
In contrast, Spanish-language TV advertising for diet drinks and $100 \%$ juice totaled just $\$ 9.1$ million dollars in 2013, approximately $10 \%$ of all beverage advertising on Spanishlanguage TV. PepsiCo spent the most to advertise these other drink categories on Spanish-language TV, including \$2.4 million to promote Tropicana juices and $\$ 1.2$ million for Diet Pepsi. Campbell Soup Company also spent $\$ 2.4$ million to promote V8 Fusion 100\% juice on Spanish-language TV.

Differences by brand. Table 41 presents total advertising spending on Spanish-language TV for individual brands. In 2013, SK Energy led in advertising for a single brand at $\$ 16.6$ million, closely followed by Pepsi and Coca-Cola regular sodas. Of note, Coca-Cola regular soda spending went down $30 \%$ versus 2010. In contrast, neither SK Energy nor Pepsi advertised on Spanish-language TV in 2010. Two Dr Pepper

Figure 18. Advertising spending on Spanish-language TV by company


Source: Rudd Center analysis of Nielsen data (2014)

Snapple Group regular soda brands (7UP and Dr Pepper) ranked fourth and fifth in Spanish-language advertising and both substantially increased advertising versus 2010. Sunny D was the only children's drink that advertised on Spanish-language TV in 2013, whereas Kraft Foods also advertised Kool-Aid in Spanish in 2010. Both 5-hour Energy and Powerade spent \$3 to $\$ 4$ million in Spanish-language advertising in 2013, declines of almost 50\% versus 2010. Coca-Cola also advertised its Fanta brand on Spanish TV in 2010, but not in 2013.

Most of the brands that advertised on Spanish-language TV in 2013 also advertised extensively on English TV, but there were some notable exceptions. Three brands dedicated

Table 41. Advertising spending on Spanish-language TV by brand

|  |  |  | Spanish-language TV advertising |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |

Highlighting indicates children's product
Source: Nielsen 2010-2013 ad spending analysis
virtually all their TV advertising budgets to Spanish-language programming: SK Energy, 7UP, and Fuze iced tea. In addition, Sunny D spent one-third of its TV budget on Spanish-language TV. Spanish-language TV also accounted for a relatively high proportion of Dr Pepper Snapple Group's total TV budget for all sugary drink brands in 2013 (36\%), compared to 16\% for Coca-Cola Co. and 7\% for PepsiCo.

## Hispanic youth exposure to Spanish-language TV adVerfising

From 2010 to 2013, exposure to TV ads for sugary drinks and energy shots on Spanish-language TV increased by 23\% and

32\% for Hispanic preschoolers and children, respectively. Consistent with 2010 results, Hispanic preschoolers saw one-third more of these ads (63.0 ads on average) compared with Hispanic children (47.6 ads). However, Hispanic teens' exposure did not increase from 2010 to 2013. As a result, in 2013 Hispanic children viewed slightly more Spanishlanguage TV ads than did Hispanic teens ( 46.5 ads). In contrast, teens saw 27\% more ads than children saw in 2010.

The composition of TV ads viewed by youth on Spanishlanguage TV also changed from 2010 to 2013 (see Figure 19). For all age groups, ads viewed for children's drinks declined by more than $60 \%$, while exposure to regular soda and other sugar drink ads increased by $32 \%$ to $49 \%$. Of note, Hispanic

Figure 19. Ads viewed on Spanish-language TV by category and age


Source: Rudd Center analysis of Nielsen data (2014)


Spanish-language TV ad depicting Spanish actress Claudia Molina. Translation: "A better source of energy"
preschoolers and children saw approximately twice as many ads for energy drinks and shots in 2013 versus 2010, while teens' exposure declined slightly by 3\%. Hispanic preschoolers also saw more ads for energy drinks and regular soda on Spanishlanguage TV compared with both Hispanic children and teens.

Ranking Table $\mathbf{1 0}$ presents ads viewed by Hispanic youth on Spanish-language TV in 2013 for individual brands, including changes versus 2010. SK Energy was responsible for


Spanish-language Pepsi TV ad featuring Latino pop DJ trio 3BallMTY
approximately one-quarter of ads for unhealthy drinks viewed on Spanish-language TV by Hispanic youth of all ages. This finding contrasts with 2010 when more than one-third of ads viewed by Hispanic youth promoted Coca-Cola Co. brands (primarily Coca-Cola regular soda). In 2013, Pepsi and Dr Pepper regular sodas also surpassed Coca-Cola in advertising to Hispanic youth. 5-hour Energy and Sunny D ranked fifth and sixth in ads viewed by Hispanic children and teens, but this order was reversed for preschoolers who saw more ads for Sunny D than for 5-hour Energy. Of note, Kraft Foods' Kool-Aid ranked third in advertising to Hispanic youth in 2010, but was not advertised on Spanish-language TV in 2013.


Spanish-language Dr Pepper TV ad featuring Pitbull and highlighting the brand's 23 flavors

Exposure to TV advertising by black youth

## TV advertising to

black youth Definition

Targeted ratio:
Black to white children
Targeted ratio:
Black to white teens

GRPs for black children (2-11 years) divided by GRPs for white children (2-11 years). Provides a measure of relative exposure to TV advertising for black versus white children. GRPs for black teens (12-17 years) divided by GRPs for white teens (12-17 years). Provides a measure of relative exposure to TV advertising for black versus white teens.

In 2013, black children saw on average 271 TV ads for sugary drinks and energy drinks, and black teens saw 486 ads. Black youth in both age groups viewed more than twice the number of ads viewed by white children and teens (127 and 235 ads, respectively). As with all youth, black youth saw fewer of these ads in 2013 than in 2010. Exposure for black children declined $32 \%$, and black teens saw $27 \%$ fewer ads. However, there were
slightly greater declines for white children and teens, who saw $42 \%$ and $33 \%$ fewer ads in 2013 than in 2010. Therefore, the disparity in exposure between black and white youth increased.

Differences between ads viewed by black and white youth can be explained partially by differences in amount of TV viewing. On average, black children watch $42 \%$ more TV compared with white children, while black teens watch $68 \%$

Table 42. Black youth exposure to TV advertising by drink category in 2013

| Category | Black children (2-11 years) |  | Black teens (12-17 years) |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Average \# of ads viewed | Black:white targeted ratio | Average \# of ads viewed | Black:white targeted ratio |
| Flavored water | 44.3 | 1.7 | 43.3 | 2.3 |
| Energy drinks | 79.6 | 2.6 | 180.3 | 2.2 |
| Iced tea | 15.2 | 2.3 | 25.5 | 2.1 |
| Regular soda | 72.6 | 2.1 | 143.3 | 2.0 |
| Fruit drinks | 30.0 | 1.8 | 35.7 | 1.9 |
| Sports drinks | 29.3 | 2.1 | 57.6 | 1.9 |
| Total unhealthy drinks | 271.0 | 2.1 | 485.6 | 2.1 |
|  |  |  |  |  |
| Other diet drinks | 2.3 | 2.0 | 3.4 | 1.8 |
| Plain water | 6.4 | 1.5 | 5.8 | 1.7 |
| Diet soda | 46.2 | 1.8 | 85.3 | 1.6 |
| 100\% juice | 77.0 | 1.6 | 90.7 | 1.5 |
| Light juice | 10.7 | 1.5 | 14.5 | 1.3 |
| Total other drink categories | 142.8 | 1.7 | 199.7 | 1.6 |

Bold numbers indicate a high black:white targeted ratio
Source: Rudd Center analysis of Nielsen data (2014)
more TV than white teens. ${ }^{14}$ Given the viewing habits of black children and teens, brands with a targeted ratio of 1.9 or higher (i.e., black youth saw 90\% more ads compared with white youth) suggests that companies purchased advertising during programming that was disproportionately viewed by black youth and could indicate advertising targeted to this audience. In 2013, every unhealthy drink category had a black to white teen targeted ratio of 1.9 or higher (see Table 42). Black children and teens saw more than twice as many ads for energy drinks, iced tea, and regular soda compared
with white children and teens. Black teens also saw $130 \%$ more ads for flavored water than white teens saw.

In contrast, targeted ratios for diet drinks, 100\% juice, and water were lower than targeted ratios for unhealthy drink categories. Of note, differences in exposure to $100 \%$ juice and diet soda TV ads for black versus white youth were comparable to differences in amount of TV viewing.

Differences by company and brand. Ranking Table 11 presents the number of ads viewed by black youth in 2010

Table 43. Brands with the highest black to white targeted ratios in 2013

| Company | Brand | Category | Black children (2-11 years) |  | Black teens (12-17 years) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Average \# of ads viewed | Targeted ratio vs. white children | Average \# of ads viewed | Targeted ratio vs. white teens |
| Coca-Cola | Gold Peak | Iced tea | 0.8 | 53.7 | 1.0 | 33.6 |
| Coca-Cola | Simply | Fruit drink | 0.2 | 23.3 | 0.4 | 19.4 |
| Coca-Cola | Sprite | Regular soda | 3.0 | 5.8 | 6.6 | 4.1 |
| Coca-Cola | Coca-Cola | Regular soda | 12.2 | 3.0 | 20.2 | 3.2 |
| Coca-Cola | Vitamin Water | Flavored water | 8.7 | 3.8 | 19.6 | 2.5 |
| Dr Pepper Snapple Group | Sun Drop | Regular soda | 10.4 | 3.2 | 21.8 | 2.5 |
| Dr Pepper Snapple Group | Snapple | Iced tea/brand | 7.3 | 2.4 | 12.3 | 2.3 |
| Innovation Ventures | 5-hour Energy | Energy drink | 60.4 | 2.7 | 137.8 | 2.2 |
| Sunny Delight Beverages | Sunny D | Fruit drink | 19.5 | 1.9 | 23.3 | 2.2 |
| Red Bull | Red Bull | Energy drink | 18.8 | 2.6 | 42.2 | 2.1 |
| Kraft Foods | Capri Sun Roarin' Waters | Flavored water | 35.7 | 1.5 | 23.7 | 2.1 |
| PepsiCo | Mtn Dew | Regular soda | 13.5 | 2.4 | 30.6 | 2.0 |
| PepsiCo | Gatorade | Sports drink | 28.8 | 2.1 | 56.6 | 1.9 |
| Unilever | Lipton | Iced tea | 6.7 | 2.2 | 11.6 | 1.8 |
| Ocean Spray | Ocean Spray | Fruit drink | 9.5 | 1.9 | 11.6 | 1.6 |

Bold numbers indicate a high black:white targeted ratio
Highlighting indicates children's drinks
Source: Rudd Center analysis of Nielsen data (2014)


5-hour Energy ads appealed to youth through humor


Gatorade TV ad featuring NBA players Kevin Durant and Dwayne Wade
and 2013 by brand and company, including targeted ratios. Overall, brand rankings for number of ads viewed by black youth were similar to those reported for all youth. 5-hour Energy was responsible for the most ads viewed on average for all children and teens, followed by Capri Sun Roarin' Waters for all children and Gatorade for all teens. Company rankings also were similar. PepsiCo advertised the most to all youth with one exception: black teens saw the most ads for 5-hour Energy. Dr Pepper Snapple Group ranked third in companies advertising sugary drinks to black youth, similar to its third and fourth ranking in TV advertising to all teens and children.

Five Coca-Cola Co. brands had the highest targeted ratios of ads viewed by black versus white youth, including Sprite black children and teens saw four to six times as many ads for
this brand compared with white children and teens - as well as Coca-Cola and Vitamin Water (see Table 43). Sun Drop, a Dr Pepper Snapple Group regular soda, and Snapple iced tea, also appeared to target black youth who saw 2.3 times or more ads for these brands compared to white youth. Two PepsiCo brands - Mtn Dew and Gatorade - also had relatively high targeted ratios of black to white youth.

In addition, energy drink companies advertised relatively more to black youth than to white youth. 5-hour Energy accounted for $22 \%$ of all ads viewed by black children and $28 \%$ of ads viewed by black teens, with targeted ratios of 2.7 and 2.2, respectively. Further, black children and teens were 2.6 and 2.1 times more likely to see ads for Red Bull, compared with white children and teens.

Targeted marketing on the internet
Internet targeted
marketing
Hispanic youth
targeted index

Black youth targeted
index

[^3]To identify potential targeted marketing on the internet, we quantify exposure by black and Hispanic youth to beverage company websites and identify the sites they visited disproportionately more often compared with all youth.

## Hispanic youth exposure fo beverage company websifes

Table 44 presents exposure data for the 19 websites in our analysis that averaged 1,000 or more unique Hispanic youth visitors monthly in 2013, including targeted indices. On average, Hispanic youth were $93 \%$ more likely to visit these websites compared with all youth.

Ten of the sites with the most Hispanic youth visitors also were visited relatively more often by Hispanic compared with all youth. 5HourEnergy.com ranked first in both Hispanic and all youth visitors, but Hispanic youth were $60 \%$ more likely to visit the site compared with all youth. 7UP.com and Sprite.com had the highest Hispanic targeted indices; Hispanic youth were approximately six times more likely to visit these websites compared to all youth. Of note, these two sites ranked numbers 22 and 39 in visits by all youth, but 7 and 18 for Hispanic youth. Hispanic youth also were two to four times more likely to visit DrinkNOS. com, ICoke.com, TumEYummies.com, and RedBull.tv.

Table 44. Hispanic youth visitors to beverage company websites

| Company | Website | Average monthly <br> Hispanic youth <br> (2/6-17 years) <br> unique visitors <br> $\mathbf{( 0 0 0 )}$ | Targeted <br> index |
| :--- | :--- | ---: | ---: |
| Innovation <br> Ventures | 5HourEnergy.com | 31.1 | $\mathbf{1 6 0}$ |
| Coca-Cola | MyCokeRewards.com | 7.3 | 67 |
| PepsiCo | Pepsi.com | 6.0 | $\mathbf{1 1 1}$ |
| Red Bull | RedBullUSA.com | 3.6 | 93 |
| PepsiCo | Gatorade.com | 3.4 | 102 |
| Red Bull | RedBull.com | 2.7 | 50 |
| Coca-Cola | Sprite.com | 2.5 | $\mathbf{5 7 2}$ |
| Coca-Cola | DrinkNOS.com | 2.2 | $\mathbf{2 0 4}$ |
| Coca-Cola | Coca-ColaScholars.org | 2.1 | $\mathbf{1 3 2}$ |
| Coca-Cola | ICoke.com | 1.5 | $\mathbf{2 3 7}$ |
| PepsiCo | PepsiCo.com | 1.4 | 69 |
| BYB Brands | TumEYummies.com | 1.4 | $\mathbf{3 6 0}$ |
| Monster Energy | MonsterEnergy.com | 1.4 | 57 |
| Dr Pepper | DrPepper.com | 1.3 | 49 |
| Snapple Group | VitaminWater.com | 1.3 | 90 |
| Coca-Cola | RockstarMayhemFest.com | 1.2 | $\mathbf{7 3}$ |
| Rockstar | Coca-ColaCompany.com | 1.1 | 68 |
| Coca-Cola | Cora | 1.1 | $\mathbf{6 0 1}$ |
| Dr Pepper <br> Snapple Group | 7UP.com | RedBull.tv | 1.0 |
| Red Bull |  | $\mathbf{2 0 4}$ |  |

Bold numbers indicate a high targeted index for Hispanic youth of 110 or more
Highlighting indicates children's drinks
Source: comScore Media Metrix Key Measures Report (2-17 years for January-June, 2013 and 6-17 years for July-December 2013)


Spanish-language pages from 5HourEnergy.com and 7UP.com

In contrast, nine websites on the top-20 list of websites visited most often by all youth were visited relatively less often by Hispanic youth, including VitaminWater.com (with a targeted index of 90), RockstarMayhemFest.com (73 targeted index), Snapple.com (39 targeted index), and MountainDew.com (31 targeted index).

## Black youth exposure to beverage company websites

Table 45 presents exposure data for the 13 websites in our analysis that averaged 1,000 or more unique black youth visitors monthly in 2013, including targeted indices. On average, black youth were $34 \%$ more likely to visit beverage company websites compared with all youth.

As with all youth, 5HourEnergy.com and MyCokeRewards. com attracted the most black youth visitors. Black youth were similarly like to visit 5HourEnergy.com, but 25\% less likely to visit MyCokeRewards.com,compared with all youth. Welchs. com had the highest targeted index: black youth were 2.5 times more likely to visit the site compared with all youth. Black youth also were more likely to visit Gatorade.com (which ranked third in number of black youth visitors compared with sixth for all youth), MountainDew.com, and OceanSpray.com. However, black youth visited other sites that were popular with all youth relatively less often, including RockstarMayhemFest. com (with a targeted index of 9), DrinkNOS.com (59 targeted index), Snapple.com (65 targeted index), and ICoke.com (86 targeted index).

Table 45. Black youth visitors to beverage company websites

| Company | Website | Average monthly <br> black youth <br> (2/6-17 years) <br> unique visitors <br> (000) | Targeted <br> index |
| :--- | :--- | ---: | ---: |
| Innovation <br> Ventures | 5HourEnergy.com | 16.7 | 98 |
| Coca-Cola | MyCokeRewards.com | 7.1 | 75 |
| PepsiCo | Gatorade.com | 4.8 | $\mathbf{1 6 2}$ |
| PepsiCo | Pepsi.com | 4.2 | 90 |
| Red Bull | RedBull.com | 3.8 | 80 |
| Dr Pepper | DrPepper.com | 2.3 | 94 |
| Snapple Group | PepsiCo.com | 1.9 | 101 |
| PepsiCo | RedBullUSA.com | 1.8 | 53 |
| Red Bull | MountainDew.com | 1.4 | $\mathbf{1 2 3}$ |
| PepsiCo | Coca-ColaCompany.com | 1.4 | 98 |
| Coca-Cola | Coca-ColaScholars.org | 1.3 | 97 |
| Coca-Cola | Welchs.com | 1.1 | $\mathbf{2 4 8}$ |
| Welch Foods Inc. | WceanSpray.com | 1.0 | $\mathbf{1 4 2}$ |
| Ocean Spray | Ocem |  |  |

Bold numbers indicate a high targeted index for black youth of 110 or more
Source: comScore Media Metrix Key Measures Report (2-17 years for January-June 2013 and 6-17 years for July-December 2013)

## Summary of marketing to Hispanic and black youth on TV and the internet

Seven companies spent $\$ 83$ million to advertise sugary drinks and energy shots on Spanish-language TV in 2013, an increase of $44 \%$ versus 2010 and on average 14\% of their total TV advertising budgets. By comparison, companies spent just \$9 million in total to advertise diet drinks, $100 \%$ juice, and water. Both PepsiCo and Dr Pepper Snapple Group substantially increased their Spanish-language advertising spending for sugary drinks by $\$ 17$ million and $\$ 13$ million, respectively. A new product, SK Energy, also spent $\$ 17$ million in 2013. Of note, SK Energy and 7UP only advertised on Spanish-language TV, while Dr Pepper Snapple Group and Sunny D devoted a relatively high one-third of their total TV advertising budgets to Spanish TV. In contrast, Coca-Cola Co. reduced its Spanishlanguage TV advertising by 38\% (although the company still ranked second in spending), while Red Bull and Kraft Foods virtually eliminated their Spanish-language TV advertising.
Hispanic preschoolers and children saw $23 \%$ and $32 \%$ more Spanish-language TV ads for unhealthy drinks in 2013 than in 2010. As in 2010, Hispanic preschoolers saw more of these ads than either Hispanic children or teens saw. However, Hispanic teens' exposure did not increase from 2010 to 2013. As a result, in 2013 Hispanic children saw more Spanish-language ads for sugary drinks and energy shots than Hispanic teens saw.

Black children and teens saw more than twice as many TV ads for sugary drinks and energy drinks compared with white children and teens in 2013. Compared with 2010, this gap increased as advertising to white youth declined at a greater
rate than advertising to black youth. Although black children and teens also watch more television than their white peers, this difference does not explain the entire difference in number of ads viewed. Brands with relatively high ratios of ads viewed by black compared with white youth included Vitamin Water (2.5), 5-hour Energy (2.2), and Red Bull (2.1). In the regular soda category, black teens saw four times as many ads for Sprite and three times as many Coca-Cola ads, compared with white teens. In contrast, black teens saw just $70 \%$ more ads for plain water, $60 \%$ more diet soda ads, and $50 \%$ more ads for $100 \%$ juice. These differences were comparable to differences in amount of TV viewing between black and white teens.

As found in our analysis of all youth visitors to beverage company websites, 5HourEnergy.com and MyCokeRewards. com attracted the most Hispanic and black youth visitors. However, some websites also attracted disproportionately high numbers of Hispanic or black youth visitors. For example, 7UP.com and Sprite.com had the highest Hispanic targeted indices; Hispanic youth were approximately six times as likely to visit these sites compared with all youth. In addition, Welchs. com had a high targeted index for black youth, who were 2.5 times as likely to visit the site compared with all internet visitors, and black youth were $62 \%$ more likely to visit Gatorade. com. Overall, Hispanic youth were $93 \%$ more likely to visit the beverage company websites in our analysis compared with all youth, and black youth were 34\% more likely to visit.

## Multicultural events and sponsorships

Beverage companies spend more to promote events and sponsorships specifically aimed at youth than companies in any other food category. ${ }^{15}$ The three largest beverage companies (PepsiCo, Coca-Cola, Dr Pepper Snapple Group) also have publicly commented on their strategies to appeal to multicultural youth. ${ }^{16}$ For example, Coca-Cola estimates that $86 \%$ of its growth through 2020 will come from multicultural youth. PepsiCo and Dr Pepper Snapple Group have noted their focus on sponsorships and events to attract multicultural youth and the "crossover" appeal of this strategy in reinforcing the "coolness" of their products. ${ }^{17}$ Although we could not comprehensively track these typically locally based marketing efforts, examination of the business press highlights many examples of events and sponsorships that appear to be aimed specifically at Hispanic and black youth, primarily for the companies' regular soda brands.

## coca-cola

Coca-Cola Co. has highlighted its strategy to appeal to all consumers in a changing America ${ }^{18}$ and has stated that its focus on multicultural youth - Hispanic consumers in particular - is vital to the company's future growth. ${ }^{19}$ To this end, the company sponsors the Hispanic Scholarship Fund, ${ }^{20}$ which provides higher education support for Latino students, and NAACP Project HELP, ${ }^{21}$ a health education program to improve quality of life for African-Americans. For over 30 years in Mexico and 10


Coca-Cola sponsorship of "Balon Rojo" youth soccer
years in the US, Coca-Cola has sponsored the Mexican National Team (soccer). ${ }^{22,23}$ In its Never Stop Believing campaign, this sponsorship was highlighted in TV ads, billboards, and a youth soccer workshop. Coca-Cola has also partnered with FIFA World Cup ${ }^{24}$ and sponsors Club Balon Rojo, which is a soccer workshop intended to motivate Latino teens to exercise.

Coca-Cola also uses promotions to appeal to black teens. For example, the company sponsored shows on Black Entertainment Television (BET), such as Wild Out Wednesday, where performers compete in R\&B, hip hop, and step dance competitions, and the Viewer's Choice Awards for music and entertainment. ${ }^{25}$ In 2012, the company's Pay It Forward campaign offered 16- to 19-year-olds the chance to win workshops with Essence president Michelle Ebanks, GRAMMY-winner/philanthropist $\mathrm{Ne}-\mathrm{Yo}$, and fashion designer Tracy Reese in honor of Black History Month. Entrants were required to sign up on MyCokeRewards.com. ${ }^{26}$

## Dr Pepper Snapple Group

Dr Pepper's crossover strategy features Pitbull as the brand's ambassador. The Cuban-American rapper and Latin GRAMMY winner has strong young, urban Hispanic appeal. His song Vida 23 was written to advertise the brand's 23 flavors. ${ }^{27}$ Dr Pepper also sponsors soccer events, such as the Dr. Pepper Fair Play tournament ${ }^{28}$ and the Dr Pepper Dallas Cup (since 2006), a youth club soccer tournament where the company donates
$\$ 5,000$ in sports gear to each of the eight winning teams. ${ }^{29}$
Another Latino-targeted brand, 7UP, has been an official sponsor of the Latin GRAMMYs since 2010. In 2013, its Live it UP contest awarded seven Enrique Iglesias fans with a private concert. ${ }^{30}$ In its more recent 2014 7x7Up campaign, the brand sponsored seven shows with seven popular electronic dance music artists, and kicked off events in Chile and Miami ${ }^{31}$ to reach Latino youth. ${ }^{32}$ 7UP was also the official soft drink of the 2013 CONCACAF Gold Cup (Confederation of North, Central American and Caribbean Association Football soccer championship). To promote the Gold Cup, 7UP used "consumer promotions, retail merchandising, ticket giveaways, premium offers, in-game advertising, product sampling and inclusion in promotional marketing materials, among other activities." ${ }^{33}$ The brand also sponsors Alianza de Futbol, an amateur Hispanic soccer organization in the United States, with logos appearing on players' shirts and 7UP tents at games. ${ }^{34}$

## Pepsico

Pepsi has also commented on its strategy to reach a broad range of young consumers through marketing with crossover appeal. ${ }^{35,36}$ For example, the brand has sponsored black artists such as Nicki Minaj (a rap artist and winner of multiple BET awards), including providing a branded livestream to her free New York City concert. ${ }^{37}$ Its partnership with Beyonce is another example of a celebrity spokesperson with crossover


7UP soccer sponsorship and logo on a young player's jersey


Celebrities with crossover appeal in Pepsi ads
appeal. ${ }^{38} 39$ In 2013, Pepsi sponsored concert tours for major Latino musicians and partnered with Tr3s, a music television network for young Hispanics, to promote its Viva Hoy (Live for Now) campaign. ${ }^{40}$ The brand also used Latino actor, William

Levy, to endorse Pepsi NEXT. He filmed several humorous videos in both Spanish and English, and supported the campaign on social media platforms.

## Markefing to Hispanic and black youth

## Signs of progress

- On Spanish-language TV, Kraft Foods and Red Bull eliminated virtually all advertising (both companies had spent approximately $\$ 3$ million in 2010). Coca-Cola also reduced its advertising spending on Spanish-language TV by 38\% and advertising for 5-hour Energy went down 50\%.
- Black children and teens saw $32 \%$ and $27 \%$ fewer TV ads for sugary drinks and energy drinks in 2013 compared with 2010, although this decrease was smaller than the decline in ads viewed by white youth.


## Continued reasons for concern

- Seven beverage companies spent $\$ 83$ million to advertise sugary drinks and energy shots on Spanish-language TV in 2013, 44\% more than was spent in 2010. Dr Pepper Snapple Group almost tripled its Spanish-language advertising to become the largest beverage advertiser in this medium, and Sunny D increased its advertising by 18\%. PepsiCo and SK Energy did not advertise in 2010, but each spent \$17 million in 2013.
- Overall, companies allocated 14\% of their TV advertising budgets to Spanish-language TV in 2013. However, Dr Pepper Snapple and Sunny D devoted a relatively high one-third of all TV advertising spending to Spanish TV, while three brands advertised exclusively on Spanish TV: SK Energy, 7UP, and Fuze iced tea. Further, just 10\% of beverage companies' Spanishlanguage TV advertising budgets promoted diet drinks, $100 \%$ juice, and water.
- Hispanic preschoolers and children saw 23\% and 32\% more unhealthy drink ads on Spanish-language TV in 2013 than in 2010. Hispanic preschoolers saw approximately one-third more of these ads than either Hispanic children or teens saw, while children saw somewhat more ads than teens saw.
- Overall, black youth saw more than twice as many TV ads for sugary drinks and energy drinks compared with white youth, and this disparity increased in 2013 versus 2010. Black teens saw four times as many Sprite ads and three times as many Coca-Cola ads than white teens saw. Other brands with high black to white targeted ratios for teens included Vitamin Water, Sun Drop, Snapple, 5-hour Energy, and Red Bull. In contrast, black teens saw $50 \%$ to $70 \%$ more TV ads for plain water, diet soda, and $100 \%$ juice, comparable to differences in amount of TV viewing for the two groups.


## Continued reasons for concern (continued)

- In 2013, Hispanic youth were $93 \%$ more likely to visit all beverage company websites compared with all youth, and black youth were $34 \%$ more likely to visit these websites. Websites that attracted disproportionately high numbers of Hispanic youth included 7 UP.com and Sprite.com, and websites that were relatively more popular with black youth included Welchs. com and Gatorade.com. As with all youth, 5HourEnergy.com and MyCokeRewards.com attracted the most Hispanic and black youth visitors.
- Coca-Cola, Dr Pepper, 7UP, and Pepsi promoted numerous youth-oriented music and sports events and sponsorships to appeal to multicultural youth.

Beverage companies have reduced total sugary drink advertising to youth on TV and the internet, and many have improved reporting of nutrition information. However, the overall nutritional content of sugary drinks has not improved, companies continue to target marketing for sugary drinks and energy drinks directly to children and teens, and newer forms of marketing popular with youth have increased.

In recent years, major beverage companies have taken steps to address public health concerns about the harmful effects of sugary drinks and position themselves as partners in solving the obesity crisis. ${ }^{1}$ The American Beverage Association (ABA) and its member companies have promised to reduce beverage calories consumed by $20 \%$, including by offering more low- and no-calorie drinks, offering sugary drinks in smaller-sized containers (e.g., 8-ounce cans), and providing consumers with more information about calories in sugary drinks (e.g., by labeling calories per serving or container on product packaging). ${ }^{2}$ ABA member companies also promise that they will only advertise water, juice, and milk-based drinks to audiences that are predominately under age 12. Beverage companies participating in the Children's Food and Beverage Advertising Initiative (CFBAI) also agreed to lower maximum sugar content of drinks advertised in child-directed media, implementing new category-specific uniform nutrition standards by the end of 2013. ${ }^{3}$

However, noticeably absent from beverage companies' promises has been any mention of reducing marketing of sugary drinks to consumers aged 12 and older. In fact, while PepsiCo and Cola-Cola Co. promised to reduce beverage calories consumed, they also promised their shareholders to invest $\$ 1.5$ billion (combined) ${ }^{45}$ to address declining sales of their core businesses (including sugar-sweetened beverages). Despite public health concerns about higher rates of obesity and other diet-related diseases within communities of color, ${ }^{6}$ PepsiCo, Coca-Cola Co., and Dr Pepper Snapple Group have publicized their intent to focus on multicultural millenials as a key to growing their businesses. ${ }^{78910}$ Further, energy drink companies, including Red Bull, Monster Energy, and Rockstar, continue to defend their marketing practices that target adolescents, ${ }^{11}$ even though the American Academy of Pediatrics has concluded that these products can be dangerous and should never be consumed by youth under age $18 .{ }^{12}$

Objective and transparent data are necessary to evaluate changes in the nutritional content of sugary drinks and the amount of marketing aimed at child and teen audiences, as well as marketing targeted to black and Hispanic youth. This report measures the industry's progress in improving the beverage marketing environment that surrounds young people and encourages them to consume products that can harm their health.

## Progress in sugary drink nutrition

Major beverage companies have largely fulfilled their promises to develop lower-sugar versions of their sugary drink brands and provide more information to consumers about calories in these drinks. PepsiCo launched reduced-sugar versions of Pepsi (Pepsi NEXT) and Mtn Dew (Kickstart). These products contain 10 grams of sugar and 40 calories per 8 -ounce serving ( 15 gr of sugar and 60 kcal in a 12-oz can). Dr Pepper Snapple Group also introduced 10-calorie versions of its most popular soda brands, including Dr Pepper Ten, 7UP Ten, and Sunkist Ten (these products are categorized as diet products in our analysis). Coca-Cola also devoted $1 \%$ of its advertising to promote its smaller-sized cans.

Sixty-three of the 162 children's drinks in our analysis also contained 40 calories or less per serving to qualify as reducedsugar beverages. In addition, both Sunny D and Hawaiian Punch (all varieties but two) reduced the sugar content of their drinks by 3 to 15 grams per serving since 2011. Although the majority of reduced-calorie children's drinks contain sugar and artificial sweeteners, two children's brands (Apple \& Eve Waterfruits and Vita Coco Kids) offered products with less than 40 calories per serving and no artificial sweeteners. These products also contained $10 \%$ and $50 \%$ juice content, respectively. Although they do contain added sugar and should not replace regular water and milk in children's diets, products such as these represent an improvement in the nutrition of children's drinks.

Companies supported their diet soda and reduced-sugar products with increased advertising in 2013. Total advertising spending for diet soda increased by $17 \%$ from 2010 to 2013, while advertising spending for regular soda declined by $4 \%$. PepsiCo devoted $24 \%$ of its advertising spending for Pepsi sugar-sweetened soda to promote Pepsi NEXT and approximately one-half of Mtn Dew spending on Kickstart. Kraft Foods also largely replaced advertising to children for Capri Sun and Kool-Aid fruit drinks with advertising for Capri Sun Roarin' Waters (8 gr of sugar and 30 kcal per 6-oz pouch) and Capri Sun Super V 100\% fruit and vegetable juice blend.

ABA members Coca-Cola Co., PepsiCo, and Dr Pepper Snapple Group reported calorie information on the front of the majority of product packages and provided easily accessible nutrition information for most products on their websites. In addition, energy drink companies substantially increased their reporting of caffeine in these products. In 2014, 100\% of energy shots and $92 \%$ of energy drinks disclosed their actual caffeine content, a major improvement over 2011 when only half of energy drinks and one-third of energy shots reported caffeine.

The most notable evidence of progress was a substantial reduction in sugary drink and energy drink advertising to children and teens on TV. Compared with 2010, preschoolers (2-5 years), children (ages 6-11), and teens (ages 12-17) saw $33 \%, 39 \%$, and $30 \%$ fewer of these ads, respectively. There was a steady decline in TV advertising to preschoolers and
children from 2010 to 2013, while sugary drink advertising to teens increased from 2010 to 2012, and then declined by 28\% from 2012 to 2013. Among product categories, TV advertising for children's fruit drinks (including Capri Sun, Kool-Aid, and Sunny D) and other fruit drinks declined the most ( $-43 \%$ or more). Regular soda TV advertising to children and teens went down by approximately $30 \%$, with declines of $24 \%$ or more for Sprite, Coca-Cola, and Dr Pepper.

There was also progress in marketing on the internet. The number of display ads for sugary drinks and energy drinks on third-party websites declined by $72 \%$ from 2010 to 2013, and ads on youth websites represented just 5\% of all sugary drink ads compared with $11 \%$ in 2013. Further, the number of youth (2-17 years) visiting beverage company websites in 2013 declined by $20 \%$ or more for over half of the websites evaluated both years. In addition, four of the top-20 websites in 2010 had been discontinued or did not have enough youth visitors to report in 2013, including Kraft Foods' website for Capri Sun and PepsiCo's RefreshEverything.com (supporting its Pepsi Refresh promotion).

## Continued reasons for concern

Despite evidence of progress, youth continue to consume too many sugary drinks. In 2013, three-quarters of high school students consumed at least one can of sugar-sweetened soda in the past week, and one-quarter consumed one or more daily. ${ }^{13}$ U.S. households spent $\$ 6.4$ billion on sugarsweetened soda in 2013, and another $\$ 3.3$ billion on sugary sports drinks, iced tea and coffee, and flavored water; \$2.6 billion on fruit drinks; and $\$ 1.9$ billion on energy drinks. In contrast, they spent less than one-half this amount on 100\% juice ( $\$ 3.5$ billion) and plain water ( $\$ 3.0$ billion). From 2010 to 2013, the amount of soda (including diet) and fruit drinks sold declined by $7 \%$ and $3 \%$, respectively, and bottled water sales increased by $15 \%$. Yet at the same time, the volume of sports drinks and ready-to-serve teas and coffees increased, while energy drink sales rose $41 \%$.

Although companies introduced some reduced-sugar and diet sodas, there were no changes in overall nutritional content for products offered by sugary drink brands from 2011 to 2014. In addition, the majority of children's drinks remained high in sugar and their packaging featured nutrition-related messages that might mislead parents into believing these products are healthier choices for children.

Further, we found considerable evidence of increased marketing directly to children or teens for some sugary drink brands and energy drinks overall. We also found increased usage of non-traditional forms of marketing with strong appeal to young consumers, including brand appearances in primetime TV programming (i.e., product placements), marketing in social media, and mobile marketing. In addition, many sugary drink and energy drink brands increased their marketing to black and Hispanic youth.

## Children's drinks

Children's drinks remain a large segment of the sugary drink market, totaling $\$ 850$ million in sales in 2013 and representing $34 \%$ of sales of all products in the fruit drink and flavored water categories. We examined 15 brands of children's fruit drinks and two flavored water brands. One 8-ounce serving of a sugar-sweetened children's fruit drink has a median sugar content of 20 grams (i.e., 5 tsp), which exceeds the maximum amount of added sugar recommended for children under age 9 to consume in an entire day. ${ }^{1415}$ Further, just $38 \%$ of children's fruit drinks contain any juice (a median of 5\%) and $36 \%$ also contain artificial sweeteners. Compared with other fruit drinks, children's fruit drinks have fewer calories, but they are less likely to contain any juice and more likely to contain artificial sweeteners.

Despite the poor nutritional quality of the majority of children's drinks, these products are often marketed to parents using messages that imply they are healthy choices for children. For example, children's fruit drinks averaged 4.5 nutrition-related messages on product packages. These products often highlighted reduced-calorie claims, such as "25\% less sugar than other leading children's drinks," as well as claims about vitamins and the absence of artificial flavors, preservatives, or high fructose corn syrup. The nutrition-related messages on children's drinks are technically accurate, but they can create a health halo that leads parents to infer that these products are nutritious options for children, despite high levels of added sugar. ${ }^{16}$ Of note, we could not obtain complete ingredient information for many of the fruit drink products, including children's fruit drinks, in our analysis.

The common use of nonnutritive sweeteners in children's drinks also raises concerns about potentially misleading parents. Although one-third of children's drinks contained artificial sweeteners, their inclusion was never highlighted on the front of product packages, even on packages that touted no artificial flavors or preservatives. Artificial sweetener content could only be determined by careful reading of ingredient lists and knowledge of the chemical names of sweeteners (ingredient lists rarely indicated the better-known brand names of sweeteners, such as Splenda or Equal). Although one could argue that nonnutritive sweeteners allow companies to offer lower-calorie children's drinks, they also were found in fruit drinks that contained high amounts of sugar, such as Happy Drinks ( 27 gr of sugar), Hawaiian Punch (13-29 gr), and Sunny D (14-15 gr). Further, research has shown that the majority of parents do not want to serve their children drinks that contain artificial sweeteners, ${ }^{17}{ }^{18}$ which could explain why they were not highlighted on product packages. In addition, the Institute of Medicine has concluded that zero-calorie sweetener consumption by children has not been adequately studied, and further research is needed to determine whether these drinks are a healthy part of children's diets. ${ }^{19}$

As noted, there were some positive changes in marketing of children's drinks, but many high-sugar children's drinks continued to be marketed directly to children. At the same time that Kraft Foods improved the products advertised to children on TV, the company also introduced a Capri Sun Big Pouch fruit drink with 130 calories and 33 grams of sugar per 11.2-ounce pouch and just $10 \%$ fruit juice. This product is aimed at older children, and each pouch contains as many calories as most 12-ounce cans of soda. In 2013, Kraft Foods placed ads for Kool-Aid and Capri Sun fruit drinks on children's websites, and continued to offer child-targeted advergame mobile apps for these products in 2014. From 2010 to 2013, Kraft Foods also doubled the number of display ads for Capri Sun (including both Roarin' Waters and fruit drinks) placed on youth websites. In addition, companies that do not participate in the CFBAI continued to advertise sugary children's drinks directly to children on TV (Sunny D) and the internet (Tum E Yummies).

## Advertising for sugary drinks directed af youth

While there was an overall decrease in TV advertising to youth, not all beverage companies contributed to this positive trend. Notably, PepsiCo increased TV advertising of its sugary drink brands to preschoolers by 39\%, and by 25\% to children and $10 \%$ to teens. In contrast, Dr Pepper Snapple Group and Coca-Cola Co reduced TV advertising for its sugary drink brands to all youth age groups by one-quarter or more. Further, beverage companies have not made any commitments to reduce advertising to children aged 12 and older, and several sugary drink brands increased their advertising to teens from 2010 to 2013, including three PepsiCo brands (Pepsi regular soda, Mtn Dew, and Gatorade) and two Dr Pepper Snapple Group brands (Snapple and Sun Drop). Of note, TV ads viewed by teens for regular soda increased $146 \%$ and Snapple ads (including iced tea and brand-level ads) increased four-fold. Sun Drop was not advertised in 2010, but ranked ninth in TV advertising to teens in 2013.

We also found evidence that several sugary drink brands targeted TV advertising to teens directly. Teens saw more ads for Sun Drop, Gatorade, Mtn Dew Kickstart, Vitamin Water, and Sprite, compared with adults. As teens spend 30\% less time watching TV than adults do, the companies placed their ads on programs watched disproportionately more often by teens than by adults, which indicates that the companies likely intended to reach teens disproportionately more often with this advertising. Of note, teens saw 2.3 times as many ads for Sun Drop soda compared with adults, the highest teen-targeted ratio for any product in our analysis. Mtn Dew Kickstart was launched in 2013 with advertising that featured youth-oriented themes (e.g., skateboarding) and youthful actors. This reduced-sugar soda contains 5\% juice and 96 mg of caffeine per 16-ounce can and has been coined a "breakfast soda" by media outlets. ${ }^{20}$ Two additional Mtn Dew Kickstart varieties were added in 2014 (and therefore not included in this analysis) and are marketed as nighttime drinks with the tagline "Kickstart Your Night." ${ }^{21}$ Another highly
caffeinated Mtn Dew product, Mtn Dew Game Fuel, was not advertised on TV in 2013, but was promoted on the internet as a drink for young "gamers."

Another indicator of advertising targeted to teens is placement of display ads on third-party websites visited disproportionately more often by youth under 18 (e.g., FanFiction.net, DeviantArt.com). Three sugary drink brands placed more than one-quarter of their display ads on these youth sites: Hawaiian Punch fruit drink, and Jarritos and Crush sodas. CFBAI companies also placed more than 46 million ads for sugary drinks not approved for advertising to children on children's websites (e.g., Nickelodeon sites, Roblox.com, Disney Online), including Coca-Cola, Powerade, Pepsi NEXT, and NOS energy drink. Although these sites may not meet CFBAI definitions of child-directed media, they nonetheless are visited disproportionately more often by children than by adults.

However, not all sugary drink brands with the most advertising to teens appeared to target them directly. Despite increases in total TV ad exposure for some of these brands, in 2013 teens saw one-half as many ads for Pepsi, Dr Pepper, and CocaCola regular sodas compared with adults and $10 \%$ to $20 \%$ fewer TV ads for Snapple brand and iced teas. In addition, some sports drink and regular soda brands with the most TV advertising to children did not appear to target them directly (including Gatorade, Pepsi, Mtn Dew, Dr Pepper, and CocaCola) as children saw less than half the number of ads that adults saw.

However, as brands attempt to increase their share of the declining soft drink market by increasing advertising to adults, children and teens will also likely be exposed to greater numbers of ads. Especially troubling is the finding that the increase in TV advertising for PepsiCo sugary drink brands affected preschoolers (who had the greatest increase in exposure among youth age groups) more than older children or teens, as preschoolers may be more likely than older children to be exposed to adult television while playing in the same room their caregivers are watching TV. ${ }^{22}$ These trends are expected to continue as Coca-Cola has promised to step up its traditional media advertising. ${ }^{23}$ These findings support the need to reduce advertising for sugary drinks on television programs viewed by large numbers of children and teens, not just advertising during programming where children make up $35 \%$ or more of the audience (i.e., the current definition of child-directed media according to the CFBAI). ${ }^{24}$

## Energy drink advertising to youth

As sales of energy drinks have climbed over the past three years, so has energy drink advertising. Total advertising spending for energy drinks and shots rose 9\% from 2010 to 2013 to reach $\$ 175$ million; only the regular and diet soda categories in our analysis spent more on advertising in 2013. TV advertising spending for energy drinks increased $13 \%$ and radio advertising more than doubled. Moreover, teens saw

20\% more TV ads for energy drinks and shots compared with adults. Energy drinks and shots represented one out of three TV ads for sugary drinks viewed by teens and one out of four ads viewed by preschoolers and children.

Energy drink brands with the most traditional advertising to youth included 5-hour Energy shots - advertised more to children and teens on TV than any other brand in our analysis - and Red Bull, which ranked fourth in TV advertising to teens and sixth for children. Teens also saw $30 \%$ more TV ads for Red Bull compared with adults and $20 \%$ more 5-hour Energy ads, indicating that this advertising was targeted to a youth audience. Although 5-hour Energy reduced its TV advertising to youth by approximately one-third from 2010 to 2013, Red Bull increased advertising to youth by $59 \%$ or more. One new product, SK Energy, spent over $\$ 20$ million in advertising in 2013. This energy shot contained 250 milligrams of caffeine per 2.5 -ounce container, more caffeine than any other drink in this report and more than three times the median caffeine for the energy drink category as a whole. Of note, this product was only advertised on radio and Spanish-language TV.

On the internet, energy drink websites were among the most popular sites in our analysis for children and teens. 5HourEnergy. com was visited by twice as many teens compared with all other beverage company websites, and ranked second in visits by children. Child and teen visitors to the site increased by 600\% and almost $800 \%$, respectively, from 2010 to 2013. RedBull. com, RedBullUSA.com, and MonsterEnergy.com also ranked in the top-ten beverage company websites visited by youth, and teen visitors to Red Bull's six websites almost quadrupled from 2010 to 2013. Red Bull also ranked fifth in display ads placed on youth websites. In social media, Red Bull ranked among the top-three sugary drink brands on Facebook, Twitter, YouTube, Instagram, and Vine. 5-hour Energy had the mostviewed YouTube video with 46 million views, while Red Bull's channel featured 4,200 different videos. Monster Energy and Rockstar also ranked among the most active brands in social media.

These findings of aggressive energy drink marketing, much of it targeted to youth under 18, are particularly problematic given the evidence that highly caffeinated drinks can be harmful to young people's health. The American Academy of Pediatrics has stated that "energy drinks have no place in the diets of children and adolescents" and recommends that they never be consumed by those under 18. ${ }^{25}$ However, consumption by youth is increasing and documented adverse effects, as reported by poison control centers and hospitals, occur disproportionately in young people. ${ }^{26}$ The ABA, which counts Red Bull, Rockstar, and Monster Beverage Corporation as members, ${ }^{27}$ has issued guidelines regarding marketing to children and youth for member companies in the ABA Guidance for the Responsible Labeling and Marketing of Energy Drinks. ${ }^{28}$ Through this commitment, member companies pledge not to market their products to children 12 and under, but companies maintain that their products are safe and appropriate to market to teens. ${ }^{29}$

## Increases in newer forms of markefing

At the same time that most beverage companies have reduced traditional advertising on TV and the internet, many have stepped up other forms of marketing - including product placements, social media, and advergame apps for mobile devices. Although much of this marketing is aimed at a broad audience (including adults), these media and the messages used strongly appeal to youth.

## Brand appearances

Brand appearances (primarily paid product placements) by sugary drinks and energy drinks have become more prevalent on prime-time TV - compared with 2010, they appeared on $33 \%$ more telecasts in 2013 and the total amount of screen time devoted to these drinks almost tripled. The average length of these appearances was 25.7 seconds-per-telecast, comparable to a 30-second TV commercial. Although our data cannot determine whether these appearances were paid product placements by companies, appearances for other types of beverages (including 100\% juice and plain water) declined during the same period. However, it appears that most programs that included brand appearances did not have large child and teen audiences, with some exceptions. Three TV programs were responsible for over three quarters of the appearances viewed by children and teens: American Idol (Coca-Cola), America's Got Talent (Snapple), and The Big Bang Theory (Sprite, 7Up, Monster Energy, Red Bull). It is interesting to note that Coca-Cola was responsible for three-quarters of sugary drink brand appearances viewed by youth in 2010, but Snapple appearances viewed approached Coca-Cola levels in 2013 due to the popularity of America's Got Talent with young viewers.

## Social media

The use of social media to promote sugary drinks, especially energy drinks and soda brands, also grew exponentially from 2011 to 2014, and newer platforms have emerged to reach young people. The number of Facebook likes for the brands in our analysis more than tripled, compared with a $21 \%$ increase in active Facebook users (in North America). ${ }^{30}$ Twitter followers of sugary drink brands increased even more dramatically, from approximately 1 million in 2011 to 10.8 million in 2014 - a growth rate of more than $1000 \%$, compared to a $160 \%$ increase in Twitter users overall over the same period. ${ }^{31}$ Of note, in 2013 one-quarter of online teens used Twitter, up from 14\% in 2011.32 Sugary drink brands also have been early adopters of Instagram and Vine, new social media platforms popular with youth. Instagram has many tween and teen users. ${ }^{334}$ In 2014, 30\% of teens reported Instagram as their preferred social network, an increase of 13 percentage points from the previous year, while preferences for Twitter and Facebook declined. ${ }^{35}$

Compared with brands in all product categories (including technology, fashion, and other food brands), sugary drinks are among the most popular brands on social media. Red Bull ranks first in followers of all corporate brands on Facebook and Coca-Cola ranks second, and both are in the top-ten most viewed YouTube brands. ${ }^{36}$ While these two brands were also the top sugary drink brands in our 2011 social media analysis, Pepsi joined the list of top-three social media sugary drink brands in 2014, with exponential growth in Facebook and YouTube followers. Red Bull, Coca-Cola, and Pepsi also led in YouTube views and Vine followers in our analysis. On Instagram, Red Bull had the most followers, and Gatorade and Coca-Cola ranked fourth and fifth behind two other energy drink companies (Monster Energy and Rockstar). Another energy drink brand, 5-hour Energy, ranked fourth in YouTube views.

The popularity of these brands on Facebook and YouTube is likely driven in part by extensive advertising of sugary drinks and energy drinks on these sites. In 2013, there were almost 2 billion sugary drink display ads viewed on these two sites, $31 \%$ of all display ads in our analysis. Coca-Cola placed the most display ads on Facebook: almost 26 million ads viewed in 2013, representing 18\% of all its display ads. In addition, Sunkist soda placed $89 \%$ of its display ads on Facebook, Gatorade placed 59\% of ads, and NOS energy drink placed $42 \%$ of ads on the site. 5-hour Energy dominated in advertising on YouTube, placing over 52 million ads on the site in 2013, $73 \%$ of all its display ads viewed. Mtn Dew and Red Bull also placed one-quarter of their display ads on YouTube.

Highly engaging social media content also likely has contributed to brands' success in this medium. For example, Red Bull maintained separate social media accounts for Red Bull X-Fighters, Red Bull Air Race, Red Bull Flugtag, and Red Bull Music Academy. On YouTube, Red Bull offered 4,200 different videos that had been viewed over 900 million times. Red Bull's videos and posts focused on entertaining users with youth-oriented music, sports, and stunts, with the product being a subtle part of the message (i.e., just the Red Bull logo). ${ }^{37}$ The newer social media platforms with short video options (15 seconds on Instagram and 6 seconds on Vine) now allow brands such as Red Bull to bring shortened versions of their popular YouTube videos to reach even more viewers. Similarly, Coca-Cola maintained separate accounts for My Coke Rewards and Coca-Cola Freestyle machines; Rockstar maintained accounts for its music festivals (Rockstar Mayhem and Rockstar Uproar) and its sexy models on Instagram; Mtn Dew maintained social media accounts for its Mtn Dew Green Label music sponsorship.

Sugary drink brands create posts and messages to engage their followers daily and encourage them to share these branded messages with their friends. Engagement devices such as hashtags, favorites, retweets, regrams, and revines further increase these brands' social media reach. Our analysis of tweets showed that some brands tweeted as much as 60
times per day and most of the top brands had high retweet rates of $50 \%$ or more. Brands' content is also well-integrated across all social media platforms, so users simply click a link on one platform to be directed to another to increase engagement with the brand and introduce users to the newest social media platforms.

Our examination of social media posts for sugary drink and energy drink brands found many examples of messages likely designed to appeal to a teen audience, including teen-targeted posts for Sun Drop, Mtn Dew, Fanta, and Gatorade, as well as black-targeted Sprite posts. In 2013, Coca-Cola announced its Ahhh all-digital campaign directly aimed at the teen market. ${ }^{38}$ Some social media campaigns also featured messages with themes that appeal to children. For example, Capri Sun supported its Capri Sun Big Pouch on both Facebook and Twitter. Mtn Dew utilized an animated superhero at a breakfast table in some posts. Lipton posts included links to videos of the Muppets suggesting that iced tea makes a meal less boring than meals with water. Fanta's Facebook and YouTube pages linked to advergame apps on its Facebook page and animated videos on its YouTube channel.

## Mobile markefing

As the use of social media marketing has exploded, so has brands' ability to reach young people on their mobile devices. Sixty-five percent of time spent with social media occurs on mobile devices. ${ }^{39}$ Much of the branded content on social media was also available as downloadable apps on mobile devices, including 15 different Red Bull apps, apps for Monster Energy and Rockstar music and sports events, and a Coca-Cola app to find Freestyle machines. Most troubling was the wide variety of smartphone apps that integrated sugary drinks as part of the game play (i.e., advergames) utilizing cartoon-style animation and simple game play that would appeal to children, including Capri Sun tattoos, Kool-Aid Man photo bomb, Fanta Fruit Slam, Fanta Fun Tap, Snapple Spiny Lobsters in Snaplantis, Mtn Dew Baja or Bust, Lipton Cool Cubes, Sierra Mist Must Haves, and Red Bull Kart Fighters.
Exposure to these newer types of marketing promoting sugary drinks and energy drinks raises additional concerns as young people (and even adults) have more difficulty recognizing and counteracting marketing disguised as entertainment (e.g., a TV program, game or video, event sponsorship) or a message from a friend on social media. ${ }^{40}$ Most parents are not aware that companies attempt to influence their children directly through these non-traditional forms of marketing that did not exist ten years ago. ${ }^{41}$ Further, these types of marking are more difficult for parents to monitor, especially marketing that reaches young people on their smartphones (i.e., social media, mobile apps) virtually everywhere they go. Research with parents also shows that they are highly supportive of policies that would restrict social media and mobile marketing to youth under age $18 .{ }^{42}$

## Marketing to black and Hispanic youth

Although beverage companies pledge to be part of the solution to high rates of obesity, they are noticeably silent about the public health impact of marketing practices promoting sugary drinks to communities of color - the same communities where greater consumption of these products contributes to higher rates of obesity, diabetes, heart disease, and other diet-related diseases. ${ }^{43}{ }^{44}$ On the contrary, Coca-Cola Co., Dr Pepper Snapple Group, and PepsiCo have all publicized their intent to grow their businesses by focusing marketing of their core brands (including sugar-sweetened sodas) on multicultural youth. These companies also discuss utilizing black and Latino celebrities and themes with crossover appeal to make their products appear cool and increase their appeal to all youth. ${ }^{45-48}$
Overall, black children and teens saw more than twice as many TV ads for sugary drinks and energy drinks compared with their white peers, and this disparity grew from 2010 to 2013. As black youth watch approximately $60 \%$ more television than white youth watch, a portion of this higher exposure to advertising was due to differences in television viewing. However, some brands appeared to target their advertising directly to black youth. For example, black teens saw four times as many ads for Sprite and three times as many CocaCola ads compared with white teens. Black teens also saw 2.0 to 2.5 times as many ads for Vitamin Water, Sun Drop soda, Snapple, 5-hour Energy, Sunny D, Red Bull, Capri Sun Roarin' Waters, and Mtn Dew. In contrast, black teens saw $50 \%$ to $70 \%$ more TV ads for plain water, diet soda, and $100 \%$ juice compared with white teens, comparable to the additional time that black youth spent watching TV.

Positively, two companies eliminated virtually all advertising for sugary drinks on Spanish-language TV in 2013 - Kraft Foods and Red Bull - while Coca-Cola Co. and 5-hour Energy reduced their Spanish-language advertising by $38 \%$ or more. However, total spending to advertise sugary drinks and energy shots on Spanish-language TV increased by $44 \%$ from 2010 to 2013, and many companies greatly expanded their promotion of sugary drinks on Spanish-language TV. PepsiCo and SK Energy did not advertise on Spanish TV in 2010, but each spent $\$ 17$ million in 2013. Dr Pepper Snapple Group almost tripled its Spanish-language advertising to become the largest beverage advertiser in the medium, and Sunny D increased its advertising by $18 \%$. Notably, both companies reduced their English-language TV advertising spending but allocated one-third of their TV advertising budgets to Spanish-language advertising in 2013, compared with $14 \%$ of TV budgets for all companies. Dr Pepper Snapple Group's 7UP brand, as well as SK Energy, devoted their entire TV advertising budgets to Spanish-language TV.
In 2013, five sugary drink brands spent more than $\$ 9$ million each in advertising on Spanish-language TV. In contrast, all beverage companies spent $\$ 9.1$ million in Spanish-language advertising for all diet drinks and $100 \%$ juice brands combined
(plain water brands did not advertise on Spanish-language TV). Further, Hispanic preschoolers and children saw 23\% and 32\% more Spanish-language TV ads for sugary drinks and energy shots in 2013 than they had in 2010, while Hispanic preschoolers saw more ads than either Hispanic children or teens saw.

## Recommendations

These findings confirm that major beverage companies have delivered on their promises to develop lower-sugar versions of regular soda and children's drinks and to provide consumers with more information about the calories and caffeine in their products. However, at the same time, companies continued to extensively market their high-sugar and highly caffeinated drinks to youth. Companies invest in marketing to enhance positive attitudes about their brands and increase product sales and consumption. They cannot market unhealthy products directly to children and teens and then put the onus on consumers (especially more vulnerable youth) to select the healthier options - especially when those products receive less than one-quarter the marketing support.
Beverage companies should do much more to ensure that youth consume fewer of the sugary drinks and energy drinks that can harm their health:

- Stop marketing sugary drinks and energy drinks to children and teens;
- Do not target sugary drink marketing to communities that suffer disproportionately from diet-related diseases, including Hispanic and black youth;
- Strengthen CFBAI self-regulatory pledges to cover children up to age 14, ensure that companies' self-regulatory policies cover all forms of marketing, and increase company participation in the program (notably absent are Dr Pepper Snapple Group and Sunny Delight Beverages);
- Establish reasonable CFBAI definitions to identify "childdirected" marketing - current definitions exclude more than one-half of TV food advertisements that children see and obvious child-targeted websites such as Nickelodeon and Disney sites;
- Discontinue marketing practices that disproportionately appeal to teens, including advertising and product placements on television programming with large numbers of youth in the audience and youth-oriented social media, celebrities, and sponsored events;
- Further improve transparency and consumer access to ingredient information, such as providing ingredient lists on websites and disclosing nonnutritive sweeteners on product packaging; and
- Replace marketing of high-sugar beverages to youth with marketing of reduced-sugar drinks, plain water, and 100\% juice.


## Public policy options

Given companies' obligations to their shareholders to maintain market share and grow sales of their core businesses, government intervention may be necessary to enable companies to reduce marketing of high-sugar products to youth. Currently, companies that choose to reduce marketing for their unhealthy brands risk losing business to their competitors who do not do the same. Regulation and legislation can help counteract marketing by lessening the appeal of sugary drinks to youth and leveling the playing field among companies.

Policy makers should:

- Require straightforward and easy-to-understand labeling requirements, such as compelling companies to highlight calories, added sugars, and nonnutritive sweeteners on the front of product packages. Regulators could also require products featuring nutrition-related claims on product packaging meet minimum nutrition standards;
- Provide funding to regularly update the Federal Trade Commission's reports on food and beverage industry expenditures on marketing directed to children and adolescents;
- Monitor and enforce children's privacy protections under the Children's Online Privacy Protection Act (COPPA), including in social and mobile media; and
- Prohibit the sale and marketing of energy drinks to children under age 18.


## Advocafes, researchers, and parents

Others can take action to encourage beverage companies to reduce marketing of sugary drinks and energy drinks to children and teens.

Advocates can play an important role by serving populations that often have a limited voice in the policy process:

- Support policy measures that can help reduce consumption and marketing of sugary drinks;
- Educate policy makers about the negative impact of marketing sugary drinks and energy drinks to children and teens and how it is contributing to overconsumption of these products;
- Educate shareholders about specific company marketing practices to fuel demand for responsible marketing practices;
- Pressure beverage companies with public relations and letter writing campaigns demanding they improve their marketing practices; and
- Develop community-based solutions and share success stories.

Researchers can help build critical evidence to support policy maker and advocacy actions:

- Evaluate strategies to reduce health disparities associated with consumption of sugary drinks;
- Measure the impact of sugary drink marketing targeted to populations vulnerable to health disparities;
- Examine how newer forms of marketing (e.g., social media, product placements, internet advertising) may differentially affect youth;
- Establish ongoing measures of youth consumption of energy drinks, as well as other sugary beverages;
- Evaluate the efficacy of any new policies implemented to reduce consumption or limit marketing of sugary drinks; and
- Continue to monitor industry progress in reducing marketing of sugary drinks and energy drinks to children and teens.

Parents can also take steps to let beverage companies know that they must change their practices:

- Ignore the claims on the front of children's drink packages, and check ingredient lists for artificial sugars, artificial sweeteners, and juice content;
- Contact beverage companies and let them know they must stop marketing their unhealthy products directly to youth; and
- Learn more about the nutrition of sugary drinks and how they are marketed to children and teens by visiting www. sugarydrinkfacts.org.
In 2011, we asked beverage companies to reduce the enormous amount of marketing for unhealthy sugary drinks and energy drinks that children and teens were exposed to daily. The facts presented in this report confirm that some companies have improved some marketing practices. However, they also show that significantly more improvements are necessary and that any one company may not be able to sustain progress if the entire industry does not follow. Policy makers, advocates, and parents should demand that beverage companies do the right thing for the health of our children.


## Executive Summary

1. Reedy J, Krebs-Smith SM (2010). Dietary sources of energy, solid fats, and added sugars among children and adolescents in the United States. Journal of the American Dietetic Association, 110(10), 1477-1484.
2. Han E, Powell LM (2013). Consumption patterns of sugarsweetened beverages in the United States. Journal of the Academy of Nutrition and Dietetics, 113(1), 43-53.
3. Mozaffarian D, Hao T, Rimm EB, Willett WC, Hu FB (2011) Changes in diet and lifestyle and long-term weight gain in women and men. New England Journal of Medicine, 364, 2392-2404.
4. Ludwig DS, Peterson KE, Gortmaker SL (2001). Relationship between consumption of sugar-sweetened drinks and childhood obesity: a prospective, observational analysis. Lancet, 357:505-508
5. Andreyeva T, Kelly IR, Harris JL (2011). Exposure to food advertising on television: associations with children's fast food and soft drink consumption and obesity. Economics \& Human Biology, 9(3), 221-233.
6. Connell PM, Brucks M, Nielsen JH (2014). How childhood advertising exposure can create biased product evaluations that persist into adulthood. Journal of Consumer Research, 41. http:// www.jcr-admin.org/files/pressPDFs/030614095007_March2014.pdf
7. Harris JL, Schwartz MB, Brownell KD, et al. (2011). Sugary Drink FACTS: Evaluating sugary drink nutrition and marketing to youth. www.sugarydrinkfacts.org.
8. Children's Food and Beverage Advertising Initiative (CFBAI) (2014). What "Child-Directed Advertising" Means Under CFBAI. http://www.bbb.org/globalassets/local-bbbs/council-113/media/ cfbai/audience-definitions-aug-2014.pdf
9. Federal Trade Commission (2012). A review of food marketing to children and adolescents: Follow-up report http://www.ftc.gov/sites/default/files/documents/reports/ review-food-marketing-children-and-adolescents-followreport/121221foodmarketingreport.pdf
10. Cartegena C (2011). Hispanic market the hot topic at the Nielsen conference. Retrieved from http://adage.com/article/the-big-tent/hispanic-market-hot-topic-nielsen-conference/228543/
11. Portada Online (2013). ANA multicultural day 1 wrap-up "Leading with ethnic insights first!" http://www.portada-online. com/2013/11/05/ana-multicultural-day-1-wrap-up/\#ixzz2jnPoPxs7
12. MediaPost Communications (2013). PepsiCo focuses on multicultural marketing. http://www.smartbrief.com/10/16/13/ pepsico-focuses-multicultural-marketing\#.U8ffSr9Uh8
13. Cartagena C (2011, July 5). Hispanic market the hot topic at the Nielsen conference. http://adage.com/article/the-big-tent/ hispanic-market-hot-topic-nielsen-conference/228543/.
14. Portada (2013, Nov 6).Content Marketing: How Pepsi's "Cultural Fluency" concept translates into Content Marketing executions. http://www.portada-online.com/2013/11/06/content-marketingpepsi/
15. Makarechi K (2012). Beyonce on Pepsi criticism: 'It's all about choices'. Retrieved from http://www.huffingtonpost.com/2013/07/10/ beyonce-pepsi-criticism-choices_n_3572582.html
16. Casserly M (2012). Beyonce's $\$ 50$ million Pepsi deal takes creative cues from Jay Z. http://www.forbes.com/sites/ meghancasserly/2012/12/10/beyonce-knowles-50-million-pepsi-deal-takes-creative-cues-from-jay-z/
17. Muhammad L (2012, Aug 14). Nicki Minaj will live stream free concert from New York City. http://hiphopwired.com/2012/08/14/ nicki-minaj-will-live-streamfree-concert-from-new-york-city/.
18. Adweek (2012, Sept 24). Mosaic Awards: Winning Campaigns. http://www.adweek.com/sa-article/mosaic-awards-winning-campaigns-143849.
19. Lukovitz K (2013). Coca-Cola campaign celebrates Mexican soccer team. http://www.mediapost.com/publications/ article/203742/coca-cola-campaign-celebrates-mexican-soccerteam.html
20. http://www.businesswire.com/news/home/20130701005808/ en/Coca-Cola-Mexican-National-Team-Celebrate-30-Years\#. VD1bPhBnA6A
21. FIFA (2014). World Cup Marketing Partners. www.fifa.com/ worldcup/organisation/partners/
22. Dr. Pepper Snapple Group (2013). 7UP named official soft drink of 2013 CONCACAF gold cup. investor.drpeppersnapple.com/ common/mobile/iphone/releasedetail.cfm?releaseid=749797\&Co mpanyID=DPSG\&mobileid=
23. O'Loughlin S (2014). Cover story: Events that speak to the Hispanic consumer. www.eventmarketer.com/article/guide-creating-events-speak-hispanic-consumer/
24. Sylvetsky AC, Dietz WH (2014). Nutrient-content claims Guidance or cause for confusion? New England Journal of Medicine (371), 195-198.

## Introduction

1. Reedy J, Krebs-Smith SM. Dietary sources of energy, solid fats, and added sugars among children and adolescents in the United States. Journal of the American Dietetic Association 2010;110(10):1477-1484.
2. Mozaffarian D, Hao T, Rimm EB, Willett WC, Hu FB. Changes in diet and lifestyle and long-term weight gain in women and men. N Engl J Med. 2011;364:2392-404.
3. Harris JL, Schwartz MB, Brownell KD, et al. (2011). Sugary Drink FACTS: Evaluating sugary drink nutrition and marketing to youth. sugarydrinkfacts.org/resources/SugaryDrinkFACTS_Report.pdf.
4. ibid.
5. Schwartz MB. (2011). Presentation at the annual meeting of American Public Health Association on October 31. Washington, DC.
6. American Academy of Pediatrics (2011). Kids Should Not Consume Energy Drinks, and Rarely Need Sports Drinks, Says AAP. www.aap.org/en-us/about-the-aap/aap-press-room/Pages/ Kids-Should-Not-Consume-Energy-Drinks,-and-Rarely-Need-Sports-Drinks,-Says-AAP.aspx\#sthash.FsDF6grJ.dpuf
7. United States Department of Agriculture [USDA] (2014). Empty calories: How many empty calories can I have? Retrieved from http://www.choosemyplate.gov/weight-management-calories/ calories/empty-calories-amount.html.
8. Johnson R K, Appel LJ, Brands M, Howard BV, Lefevre M, Lustig RH, et al. (2009). Dietary sugars intake and cardiovascular health: A scientific statement from the American Heart Association. Journal of the American Heart Association, 120, 1011-1020.
9. Han E, Powell LM (2013). Consumption Patterns of SugarSweetened Beverages in the United States. Journal of the Academy of Nutrition and Dietetics. 113(1), 43-53.
10. Ogden CL, Kit BK, Carroll MD, \& Park S (2011). Consumption of sugar drinks in the United States, 2005-2008. NCHS data brief (71). www.cdc.gov/nchs/data/databriefs/db71.pdf.
11. Park S, Blanck HM, Sherry B, Brener N, \& O'Toole T (2012) Factors associated with sugar-sweetened beverage intake among United States high school students. Journal of Nutrition. 142(2), 306-312.
12. Ervin RB, Kit BK, Carroll MD, \& Ogden CL (2012). Consumption of added sugar among U.S. children and adolescents, 20052008. NCHS data brief (87). www.cdc.gov/nchs/data/databriefs/ db87.htm
13. Ibid.
14. National Cancer Institute (2014). Table 1A. Mean intake of added sugar \& percentage contribution (KCAL) of various foods among US children \& adolescents, by age, NHANES 2003-04. appliedresearch.cancer.gov/diet/foodsources/added_sugars/ table1a.html
15. Morenga LT, Mallard S, \& Mann J (2013). Dietary sugar and body weight: systematic review and meta-analyses of randomised controlled trials and cohort studies. British Medical Journal. 346:e7492.
16. Morgan RE (2013). Does consumption of high-fructose corn syrup beverages cause obesity in children? Pediatric Obesity. 8(4), 249-254.
17. Flores $G$ \& Lin $H$ (2013). Factors predicting severe obesity in kindergarteners. International Journal of Obesity (London). 37(5), 758.
18. Burger KS \& Stice E (2013). Neural responsivity during soft drink intake, anticipation, and advertisement exposure in habitually consuming youth. Obesity. 22(2), 441-450.
19. Yokum S, Gearhardt AN, Harris JL, Brownell KD, \& Stice E (2014). Individual differences in striatum activity to food commercials predict weight gain in adolescents.
20. Connell PM, Brucks M, \& Nielsen JH (2014). How childhood advertising exposure can create biased product evaluations that persist into adulthood. Journal of Consumer Research. 41.
21. Kumar G, Onufrak S, Zytnick D, Kingsley B, \& Park S (2014). Self-reported advertising exposure to sugar-sweetened beverages among US youth. Public Health Nutrition. 1-7.
22. Kumanyika S, \& Grier S (2006). Targeting interventions for ethnic minority and low-income populations. Future of Children. 16(1), 187-207.
23. Mekonnen TA, Odden MC, Coxson PG, Guzman D, Lightwood J, Wang YC, et al. (2013). Health Benefits of Reducing SugarSweetened Beverage Intake in High Risk Populations of California: Results from the Cardiovascular Disease (CVD) Policy Model. PLoS ONE. 8(12).
24. IEGSR (2012, Sept. 17). Who does what: Energy drinks. www. sponsorship.com/iegsr/2012/09/17/Who-Does-What--EnergyDrinks.aspx
25. Larson N, DeWolfe J, Story M, \& Neumark-Sztainer D (2014). Journal of Nutrition Education and Behavior. 46(3), 181-187.
26. Branum AM, Rossen LM, \& Schoendorf KC (2014). Trends in caffeine intake among US children and adolescents. Pediatrics. 133(3), 386-393.
27. Reissig CJ, Strain EC, \& Griffiths RR (2009). Caffeinated energy drinks -a growing problem. Drug and Alcohol Dependence. 99(1-3), 1-10.
28. Hansen Bev. Co.v.Innovation Ventures, LLC, 2008 U.S. Dist. LEXIS 76243 (S.D. Cal. 28 September, 2008)
29. Jaslow R. (2013, December 2). Energy drinks increase heart contractions, study shows: dangerous? www.cbsnews.com/ news/energy-drinks-heart-contractions/.
30. SAMHSA (2014, March 13). The DAWN Report. www.samhsa. gov/data/sites/default/files/spot124-energy-drinks-2014.pdf
31. American Academy of Pediatrics, Committee on Nutrition and the Council on Sports Medicine and Fitness (2011). Clinical Report - Sports drinks and energy drinks for children and adolescents: Are they appropriate? Pediatrics (127), 1182-1189.
32. United States Senate. (2013). Durbin, Markey, Rockefeller, Blumenthal Call on Energy Drink Companies to Stop Marketing to Children. www.durbin.senate.gov/public/index.cfm/ pressreleases?ID=1b34699c-7882-4da0-bec7-a00912ef2192.
33. Haggin P (2014, July 17). Three U.S. states sue 5 -hour Energy drink over advertising. www.reuters.com/article/2014/07/18/us-usa-energy-drink-lawsuit-idUSKBNOFN06N20140718
34. New York City Department of Public Health and Hygiene (2009). New campaign asks New Yorkers if they're "pouring on the pounds." Press release. www.nyc.gov/html/doh/html/pr2009/ pr057-09.shtml.
35. Ibid
36. Philadelphia Department of Public Health. All about sugary drinks. www.foodfitphilly.org/all-about-sugary-drinks/
37. Center for Science in the Public Interest (2014). Healthy food on government property. cspinet.org/images/StateMap2.pdf.
38. Center for Science in the Public Interest (2014). Food and nutrition guidelines for government, worksites, hospitals \& organizations. www.cspinet.org/nutritionpolicy/foodstandards.html.
39. Andreyeva T, Chaloupka FJ, \& Brownell KD (2011). Estimating the potential of taxes on sugar-sweetened beverages to reduce consumption and generate revenue. Preventive Medicine. 52 (6), 413-416.
40. Aubrey A (2012, January 12). Could a soda tax prevent 2,600 deaths per year? www.npr.org/blogs/ thesalt/2012/01/12/145112865/could-a-soda-tax-prevent-26-000-deaths-per-year.
41. Center for Science in the Public Interest (2014). Sugary drink taxes. www.cspinet.org/liquidcandy/sugarydrinktaxes.html.
42. Fairchild AL (2013). Half empty or half full? New York's soda rule in historic perspective. The New England Journal of Medicine. 368(19), 1765-1767.
43. Shelley D, Ogedegbe G, \& Elbel B (2014). Same strategy different industry: corporate influence on public policy. American Journal of Public Health. 104(4).
44. United States Department of Agriculture Food and Nutrition Service (2013). National School Lunch Program and School Breakfast Program: Nutrition Standards for All Foods Sold in Schools as Required by the Health, Hunger-Free Kids Act of 2010; Interim Final Rule. 78(125), 7 CFR Parts 210 and 220, 39067-39120.
45. United States Department of Agriculture (2014). Smart Snacks in school. USDA's "All food sold in schools" standards. www.fns. usda.gov/sites/default/files/allfoods_flyer.pdf
46. United States Department of Agriculture Food and Nutrition Service (2013). National School Lunch Program and School Breakfast Program: Nutrition Standards for All Foods Sold in Schools as Required by the Health, Hunger-Free Kids Act of 2010; Interim Final Rule. 78(125), 7 CFR Parts 210 and 220, 39067-39120.
47. Office of Obama M (2014). The White House and USDA announce school wellness standards. www.whitehouse.gov/ the-press-office/2014/02/25/white-house-and-usda-announce-school-wellness-standards.
48. Healthy Eating Research (2013, March). Recommendations for Healthier Beverages. healthyeatingresearch.org/research/ recommendations-for-healthier-beverages/.
49. Center for Science in the Public Interest (2013, February 13). FDA urged to determine safe limits on high-fructose corn syrup and other sugars in soft drinks. www.cspinet.org/ new/201302131.html.
50. Center for Science in the Public Interest. National Soda Summit 2014 Washington, DC. www.cspinet.org/Soda-Summit-2014.html.
51. Center for Science in the Public Interest (2012, July 19). Health groups urge surgeon general's report on soda. cspinet.org/ new/201207191.html.
52. Powell D \& Gard M (2014). The governmentality of childhood obesity: Coca-Cola, public health and primary schools. Discourse: Studies in the Cultural Politics of Education.
53. The Coca-Cola Company (2014, August 22). The Coca-Cola Company Policy on Nutrition Labeling and Nutrition Information. www.coca-colacompany.com/brands/policy-on-nutrition-labeling-and-nutrition-information\#TCCC.
54. American Beverage Association (2014, September 23). Alliance for a healthier generation and America's beverage companies announce landmark CGI commitment to reduce beverage calories consumed across the nation. http://www.ameribev.org/ news-media/news-releases-statements/more/334/
55. American Beverage Association (2014). Delivering choices for balance. www.deliveringchoices.org/\#calorielabels
56. American Beverage Association (2014). Calories count. http:// www.ameribev.org/nutrition-science/calories-count/
57. Ferdman RA (2014, September 23). Coke and Pepsi concede that maybe soda is bad for you. www.washingtonpost.com/ blogs/wonkblog/wp/2014/09/23/coke-and-pepsi-concede-that-maybe-soda-is-bad-for-you/?Post+generic=\%3Ftid\%3Dsm_ twitter_washingtonpost.
58. Strom S (2014, September 23). Soda makers Coca-Cola, PepsiCo and Dr Pepper join in effort to cut American's drink calories. www. nytimes.com/2014/09/24/business/big-soda-companies-agree-on-effort-to-cut-americans-drink-calories.html?_r=0.
59. Jennings K (2014, August 22). Mid-calorie sodas seem destined to fail -so why are Coke and Pepsi launching them? Retrieved from http://www.slate.com/blogs/business_insider/2014/08/22/ mid_calorie_sodas_coca_cola_life_and_pepsi_next_don_t_ appeal_to_consumers.html.
60. Dr Pepper Snapple Group (2012, December 20). Dr Pepper Snapple dials the flavor up to "TEN" with five new low-calorie sodas. news.drpeppersnapplegroup.com/press-release/dr-pepper-snapple-dials-flavor-ten-five-new-low-calorie-sodas
61. Smith G (2012, February 24). The cola wars: Pepsi launches mid-calorie Pepsi Next as it takes on Coke in battle to lure the 'health-conscious'. www.dailymail.co.uk/news/article-2105791/ Pepsi-launches-mid-calorie-Pepsi-Next-takes-Coke-battle-lure-health-conscious.html.
62. Jennings K (2014, August 22). Mid-calorie sodas seem destined to fail -so why are Coke and Pepsi launching them?www.slate. com/blogs/business_insider/2014/08/22/mid_calorie_sodas_coca_ cola_life_and_pepsi_next_don_t_appeal_to_consumers.html.
63. Suddath C (2014, June 17). Coke's new low-cal, low-sugar soda is designed to quiet critics. www.businessweek.com/ articles/2014-06-17/cokes-new-low-cal-low-sugar-soda-is-designed-to-quiet-critics.
64. Jennings K (2014, August 19). Here's why Coke Life and Pepsi NEXT will never take off in the US. www.businessinsider.com/ coke-life-and-pepsi-next-wont-work-2014-8.
65. American Beverage Association (2014, February, 25). American Beverage Association Supports First Lady's Announcement on School Wellness. www.ameribev.org/news-media/news-releasesstatements/more/328/.
66. American Beverage Association (2014). Delivering Choices for Balance. www.deliveringchoices.org/\#calorielabels
67. American Beverage Association (2014). We're committed to marketing responsibly to children. deliveringchoices.org/ incommunities/
68. Council of Better Business Bureaus. Children's Food and Beverage Advertising Initiative. www.bbb.org/council/the-national-partner-program/national-advertising-review-services/ childrens-food-and-beverage-advertising-initiative/.
69. Council of Better Business Bureaus. Children's Food and Beverage Advertising Initiative. www.bbb.org/us/storage/0/ Shared\%20Documents/coke\%20final.pdf
70. Council of Better Business Bureaus. Children's Food and Beverage Advertising Initiative. http://www.bbb.org/us/ storage/16/documents/cfbai/CFBAI\%202012\%20amended\%20 pledge.pdf
71. Council of Better Business Bureaus. Children's Food and Beverage Advertising Initiative. www.bbb.org/globalassets/ local-bbbs/council-113/media/cfbai/kraft-product-information-received-12.16.13_merged.pdf
72. American Beverage Association (2014). We're active in the communities where we live and work. deliveringchoices.org/ incommunities/community/
73. American Beverage Association (2014, February 25). American Beverage Association supports first lady's announcement on school wellness. http://www.ameribev.org/news-media/news-releases-statements/more/328/
74. Strom S (2012, March 12). Pepsi chief shuffles management to soothe investors. from www.nytimes.com/2012/03/13/business/ pepsico-executives-line-up-behind-ceo.html?adxnnl=1\&pagewa nted =all\&adxnnlx=1415224365-dLEirjxNfBkNOEP53xjhuw
75. Zmuda N (2014, February 18). Coca-Cola boosts media spending as demand slows. adage.com/article/news/coca-cola-boosts-marketing-spend-demand-slows/291747/

## Results

1. Harris JL, Schwartz MB, Brownell KD, et al. (2011). Sugary Drink FACTS: Evaluating sugary drink nutrition and marketing to youth. sugarydrinkfacts.org/resources/SugaryDrinkFACTS_Report.pdf.
2. Rudd Center analysis of Beverage Marketing Corporation of American data.
3. Rudd Center analysis of Nielsen 2012 data.
4. Children's Food and Beverage Advertising Initiative (2014). http://www.bbb.org/globalassets/local-bbbs/council-113/media/ cfbai/audience-definitions-aug-2014.pdf.
5. comScore Key Measures (March 2013 - February 2014). http:// www.comscore.com/Products/Audience-Analytics/Media-Metrix.
6. Simply Measured (2013). http://simplymeasured.com/ blog/2013/04/08/youtube-changes/.
7. Google Online Security (2014). http://googleonlinesecurity. blogspot.ca/2014/02/keeping-youtube-views-authentic.html.
8. Consumer Reports (2011). That Facebook Friend Might be 10 years old, and Other Troubling News. http://www.consumerreports. org/cro/magazine-archive/2011/june/electronics-computers/state-of-the-net/facebook-concerns/index.htm.
9. Twitonomy (2014). http://www.twitonomy.com.
10. Social Baker (2014). http://www.socialbakers.com/youtube-statistics/.
11. Marketing Charts (2014, April 9). Instagram Now Tops Twitter, Facebook as Teens' Most Important Social Network. http:// www.marketingcharts.com/online/instagram-now-tops-twitter-facebook-as-teens-most-important-social-network-41924/.
12. Business Wire (2014, August 15). "Fanta for the Funny" Campaign Gives Teens Digital Stage to Create Their Own Series. http://www.businesswire.com/news/home/20140815005174/ en/\%E2\%80\%9CFanta-Funny\%E2\%80\%9D-Campaign-Teens-Digital-Stage-Create\#.VDwe5hCZ3xg.
13. Harris JL, Schwartz MB, Brownell KD, et al. (2011).
14. In 2012, black children watched 4 hrs: 48 min of TV daily vs. 3 hrs:23 min for white children, and black teens watched 4 hrs:55 min daily vs. 2 hrs:55 min for white teens. (Rudd Center analysis of Nielsen data)
15. Federal Trade Commission (2012). A review of food marketing to children and adolescents. Follow-up report. http://www.ftc.gov/sites/default/files/documents/reports/ review-food-marketing-children-and-adolescents-followreport/121221foodmarketingreport.pdf.
16. Cartagena C (2011, July 5). Hispanic market the hot topic at the Nielsen conference. http://adage.com/article/the-big-tent/ hispanic-market-hot-topic-nielsen-conference/228543/.
17. Portada Online (2013, November 5). ANA multicultural day 1 wrap-up: "Leading with ethnic insights first!" http://www. portada-online.com/2013/11/05/ana-multicultural-day-1-wrapup/\#ixzz2jnPoPxs7.
18. Zmuda N (2012, February 29). Coca-Cola's Kimberly Paige on thinking beyond ethnicity: Often, consumers see themselves as more than one marketing segment. http://adage.com/article/the-big-tent/coca-cola-s-kimberly-paige-thinking-ethnicity/232954/.
19. Cartagena C (2011, July 5).
20. Hispanic Scholarship Fund (2014). http://hsf.net/en/sponsors/ coca-cola.
21. NAACP (2014). Project HELP (Healthy Eating, Lifestyles, and Physical Activity). http://www.naacp.org/pages/2799
22. Lukovitz K (2013, July 2). Coca-Cola campaign celebrates Mexican soccer team. http://www.mediapost.com/publications/ article/203742/coca-cola-campaign-celebrates-mexican-soccerteam.html.
23. Business Wire (2013, July 1). Coca-Cola and the Mexican National Team celebrate 30 years in new marketing campaign. http://www.businesswire.com/news/home/20130701005808/ en/Coca-Cola-Mexican-National-Team-Celebrate-30-Years\# VD1bPhBnA6A.
24. FIFA (2014). World Cup Marketing Partners. http://www.fifa.com/ worldcup/organisation/partners/.
25. Lukovitz K (2011, July 18). Coke extends BET partnership into the store. http://www.mediapost.com/publications/article/154215/ coke-extends-bet-partnership-into-the-store.html.
26. Lukovitz K (2012, February 2). Coke effort encourages AfricanAmerican teens. http://www.mediapost.com/publications/ article/167017/coke-effort-encourages-african-american-teens.html.
27. Schultz E (2011, September 23). Bud light pairs with hiphop star Pitbull in new multicultural TV campaign. http:// adage.com/article/news/bud-light-pairs-pitbull-multiculturalcampaign/230026/
28. Got Soccer (2013). Dr Pepper Fair Play. https://home.gotsoccer. com/rankings/event.aspx?eventid=32461.
29. Dr. Pepper Snapple Group (2014, April 21). Dr. Pepper Dallas Cup tournament winners score $\$ 40,000$ in sports equipment for their favorite community organizations through let's play. http:// news.drpeppersnapplegroup.com/press-release/corporate-news/dr-pepper-dallas-cup-tournament-winners-score-40000-sports-equipment-th.
30. Dr. Pepper Snapple Group (2013, October 7). 7UP gives fans a chance to win a trip to the 14th annual Latin GRAMMY awards and a VIP concert with Enrique Iglesias as part of its "Live it UP with Enrique" promotion. http://investor.drpeppersnapplegroup. com/releasedetail.cfm?ReleaseID=795276.
31. 7Up (2014). \#7x7Up. http://7upmusic.tumblr.com/tagged/ about7x7up.
32. Faw L (2014, March 7). 7Up goes electronic to court Hispanic consumers. http://www.mediapost.com/publications/ article/220991/7up-goes-electronic-to-court-hispanic-consumers.
html.
33. Business Wire (2013). 7UP named official soft drink of 2013 CONCACAF gold cup. http://investor.drpeppersnapple.com/ common/mobile/iphone/releasedetail.cfm?releaseid=749797\&Co mpanyID=DPSG\&mobileid.
34. O'Loughlin S (2014, March 12). Cover story: Events that speak to the Hispanic consumer. http://www.eventmarketer.com/article/ guide-creating-events-speak-hispanic-consumer/.
35. Portada Online (2013, November 5).
36. Beaulieu K (2013, October 16). PepsiCo's new marketing mindset. http://www.mediapost.com/publications/article/210263/ pepsicos-new-marketing-mindset.html.
37. Muhammad, L (2012, August 14). Nicki Minaj will live stream free concert from New York City. http://hiphopwired.com/2012/08/14/ nicki-minaj-will-live-stream-free-concert-from-new-york-city/.
38. Makarechi K (2013, July 10). Beyonce on Pepsi criticism: 'It's all about choices.' http://www.huffingtonpost.com/2013/07/10/ beyonce-pepsi-criticism-choices_n_3572582.html.
39. Casserly M (2012, December 10). Beyonce's $\$ 50$ million Pepsi deal takes creative cues from Jay Z. http://www.forbes.com/sites/ meghancasserly/2012/12/10/beyonce-knowles-50-million-pepsi-deal-takes-creative-cues-from-jay-z/.
40. Sass E (2013, October 4). Pepsi taps Tr3s for 'Vive Hoy' campaign. http://www.mediapost.com/publications/ article/210670/pepsi-taps-tr3s-for-vive-hoy-campaign.html.

## Discussion

1. Powell D \& Gard M (2014). The governmentality of childhood obesity: Coca-Cola, public health and primary schools. Discourse: Studies in the Cultural Politics of Education.
2. American Beverage Association. (2013, Sept 23). Alliance for a Healthier Generation and America's Beverage Companies Announce Landmark CGI Commitment to Reduce Beverage Calories Consumed Across the Nation. http://www.ameribev.org/ news-media/news-releases-statements/more/334/.
3. Children's Food and Beverage Advertising Initiative (CFBAI) (2013 June). CFBAl's Category-Specific Uniform Nutrition Criteria. www. bbb.org/storage/16/documents/cfbai/CFBAI\ Uniform\  Nutrition\%20Criteria\%20Fact\%20Sheet\%20-FINAL.pdf.
4. Strom S (2012, March 12). Pepsi chief shuffles management to soothe investors. from www.nytimes.com/2012/03/13/business/ pepsico-executives-line-up-behind-ceo.html?adxnnl=1\&pagewa nted $=$ all\&adxnnlx=1415224365-dLEirjxNfBkNOEP53xjhuw.
5. Zmuda N (2014, February 18). Coca-Cola boosts media spending as demand slows. adage.com/article/news/coca-cola-boosts-marketing-spend-demand-slows/291747/.
6. Ogden CL, Carroll MD, Kit BK, Flegal KM (2014). Prevalence of childhood and adult obesity in the United States, 2011-2012. JAMA. 311(8), 806-14
7. Beaulieu, K (2013, Oct 16). MediaPost. PepsiCo's new marketing mindset. http://www.mediapost.com/publications/article/210263/ pepsicos-new-marketing-mindset.html.
8. Lukovitz, K (2012, February 2). Coke effort encourages AfricanAmerican teens. http://www.mediapost.com/publications/ article/167017/coke-effort-encourages-african-american-teens.html.
9. O'Loughlin, S (2014, March 12). Cover story: Events that speak to the Hispanic consumer. http://www.eventmarketer.com/article/ guide-creating-events-speak-hispanic-consumer/.
10. Faw, L (2014, March 7). 7Up goes electronic to court Hispanic consumers. http://www.mediapost.com/publications/ article/220991/7up-goes-electronic-to-court-hispanic-consumers. html.
11. C-Span (2013, July 31). Energy drink marketing strategy. http:// www.c-span.org/video/?314301-1/energy-drink-makers-appear-senate-commerce.
12. American Academy of Pediatrics, Committee on Nutrition and the Council on Sports Medicine and Fitness (2011). Clinical Report - Sports drinks and energy drinks for children and adolescents: Are they appropriate? Pediatrics (127), 1182-1189.
13. Centers for Disease Control and Prevention (2014). Youth Risk Behavior Surveillance - United States, 2013. www.cdc.gov/ mmwr/pdf/ss/ss6304.pdf.
14. Johnson RK, Appel LJ, Brands M, Howard BV, Lefevre M, Lustig RH, et al. (2009). Dietary sugars intake and cardiovascular health: A scientific statement from the American Heart Association. Journal of the American Heart Association, 120, 1011-1020.
15. United States Department of Agriculture [USDA] (2014). Empty calories: How many empty calories can I have? Retrieved from http://www.choosemyplate.gov/weight-management-calories/ calories/empty-calories-amount.html.
16. Harris JL, Thompson JM, Schwartz MB, Brownell KD (2011b). Nutrition-related claims on children's cereals: what do they mean to parents and do they influence willingness to buy? Public Health Nutr. 14(12), 2207-12.
17. Dietz WH (2013). New strategies to improve food marketing to children. Health Affairs. (32) 1652-1658.
18. Schwartz MB (2011). Presentation at the annual meeting of American Public Health Association on October 31. Washington, DC.
19. Institute of Medicine (2007). Nutrition standards for foods in schools: Leading the way toward healthier youth. www.iom.edu/ object.file/Master/42/505/Food\%20in\%20Schools.pdf.
20. Goldbacher R (2013, Feb 13). Mountain Dew wants to Kickstart your breakfast. USA Today. http://www.usatoday.com/ story/money/business/2013/02/11/mountain-dew-kickstartpepsico/1908923/.
21. http://www.mountaindew.com/kickstart/\#/products.
22. Lapierre MA, Piotrowski JT, Linebarger DL (2012). Background television in the homes of US children. Pediatrics, 2012. 130(5), 839-46.
23. Zmuda N (2014, February 18). Coca-Cola boosts media spending as demand slows. adage.com/article/news/coca-cola-boosts-marketing-spend-demand-slows/291747/.
24. Council of Better Business Bureaus. Children's Food and Beverage Advertising Initiative. http://www.bbb.org/globalassets/ local-bbbs/council-113/media/cfbai/audience-definitions-aug-2014.pdf.
25. American Academy of Pediatrics (2011, May). Kids Should Not Consume Energy Drinks, and Rarely Need Sports Drinks, Says AAP. www.aap.org/en-us/about-the-aap/aap-press-room/Pages/ Kids-Should-Not-Consume-Energy-Drinks,-and-Rarely-Need-Sports-Drinks,-Says-AAP.aspx\#sthash.FsDF6grJ.dpuf.
26. Pomeranz JL, Munsell CR, Harris JL (2013). Energy drinks: An emerging public health hazard for youth. Journal of Public Health Policy, 14:1-8.
27. American Beverage Association. http://www.ameribev.org/ members/active-members/.
28. American Beverage Association. ABA Guidance for the Responsible Labeling and Marketing of Energy Drinks. http:// www.ameribev.org/files/resources/2014-energy-drinks-guidance--approved-by-bod-43020.pdf.
29. C-Span (2013, July 31). Energy drink marketing strategy. http:// www.c-span.org/video/?314301-1/energy-drink-makers-appear-senate-commerce.
30. Statista (2014). Number of monthly active Facebook users in the United States and Canada from 1st quarter 2010 to 3rd quarter 2014. http://www.statista.com/statistics/247614/number-of-monthly-active-facebook-users-worldwide/.
31. Statista (2014). Number of monthly active Twitter users in the United States from 1st quarter 2010 to 3rd quarter 2014. http:// www.statista.com/statistics/274564/monthly-active-twitter-users-in-the-united-states/.
32. Pew Research (2013). Teens, social media, and privacy. http:// www.pewinternet.org/2013/05/21/teens-social-media-and-privacy/.
33. CNET (2012). How Instagram became the social network for tweens. http://www.cnet.com/news/how-instagram-became-the-social-network-for-tweens/.
34. Business Insider (2014). New study shows Snapchat and Instagram beating Twitter among teens and young adults. http:// www.businessinsider.com/instagram-and-snapchat-are-more-popular-than-twitter-among-teens-and-young-adults-sai-2014-3.
35. Marketing Charts (2014). Instagram now tops Twitter, Facebook as teens' most important social network. http:// www.marketingcharts.com/online/instagram-now-tops-twitter-facebook-as-teens-most-important-social-network-41924/.
36. Social Baker (2014). http://www.socialbakers.com/all-social-media-stats/youtube/.
37. University of Montana (2011). SoBA alum Nate Warner provides inside look at Red Bull's social media and digital marketing initiatives. Available at http://www.business.umt.edu/Soba/ featureStories/redbullmarketing.aspx.
38. Wasserman T (2013, Aug 20). http://mashable.com/2013/08/20/ coke-digital-campaign-results/.
39. Fox $Z$ (2013, Oct 24). 65\% of time spent on social networks happens on mobile. http://mashable.com/2013/10/24/content-consumption-desktop-mobile/.
40. Ali M, Blades M, Oates C, Blumberg F (2009). Young children's ability to recognize advertisements in web page designs. British Journal of Developmental Psychology. 27(1) 71-83.
41. Harris JL, Fleming Milici F, Sarda V, Schwartz MB (2012). Food marketing to children: What do parents think? http://www. yaleruddcenter.org/resources/upload/docs/what/reports/Rudd_ Report_Parents_Survey_Food_Marketing_2012.pdf.
42. Ibid.
43. African American Collaborative Obesity Reasearch Network. (2011, January). Impact of sugar-sweetened beverage consumption on black Americans' health. http://www.aacorn.org/ uploads/files/AACORNSSBBrief2011.pdf.
44. Salud America! and Bridging the Gap (2013, September), Sugary drinks and Latino kids. http://www. bridgingthegapresearch.org/_asset/z6x4mo/BTG-Salud-America_Sugary-Drinks-brief_09-30-13.pdf.
45. MediaPost Communications. (2013). PepsiCo focuses on multicultural marketing. Retrieved from http://www.smartbrief. com/10/16/13/pepsico-focuses-multicultural-marketing\#. U8ffSr9Uh8F.
46. Goetzl D (2011). Leaders \& bleeders: Pitbull up, Glenn Beck down. Retrieved from http://www.mediapost.com/publications/ article/159839/leaders-bleeders-pitbull-up-glenn-beck-down.html.
47. Lukovitz K (2012, February 2). Coke effort encourages AfricanAmerican teens. http://www.mediapost.com/publications/ article/167017/coke-effort-encourages-african-american-teens.html.
48. Faw L (2014, March 7). 7Up goes electronic to court Hispanic consumers. http://www.mediapost.com/publications/ article/220991/7up-goes-electronic-to-court-hispanic-consumers. html.

## Nufritional confent of beverages

Ranking by median sugar then by median calories then by maximum sugar then by maximum calories
Includes sugar and calorie content per serving* of all sugary and diet drinks by brand, category, and subcategory

| Rank | Company | Brand (sub-brand) | Category | Subcategory | \# of products | Sugar (g) |  | Calories (kcal) |  | 0-calorie sweeteners (Y/N)*** | Caffeine (median $\mathrm{mg})^{\star * *}$ | \% juice (median) *** |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Median | Range | Median | Range |  |  |  |
| 1 | Jones Soda Co. | Jones | Regular soda | Full-calorie | 9 | 43 | 36-48 | 165 | 160-190 | N | 0 | 0 |
| 2 | Reed's | Virgil's | Regular soda | Full-calorie | 6 | 42 | 42 | 160 | 160 | N | 0 | 0 |
| 3 | Carolina Beverage Corporation | Cheerwine | Regular soda | Full-calorie | 1 | 42 | 42 | 150 | 150 | N | ** | 0 |
| 4 | Reed's | Reed's | Regular soda | Full-calorie | 6 | 37 | 37 | 145 | 145 | N | 0 | 50 (1) |
| 5 | Goya | Nectars | Fruit drink | Full-calorie | 5 | 35 | 33-46 | 150 | 140-180 | ** | 0 | 23 |
| 6 | Dr Pepper Snapple Group | Tahitian Treat | Regular soda | Full-calorie | 1 | 33 | 33 | 120 | 120 | N | 0 | 0 |
| 7 | Welch Foods Inc. | Welch's | Fruit drink | Full-calorie | 23 | 32 | 23-36 | 130 | 100-150 | ** | 0 | 20 |
| 8 | Campbell Soup Company | Bolthouse Farms | Fruit drink | Full-calorie | 1 | 32 | 32 | 130 | 130 | N | ** | ** |
| 9 | Dr Pepper Snapple Group | Big Red | Regular soda | Full-calorie | 5 | 32 | 25-36 | 120 | 120-140 | N | 0 | 0 |
| 10 | Coca-Cola | Fanta | Regular soda | Full-calorie | 5 | 32 | 30-32 | 120 | 108-120 | N | 0 | 0 |
| 11 | Stremick's Heritage Foods | Kern's | Fruit drink | Full-calorie | 4 | 31 | 29-31 | 139 | 132-146 | ** | 0 | * |
| 12 | Rockstar | Rockstar | Energy drink | Full-calorie | 5 | 31 | 30-33 | 130 | 130-140 | Y | 120 | 0 |
| 13 | Dr Pepper Snapple Group | Stewart's Fountain Classics | Regular soda | Full-calorie | 10 | 31 | 27-33 | 127 | 110-133 | N | 0 | 0 |
| 14 | Dr Pepper Snapple Group | A\&W | Regular soda | Full-calorie | 2 | 31 | 30-32 | 120 | 120 | N | 10 | 0 |
| 15 | PepsiCo | Mug | Regular soda | Full-calorie | 2 | 31 | 29-32 | 115 | 110-120 | N | 0 | 0 |
| 16 | Coca-Cola | Mello Yello | Regular soda | Full-calorie | 1 | 31 | 31 | 113 | 113 | N | ** | 0 |
| 17 | Langers Juice Company | Langers | Fruit drink | Full-calorie | 25 | 30 | 26-37 | 130 | 120-165 | Y | 0 | 27 |
| 18 | Welch Foods Inc. | Welch's Chillers | Fruit drink | Full-calorie | 5 | 30 | 28-33 | 130 | 120-140 | ** | 0 | 10 |
| 19 | Dr Pepper Snapple Group | Crush | Regular soda | Full-calorie | 9 | 30 | 27-34 | 120 | 108-130 | N | 0 | 0 |
| 19 (fie) | Dr Pepper Snapple Group | Sunkist | Regular soda | Full-calorie | 8 | 30 | 29-34 | 120 | 110-130 | N | 0 | 0 |
| 21 | Nestle | Poland Spring (Nature's Blends) | Fruit drink | Full-calorie | 7 | 30 | 30 | 120 | 120 | ** | 0 | ** |
| 22 | Dr Pepper Snapple Group | IBC | Regular soda | Full-calorie | 4 | 30 | 29-32 | 117 | 110-120 | N | 0 | 0 |
| 23 | Dr Pepper Snapple Group | Sun Drop | Regular soda | Full-calorie | 1 | 30 | 30 | 116 | 116 | N | 42 | ** |
| 24 | PepsiCo | Mtn Dew | Regular soda | Full-calorie | 9 | 30 | 29-31 | 110 | 110-120 | N | 36 | 0 |
| 25 | Coca-Cola | Barq's | Regular soda | Full-calorie | 1 | 30 | 30 | 110 | 110 | N | 22 | 0 |
| 26 | Coca-Cola | Full Throttle | Energy drink | Full-calorie | 5 | 29 | 24-29 | 120 | 111-148 | ** | ** | ** |
| 27 | Britvic | Robinsons Fruit Shoot | Fruit drink | Full-calorie | 3 | 29 | 25-29 | 119 | 119 | N | 10 | 0 |
| 28 | Coca-Cola | Minute Maid | Fruit drink | Full-calorie | 16 | 29 | 21-57 | 110 | 80-217 | Y | 0 | 11 |
| 29 | Dr Pepper Snapple Group | RC Cola | Regular soda | Full-calorie | 2 | 29 | 28-29 | 110 | 110 | N | 29 | 0 |
| 29 (fie) | PepsiCo | AMP Energy | Energy drink | Full-calorie | 2 | 29 | 29 | 110 | 110 | N | 76 | 0 |
| 31 | PepsiCo | Tropicana | Fruit drink | Full-calorie | 16 | 28 | 26-38 | 120 | 100-150 | N | 0 | 8 |
| 32 | Coca-Cola | Simply | Fruit drink | Full-calorie | 7 | 28 | 28-34 | 120 | 110-130 | N | 0 | 12 |


| Nutrifional confent of beverages conf'd |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Sugar (g) |  | Calories (kcal) |  | $\begin{array}{r} \text { 0-calorie } \\ \text { sweeteners } \\ (\mathrm{Y} / \mathrm{N})^{* * *} \\ \hline \end{array}$ | Caffeine (median $\mathrm{mg})^{\star * *}$ | $\begin{array}{r} \% \text { juice } \\ \text { (median) } \\ * * * \end{array}$ |
| Rank | Company | Brand (sub-brand) | Category | Subcategory | $\begin{array}{r} \text { \# of } \\ \text { products } \end{array}$ | Median | Range | Median | Range |  |  |  |
| 33 | Coca-Cola | Calypso | Fruit drink | Full-calorie | 12 | 28 | 28 | 120 | 120 | N | 0 | 6 |
| 34 | Polar Beverages | Polar | Regular soda | Full-calorie | 15 | 28 | 11-32 | 110 | 90-130 | N | 0 | ** |
| 34 (fie) | Ocean Spray | Ocean Spray | Fruit drink | Full-calorie | 21 | 28 | 21-32 | 110 | 80-130 | ** | ** | 20 |
| 36 | Coca-Cola | Bright \& Early | Fruit drink | Full-calorie | 3 | 28 | 24-30 | 110 | 90-110 | Y | 0 | 0 |
| 37 | Novamex | Jarritos | Regular soda | Full-calorie | 6 | 28 | 22-29 | 110 | 90-120 | N | 0 | 0 |
| 38 | PepsiCo | Pepsi | Regular soda | Full-calorie | 4 | 28 | 26-28 | 110 | 110 | N | 25 | 0 |
| 39 | PepsiCo | Manzanita Sol | Regular soda | Full-calorie | 5 | 28 | 27-30 | 107 | 100-113 | N | 0 | 0 |
| 41 | Dr Pepper Snapple Group | Squirt | Regular soda | Full-calorie | 2 | 28 | 25-30 | 105 | 100-110 | N | 13 | 0 |
| 41 | Alamance Foods | Happy Drinks | Fruit drinks | Full-calorie | 11 | 27 | 27 | 120 | 120 | N | 0 | 0 |
| 42 | Dr Pepper Snapple Group | Canada Dry | Regular soda | Full-calorie | 8 | 27 | 24-32 | 110 | 90-124 | N | 0 | 0 |
| 43 | Newman's Own | Newman's Own | Fruit drinks | Full-calorie | 4 | 27 | 26-27 | 110 | 110 | N | 0 | 0 |
| 44 | Coca-Cola | NOS | Energy drink | Full-calorie | 3 | 27 | 27 | 105 | 105 | Y | ** | 0 |
| 45 | Dr Pepper Snapple Group | Dr Pepper | Regular soda | Full-calorie | 5 | 27 | 25-28 | 100 | 100-110 | N | 27 | 0 |
| 46 | Coca-Cola | Coca-Cola | Regular soda | Full-calorie | 4 | 27 | 26-28 | 99 | 93-100 | N | 34 | 0 |
| 47 | S. Martinelli \& Company | Martinelli's | Fruit drinks | Full-calorie | 4 | 26 | 24-29 | 120 | 100-120 | N | 0 | 11 |
| 48 | Turkey Hill Dairy | Turkey Hill | Fruit drink | Full-calorie | 4 | 26 | 25-28 | 120 | 100-120 | N | 0 | ** |
| 49 | Bug Juice | Bug Juice | Fruit drink | Full-calorie | 3 | 26 | 26-29 | 110 | 110-120 | ** | 0 | ** |
| 50 | Red Bull | Red Bull | Energy drink | Full-calorie | 1 | 26 | 26 | 106 | 106 | ** | 80 | 0 |
| 51 | Dr Pepper Snapple Group | Cactus Cooler | Regular soda | Full-calorie | 1 | 26 | 26 | 100 | 100 | N | 0 | ** |
| s1(tie) | Dr Pepper Snapple Group | Vernors | Regular soda | Full-calorie | 1 | 26 | 26 | 100 | 100 | N | 0 | ** |
| s1(fie) | PepsiCo | Sierra Mist | Regular soda | Full-calorie | 2 | 26 | 25-26 | 100 | 100 | N | 0 | 0 |
| 54 | Coca-Cola | Pibb Xtra | Regular soda | Full-calorie | 1 | 26 | 26 | 93 | 93 | N | ** | 0 |
| 55 | S. Martinelli \& Company | Martinelli's | Fruit drink | Full-calorie | 5 | 25 | 9-29 | 120 | 45-120 | Y | 0 | 11 |
| 56 | Jumex Group | Jumex | Fruit drink | Full-calorie | 7 | 25 | 22-39 | 110 | 90-170 | Y | 0 | 19 |
| 57 | Johanna Foods | Ssips | Fruit drink | Full-calorie | 7 | 25 | 19-38 | 110 | 80-160 | ** | 0 | 15 |
| 58 | Monster Beverage Corporation | Monster Energy | Energy drink | Full-calorie | 11 | 25 | 18-27 | 110 | 70-110 | Y | 82 | 0 |
| 59 | National Beverage Corp | Faygo | Regular soda | Full-calorie | 9 | 25 | 23-28 | 100 | 90-110 | Y | 0 | ** |
| 60 | Coca-Cola | Minute Maid (Coolers) | Fruit drink | Full-calorie | 6 | 25 | 24-27 | 100 | 90-100 | N | 0 | 10 |
| 61 | PepsiCo | SoBe | Fruit drink | Full-calorie | 10 | 25 | 21-26 | 100 | 80-100 | Y | 0 | 0 |
| 62 | Dr Pepper Snapple Group | 7UP | Regular soda | Full-calorie | 3 | 25 | 25 | 100 | 102 | N | 0 | 0 |
| 63 | Coca-Cola | Sprite | Regular soda | Full-calorie | 1 | 25 | 25 | 100 | 100 | N | 0 | 0 |
| 63 (fie) | Campbell Soup Company | V8 Fusion (Refreshers) | Fruit drink | Full-calorie | 4 | 25 | 24-25 | 100 | 100 | ** | 0 | 25 |
| 63 (fie) | Coca-Cola | Fuze | Fruit drink | Full-calorie | 1 | 25 | 25 | 100 | 100 | ** | 0 | 3 |
| 66 | Goya | Malta | Regular soda | Full-calorie | 1 | 24 | 24 | 110 | 110 | N | 0 | 34 |
| 67 | Arizona | Arizona | Fruit drink | Full-calorie | 13 | 24 | 16-28 | 100 | 70-120 | ** | 0 | 10 |
| 67 (fie) | Dr Pepper Snapple Group | Snapple | Fruit drink | Full-calorie | 18 | 24 | 20-28 | 100 | 90-120 | N | 0 | 5 |
| 69 | Unilever | Lipton | Fruit drink | Full-calorie | 2 | 23 | 18-27 | 85 | 70-100 | Y | 0 | 1 |
|  |  |  |  |  |  |  |  |  |  |  |  | continued |


| Nutrifional confent of beverages conf'd |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rank | Company | Brand (sub-brand) | Category | Subcategory | \# of products | Median | Range | Median | Range | 0-calorie sweeteners <br> (Y/N)*** | Caffeine (median $\mathrm{mg})^{* * *}$ | $\begin{gathered} \text { \% juice } \\ \left(\begin{array}{c} \text { median) } \\ * * * \end{array}\right. \end{gathered}$ |
| 70 | J.M. Smucker Company | Santa Cruz Organic | Fruit drink | Full-calorie | 6 | 22 | 21-25 | 90 | 90-100 | ** | 0 | 13 |
| 71 | National Beverage Corp | Shasta | Regular soda | Full-calorie | 5 | 22 | 19-26 | 87 | 80-100 | Y | 0 | ** |
| 72 | Coca-Cola | Hi-C | Fruit drink | Full-calorie | 3 | 22 | 22-23 | 80 | 80-90 | ** | 0 | 10 |
| 73 | Dr Pepper Snapple Group | Schweppes | Regular soda | Full-calorie | 1 | 22 | 22 | 80 | 80 | N | 0 | 0 |
| 74 | Dr Pepper Snapple Group | Snapple | Iced tea/coffee | Full-calorie | 7 | 21 | 17-26 | 80 | 65-110 | N | 19 | 0 |
| 75 | Coca-Cola | Gold Peak | Iced tea/coffee | Full-calorie | 5 | 21 | 11-24 | 80 | 60-93 | N | 12 | 0 |
| 76 | PepsiCo | SoBe | Iced tea/coffee | Full-calorie | 1 | 20 | 20 | 80 | 80 | Y | 10 | 0 |
| 77 | Monster Beverage Corporation | Java Monster | Energy drink | Full-calorie | 5 | 19 | 15-19 | 110 | 110-120 | Y | 100 | 0 |
| 78 | Starbucks | Tazo | Iced tea/coffee | Full-calorie | 16 | 19 | 8-21 | 76 | 29-87 | ** | 18 | ** |
| 79 | Nestle | Tradewinds | Iced tea/coffee | Full-calorie | 5 | 19 | 18-23 | 70 | 70-90 | N | ** | 0 |
| 80 | Campbell Soup Company | V8 Splash | Fruit drink | Full-calorie | 10 | 18 | 16-19 | 80 | 70-80 | ** | 0 | ** |
| 81 | Karhl Holdings LLC | Two If By Tea | Iced tea/coffee | Full-calorie | 4 | 18 | 15-20 | 70 | 60-80 | N | ** | 0 |
| 82 | Nestle | Sweet Leaf | Iced tea/coffee | Full-calorie | 6 | 18 | 15-19 | 70 | 60-70 | ** | 15 | 0 |
| 83 | PepsiCo | Lipton Pure Leaf | Iced tea/coffee | Full-calorie | 6 | 18 | 11-28 | 69 | 43-108 | N | 25 | 0 |
| 84 | Arizona | Arizona | Iced tea/coffee | Full-calorie | 27 | 17 | 13-25 | 70 | 50-100 | Y | 15 | 5 |
| 85 | Coca-Cola | Seagram's | Regular soda | Full-calorie | 1 | 17 | 17 | 67 | 67 | Y | ** | 0 |
| 86 | Kraft Foods | Capri Sun | Fruit drink | Full-calorie | 18 | 16 | 16-33 | 60 | 60-130 | N | 0 | 10 |
| 87 | XINGtea | XINGtea | Iced tea/coffee | Full-calorie | 3 | 16 | 16-20 | 60 | 60-80 | ** | ** | 0 |
| 87 (fie) | Kraft Foods | Kool-Aid (Jammers, Twists, packets) | Fruit drink | Full-calorie | 17 | 16 | 16-20 | 60 | 60-80 | N | ** | 0 |
| 89 | Starbucks | Starbucks | Iced tea/coffee | Full-calorie | 21 | 15 | 5-28 | 107 | 60-169 | Y | 76 | 0 |
| 90 | Dr Pepper Snapple Group | Hawaiian Punch | Fruit drink | Full-calorie | 15 | 15 | 13-29 | 60 | 60-110 | Y | 0 | 5 |
| 91 | Johanna Foods | Ssips | Iced tea/coffee | Full-calorie | 2 | 15 | 12-17 | 60 | 50-70 | ** | 0 | 0 |
| 92 | PepsiCo | AMP Energy | Energy drink | Full-calorie | 3 | 15 | 15 | 60 | 60 | Y | 80 | 0 |
| 93 | Monster Beverage Corporation | Huberts | Fruit drink | Full-calorie | 11 | 14 | 14-17 | 60 | 60-80 | Y | 0 | 10 |
| 94 | Sunny Delight Beverages | Sunny D | Fruit drink | Full-calorie | 13 | 14 | 14-15 | 60 | 50-60 | Y | 0 | 5 |
| 95 | Tuscan Dairy Farms | Fruit Rush | Fruit drink | Full-calorie | 4 | 14 | 14 | 60 | 60 | Y | 0 | ** |
| 96 | Reed's | Reed's | Regular soda | Full-calorie | 1 | 14 | 14 | 55 | 55 | Y | 0 | 25 |
| 97 | Coca-Cola | Powerade | Sports drink | Full-calorie | 8 | 14 | 14 | 53 | 53 | N | 0 | 0 |
| 98 | Coca-Cola | Fuze | Iced tea/coffee | Full-calorie | 4 | 14 | 12-17 | 50 | 47-67 | N | ** | 0 |
| 99 | PepsiCo | Gatorade | Sports drink | Full-calorie | 21 | 14 | 14 | 50 | 50-53 | N | 0 | 0 |
| 100 | Starbucks | Starbucks (Refreshers) | Energy drink | Full-calorie | 3 | 13 | 13 | 60 | 60 | ** | 33 | 0 |
| 100 (fie) | Campbell Soup Company | Bolthouse Farms | Fruit drink | Full-calorie | 1 | 13 | 13 | 60 | 60 | Y | 0 | ** |
| 102 | Unilever | Lipton | Iced tea/coffee | Full-calorie | 16 | 13 | 11-23 | 50 | 45-80 | Y | 7 | 1 |
| 103 | Arizona | Arizona | Iced tea/coffee | Full-calorie | 3 | 13 | 13 | 50 | 50 | Y | 11 | ** |
| 104 | Coca-Cola | Vitamin Water | Flavored water | Full-calorie | 10 | 13 | 12-13 | 48 | 48 | N | 0 | 0 |


| Nutrifional confent of beverages cont'd |  |  |  |  |  | Sugar (g) |  | Calories (kcal) |  | 0-calorie sweeteners $(\mathrm{Y} / \mathrm{N})^{* * *}$ | Caffeine (median $\mathrm{mg})^{* * *}$ | \% juice (median) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rank | Company | Brand (sub-brand) | Category | Subcategory | $\begin{array}{r} \text { \# of } \\ \text { products } \end{array}$ | Median | Range | Median | Range |  |  |  |
| 105 | Houchens Industries | Tampico | Fruit drink | Full-calorie | 10 | 12 | 12-15 | 60 | 50-70 | Y | 0 | ** |
| 106 | Monster Beverage Corporation | Peace Tea | Iced tea/coffee | Full-calorie | 8 | 12 | 11-13 | 50 | 50 | Y | ** | 5 |
| 107 | Coca-Cola | Honest Tea | Iced tea/coffee | Full-calorie | 3 | 12 | 11-12 | 47 | 47 | y | 22 | 2 |
| 108 | Nestle | Nestea | Iced tea/coffee | Full-calorie | 8 | 11 | 11-12 | 50 | 45-50 | Y | ** | 0 |
| 109 | Unilever | Lipton (select varieties) | Iced tea/coffee | Reduced-sugar | 2 | 11 | 10-11 | 40 | 40 | Y | 3 | 1 |
| 110 | PepsiCo | Pepsi (NEXT) | Regular soda | Reduced-sugar | 1 | 10 | 10 | 40 | 40 | Y | 23.5 | ** |
| 110 (fie) | Apple \& Eve | Apple \& Eve (Waterfruits) | Flavored water | Reduced-sugar | 3 | 10 | 10 | 40 | 40 | N | 0 | 10 |
| 110 (fie) | PepsiCo | SoBe (Lifewater) | Flavored water | Reduced-sugar | 7 | 10 | 8-10 | 40 | 35-40 | Y | 0 | 0 |
| 110 (tie) | BYB Brands, Inc. | Tum E Yummies | Fruit drink | Reduced-sugar | 5 | 10 | 10 | 40 | 40 | ** | 0 | 0 |
| 110 (fie) | PepsiCo | Mtn Dew (Kickstart) | Regular soda | Reduced-sugar | 2 | 10 | 10 | 40 | 40 | Y | 46 | 5 |
| 115 | Kratt Foods | Kool-Aid (Bursts, Singles) | Fruit drink | Reduced-sugar | 9 | 9 | 7-9 | 35 | 30-35 | Y | ** | ** |
| 116 | Vita Coco | Vita Coco Kids | Fruit drink | Reduced-sugar | 5 | 8 | 8 | 35 | 35 | N | 0 | 50 |
| 117 | Coca-Cola | Honest Tea | Iced tea/coffee | Reduced-sugar | 16 | 8 | 5-10 | 30 | 17-38 | N | 24 | 0 |
| 118 | Jones Soda Co. | Jones (select flavors) | Regular soda | Reduced-sugar | 6 | 8 | 8 | 30 | 30 | Y | ** | ** |
| 118 (fie) | Coca-Cola | Capri Sun (Roarin' Waters) | Flavored water | Reduced-sugar | 6 | 8 | 8 | 30 | 30 | Y | 0 | 0 |
| 120 | Coca-Cola | Minute Maid (Light) | Fruit drink | Reduced-sugar | 2 | 6 | 2-10 | 33 | 15-40 | Y | 0 | 24 |
| 121 | Dr Pepper Snapple Group | Snapple (diet varieties) | Fruit drink | Reduced-sugar | 2 | 6 | 2-9 | 25 | 10-40 | Y | 6 | 3 |
| 122 | Monster Beverage Corporation | Java Monster (Vanilla Light) | Energy drink | Reduced-sugar | 1 | 5 | 5 | 50 | 50 | Y | 99 | 0 |
| 123 | PepsiCo | Gatorade (G2) | Sports drink | Reduced-sugar | 12 | 5 | 5 | 20 | 20 | Y | 0 | 0 |
| 124 | Monster Beverage Corporation | Monster Energy (select varieties) | Energy drink | Reduced-sugar | 7 | 3 | 3-6 | 10 | 10-25 | Y | 83 | 0 |
| 125 | Rockstar | Rockstar (Recovery) | Energy drink | Reduced-sugar | 2 | 3 | 3 | 10 | 10 | Y | 160 | 3 |
| 126 | Starbucks | Starbucks (Low Calorie) | Iced tea/coffee | Reduced-sugar | 1 | 2 | 2 | 36 | 36 | ** | 80 | 0 |
| 127 | Royal Wessanen | Little Hug Fruit Barrels | Fruit drink | Reduced-sugar | 10 | 2 | 2 | 10 | 10 | ** | 0 | 0 |
| 128 | Ocean Spray | Ocean Spray (Diet and other) | Fruit drink | Reduced-sugar | 13 | 2 | 2-13 | 5 | 5-50 | ** | ** | ** |
| 129 | Coca-Cola | NOS (Fruit Punch, Active-Acai Pomegranate Blueberry) | Energy drink | Reduced-sugar | 2 | 1 | 1 | 7 | 7 | Y | 81 | 0 |

## Nutrifional confent of beverages conf'd

DIET CHILDREN'S DRINKS, ENERGY DRINKS AND ENERGY SHOTS

| Company | Brand (sub-brand) | Category | Subcategory | \# of products | Sugar (g) |  | Calories (kcal) |  | $\begin{array}{r} \text { 0-calorie } \\ \text { sweeteners } \\ (\mathrm{Y} / \mathrm{N})^{* *} \end{array}$ | Caffeine (median $\mathrm{mg})^{* *}$ | \% juice (median) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Median | Range | Median | Range |  |  |  |
| Dr Pepper Snapple Group | Hawaiian Punch (Juicy Red Light) | Fruit drink | Diet**** | 1 | 2 | 2 | 10 | 10 | Y | 0 | 5 |
| Coca-Cola | Minute Maid (Fruit Falls) | Flavored water | Diet**** | 2 | 1 | 1 | 6 | 6 | Y | 0 | 3 |
| Jel Sert Company | Hawaiian Punch | Fruit drink | Diet | 10 | 0 | 0 | 5 | 5 | Y | 0 | 0 |
| Kraft Foods | Kool-Aid (Liquid Drink Mix) | Fruit drink | Diet | 4 | 0 | 0 | 0 | 0 | Y | 0 | 0 |
| Joseph Co. Intl LLC | West Coast Chill | Energy drink | Diet | 1 | 0 | 0 | 10 | 10 | Y | 0 | 0 |
| PepsiCo | AMP Energy | Energy drink | Diet | 2 | 0 | 0 | 7 | 5-10 | Y | 76 | 0 |
| Innovation Ventures | 5-hour Energy | Energy drink | Shot | 7 | 0 | 0 | 4 | 4 | Y | 200 | 0 |
| Red Bull | Red Bull | Energy drink | Diet | 2 | 0 | 0 | 5 | 0-10 | Y | 80 | 0 |
| Novartis | NoDoz | Energy drink | Shot | 2 | 0 | 0 | 1 | 1 | ** | 115 | 0 |
| Monster Beverage Corporation | Monster Energy | Energy drink | Diet | 5 | 0 | 0 | 0 | 0 | Y | 70 | 0 |
| Coca-Cola | NOS | Energy drink | Diet | 3 | 0 | 0 | 0 | 0 | Y | 80 | 0 |
| Rockstar | Rockstar | Energy drink | Diet | 6 | 0 | 0 | 0 | 0 | Y | 120 | 0 |
| SK Energy Shots | SK Energy | Energy drink | Shot | 4 | 0 | 0 | 0 | 0 | Y | 280 | 0 |
| NVE Pharmaceuticals | Stacker 2 XTRA | Energy drink | Shot | 2 | 0 | 0 | 0 | 0 | Y | ** | 0 |

*Serving size is eight ounces, except for products sold only in smaller packaging, for example children's products in smaller, single-serve pouches or boxes ( 6 to 6.8 ounces ) and energy shots (approx 2 to 2.5 ounces). **Not reported
${ }^{* * *}$ Y indicates the ingredient was present in at least one of the products; medians are for drinks reporting amounts
****Sugar in these drinks comes from juice
Shading indicates children's product
Source: Nutrition analysis (August, 2014

## on-package ingredient claims and Child feafures

Ranking by number of ingredient claims per package and then by child features
Includes packaging for all brands found in local supermarkets in July 2014

| Rank | Company | Brand | Category | Nutrition-related messages* |  | Child features** |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | \% of packages with claims | Avg \# per package*** | \% of packages with features | Avg \# per package*** |
| 1 | Apple \& Eve | Apple \& Eve (Waterfruits) | Flavored water | 100\% | 8.0 | 100\% | 1.0 |
| 2 | Campbell Soup Company | V8 Fusion (Refreshers) | Fruit drink | 100\% | 7.0 | 0\% |  |
| 3 | Coca-Cola | Minute Maid (Coolers, Fruit Falls) | Fruit drink | 100\% | 7.0 | 100\% | 1.0 |
| 4 | PepsiCo | Sierra Mist | Regular soda | 100\% | 7.0 | 0\% |  |
| 5 | Coca-Cola | Powerade | Sports drink | 100\% | 6.7 | 0\% |  |
| 6 | Coca-Cola | Vitamin Water | Flavored water | 100\% | 6.4 | 0\% |  |
| 7 | Unilever | Lipton | Iced tea/coffee | 100\% | 6.1 | 0\% |  |
| 8 | Royal Wessanen | Little Hug Fruit Barrels | Fruit drink | 100\% | 6.0 | 100\% | 1.0 |
| 9 | PepsiCo | SoBe | Iced tea/coffee | 100\% | 6.0 | 100\% | 1.0 |
| 10 | BYB Brands, Inc. | Tum E Yummies | Fruit drink | 100\% | 6.0 | 0\% |  |
| 11 | Dr Pepper Snapple Group | Hawaiian Punch | Fruit drink | 100\% | 5.9 | 100\% | 1.0 |
| 12 | Coca-Cola | Honest Tea | Iced tea/coffee | 100\% | 5.8 | 13\% | 1.0 |
| 13 | Coca-Cola | Gold Peak | Iced tea/coffee | 100\% | 5.8 | 0\% |  |
| 14 | Langers Juice Company | Langers | Fruit drink | 100\% | 5.4 | 92\% | 1.3 |
| 15 | Campbell Soup Company | V8 Splash | Fruit drink | 100\% | 5.4 | 0\% |  |
| 16 | Coca-Cola | $\mathrm{Hi}-\mathrm{C}$ | Fruit drink | 100\% | 5.0 | 100\% | 2.0 |
| 17 | Coca-Cola | Fuze | Iced tea/coffee | 100\% | 5.0 | 0\% |  |
| 17 (fie) | XINGtea | XINGtea | Iced tea/coffee | 100\% | 5.0 | 0\% |  |
| 17 (fie) | Novamex | Jarritos | Regular soda | 100\% | 5.0 | 0\% |  |
| 17 (fie) | Coca-Cola | Seagram's | Regular soda | 75\% | 5.0 | 0\% |  |
| 17 (fie) | Coca-Cola | Minute Maid | Fruit drink | 100\% | 5.0 | 0\% |  |
| 22 | Kraft Foods | Capri Sun <br> (Roarin' Waters) | Flavored water | 100\% | 4.8 | 100\% | 2.5 |
| 23 | Kraft Foods | Capri Sun | Fruit drink | 100\% | 4.0 | 100\% | 2.0 |
| 24 | Kraft Foods | Kool-Aid (singles packets) | Fruit drink | 100\% | 4.0 | 100\% | 1.0 |
| 24 (fie) | Unilever | Lipton (Brisk) | Iced tea/coffee | 100\% | 4.0 | 100\% | 1.0 |
| 26 | Reed's | Reed's | Regular soda | 100\% | 3.8 | 0\% |  |
| 27 | PepsiCo | Mtn Dew | Regular soda | 81\% | 3.8 | 0\% |  |
| 28 | PepsiCo | SoBe (Lifewater) | Flavored water | 100\% | 3.6 | 0\% |  |
| 29 | PepsiCo | Gatorade | Sports drink | 98\% | 3.6 | 0\% |  |
| 30 | Dr Pepper Snapple Group | Snapple | Iced tea/coffee | 100\% | 3.5 | 100\% | 1.0 |
| 31 | Polar Beverages | Polar | Regular soda | 90\% | 3.4 | 10\% | 1.0 |

Nutrition-related messages*
Child features**

## on-package ingredient claims and Child feafures conf'd

Nutrition-related messages*
\% of packages with claims Avg \# per package***

## Category

Category
Regular soda

| Regular soda | $75 \%$ |
| :--- | :--- |


| Regular soda | $75 \%$ | 3.4 |
| :--- | :--- | :--- |

Regular soda $\quad 75 \% \quad 3.3 \quad 0 \%$

| Rank | Company | Brand | Cate |
| :---: | :--- | :--- | :--- |
| $\mathbf{3 2}$ | Dr Pepper Snapple Group | 7UP | Regula |
| 33 | PepsiCo | Pepsi | Regula |
| $\mathbf{3 4}$ | Dr Pepper Snapple Group | Schweppes | Regula |
| $\mathbf{3 5}$ | Dr Pepper Snapple Group | Sun Drop | Regula |
| $\mathbf{3 6}$ | Coca-Cola | Simply | Fruit d |
| $\mathbf{3 6 ( \text { (fie) }}$ | Johanna Foods | Ssips | Fruit |
| $\mathbf{3 6 ( \text { (fie) }}$ | Coca-Cola | Sprite | Regula |
| $\mathbf{3 6 ( \text { (fie) }}$ | Newman's Own | Newman's Own | Fruit d |
| $\mathbf{3 9}$ | Ocean Spray | Ocean Spray | Fruit |
| $\mathbf{4 0}$ | Dr Pepper Snapple Group | A\&W | Regula |
| $\mathbf{4 1}$ | PepsiCo | SoBe | Fruit d |
| $\mathbf{4 2}$ | Nestle | Nestea | Iced t |
| $\mathbf{4 3}$ | Kraft Foods | Kool-Aid | (Jammers, Bursts) |
| $\mathbf{4 4}$ | Jones Soda Co. | Fruit |  |
| $\mathbf{4 5}$ | Jel Sert Company | Mones | Regula Fruit Squeezers | Fruit d


| Regular soda | $75 \%$ | 3.3 |
| :--- | :--- | :--- |

Avg \# per package***
continued

## on-package ingredienf claims and child feafures conf'd

## COMPANY RANKINGS

| Most |  |  | Nutrition-related messages* |  | Child features** |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rank | Company | \% of packages with claims | Avg \# per package*** | \% of packages with features | Avg \# per package*** |
|  | 1 | Apple \& Eve | 100\% | 8.0 | 100\% | 1.0 |
|  | 2 | Royal Wessanen | 100\% | 6.0 | 100\% | 1.0 |
|  | 3 | BYB Brands, Inc. | 100\% | 6.0 | 0\% |  |
|  | 4 | Campbell Soup Company | 100\% | 5.9 | 0\% |  |
|  | 5 | Coca-Cola | 97\% | 5.8 | 8\% | 1.5 |
|  | 6 | Langers Juice Company | 100\% | 5.4 | 92\% | 1.3 |
|  | 7 | Novamex | 100\% | 5.0 | 0\% |  |
|  | 7 (fie) | XINGtea | 100\% | 5.0 | 0\% |  |
|  | 9 | Unilever | 100\% | 4.0 | 100\% | 1.0 |
|  | 10 | Kraft Foods | 100\% | 3.9 | 100\% | 2.9 |
|  | 11 | Dr Pepper Snapple Group | 82\% | 3.8 | 76\% | 1.0 |
|  | 12 | PepsiCo | 95\% | 3.8 | 11\% | 1.0 |
|  | 13 | Reed's | 100\% | 3.8 | 0\% |  |
|  | 14 | Polar Beverages | 90\% | 3.4 | 10\% | 1.0 |
|  | 15 | Arizona | 57\% | 3.0 | 7\% | 1.0 |
|  | 16 | Newman's Own | 100\% | 3.0 | 0\% |  |
|  | 17 | Ocean Spray | 100\% | 2.9 | 0\% |  |
|  | 18 | Jones Soda Co. | 100\% | 2.6 | 0\% |  |
|  | 19 | Johanna Foods | 100\% | 2.5 | 0\% |  |
|  | 20 | Nestle | 83\% | 2.4 | 0\% |  |
|  | 21 | Jel Sert Company | 100\% | 2.0 | 100\% | 1.0 |
|  | 22 | J.M. Smucker Company | 100\% | 2.0 | 0\% |  |
|  | 22 (fie) | Jumex Group | 100\% | 2.0 | 0\% |  |
| Least | 24 | Goya | 35\% | 1.4 | 0\% |  |

${ }^{*}$ Nutrition-related messages include claims about ingredients, natural messages, calorie labels, and other health-related messages.
${ }^{* *}$ Child features include cartoon brand and non-brand characters and any reference to kids/family, fun, or child-targeted promotions on the package.
${ }^{* *}$ Average \# per package of those packages containing claims or child features
Shading indicates childrens product
Source: In-store marketing product claims and packaging analysis (July 2014)

## AdVertising spending

## Ranking by total advertising spending in 2013

Includes total spending in all measured media for sugary drinks and energy drinks*

| Rank | Company | Brand | Category | Total advertising spending (\$000) |  |  | 2013 advertising spending by medium** (\$000) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 2010 | 2013 | Change | TV | TV \% of total | Magazine | Radio | Outdoor | Internet |
| 1 | PepsiCo | Pepsi | Regular soda | \$49,576 | \$139,310 | 181\% | \$124,102 | 89\% | \$144 | \$8,371 | \$4,236 | \$2,081 |
| 2 | PepsiCo | Gatorade | Sports drink | \$113,252 | \$108,212 | -4\% | \$91,745 | 85\% | \$13,608 | \$14 | \$0 | \$430 |
| 3 | Coca-Cola | Coca-Cola | Regular soda | \$131,659 | \$100,466 | -24\% | \$84,920 | 85\% | \$78 | \$8,079 | \$5,926 | \$109 |
| 4 | Innovation Ventures | 5-hour Energy | Energy drink | \$107,006 | \$98,842 | -8\% | \$96,754 | 99\% | \$0 | \$876 | \$0 | \$106 |
| 5 | Dr Pepper Snapple Group | Dr Pepper | Regular soda | \$57,062 | \$54,286 | -5\% | \$49,705 | 92\% | \$1,125 | \$429 | \$2,776 | \$233 |
| 6 | Red Bull | Red Bull | Energy drink | \$25,974 | \$47,773 | 84\% | \$45,606 | 96\% | \$38 | \$1 | \$1,105 | \$767 |
| 7 | PepsiCo | Mtn Dew | Regular soda | \$18,590 | \$41,112 | 121\% | \$26,477 | 64\% | \$639 | \$1,652 | \$537 | \$11,780 |
| 8 | Kraft Foods | Kool-Aid | Fruit drink | \$24,251 | \$28,755 | 19\% | \$15,198 | 53\% | \$13,525 | \$0 | \$0 | \$0 |
| 9 | SK Energy Shots | SK Energy | Energy drink | \$0 | \$20,408 |  | \$16,999 | 83\% | \$0 | \$3,409 | \$0 | \$0 |
| 10 | Ocean Spray | Ocean Spray | Fruit drink | \$32,464 | \$18,835 | -42\% | \$18,822 | 100\% | \$0 | \$0 | \$0 | \$12 |
| 11 | Coca-Cola | Coca-Cola | Soda brand | \$44,889 | \$18,483 | -59\% | \$4,105 |  | \$245 |  | \$13,291 | \$827 |
| 12 | Coca-Cola | Powerade | Sports drink | \$14,956 | \$17,841 | 19\% | \$17,519 | 98\% | \$0 | \$255 | \$37 | \$31 |
| 13 | Dr Pepper Snapple Group | Snapple | Other sugary drink brand | \$4,325 | \$15,638 | 262\% | \$11,145 | 71\% | \$0 | \$2,956 | \$1,414 | \$123 |
| 14 | Coca-Cola | Vitamin Water | Flavored water | \$31,272 | \$15,603 | -50\% | \$15,196 | 97\% | \$0 | \$0 | \$383 | \$24 |
| 15 | Sunny Delight Beverages | Sunny D | Fruit drink | \$22,906 | \$13,844 | -40\% | \$13,844 | 100\% | \$0 | \$0 | \$0 | \$0 |
| 16 | Dr Pepper Snapple Group | 7UP | Regular soda | \$28,963 | \$12,114 | -58\% | \$10,727 | 89\% | \$384 | \$734 | \$270 | \$0 |
| 17 | Dr Pepper Snapple Group | Snapple | Iced tea/coffee | \$4,393 | \$11,686 | 166\% | \$11,451 | 98\% | \$0 | \$0 | \$10 | \$124 |
| 18 | Unilever | Lipton | Iced tea/coffee | \$17,191 | \$9,222 | -46\% | \$8,399 | 91\% | \$0 | \$744 | \$0 | \$0 |
| 19 | Dr Pepper Snapple Group | Canada Dry | Regular soda | \$10,752 | \$9,047 | -16\% | \$9,025 | 100\% | \$22 | \$0 | \$0 | \$0 |
| 20 | Coca-Cola | Seagram's | Regular soda | \$0 | \$7,651 |  | \$0 | 0\% | \$7,552 | \$5 | \$0 | \$0 |
| 21 | PepsiCo | Sierra Mist | Regular soda | \$22,141 | \$6,581 | -70\% | \$4,627 | 70\% | \$0 | \$1,321 | \$632 | \$0 |
| 22 | Coca-Cola | Fuze | Iced tea/coffee | \$0 | \$6,220 |  | \$901 | 14\% | \$5,296 | \$4 | \$0 | \$19 |
| 23 | Kraft Foods | Capri Sun (Roarin' Waters) | Flavored water | \$0 | \$5,982 |  | \$5,890 | 98\% | \$57 | \$0 | \$0 | \$35 |
| 24 | PepsiCo | Pepsi | Soda brand | \$4,585 | \$5,066 | 10\% | \$12 |  |  |  | \$4,652 | \$402 |
| 25 | Coca-Cola | Sprite | Regular soda | \$12,743 | \$4,746 | -63\% | \$4,746 | 100\% | \$0 | \$0 | \$0 | \$0 |
| 26 | Coca-Cola | NOS | Energy drink | \$1,828 | \$4,612 | 152\% | \$4,502 | 98\% | \$0 | \$86 | \$24 | \$0 |
| 27 | Dr Pepper Snapple Group | Sun Drop | Regular soda | \$35 | \$4,606 | 13184\% | \$4,606 | 100\% | \$0 | \$0 | \$0 | \$0 |
| 28 | Campbell Soup Company | V8 Fusion (Refreshers) | Fruit drink | \$0 | \$3,635 |  | \$0 | 0\% | \$3,560 | \$0 | \$0 | \$0 |
| 29 | Houchens Industries | Tampico | Fruit drink | \$279 | \$3,411 | 1122\% | \$3,123 | 92\% | \$0 | \$0 | \$288 | \$0 |
| 30 | PepsiCo | Lipton Pure Leaf | Iced tea/coffee | \$0 | \$3,261 |  | \$1,563 | 48\% | \$197 | \$1,004 | \$236 | \$120 |
| 31 | PepsiCo | Manzanita Sol | Regular soda | \$0 | \$2,364 |  | \$1,351 | 57\% | \$0 | \$736 | \$276 | \$0 |
| 32 | Dr Pepper Snapple Group | Dr Pepper | Soda brand | \$1,925 | \$1,891 | -2\% | \$48 | 3\% | \$245 | \$1,394 | \$198 | \$0 |
| 33 | Dr Pepper Snapple Group | 7UP | Soda brand | \$2,404 | \$1,671 | -30\% | \$0 | 0\% | \$0 | \$0 | \$1,088 | \$583 |

## Advertising spending cont'd

|  | Rank | Company | Brand | Category | Total advertising spending (\$000) |  |  | 2013 advertising spending by medium** (\$000) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 2010 | 2013 | Change | TV | TV \% of total | Magazine | Radio | Outdoor | Internet |
|  | 34 | Nestle | Poland Spring (Nature's Blends) | Fruit drink | \$0 | \$1,532 |  | \$0 |  | \$1,509 | \$0 | \$0 | \$0 |
|  | 35 | PepsiCo | Sierra Mist | Soda brand | \$211 | \$1,437 | 582\% | \$0 | 0\% | \$0 | \$1,437 | \$0 | \$0 |
|  | 36 | PepsiCo | PepsiCo | Company | \$633 | \$1,096 | 73\% | \$0 | 0\% | \$0 | \$0 | \$1,096 | \$0 |
|  | 37 | Campbell Soup Company | Bolthouse Farms | Other sugary drink brand | \$0 | \$1,067 |  | \$0 | 0\% | \$0 | \$2 | \$1,065 | \$0 |
|  | 38 | Coca-Cola | Fanta | Regular soda | \$6,330 | \$927 | -85\% | \$744 | 80\% | \$0 | \$88 | \$94 | \$0 |
|  | 39 | Dr Pepper Snapple Group | Dr Pepper Snapple Group | Company | \$48 | \$870 | 1697\% | \$0 | 0\% | \$0 | \$11 | \$520 | \$0 |
|  | 40 | Dr Pepper Snapple Group | Canada Dry | Soda brand | \$589 | \$845 | 44\% | \$0 | 0\% | \$0 | \$0 | \$844 | \$1 |
|  | 41 | Dr Pepper Snapple Group | Crush | Soda brand | \$492 | \$794 | 61\% | \$0 | 0\% | \$0 | \$777 | \$0 | \$17 |
|  | 42 | Welch Foods Inc. | Welch's | Fruit drink | \$5,451 | \$724 | -87\% |  |  | \$85 |  |  | \$14 |
|  | 43 | Kraft Foods | Capri Sun | Fruit drink | \$9,875 | \$692 | -93\% | \$43 | 6\% | \$0 | \$0 | \$0 | \$617 |
|  | 44 | Coca-Cola | Fuze | Other sugary drink brand | \$137 | \$648 | 374\% | \$0 | 0\% | \$0 | \$369 | \$268 | \$11 |
|  | 45 | Kraft Foods | Capri Sun | Other sugary drink brand | \$232 | \$640 | 176\% | \$0 | 0\% | \$0 | \$1 | \$0 | \$522 |
|  | 46 | Coca-Cola | Sprite | Soda brand | \$6,868 | \$593 | -91\% | \$124 | 21\% | \$0 | \$68 | \$247 | \$154 |
|  | 47 | PepsiCo | Tropicana | Other sugary drink brand | \$856 | \$458 | -46\% | \$0 | 0\% | \$0 | \$0 | \$458 | \$0 |
|  | 48 | Dr Pepper Snapple Group | Dr Pepper/7UP | Soda brand | \$8,596 | \$452 | -95\% | \$0 | 0\% | \$0 | \$0 | \$0 | \$452 |
|  | 49 | Royal Wessanen | Little Hug Fruit Barrels | Fruit drink | \$1,077 | \$451 | -58\% | \$15 | 3\% | \$0 | \$0 | \$0 | \$321 |
|  | 50 | Coca-Cola | Gold Peak | Iced tea/coffee | \$1,160 | \$369 | -68\% | \$367 | 100\% | \$0 | \$0 | \$0 | \$1 |
|  | 51 | PepsiCo | SoBe | Other sugary drink brand | \$1,814 | \$249 | -86\% | \$0 | 0\% | \$0 | \$0 | \$249 | \$0 |
|  | 52 | Welch Foods Inc. | Welch's Chillers | Fruit drink | \$0 | \$218 |  | \$0 | 0\% | \$0 | \$0 | \$0 | \$0 |
|  | 53 | Dr Pepper Snapple Group | Schweppes | Soda brand | \$3 | \$204 | 7754\% | \$0 | 0\% | \$0 | \$204 | \$0 | \$0 |
|  | 54 | Coca-Cola | Mello Yello | Soda brand | \$55 | \$144 | 161\% | \$0 | 0\% | \$0 | \$0 | \$0 | \$0 |
|  | 55 | National Beverage Corp | Faygo | Soda brand | \$277 | \$136 | -51\% | \$0 | 0\% | \$0 | \$0 | \$136 | \$0 |
|  | 56 | Coca-Cola | Minute Maid | Other sugary drink brand | \$187 | \$130 | -30\% | \$0 | 0\% | \$0 | \$130 | \$0 | \$0 |
| M | 57 | Dr Pepper Snapple Group | Squirt | Soda brand | \$482 | \$128 | -73\% | \$0 | 0\% | \$0 | \$128 | \$0 | \$0 |
| Least | 58 | Carolina Beverage Corporation | Cheerwine | Other sugary drink brand | \$11 | \$127 | 1005\% | \$0 | 0\% | \$0 | \$86 | \$41 | \$0 |

## Adverfising spending cont'd

 COMPANY RANKINGS|  | Rank | Company | Total advertising spending (\$000) |  |  | 2013 advertising spending by medium** (\$000) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 2010 | 2013 | Change | TV | $\begin{aligned} & \text { TV \% } \\ & \text { of total } \end{aligned}$ | Magazine | Radio | Outdoor | Internet |
| Most | 1 | PepsiCo | \$234,562 | \$309,651 | 32\% | \$249,877 | 81\% | \$14,588 | \$15,024 | \$12,389 | \$14,815 |
|  | 2 | Coca-Cola | \$284,601 | \$184,840 | -35\% | \$134,504 | 73\% | \$13,221 | \$9,528 | \$24,318 | \$1,330 |
|  | 3 | Dr Pepper Snapple Group | \$132,080 | \$114,407 | -13\% | \$67,721 | 59\% | \$1,775 | \$6,706 | \$7,127 | \$1,538 |
|  | 4 | Innovation Ventures | \$107,006 | \$98,842 | -8\% | \$96,754 | 98\% | \$0 | \$876 | \$0 | \$106 |
|  | 5 | Red Bull | \$25,974 | \$47,773 | 84\% | \$45,606 | 95\% | \$38 | \$1 | \$1,105 | \$767 |
|  | 6 | Kraft Foods | \$34,381 | \$36,068 | 5\% | \$21,131 | 59\% | \$13,582 | \$1 | \$0 | \$1,175 |
|  | 7 | SK Energy Shots | \$0 | \$20,408 |  | \$16,999 | 83\% | \$0 | \$3,409 | \$0 | \$0 |
|  | 8 | Ocean Spray | \$32,608 | \$18,929 | -42\% | \$18,845 | 100\% | \$0 | \$0 | \$0 | \$84 |
|  | 9 | Sunny Delight Beverages | \$22,906 | \$13,844 | -40\% | \$13,844 | 100\% | \$0 | \$0 | \$0 | \$0 |
|  | 10 | Unilever | \$17,196 | \$9,222 | -46\% | \$8,399 | 91\% | \$0 | \$744 | \$0 | \$0 |
|  | 11 | Campbell Soup Company | \$299 | \$5,109 | 1608\% | \$0 | 0\% | \$3,560 | \$2 | \$1,065 | \$0 |
|  | 12 | Welch Foods Inc. | \$5,451 | \$942 | -83\% | \$0 | 0\% | \$85 | \$0 | \$0 | \$14 |
| V | 13 | Rockstar | \$326 | \$300 | -8\% | \$175 | 58\% | \$0 | \$3 | \$113 | \$0 |
| Least | 14 | National Beverage Corp | \$277 | \$136 | -51\% | \$0 | 0\% | \$0 | \$0 | \$136 | \$0 |

* Includes all brands with \$100,000 or more in advertising spending in 2013
**Includes spending in 18 different media, including TV, magazines, radio, newspapers, free standing insert coupons, internet and outdoor advertising Shading indicates children's product
Source: Rudd Center analysis of Nielsen data


## TeleVision adVerfising exposure for Children

Ranking by ads viewed by children (6-11 years)
Includes average number of ads viewed by children on national (network, cable, and syndicated) and spot TV

| Rank | Company | Brand | Category | Average \# of ads viewed |  |  |  |  |  | 2013 targeted ratios* |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Preschoolers (2-5 years) |  |  | Children (6-11 years) |  |  | Preschooler: adult | Child: adult |
|  |  |  |  | 2010 | 2013 | \% change | 2010 | 2013 | \% change |  |  |
| 1 | Innovation Ventures | 5-hour Energy | Energy drink | 37.7 | 25.4 | -33\% | 45.5 | 29.9 | -34\% | 0.4 | 0.5 |
| 2 | Kraft Foods | Capri Sun (Roarin' Waters) | Flavored water | 0.0 | 24.0 |  | 0.0 | 28.8 |  | 5.7 | 6.9 |
| 3 | PepsiCo | Gatorade | Sports drink | 10.2 | 13.7 | 34\% | 13.7 | 17.2 | 26\% | 0.4 | 0.5 |
| 4 | Sunny Delight Beverages | Sunny D | Fruit drink | 15.8 | 9.3 | -41\% | 24.8 | 14.7 | -41\% | 1.0 | 1.5 |
| 5 | PepsiCo | Pepsi | Regular soda | 3.6 | 12.9 | 253\% | 4.5 | 13.7 | 204\% | 0.4 | 0.4 |
| 6 | Red Bull | Red Bull | Energy drink | 5.0 | 8.7 | 72\% | 6.1 | 9.7 | 59\% | 0.4 | 0.5 |
| 7 | PepsiCo | Mtn Dew | Regular soda | 3.9 | 6.2 | 58\% | 4.6 | 7.2 | 58\% | 0.4 | 0.4 |
| 8 | Dr Pepper Snapple Group | Dr Pepper | Regular soda | 7.7 | 5.9 | -24\% | 9.2 | 6.2 | -34\% | 0.4 | 0.4 |
| 9 | Ocean Spray | Ocean Spray | Fruit drink | 7.4 | 5.8 | -21\% | 8.4 | 5.8 | -31\% | 0.3 | 0.3 |
| 10 | Coca-Cola | Coca-Cola | Regular soda | 9.0 | 5.2 | -42\% | 11.8 | 5.6 | -52\% | 0.4 | 0.5 |
| 11 | Dr Pepper Snapple Group | Sun Drop | Regular soda | 0.0 | 3.8 | 87131\% | 0.0 | 5.3 | 95784\% | 0.8 | 1.1 |
| 12 | Dr Pepper Snapple Group | Snapple | Other sugary drink brand | 0.3 | 3.4 | 1098\% | 0.3 | 4.1 | 1128\% | 0.4 | 0.5 |
| 13 | Dr Pepper Snapple Group | Snapple | Iced tea/coffee | 2.1 | 3.3 | 56\% | 2.5 | 3.8 | 49\% | 0.4 | 0.5 |
| 14 | Unilever | Lipton | Iced tea/coffee | 3.4 | 3.4 | 0\% | 4.5 | 3.8 | -16\% | 0.4 | 0.4 |
| 15 | Coca-Cola | Vitamin Water | Flavored water | 4.1 | 3.3 | -19\% | 4.7 | 3.5 | -24\% | 0.5 | 0.5 |
| 16 | Dr Pepper Snapple Group | Canada Dry | Regular soda | 5.0 | 3.2 | -36\% | 6.5 | 3.4 | -47\% | 0.4 | 0.4 |
| 17 | Kraft Foods | Kool-Aid | Fruit drink | 30.2 | 1.9 | -94\% | 41.8 | 1.4 | -97\% | 0.5 | 0.3 |
| 18 | Coca-Cola | Sprite | Regular soda | 4.2 | 0.9 | -77\% | 6.0 | 1.0 | -83\% | 0.4 | 0.5 |
| 19 | Kraft Foods | Capri Sun | Fruit drink | 40.3 | 0.5 | -99\% | 52.2 | 0.7 | -99\% | 7.1 | 9.6 |
| 20 | Coca-Cola | Coca-Cola | Soda brand | 0.1 | 0.7 | 1223\% | 0.1 | 0.6 | 756\% | 0.3 | 0.3 |
| 21 | PepsiCo | Sierra Mist | Regular soda | 3.9 | 0.6 | -84\% | 5.2 | 0.5 | -90\% | 0.6 | 0.5 |
| 22 | Coca-Cola | NOS | Energy drink | 0.1 | 0.4 | 413\% | 0.1 | 0.4 | 376\% | 0.2 | 0.2 |
| 23 | Coca-Cola | Powerade | Sports drink | 0.6 | 0.4 | -34\% | 0.6 | 0.3 | $-41 \%$ | 0.3 | 0.3 |
| 24 | Houchens Industries | Tampico | Fruit drink | 0.0 | 0.4 |  | 0.0 | 0.2 |  | 0.8 | 0.4 |
| 25 | Coca-Cola | Gold Peak | Iced tea/coffee | 0.0 | 0.2 |  | 0.0 | 0.2 |  | 0.6 | 0.6 |
| 26 | Dr Pepper Snapple Group | Sun Drop | Soda brand | 0.0 | 0.1 |  | 0.0 | 0.1 |  | 0.7 | 1.5 |
| 27 | PepsiCo | Manzanita Sol | Regular soda | 0.0 | 0.2 |  | 0.0 | 0.1 |  | 0.8 | 0.6 |
| 28 | Coca-Cola | Sprite | Soda brand | 0.1 | 0.1 | -50\% | 0.2 | 0.1 | -71\% | 0.6 | 0.6 |
| 29 | Coca-Cola | Fanta | Regular soda | 0.2 | 0.1 | -51\% | 0.4 | 0.1 | -82\% | 0.9 | 0.6 |
| 30 | S. Martinelli \& Company | Martinelli's | Fruit drink | 0.0 | 0.1 |  | 0.0 | 0.0 |  | 0.4 |  |
| 31 | Coca-Cola | Simply | Fruit drink | 0.3 | 0.1 | -82\% | 0.4 | 0.0 | -90\% |  |  |

```
Ranking Table 4
```

Television adverfising exposure for children cont'd
COMPANY RANKINGS

|  | Rank | Company | Average \# of ads viewed |  |  |  |  |  | 2013 targeted ratios* |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Preschoolers (2-5 years) |  |  | Children (6-11 years) |  |  | Preschooler: adult | Child: adult |
|  |  |  | 2010 | 2013 | \% change | 2010 | 2013 | \% change |  |  |
| Most | 1 | PepsiCo | 24.5 | 33.9 | 39\% | 31.4 | 39.1 | 25\% | 0.4 | 0.4 |
|  | 2 | Kraft Foods | 70.5 | 26.5 | -62\% | 94.0 | 30.8 | -67\% | 3.2 | 3.7 |
|  | 3 | Innovation Ventures | 37.7 | 25.4 | -33\% | 45.5 | 29.9 | -34\% | 0.4 | 0.5 |
|  | 4 | Dr Pepper Snapple Group | 25.8 | 19.5 | -24\% | 32.8 | 22.9 | -30\% | 0.4 | 0.5 |
|  | 5 | Sunny Delight Beverages | 15.8 | 9.3 | -41\% | 24.8 | 14.7 | -41\% | 1.0 | 1.5 |
|  | 6 | Coca-Cola | 20.0 | 11.3 | -43\% | 25.8 | 11.8 | -54\% | 0.4 | 0.4 |
|  | 7 | Red Bull | 5.0 | 8.7 | 72\% | 6.1 | 9.7 | 59\% | 0.4 | 0.5 |
|  | 8 | Ocean Spray | 7.5 | 5.8 | -22\% | 8.5 | 5.8 | -32\% | 0.3 | 0.3 |
|  | 9 | Unilever | 3.4 | 3.4 | 0\% | 4.5 | 3.8 | -16\% | 0.4 | 0.4 |
| Least | 10 | Houchens Industries | 0.0 | 0.4 |  | 0.0 | 0.2 |  | 0.8 | 0.4 |

*Ratio of 1.0 or higher (bolded) indicates more ads viewed than expected given the viewing habits of children 2-11 years
Shading indicates children's product
Source: Rudd Center analysis of Nielsen data (2014)

## Television adVertising exposure for feens

Ranking by ads viewed by teens (12-17 years)
Includes average number of ads viewed by teens on national (network, cable, and syndicated) and spot TV

continued

Television advertising exposure for feens conf'd
COMPANY RANKINGS

|  | Rank |  | Average \# of ads viewed |  |  | 2013 targeted ratio* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Teens (12-17 years) |  |  |  |
|  |  |  | 2010 | 2013 | \% change | Teen:adult |
|  | 1 | PepsiCo | 71.6 | 78.7 | 10\% | 0.9 |
|  | 2 | Innovation Ventures | 104.6 | 72.7 | -30\% | 1.2 |
|  | 3 | Dr Pepper Snapple Group | 61.8 | 43.4 | -30\% | 1.0 |
|  | 4 | Red Bull | 14.5 | 24.4 | 68\% | 1.3 |
|  | 5 | Coca-Cola | 50.0 | 23.7 | -53\% | 0.9 |
|  | 6 | Kraft Foods | 59.2 | 16.3 | -72\% | 1.9 |
|  | 7 | Sunny Delight Beverages | 22.2 | 12.8 | -42\% | 1.3 |
| N | 8 | Ocean Spray | 10.9 | 7.9 | -28\% | 0.4 |
| $\checkmark$ | 9 | Unilever | 7.2 | 7.0 | -3\% | 0.7 |
| Least | 10 | Houchens Industries | 0.0 | 0.3 |  | 0.4 |

*Ratio of .9 or higher (bolded) more ads viewed than expected given teen viewing habits
Shading indicates children's product
Source: Rudd Center analysis of Nielsen data (2014)

## Brand appearances on prime-fime TV

Ranking by total screen time for brand appearances in 2013
Includes brands appearing during prime-time TV programming in 2013*

|  | Rank | Company | Brand | Category** | Total screen time (mins) |  |  | Number of telecasts |  |  | Average duration per telecast (seconds) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 2010 | 2013 | \% change | 2010 | 2013 | \% change | 2010 | 2013 | \% change |
| Most | 1 | Dr Pepper Snapple Group | Snapple | Other sugary drink brand | 11.4 | 299.1 | 2531.1 | 63 | 113 | 79\% | 10.8 | 158.8 | 1367\% |
|  | 2 | Coca-Cola | Coca-Cola | Soda brand | 194.9 | 277.8 | 42.5 | 482 | 546 | 13\% | 24.3 | 30.5 | 26\% |
|  | 3 | Coca-Cola | Sprite | Soda brand | 3.5 | 104.9 | 2896.2 | 42 | 191 | 355\% | 5.0 | 32.9 | 559\% |
|  | 4 | Dr Pepper Snapple Group | 7UP | Soda brand | 8.0 | 51.3 | 539.0 | 55 | 129 | 135\% | 8.8 | 23.9 | 172\% |
|  | 5 | PepsiCo | Pepsi | Soda brand | 28.6 | 31.7 | 11.0 | 263 | 287 | 9\% | 6.5 | 6.6 | 2\% |
|  | 6 | Monster Beverage Corporation | Monster | Energy drink | 0.4 | 27.8 | 7160.9 | 13 | 65 | 400\% | 1.8 | 25.7 | 1352\% |
|  | 7 | Dr Pepper Snapple Group | Dr Pepper | Soda brand | 4.6 | 21.7 | 376.6 | 43 | 102 | 137\% | 6.3 | 12.8 | 101\% |
|  | 8 | Dr Pepper Snapple Group | Sunkist | Soda brand | 4.0 | 15.1 | 277.9 | 17 | 18 | 6\% | 14.1 | 50.4 | 257\% |
|  | 9 | PepsiCo | Sierra Mist | Soda brand | 1.3 | 10.4 | 678.8 | 8 | 18 | 125\% | 10.0 | 34.6 | 246\% |
|  | 10 | Red Bull | Red Bull | Energy drink | 10.2 | 9.8 | -3.6 | 109 | 127 | 17\% | 5.6 | 4.6 | -17\% |
|  | 11 | Coca-Cola | Fanta | Soda brand | 1.0 | 7.3 | 619.7 | 11 | 34 | 209\% | 5.5 | 12.9 | 133\% |
|  | 12 | PepsiCo | Gatorade | Sports drink | 8.9 | 7.0 | -21.2 | 100 | 99 | -1\% | 5.3 | 4.2 | -20\% |
|  | 13 | PepsiCo | Mtn Dew | Soda brand | 4.7 | 4.8 | 3.2 | 52 | 74 | 42\% | 5.4 | 3.9 | -27\% |
|  | 14 | Coca-Cola | NOS | Energy drink | 2.5 | 4.5 | 81.3 | 6 | 23 | 283\% | 25.0 | 11.8 | -53\% |
|  | 15 | Kraft Foods | Kool-Aid | Fruit drink | 6.0 | 4.2 | -30.3 | 90 | 87 | -3\% | 4.0 | 2.9 | -28\% |
|  | 16 | Rockstar | Rockstar | Energy drink | 0.2 | 3.2 | 1645.5 | 4 | 6 | 50\% | 2.8 | 32.0 | 1064\% |
|  | 17 | Dr Pepper Snapple Group | Canada Dry | Soda brand | 0.9 | 2.5 | 192.2 | 5 | 15 | 200\% | 10.2 | 9.9 | -3\% |
|  | 18 | Dr Pepper Snapple Group | A\&W | Soda brand | 2.0 | 2.4 | 18.2 | 12 | 14 | 17\% | 10.1 | 10.2 | 1\% |
|  | 19 | Coca-Cola | Full Throttle | Energy drink | 0.0 | 2.0 |  | 0 | 9 |  | 0.0 | 13.0 |  |
|  | 20 | Coca-Cola | Powerade | Sports drink | 0.3 | 1.9 | 544.4 | 5 | 16 | 220\% | 3.6 | 7.3 | 101\% |
|  | 21 | Coca-Cola | Vitamin Water | Flavored water | 5.7 | 1.6 | -71.8 | 24 | 11 | -54\% | 14.2 | 8.7 | -38\% |
|  | 22 | Coca-Cola | Barq's | Soda brand | 0.1 | 0.8 | 900.0 | 5 | 4 | -20\% | 1.0 | 12.5 | 1150\% |
| $V$ | 23 | Dr Pepper Snapple Group | RC Cola | Soda brand | 1.4 | 0.7 | -48.2 | 13 | 5 | -62\% | 6.5 | 8.8 | 35\% |
| Least | 24 | Innovation Ventures | 5-hour Energy | Energy drink | 0.2 | 0.5 | 128.6 | 14 | 22 | 57\% | 1.0 | 1.5 | 45\% |

continued

## Brand appearances on prime-fime TV conf'd

## COMPANY RANKINGS

| Most | Rank | Company | Total screen time (mins) |  |  | Number of telecasts |  |  | Average duration per telecast (seconds) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 2010 | 2013 | \% change | 2010 | 2013 | \% change | 2010 | 2013 | \% change |
|  | 1 | Coca-Cola | 209.7 | 401.6 | 92\% | 597 | 848 | 42\% | 21.1 | 28.4 | 35\% |
|  | 2 | Dr Pepper Snapple Group | 34.9 | 393.6 | 1029\% | 242 | 421 | 74\% | 8.6 | 56.1 | 549\% |
|  | 3 | PepsiCo | 45.8 | 54.5 | 19\% | 441 | 496 | 12\% | 6.2 | 6.6 | 6\% |
|  | 4 | Monster Beverage Corporation | 2.2 | 28.2 | 1212\% | 20 | 67 | 235\% | 6.5 | 25.3 | 292\% |
|  | 5 | Red Bull | 10.2 | 9.8 | -4\% | 109 | 127 | 17\% | 5.6 | 4.6 | -17\% |
|  | 6 | Kraft Foods | 6.1 | 4.2 | -31\% | 92 | 89 | -3\% | 4.0 | 2.8 | -28\% |
| $V$ | 7 | Rockstar | 0.2 | 3.2 | 1645\% | 4 | 6 | 50\% | 2.8 | 32.0 | 1064\% |
| Least | 8 | Innovation Ventures | 0.2 | 0.5 | 129\% | 14 | 22 | 57\% | 1.0 | 1.5 | 45\% |

Includes all brands with total screen time of 0.5 minutes ( 30 sec ) or longer in 2013
**Soda brand category includes appearances for soda brands and regular soda combined
Shading indicates children's product
Source: Rudd Center analysis of Nielsen data (2014)

## Beverage websife exposure

Ranking by average unique youth visitors (2-17 years) per month in 2013
Includes data for websites featuring sugary drink or energy drink content in 2013*

|  |  |  |  |  | Average unique visitors per month (000) |  |  |  |  |  | 2013 average for all youth visitors (2-17 years) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | $\begin{aligned} & \text { Child } \\ & 1 / 12 \text { ye } \end{aligned}$ | $\begin{aligned} & \text { lren } \\ & \text { ears)**** } \end{aligned}$ |  | $\begin{array}{r} \text { Teer } \\ 13-17 y \end{array}$ | ears)**** |  |  |  |  |
| Rank | Company | Brand | Category | Websites | 2010 | 2013 | Change | 2010 | 2013 | Change | Avg visits per month | Avg time spent (min) | Avg pages per month | Quarters with data available |
| 1 | Innovation Ventures | 5-hour Energy | Energy drink | 5HourEnergy.com | 1.6 | 11.4 | 633\% | 13.2 | 116.8 | 785\% | 1.1 | 1.2 | 1.3 | 4 |
| 2 | Coca-Cola | Coca-Cola | Soda brand | MyCokeRewards.com | 42.0 | 12.6 | -70\% | 128.9 | 58.9 | -54\% | 1.7 | 7.0 | 19.6 | 4 |
| 3 | Red Bull | Red Bull | Energy drink | RedBull.com | 0.7 | 1.0 | 41\% | 11.8 | 34.8 | 195\% | 1.1 | 1.4 | 2.2 | 4 |
| 4 | PepsiCo | Pepsi | Soda brand | Pepsi.com | 2.3 | 2.8 | 22\% | 15.4 | 32.6 | 112\% | 1.1 | 1.3 | 2.2 | 4 |
| 5 | Red Bull | Red Bull | Energy drink | RedBullUSA.com | ** | 2.0 |  | ** | 23.2 |  | 2.7 | 1.6 | 7.1 | 4 |
| 6 | PepsiCo | Gatorade | Sports drink | Gatorade.com | 9.7 | 0.5 | -95\% | 20.0 | 21.6 | 8\% | 1.1 | 1.2 | 1.5 | 4 |
| 7 | Dr Pepper Snapple Group | Dr Pepper | Regular soda | DrPepper.com | 4.8 | 1.9 | -61\% | 38.2 | 16.1 | -58\% | 1.1 | 1.3 | 1.8 | 4 |
| 8 | Monster Beverage Corporation | Monster Energy | Energy drink | MonsterEnergy.com | 0.8 | 0.5 | -44\% | 23.3 | 15.5 | -34\% | 1.2 | 2.6 | 7.5 | 4 |
| 9 | PepsiCo | PepsiCo | Company | PepsiCo.com | 1.1 | 3.5 | 213\% | 10.7 | 10.6 | -1\% | 1.2 | 1.9 | 4.6 | 4 |
| 10 | Coca-Cola | Coca-Cola | Company | Coca-ColaCompany.com | ** | 0.7 |  | ** | 9.7 |  | 1.2 | 1.5 | 2.0 | 4 |
| 11 | Coca-Cola | Coca-Cola | Company | Coca-ColaScholars.org | 0.1 | *** |  | 8.1 | 10.3 | 27\% | 1.6 | 7.5 | 13.4 | 4 |
| 12 | Coca-Cola | Vitamin Water | Flavored water | VitaminWater.com | ** | *** |  | ** | 9.3 |  | 1.1 | 1.1 | 1.7 | 4 |
| 13 | PepsiCo | Mtn Dew | Soda brand | MountainDew.com | 1.7 | 0.2 | -88\% | 10.7 | 8.3 | -23\% | 1.4 | 1.0 | 1.7 | 4 |
| 14 | Rockstar | Rockstar | Energy drink | RockstarMayhemFest.com | ${ }^{* *}$ | 0.9 |  | ** | 6.9 |  | *** | *** | *** | 3 |
| 15 | Coca-Cola | NOS | Energy drink | DrinkNOS.com | ** | 0.7 |  | 0.4 | 6.5 | 1428\% | 1.2 | 0.7 | 2.1 | 4 |
| 16 | Coca-Cola | Coca-Cola | Soda brand | Coca-Cola.com | 1.9 | 0.6 | -67\% | 32.6 | 5.3 | -84\% | *** | *** | *** | 4 |
| 17 | Ocean Spray | Ocean Spray | Other sugary drink brand | OceanSpray.com | 7.6 | 0.7 | -91\% | 3.4 | 4.6 | 34\% | *** | *** | *** | 4 |
| 18 | Dr Pepper Snapple Group | Snapple | Other sugary drink brand | Snapple.com | 2.8 | 0.1 | -97\% | 4.4 | 4.9 | 12\% | *** | *** | *** | 4 |
| 19 | Coca-Cola | Coca-Cola | Soda brand | ICoke.com | ** | 0.2 |  | ** | 4.0 |  | *** | *** | *** | 4 |
| 20 | Welch Foods Inc. | Welch's | Other sugary drink brand | Welchs.com | 0.2 | 0.2 | -16\% | 3.1 | 3.3 | 6\% | 1.1 | 0.7 | 1.3 | 4 |
| 21 | Arizona | Arizona | Other sugary drink brand | DrinkArizona.com | 0.1 | 0.6 | 474\% | 1.0 | 2.5 | 152\% | *** | *** | *** | 2 |
| 22 | Coca-Cola | Sprite | Soda brand | Sprite.com | 2.1 | 1.0 | -51\% | 7.0 | 1.8 | -74\% | *** | *** | *** | 4 |
| 23 | Coca-Cola | Coca-Cola | Soda brand | LivePositively.com | 0.3 | 0.1 | -80\% | 5.2 | 2.7 | -48\% | *** | *** | *** | 3 |
| 24 | Coca-Cola | Coca-Cola | Soda brand | MyCoke.com | 4.7 | 0.4 | -91\% | 28.4 | 2.0 | -93\% | *** | *** | *** | 4 |
| 25 | Red Bull | Red Bull | Energy drink | RedBull.tv | ** | *** |  | ** | 2.3 |  | *** | *** | *** | 3 |
| 26 | Rockstar | Rockstar | Energy drink | RockstarUpRoar.com | ** | *** |  | ** | 2.3 |  | *** | *** | *** | 2 |

Beverage website exposure cont'd

| Rank | Company | Brand | Category | Websites 2 | Average unique visitors per month (000) |  |  |  |  |  | 2013 average for all youth visitors (2-17 years) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | $\begin{gathered} \text { Children } \\ (2-11 / 12 \text { years })^{* * * *} \end{gathered}$ |  |  | $\begin{gathered} \text { Teens } \\ (12 / 13-17 \text { years })^{\star * * *} \\ \hline \end{gathered}$ |  |  | Avg visits per month | Avg time spent (min) | $\begin{array}{r} \text { Avg } \\ \text { pages } \\ \text { per } \\ \text { month } \end{array}$ | Quarters with data available |
|  |  |  |  |  | 2010 | 2013 | Change | 2010 | 2013 | Change |  |  |  |  |
| 27 | Campbell Soup Company | V8 | Other sugary drink brand | V8Juice.com | 0.8 | 0.8 | 8\% | 2.0 | 1.4 | -28\% | *** | *** | *** | 4 |
| 28 | Novamex | Jarritos | Regular soda | Jarritos.com | ** | 0.0 |  | ** | 1.5 |  | *** | *** | *** | 2 |
| 29 | Rockstar | Rockstar | Energy drink | Rockstar69.com | 0.6 | 0.0 | -91\% | 5.1 | 1.4 | -72\% | *** | *** | *** | 2 |
| 30 | Dr Pepper Snapple Group | Crush | Regular soda | CrushSoda.com | ** | 0.1 |  | 0.2 | 1.1 | 661\% | *** | *** | *** | 4 |
| 31 | BYB Brands, Inc. | Tum E Yummies | Fruit drink | TumEYummies.com | ** | 0.7 |  | ** | 0.5 |  | *** | *** | *** | 2 |
| 32 | Coca-Cola | Powerade | Other sugary drink brand | Powerade.com | ** | 0.1 |  | ** | 1.1 |  | *** | *** | *** | 4 |
| 33 | Coca-Cola | Coca-Cola | Company | TheCoca-ColaCompany.com | 3.5 | *** |  | 11.3 | 1.1 | -91\% | *** | *** | *** | 3 |
| 34 | Coca-Cola | Fanta | Regular soda | Fanta.com | 0.8 | 0.3 | -62\% | 8.3 | 0.7 | -91\% | *** | *** | *** | 4 |
| 35 | Red Bull | Red Bull | Energy drink | RedBullFlugTagUSA.com | ** | *** |  | ** | 0.9 |  | *** | *** | *** | 3 |
| 36 | PepsiCo | AMP Energy | Energy drink | AmpEnergy.com | ** | *** |  | 2.6 | 0.7 | -72\% | *** | *** | *** | 3 |
| 37 | Dr Pepper Snapple Group | Dr Pepper Snapple Group | Company | DrPepperSnappleGroup.com | m 0.1 | *** |  | 2.4 | 0.6 | -73\% | *** | *** | *** | 4 |
| 38 | Dr Pepper Snapple Group | 7UP | Soda brand | 7Up.com | 0.5 | *** |  | 1.6 | 0.6 | -64\% | *** | *** | *** | 2 |
| 39 | Dr Pepper Snapple Group | A\&W | Soda brand | AAndWRootBeer.com | ** | 0.1 |  | ** | 0.5 |  | *** | *** | *** | 4 |
| 40 | Coca-Cola | Minute Maid | Other sugary drink brand | MinuteMaid.com | ** | 0.2 |  | ** | 0.3 |  | *** | *** | *** | 3 |
| 41 | Coca-Cola | Coca-Cola | Soda brand | Coca-ColaStore.com | ** | 0.1 |  | 2.7 | 0.4 | -85\% | *** | *** | *** | 4 |
| 42 | Red Bull | Red Bull | Energy drink | RedBullMusicAcademy.com | $\mathrm{m}^{* *}$ | *** |  | ** | 0.5 |  | *** | *** | *** | 4 |
| 43 | Red Bull | Red Bull | Energy drink | RedBullStratos.com | ** | ** |  | ** | 0.4 |  | *** | ** | *** | 1 |
| 44 | PepsiCo | Aquafina | Other sugary drink brand | Aquafina.com | ** | *** |  | ** | 0.4 |  | *** | *** | *** | 1 |
| 45 | PepsiCo | Mtn Dew | Regular soda | GreenLabelSound.com | ** | *** |  | 3.1 | 0.4 | -87\% | *** | *** | *** | 2 |
| 46 | PepsiCo | Tropicana | Other sugary drink brand | Tropicana.com | 9.8 | *** |  | 13.2 | 0.4 | -97\% | *** | *** | *** | 4 |
| 47 | PepsiCo | Mtn Dew | Soda brand | MountainDewGameFuel.com | $m^{* *}$ | *** |  | ** | 0.2 |  | *** | *** | *** | 2 |
| 48 | Unilever | Lipton | Other sugary drink brand | Lipton.com | ** | *** |  | ** | 0.2 |  | ** | *** | *** | 1 |
| 49 | PepsiCo | Sierra Mist | Regular soda | SierraMist.com | ** | *** |  | 0.0 | 0.2 |  | ** | *** | *** | 1 |
| 50 | PepsiCo | Mtn Dew | Regular soda | GreenLabelArt.com | 0.2 | *** |  | 11.7 | 0.1 | -99\% | *** | *** | *** | 1 |

continued

## Beverage websife exposure conf'd

## COMPANY RANKINGS

|  | Rank | Company | Average unique visitors per month (000) |  | 2013 average for all youth visitors (2-17 years) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} \text { Children } \\ (2-11 / 12 \text { years })^{* * * *} \end{gathered}$ | Teens $(12 / 13-17$ years)**** |  |  |  | Quarters data <br> available |
|  |  |  | 2013 | 2013 |  |  |  |  |
| Most | 1 | Innovation Ventures | 11.4 | 116.8 | 1.1 | 1.2 | 1.3 | 4 |
|  | 2 | Coca-Cola | 18.8 | 107.5 | 1.5 | 5.5 | 13.1 | 4 |
|  | 3 | PepsiCo | 11.0 | 108.4 | 1.2 | 1.9 | 3.6 | 4 |
|  | 4 | Red Bull | 3.0 | 58.5 | 1.5 | 1.7 | 4.0 | 4 |
|  | 5 | Dr Pepper Snapple Group | 2.4 | 25.6 | 1.1 | 1.2 | 1.9 | 4 |
|  | 6 | Monster Beverage Corporation | 0.5 | 15.5 | 1.2 | 2.6 | 7.5 | 4 |
|  | 7 | Ocean Spray | 0.7 | 4.6 | *** | *** | *** | 4 |
|  | 8 | Welch Foods Inc. | 0.2 | 3.3 | 1.1 | 0.7 | 1.3 | 4 |
|  | 9 | Arizona | 0.6 | 2.5 | *** | ${ }_{* *}^{* *}$ | *** | 2 |
|  | 10 | Campbell Soup Company | 0.8 | 1.4 | *** | *** | *** | 4 |
| $V$ | 11 | Novamex | 0.0 | 1.5 | *** | *** | *** | 2 |
| Least | 12 | BYB Brands, Inc. | 0.7 | 0.5 | *** | *** | *** | 2 |

*Includes websites with enough youth visitors (2-17 years) for comScore to measure
**Brand or company-level data were not included in 2010 analysis
*** Data not available due to low numbers of youth visitors
${ }^{* * * *}$ comScore changed the age ranges for children and teens: 12-year-olds were classified as teens in 2010 and Jan-June 2013, but classified as children in July-Dec 2013
Shading indicates children's product
Source: comScore Media Metrix Key Measures Report (January-December 2013)

## Display advertising on youth websifes

Ranking by average ads viewed on youth websites per month
Includes proportion of ads viewed on youth websites as well as average number of ads viewed per viewer

|  | Rank | Company | Brand | Category | Products/promotions | Average \# of monthly ads viewed on youth websites (000) |  |  | Proportion of ads viewed on youth websites |  |  | \# ads viewedper viewer(2+ years)per month |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 2010 | 2013 | \% change | 2010 | 2013 | \% change |  |
| Most | 1 | Kraft Foods | Capri Sun | Other sugary drink brand | Capri Sun Roarin' Waters, Capri Sun | 4,375 | 8,968 | 105\% | 46.7\% | 23.2\% | -51\% | 3.7 |
|  | 2 | Coca-Cola | Coca-Cola | Soda brand | Coca-Cola, Coca-Cola Mini, Coca-Cola Caffeine Free, Coca-Cola FM***, Coca-Cola Freestyle ${ }^{* * *}$, My Coke Rewards, Live Positively Coca-Cola*** | 50,684 | 6,409 | -87\% | 9.0\% | 4.4\% | -51\% | 3.7 |
|  | 3 | Coca-Cola | Powerade | Sports drink | Powerade | 668 | 2,121 | 218\% | 3.7\% | 11.9\% | 220\% | 3.9 |
|  | 4 | Novamex | Jarritos | Regular soda | Jarritos | ** | 1,152 |  | ** | 33.5\% |  | 1.6 |
|  | 5 | Red Bull | Red Bull | Energy drink | Red Bull, Red Bull Mobile Pre-paid, Red Bull Music Academy | 260 | 863 | 232\% | 2.0\% | 1.5\% | -27\% | 1.6 |
|  | 6 | Dr Pepper Snapple Group | Dr Pepper | Regular soda | Dr Pepper | 6,269 | 854 | -86\% | 10.2\% | 1.9\% | -82\% | 3.3 |
|  | 7 | Dr Pepper Snapple Group | Crush | Regular soda | Crush | 390 | 847 | 117\% | 22.6\% | 26.7\% | 18\% | 3.7 |
|  | 8 | PepsiCo | Pepsi | Regular soda | Pepsi Next | ** | 820 |  | ** | 3.9\% |  | 3.2 |
|  | 9 | PepsiCo | Mtn Dew | Regular soda | Mtn Dew, DEWmocracy*** | 8,923 | 800 | -91\% | 13.9\% | 4.4\% | -68\% | 3.0 |
|  | 10 | Kraft Foods | Kool-Aid | Fruit drink | Kool-Aid | 4,552 | 657 | -86\% | 12.4\% | 7.1\% | -43\% | 1.9 |
|  | 11 | Innovation Ventures | 5-hour Energy | Energy drink | 5-hour Energy | ** | 630 |  | ** | 0.9\% |  | 3.1 |
|  | 12 | Coca-Cola | Fuze | Iced tea/coffee | Fuze | 0 | 611 |  | 0.0\% | 8.2\% |  | 2.2 |
|  | 13 | Starbucks | Starbucks | Iced tea/coffee | Frappuccino + DoubleShot Energy | ** | 420 |  | ** | 8.9\% |  | 1.1 |
|  | 14 | BYB Brands, Inc. | Tum E Yummies | Fruit drink | Tum E Yummies | ** | 383 |  | ** | 49.6\% |  | 1.2 |
|  | 15 | Coca-Cola | NOS | Energy drink | NOS | ** | 290 |  | ** | 4.1\% |  | 3.8 |
|  | 16 | Dr Pepper Snapple Group | Hawaiian Punch | Fruit drink | Hawaiian Punch | 0 | 237 |  | 0.0\% | 44.7\% |  | 0.8 |
|  | 17 | Coca-Cola | Sprite | Regular soda | Sprite | 3,933 | 170 | -96\% | 11.6\% | 1.8\% | -84\% | 4.9 |
|  | 18 | Houchens Industries | Tampico | Fruit drink | Tampico | ** | 146 |  | ** | 11.1\% |  | 0.5 |
|  | 19 | Ocean Spray | Ocean Spray | Fruit drink | Ocean Spray | 32 | 141 | 345\% | 0.8\% | 4.7\% | 512\% | 4.9 |
|  | 20 | PepsiCo | Gatorade | Sports drink | Gatorade | 4,083 | 66 | -98\% | 5.6\% | 1.2\% | -78\% | 5.1 |
|  | 21 | Coca-Cola | Vitamin Water | Flavored water | Vitamin Water | 5,480 | 62 | -99\% | 12.8\% | 2.4\% | -81\% | 3.0 |
|  | 22 | Dr Pepper Snapple Group | Snapple | Iced tea/coffee | Snapple | 0 | 49 |  | 0.0\% | 0.5\% |  | 2.3 |
|  | 23 | Dr Pepper Snapple Group | 7UP | Regular soda | 7UP | 0 | 36 |  | 0.0\% | 0.4\% |  | 2.5 |
|  | 24 | PepsiCo | AMP Energy | Energy drink | AMP Energy | 1,531 | 26 | -98\% | 9.8\% | 1.5\% | -84\% | 1.7 |
|  | 25 | Unilever | Lipton | Iced tea/coffee | Lipton Iced Tea | ** | 6 |  | ** | 4.2\% |  | 1.4 |
|  | 26 | Welch Foods Inc. | Welch's | Fruit drink | Welch's Light Juices | ** | 3 |  | ** | 1.4\% |  | 1.4 |
|  | 27 | Rockstar | Rockstar | Energy drink | Rockstar | ** | 3 |  | ** | 2.5\% |  | 0.9 |
|  | 28 | Coca-Cola | Honest Tea | Iced tea/coffee | Honest Tea | ** | 3 |  | ** | 0.2\% |  | 1.0 |
|  | 29 | Vita Coco | Vita Coco | Flavored water | Vita Coco Kids | ** | 1 |  | ** | 0.3\% |  | 0.3 |
| Least |  | - |  |  |  |  |  |  |  |  |  | continued |

## Display adverfising on youth websifes conf'd

COMPANY RANKINGS

| Most | Rank | Company | Average \# of monthly ads viewed on youth websites (000) |  |  | Proportion of ads viewed on youth websites |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 2010 | 2013 | \% change | 2010 | 2013 | \% change |
|  | 1 | Kraft Foods | 8,927 | 9,625 | 8\% | 19.3\% | 20.1\% | 4\% |
|  | 2 | Coca-Cola | 63,348 | 9,665 | -85\% | 9.4\% | 5.3\% | -43\% |
|  | 3 | Dr. Pepper Snapple Group | 7,570 | 2,023 | -73\% | 11.6\% | 3.0\% | -74\% |
|  | 4 | PepsiCo | 14,537 | 1,713 | -88\% | 9.5\% | 6.6\% | -30\% |
|  | 5 | Novamex | ** | 1,152 |  | ** | 33.5\% |  |
|  | 6 | Red Bull | 260 | 863 | 232\% | 2.0\% | 1.5\% | -27\% |
|  | 7 | Innovation Ventures | ** | 630 |  | ** | 0.9\% |  |
|  | 8 | Starbucks | ** | 420 |  | ** | 8.9\% |  |
|  | 9 | BYB Brands, Inc. | ** | 383 |  | ** | 49.6\% |  |
|  | 10 | Houchens Industries | ** | 146 |  | ** | 11.1\% |  |
|  | 11 | Ocean Spray | 32 | 141 | 339\% | 0.8\% | 4.7\% | 504\% |
|  | 12 | Unilever | 0 | 6 |  | 0.0\% | 4.3\% |  |
|  | 13 | Welch Foods Inc. | ** | 3 |  | ** | 1.4\% |  |
|  | 14 | Rockstar | ** | 3 |  | ** | 2.5\% |  |
| V | 15 | Turkey Hill Dairy | ** | 2 |  | ** | 0.4\% |  |
| Least | 16 | Vita Coco | ** | 1 |  | ** | 0.3\% |  |

*Includes brands with advertising on youth websites, Facebook, and/or YouTube in 2013
${ }_{* *}$ Company or brand was not included in the 2010 analysis
*** These products/brands/companies did not advertise on youth websites in 2013, but they did advertise on YouTube or Facebook Shading indicates children's product
Source: comScore Admetrix Advertiser report (January - December 2013)

## Social media markefing

## Ranking by Facebook likes in 2014

Includes information for brands featuring sugary drinks or energy drink on social media in 2014*


## Social media markefing conf'd

| Rank | Company | Brand | Category | Products/ promotions | Facebook *** |  |  | Twitter |  |  |  | $\begin{gathered} \text { YouTube }^{* * *} \\ \hline \text { Views } \\ (000) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Likes (000) |  |  | Followers (000) |  |  | Avg \# of tweets/day |  |
|  |  |  |  |  | 2011 | 2014 | \% change | 2011 | 2014 | \% change | 2014 | 2014 |
| 21 | PepsiCo | Sierra Mist | Soda brand |  | 44 | 1,326 | 2927\% | 1 | 17 | 1835\% | 1.05 |  |
| 22 | Unilever | Lipton (Brisk) | Other sugary drink brand |  | 850 | 1,297 | 53\% | 27 | 29 | 8\% | 3.74 | 24,153 |
| 23 | Coca-Cola | Minute Maid | Other sugary drink brand |  | 189 | 1,288 | 582\% | ** | 2 |  | 1.73 | 4,111 |
| 24 | Kraft Foods | Capri Sun | Other sugary drink brand | Capri Sun, Capri Sun Roarin' Waters | ** | 1,128 |  | ** | 1 |  | 0.60 | 2,411 |
| 25 | PepsiCo | Tropicana | Other sugary drink brand |  | 138 | 1,083 | 685\% | 7 | 110 | 1566\% | 3.56 |  |
| 26 | Jones Soda Co. | Jones | Soda brand |  | ** | 1,012 |  | ** | 14 |  | 12.85 |  |
| 27 | Ocean Spray | Ocean Spray | Other sugary drink brand |  | 340 | 919 | 170\% | 2 | 18 | 789\% | 5.92 | 553 |
| 28 | PepsiCo | SoBe | Other sugary drink brand |  | 175 | 825 | 371\% | 5 | 9 | 71\% | 0.73 | 111 |
| 29 | Coca-Cola | Powerade | Sports drink |  | 110 | 573 | 419\% | 10 | 134 | 1235\% | 1.06 | 3,692 |
| 30 | SK Energy Shots | SK Energy | Energy drink |  | ** | 518 |  | ** | 38 |  | 2.28 |  |
| 31 | Coca-Cola | Coca-Cola Company | Company |  | ** | 510 |  | ** | 224 |  | 8.55 | 3,073 |
| 32 | PepsiCo | Lipton Pure Leaf | Other sugary drink brand |  | ** | 431 |  | ** | 2 |  | 4.86 | 2 |
| 33 | Coca-Cola | Honest Tea | Other sugary drink brand |  | ** | 372 |  | ** | 27 |  | 15.29 | 1,725 |
| 34 | Langers Juice Company | Langers | Other sugary drink brand |  | ** | 365 |  | ** |  |  |  |  |
| 35 | Sunny Delight Beverages | Sunny D | Fruit drink |  | 96 | 357 | 271\% | 2 | 5 | 176\% | 18.87 | 175 |
| 36 | Coca-Cola | Fuze | Other sugary drink brand |  | 40 | 354 | 783\% | 0 | 2 | 916\% | 2.33 | 121 |
| 37 | Campbell Soup Company | Bolthouse Farms | Other sugary drink brand |  | ** | 341 |  | ** | 12 |  | 19.04 |  |
| 38 | Coca-Cola | Simply | Other sugary drink brand |  | 60 | 329 | 451\% | ** |  |  |  | 61 |
| 39 | Arizona | Arnold Palmer | Iced tea/coffee |  | ** | 293 |  |  | ** |  |  |  |
| 40 | Coca-Cola | NOS | Energy drink |  | 58 | 274 | 374\% | ** | 7 |  | 1.61 | 7,144 |
| 41 | PepsiCo | Trop50 | Other sugary drink brand |  | ** | 240 |  | ** | 0 |  | 0.49 |  |
| 42 | Coca-Cola | Mello Yello | Soda brand |  | ** | 225 |  | ** | 7 |  | 6.00 |  |
| 43 | Dr Pepper Snapple Group | Big Red | Soda brand |  | ** | 207 |  | ** | 14 |  | 0.70 | 668 |
| 44 | Nestle | Sweet Leaf | Other sugary drink brand |  | ** | 195 |  | ** | 15 |  | 1.47 | 100 |
| 45 | Monster Beverage Corporation | Peace Tea | Iced tea/coffee |  | ** | 186 |  | ** | 14 |  | 0.84 |  |
| 46 | Coca-Cola | Gold Peak | Other sugary drink brand |  | ** | 156 |  | ** | 1 |  | 3.54 |  |
| 47 | Houchens Industries | Tampico | Other sugary drink brand |  | ** | 144 |  | ** | 6 |  | 1.07 | 31 |
| 48 | Carolina Beverage Corporation | Cheerwine | Regular soda |  | ** | 132 |  | ** | 5 |  | 2.48 | 34 |

```
Ranking Table }
```

Social media markefing conf'd


COMPANY RANKINGS

| Rank | Company | 2011 | 2014 | \% change | 2011 | 2014 | \% change | 2014 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Coca-Cola | 37,485 | 123,437 | 229\% | 339 | 3,280 | 866\% | 446,953 |
| 2 | PepsiCo | 14,237 | 51,997 | 265\% | 180 | 3,413 | 1799\% | 240,668 |
| 3 | Red Bull | 20,462 | 46,333 | 126\% | 223 | 1,680 | 652\% | 841,789 |
| 4 | Dr Pepper Snapple Group | 10,716 | 30,993 | 189\% | 62 | 425 | 591\% | 5,376 |
| 5 | Monster Beverage Corporation | 11,239 | 24,854 | 121\% | 75 | 1,335 | 1669\% | 81,876 |
| 6 | Unilever | 850 | 7,122 | 738\% | 27 | 61 | 129\% | 38,828 |
| 7 | Nestle | ** | 4,788 |  | ** | 18 |  | 4,557 |
| 8 | Kraft Foods | 1,084 | 4,238 | 291\% | ** | 1 |  | 2,411 |
| 9 | Arizona | 2,196 | 3,589 | 63\% | 32 | 66 | 107\% | 33 |
| 10 | Rockstar | 925 | 2,735 | 196\% | 18 | 329 | 1741\% | 11,722 |
| 11 | Novamex | ** | 2,519 |  | ** | 6 |  | 1,299 |
| 12 | Jones Soda Co. | ** | 1,012 |  | ** | 14 |  |  |
| 13 | Ocean Spray | 340 | 919 | 170\% | 2 | 18 | 789\% | 553 |
| 14 | SK Energy Shots | ** | 518 |  | ** | 38 |  |  |
| 15 | Langers Juice Company | ** | 365 |  | ** |  |  |  |
| 16 | Sunny Delight Beverages | 96 | 357 | 271\% | 2 | 5 | 175\% | 175 |
| 17 | Campbell Soup Company | ** | 341 |  | ** | 12 |  |  |
| 18 | National Beverage Corp | ** | 171 |  | ** | 15 |  |  |
| 19 | Houchens Industries | ** | 144 |  | ** | 6 |  | 31 |
| 20 | Carolina Beverage Corporation | ** | 132 |  | ** | 5 |  | 34 |
| 21 | Royal Wessanen | ** | 130 |  | ** |  |  |  |
| 22 | Innovation Ventures | 32 | 93 | 188\% | 2 | 15 | 847\% | 128,660 |

[^4]
## Spanish language TV adVertising

Ranking by ads viewed by Hispanic children (6-11 years) in 2013
Includes average \# of ads viewed on Spanish-language TV by Hispanic youth

|  | Rank | Company | Brand | Category | Average \# of ads viewed |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Preschoolers (2-5 years) |  |  | Children (6-11 years) |  |  | Teens (12-17 years) |  |  |
|  |  |  |  |  | 2010 | 2013 | \% change | 2010 | 2013 | \% change | 2010 | 2013 | \% change |
| Most | 1 | SK Energy Shots | SK Energy | Energy drink | 0.0 | 17.2 |  | 0.0 | 12.7 |  | 0.0 | 11.0 |  |
|  | 2 | PepsiCo | Pepsi | Regular soda | 0.0 | 12.2 |  | 0.0 | 9.1 |  | 0.0 | 8.9 |  |
|  | 3 | Dr Pepper Snapple Group | Dr Pepper | Regular soda | 0.4 | 9.0 | 2232\% | 0.3 | 7.3 | 2155\% | 0.4 | 7.4 | 1962\% |
|  | 4 | Coca-Cola | Coca-Cola | Regular soda | 16.6 | 8.3 | -50\% | 11.2 | 6.0 | -47\% | 11.7 | 5.9 | -49\% |
|  | 5 | Innovation Ventures | 5-hour Energy | Energy drink | 7.1 | 4.7 | -34\% | 6.2 | 3.9 | -38\% | 12.4 | 4.0 | -68\% |
|  | 6 | Sunny Delight Beverages | Sunny D | Fruit drink | 5.8 | 5.3 | -9\% | 3.6 | 3.2 | -10\% | 4.0 | 3.0 | -24\% |
|  | 7 | Dr Pepper Snapple Group | 7UP | Regular soda | 7.3 | 3.0 | -59\% | 4.6 | 2.5 | -47\% | 4.6 | 2.4 | -48\% |
|  | 8 | Coca-Cola | Fuze | Iced tea/coffee | 0.0 | 1.1 |  | 0.0 | 0.8 |  | 0.0 | 1.0 |  |
|  | 9 | PepsiCo | Mtn Dew | Regular soda | 0.0 | 0.9 |  | 0.0 | 0.9 |  | 0.0 | 1.3 |  |
|  | 10 | Coca-Cola | Vitamin Water | Flavored water | 0.0 | 0.6 |  | 0.0 | 0.6 |  | 0.0 | 0.8 |  |
|  | 11 | Coca-Cola | Powerade | Sports drink | 1.6 | 0.6 | -64\% | 1.5 | 0.6 | -60\% | 2.1 | 0.7 | -69\% |
| Least | 12 | Red Bull | Red Bull | Energy drink | 3.1 | 0.1 | -96\% | 2.5 | 0.1 | -95\% | 3.1 | 0.1 | -97\% |

## COMPANY RANKINGS

| Rank | Company | Average \# of ads viewed |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Preschoolers (2-5 years) |  |  | Children (6-11 years) |  |  | Teens (12-17 years) |  |  |
|  |  | 2010 | 2013 | \% change | 2010 | 2013 | \% change | 2010 | 2013 | \% change |
| 1 | SK Energy Shots | 0.0 | 17.2 |  | 0.0 | 12.7 |  | 0.0 | 11.0 |  |
| 2 | PepsiCo | 0.2 | 13.1 | 5247\% | 0.2 | 10.0 | 5249\% | 0.2 | 10.2 | 4578\% |
| 3 | Dr Pepper Snapple Group | 7.6 | 12.0 | 57\% | 4.9 | 9.7 | 97\% | 4.9 | 9.8 | 98\% |
| 4 | Coca-Cola | 19.1 | 10.6 | -44\% | 13.5 | 8.0 | -41\% | 15.0 | 8.4 | -44\% |
| 5 | Innovation Ventures | 7.1 | 4.7 | -34\% | 6.2 | 3.9 | -38\% | 12.4 | 4.0 | -68\% |
| 6 | Sunny Delight Beverages | 5.8 | 5.3 | -9\% | 3.6 | 3.2 | -10\% | 4.0 | 3.0 | -24\% |
| 7 | Red Bull | 3.1 | 0.1 | -96\% | 2.5 | 0.1 | -95\% | 3.1 | 0.1 | -97\% |

[^5]
## TV adVertising exposure for black youth

Ranking by ads viewed by black children (2-11 years) in 2013
Includes average number of ads viewed by black youth on national (network, cable, and syndicated) TV

| Rank | Company | Brand | Category | Black children (2-11 years) |  |  |  |  | Black teens (12-17 years) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Average \# of ads viewed |  |  | Black:white |  | Average \# of ads viewed |  |  | Black:white |  |
|  |  |  |  | 2010 | 2013 | \% change | 2010 | 2013 | 2010 | 2013 | \% change | 2010 | 2013 |
| 1 | Innovation Ventures | 5-hour Energy | Energy drink | 97.0 | 60.4 | -38\% | 2.7 | 2.7 | 200.7 | 137.8 | -31\% | 2.1 | 2.2 |
| 2 | Kraft Foods | Capri Sun <br> (Roarin' Waters) | Flavored water | 0.0 | 35.7 |  |  | 1.5 | 0.0 | 23.7 |  |  | 2.1 |
| 3 | PepsiCo | Gatorade | Sports drink | 22.2 | 28.8 | 30\% | 2.3 | 2.1 | 51.7 | 56.6 | 9\% | 1.9 | 1.9 |
| 4 | PepsiCo | Pepsi | Regular soda | 5.7 | 19.9 | 252\% | 1.7 | 1.6 | 13.9 | 38.8 | 179\% | 1.5 | 1.6 |
| 5 | Sunny Delight Beverages | Sunny D | Fruit drink | 31.5 | 19.5 | -38\% | 1.7 | 1.9 | 42.0 | 23.3 | -45\% | 2.4 | 2.2 |
| 6 | Red Bull | Red Bull | Energy drink | 11.0 | 18.8 | 71\% | 2.5 | 2.6 | 22.5 | 42.2 | 88\% | 1.8 | 2.1 |
| 7 | PepsiCo | Mtn Dew | Regular soda | 8.5 | 13.5 | 59\% | 2.9 | 2.4 | 20.1 | 30.6 | 52\% | 2.1 | 2.0 |
| 8 | Coca-Cola | Coca-Cola | Regular soda | 15.1 | 12.2 | -19\% | 1.5 | 3.0 | 30.4 | 20.2 | -33\% | 1.8 | 3.2 |
| 9 | Dr Pepper Snapple Group | Sun Drop | Regular soda | 0.0 | 10.4 |  |  | 3.2 | 0.0 | 21.8 |  |  | 2.5 |
| 10 | Ocean Spray | Ocean Spray | Fruit drink | 12.8 | 9.5 | -25\% | 1.7 | 1.9 | 17.3 | 11.6 | -33\% | 1.8 | 1.6 |
| 11 | Dr Pepper Snapple Group | Dr Pepper | Regular soda | 13.1 | 8.9 | -32\% | 1.8 | 1.8 | 26.3 | 17.6 | -33\% | 1.6 | 1.7 |
| 12 | Coca-Cola | Vitamin Water | Flavored water | 9.2 | 8.7 | -6\% | 2.7 | 3.8 | 22.8 | 19.6 | -14\% | 2.6 | 2.5 |
| 13 | Dr Pepper Snapple Group | Snapple | Other sugary drink brand | nd 0.4 | 7.4 | 1624\% | 1.9 | 2.4 | 0.7 | 13.5 | 1878\% | 1.7 | 2.2 |
| 14 | Dr Pepper Snapple Group | Snapple | Iced tea/coffee | 3.1 | 7.3 | 139\% | 1.4 | 2.4 | 4.4 | 12.3 | 183\% | 1.2 | 2.3 |
| 15 | Unilever | Lipton | Iced tea/coffee | 6.9 | 6.7 | -2\% | 1.8 | 2.2 | 10.7 | 11.6 | 8\% | 1.6 | 1.8 |
| 16 | Dr Pepper Snapple Group | Canada Dry | Regular soda | 9.4 | 4.8 | -49\% | 1.7 | 1.4 | 14.7 | 7.7 | -48\% | 1.4 | 1.4 |
| 17 | Coca-Cola | Sprite | Regular soda | 10.8 | 3.0 | -72\% | 2.8 | 5.8 | 24.8 | 6.6 | -73\% | 2.6 | 4.1 |
| 18 | Coca-Cola | Coca-Cola | Soda brand | 0.1 | 1.3 | 2114\% | 1.2 | 2.3 | 0.2 | 1.7 | 832\% | 1.4 | 1.8 |
| 19 | Coca-Cola | Gold Peak | Iced tea/coffee | 0.0 | 0.8 |  |  | 53.7 | 0.0 | 1.0 |  | 33.6 |  |
| 20 | Kraft Foods | Capri Sun | Fruit drink | 54.9 | 0.6 | -99\% | 1.2 | 1.2 | 44.0 | 0.3 | -99\% | 1.8 | 1.7 |
| 21 | Coca-Cola | Powerade | Sports drink | 0.8 | 0.5 | -34\% | 1.4 | 1.6 | 1.5 | 1.0 | -35\% | 1.4 | 1.7 |
| 22 | Coca-Cola | Sprite | Soda brand | 0.4 | 0.4 | 5\% | 3.0 | 54.5 | 0.9 | 0.8 | -16\% | 2.7 | 49.9 |
| 23 | PepsiCo | Lipton Pure Leaf | Iced tea/coffee | 0.0 | 0.4 |  |  | 1.2 | 0.0 | 0.6 |  | 1.0 |  |
| 24 | Coca-Cola | NOS | Energy drink | 0.0 | 0.3 | 1166\% | 0.2 | 0.8 | 0.0 | 0.3 | 1284\% | 0.2 | 0.6 |
| 25 | Coca-Cola | Simply | Fruit drink | 0.5 | 0.2 | -59\% | 1.4 | 23.3 | 0.7 | 0.4 | -45\% | 1.3 | 19.4 |
| 26 | Dr Pepper Snapple Group | Sun Drop | Soda brand | 0.0 | 0.1 |  |  | 0.8 | 0.0 | 0.2 |  | 1.0 |  |
| 27 | S. Martinelli \& Company | Martinelli's | Fruit drink | 0.0 | 0.1 |  |  | 1.3 | 0.0 | 0.1 |  | 1.2 |  |

TV adverfising exposure for black youth conf'd
COMPANY RANKINGS

*Ads viewed by black children or teens compared with white children or teens.
Bolded ratio indicates more ads viewed than expected given differences in amount of TV viewing by black versus white youth
Shading indicates children's product
Source: Rudd Center analysis of Nielsen data (2014)

## Methods

We used a variety of publicly available data sources and methods to provide a comprehensive analysis of the sugary drink market in the United States. We evaluated the nutritional content of sugary drinks and the marketing practices of 23 different beverage companies. Using the same methods as our 2011 report, ${ }^{1}$ we also measure changes over the past three years.

Our methods include the following analyses: sales of sugary drinks and other drink products; the nutritional quality of sugary drinks, and diet children's drinks and energy drinks and energy shots; content analysis of nutrition-related messages, child-directed messages, and promotions on product packaging; media exposure and advertising spending using Nielsen and comScore syndicated data; and marketing to youth on company websites, internet display advertising, social media, and mobile marketing. We supplement these analyses with information collected from company websites, monitoring of business and consumer press, and numerous visits to retail establishments and calls to beverage company consumer helplines. These methods are described in detail in the following sections.

We did not have access to beverage industry proprietary documents, including privately commissioned market research, media, and marketing plans or other strategic documents. Therefore, we do not attempt to interpret companies' strategies or objectives for their marketing practices. Rather, we provide transparent documentation of: 1) the nutritional quality of sugary drinks; 2) the extent of children's and teens' exposure to common forms of sugary drink marketing, including exposure by black and Hispanic youth, and comparisons to marketing for diet drinks, 100\% juice, and plain water; 3) marketing messages conveyed in traditional and digital media; and 4) changes in nutrition and marketing that occurred from 2010 to 2014.

## Scope of the analysis

We focus our analyses on sugary drinks, defined as any nonalcoholic refreshment beverage containing at least one gram of added sugar per 8-ounce serving, including sugars from all sources except fruit juice concentrate, fruit juice, or fruit puree. We also include diet children's drinks, diet energy drinks, and energy shots in our analyses of unhealthy drinks. In some analyses, we also include diet soda and other diet drinks, 100\% juice, and plain noncarbonated water for comparison purposes.

To narrow down the list of drink products to evaluate, we obtained sales data from IRI. ${ }^{2}$ For all brands within all beverage subcategories, IRI provided total dollar sales at U.S. supermarkets, convenience stores, drug stores, and mass merchandisers in 2013. We also utilized Nielsen data to
identify brands that were advertised in any form of measured media in 2013 and amount spent on advertising.

We first identified IRI beverage subcategories that contained drinks with added sugar. Within these subcategories, we selected all brands with $\$ 5$ million or more in nationwide sales in 2013. We also selected brands with $\$ 1$ to $\$ 5$ million in sales that qualified as children's drinks (see category definitions below) or that had $\$ 100,000$ or more in advertising spending in 2013 (according to Nielsen). From this list, we excluded the following for all categories except energy drinks and children's drinks: 1) brands that did not have products with added sugar; and 2) powders and liquid drink mixes, cocktail mixes, smoothies, and protein drinks. For children's drinks, we included powders and liquid drink mixes, as well as drinks that contained artificial sweeteners but no added sugar (i.e., diet drinks) in our analyses. For energy drinks, we also included energy drinks and shots that contained artificial sweeteners but no added sugar.

## Sugary drink market

We assigned a company, brand, and drink category designation to all products identified above.

- Company refers to the company that is listed on the product package or that owns the official website for the product.
- Brand references the marketing unit for each beverage. Brands may include numerous flavors or varieties of the same product (e.g., Vitamin Water Focus, Vitamin Water Essential). Brands can also have products in multiple categories or subcategories (e.g., Capri Sun fruit drinks and Capri Sun Roarin' Waters flavored water, Ocean Spray full-calorie and reduced-calorie fruit drinks). When a brand offers products in more than one category, each brand/category combination is presented separately in our analyses. For example, advertising for Capri Sun fruit drinks and advertising for Capri Sun Roarin' Waters flavored water are identified separately.
- If a brand includes sub-brands that differ substantially in nutrition quality and/or marketing practices, differences between sub-brands are identified in the appropriate results section. For example, Pepsi advertises both fullcalorie Pepsi and reduced-calorie Pepsi NEXT. Results for the Pepsi regular soda brand include both sub-brands, but marketing that specifically identifies either full-calorie Pepsi or Pepsi NEXT is described in the results.
- Individual products are highlighted or described in more detail in the nutrition section. Products include different flavors or varieties of a brand or sub-brand.


## Drink Categories

Category describes the type of beverage (e.g., regular soda, sports drink). The beverage categories in this report include products that tend to be grouped together in industry reports
and previous research on sugary drink consumption. In some cases, we also classified products into subcategories to identify those with similar nutritional properties or marketing characteristics.

We assigned all brands to one of the following six sugary drink categories:

- Regular sodas are carbonated, sugar-sweetened soft drinks. These products are also known as "pop."
- Fruit drinks are fruit-flavored, non-carbonated drinks with 0\% to 50\% fruit juice. Manufacturers refer to these products as juice drinks, juice beverages, fruit cocktails, and fruitflavored drinks. This category also includes powdered and liquid drink mixes and diet drinks for children's drinks only.
- Flavored water includes non-carbonated drinks described as "water beverages" on the product container or that contain the word "water" in the drink name. This category also includes diet children's flavored water.
- Sports drinks are marketed as drinks that should accompany physical activity. They carry the label "sports drink" and explicitly convey that the product should be consumed in conjunction with sports activities.
- Iced teas/coffee includes both types of sugary drinks. Iced teas are sugar-sweetened ready-to-drink teas. Coffee drinks include chilled, ready-to-serve products with "coffee" or a variation of coffee in the name.
- Energy drinks are liquid products labeled by the manufacturer as "energy drinks" or "energy supplements" that usually contain high levels of caffeine (typically 80 mg per serving or greater). This category includes carbonated, canned drinks as well as energy shots, which are concentrated and typically come in 1.8 - to 2.5 -ounce individual serving containers. Diet energy drinks and shots are included in this analysis, as the American Academy of Pediatrics has recommended that children and teens never consume these products. ${ }^{3}$

We also identified subcategories of sugary drinks based on evidence of child-targeted marketing and the amount of added sugar in the product.

- Children's drinks designate brands and products promoted as intended specifically for children by the beverage company in its media advertising or on company websites. Diet children's fruit drinks and flavored water with nonnutritive sweeteners (zero-calorie sweeteners) are also included as these drinks are not recommended for children. ${ }^{4}$
- Full-calorie drinks contain more than 40 calories per 8 -ounce serving. Most, if not all, of the sugar in these products is added, but they may also contain naturallyoccurring sugar from fruit juice. Some full-calorie drinks also contain zero-calorie sweeteners.
- Reduced-sugar drinks are lower-sugar, reduced-calorie drinks with 40 or fewer calories per 8-ounce serving. This definition of reduced-calorie was adopted from

Recommendations for Healthier Beverages developed by a national panel of experts. ${ }^{5}$ The experts recommended non-caffeinated, non-fortified beverages with no more than 40 calories per container as healthier drink choices for adolescents. Reduced-sugar drinks often contain zerocalorie sweeteners in addition to added sugar. The drink name may contain the words "light" or "diet," or it may give no indication that the drink is lower in calories.

As a point of comparison with sugary drinks, we also analyzed marketing for other drink categories, including healthier products such as water and 100\% juice, as well as zerocalorie, diet products offered by brands that also offer sugary drinks.

- Diet drinks contain zero-calorie sweeteners and zero grams of added sugar. They may contain minimal calories from other carbohydrate sources, but most have no calories. Unsweetened zero-calorie products are not included in this category (e.g., flavored seltzer). Within the diet drinks category, we identify diet soda, which includes carbonated soft drinks with zero-calories sweeteners and less than two grams of sugar per eight ounces, and other diet drinks, which includes diet iced teas, sports drinks, and flavored water.
- 100\% juices are products that contain calories only from fruit and/or vegetable juice and do not contain added sugars or nonnutritive sweeteners.
- Light fruit juices contain juice diluted with water, as well as zero-calorie sweeteners, but no added sugar (e.g., V8 Fusion Light, Trop 50). These products are typically advertised as reduced-calorie juice drinks.
- Plain water includes noncarbonated products labeled as "water" that are not sweetened.


## Nutritional content

We collected nutrition information for the sugary drinks, diet children's drinks and energy drinks, and energy shots in our analysis from company or brand websites in March to June 2014. If nutrition and/or ingredient information was not provided online, researchers made at least two calls to companies' customer service representatives. If information could not be obtained in this way, researchers visited local stores to obtain nutrition information from beverage packages. Finally, researchers utilized Gigwalk mobile work marketplace ${ }^{6}$ to hire field personnel in other regions of the country to take pictures of nutrition facts panels with their mobile phones.
To standardize the nutrition analyses, we report calories, sugar, sodium, and caffeine per 8-ounce serving of a product, with the exception of products only available in a singleserving container, such as children's fruit drink pouches or energy shots. We report nutrition information per container for these products.

We report the following measures of nutrition content for the products in our analysis:

- Nutrition information includes calorie, sugar, and sodium content per serving provided on the nutrition facts panels. Median and range of values per serving are provided.
- Ingredient information includes caffeine, \% juice, and zero-calorie sweetener content. This information may be provided on product packages, typically within or near ingredient lists. However, we were unable to obtain this information for many of the products in our analysis. When available, caffeine content is reported per serving. Juice is reported as \% of total volume, and presence of zero-calorie sweeteners is noted (yes or no).
- Zero-calorie sweeteners refer to all nonnutritive (non-caloric) sweeteners, including artificial and natural sweeteners. Artificial sweeteners in this report include acesulfame potassium, aspartame, sucralose, and neotame. Stevia (also called rebiana or Red A) is the only natural sweetener found in drinks in this report.

To analyze changes in nutritional content from 2011 to 2104 by brand, we included only brands with data available for both years. This analysis also included all products that existed for these brands in 2011, even if the product was discontinued or did not meet our criteria to include in the 2014 analysis. In addition, new products for these brands that did not meet our criteria for inclusion were included in the 2014 comparison. A full list of all products analyzed can be found in Appendix B, which includes an indicator for products only included in the comparative analysis. We also include a comparison of the nutritional content of children's fruit drinks with the nutrition of other fruit drinks.

## Marketing practices

Our analysis of sugary drink marketing practices documents marketing on product packaging; advertising spending in measured media; advertising and brand appearances on TV; marketing in digital media, including beverage company websites and display advertising on third-party websites; and newer forms of digital marketing, including in social media and on mobile devices. We also identify marketing that appears to be targeted to children, teens, and black and Hispanic youth.

## on-package markefing

We conducted a content analysis of the marketing messages that appear on sugary drink product packaging, including nutrition-related messages, promotions, and evidence of child targeting. We collected the data by surveying product packages in two large supermarkets in Bridgeport and Hamden, Connecticut during July 2014. Researchers used a codebook to record all messages found on the packaging.

Prior to data collection, two researchers visited one of the supermarkets to identify the flavors, varieties, and forms of packaging available for the drinks included in our analysis. They also conducted a preliminary assessment of the marketing messages that appeared on product packaging. During these visits, researchers compared the messages on differ-
ent forms of packaging for each product (e.g., 2-liter bottles and multipacks of individual cans for sodas). If products in a beverage category had multiple forms of packaging, but the messages on packaging tended to be similar, just one type of package was coded. However, if the messages on different packaging for the same drink differed considerably, each type of package was coded separately. All flavors of each brand available for the selected package types were coded. Energy drinks were excluded from this analysis.

We coded the following package types for the sugary drink categories examined:

- Regular soda brands: both 12-can cardboard multipacks and 2 -liter bottles, when available.
- Children's fruit drinks: cardboard or other multipacks of pouches and boxes.
- Other fruit drinks: single-serving bottles when available, otherwise the largest multi-serving container available (e.g., 64-, 128-, or 256-oz jugs).
- Iced tea: single-serving bottles or cans when available, otherwise the largest multi-serving container available (e.g., 64-oz jug).
- Sports drinks: single-serving container (i.e., 20-oz bottle) or multi-serving container (i.e., 32-oz bottle) when available.

■ Flavored water: 20-ounce bottles, except Capri Sun Roarin' Waters (the 10-pack carton multipack was coded).
The codebook for this analysis was based on the codebook from a previous analysis of marketing on sugary drink packages, ${ }^{7}$ with modifications based on new messages that appeared frequently on drink packaging as identified in the preliminary store visits. The coding manual outlined three main categories of messages: marketing tactics (URLs and promotions), nutrition-related messages (ingredient claims, natural messages, calorie labels, and other health-related messages), and child features.

- Nutrition-related messages describes all types of messages about product nutrition, including claims about ingredients, natural claims, calorie labels, and other healthrelated messages.
- Promotions include a wide range of marketing strategies, such as contests and giveaways, celebrity endorsements, entertainment tie-ins (e.g., movies, music), cause-related marketing, and education. We specify eleven categories of promotional messaging and recorded brief descriptions of each promotion.
- Child features indicate the product is intended for child consumption, including cartoon brand characters and other cartoon pictures, any reference to children or families, fun messaging, and novelty shapes.

Due to the many different nutrition-related messages appearing on product packages, we created subsets of these messages as follows:

■ Ingredient claims refer to messages regarding micronutrients (i.e., vitamins and minerals), antioxidants, and electrolytes, as well as sugar, artificial flavors, colors, and sweeteners, gluten-free, and caffeine content.

- Natural claims include messages about natural flavors or sugars, in addition to real, organic, and GMO references.
- Calorie labels refer to calorie counts (per serving or per container) indicated on the product package, not including information on the nutrition facts panel.
- Other health-related messages refer to messages that imply health-related benefits from consuming the products, including hydration, exercise performance, and energy.

A team of seven or eight researchers conducted both in-store surveys in pairs to ensure that all messages were recorded. In addition to coding the existence of each type of message, researchers recorded the specific message. They also wrote in any additional messages that were not included on the coding form, such as "please recycle." All nutrition-related messages, promotions, and child features were recorded regardless of their location on the package, excluding messages on the nutrition facts panel.

We analyzed the on-package marketing data by brand and drink category. Duplicates of packages coded in both stores were removed from the analysis. We provide the percentage of packages that included each type of message, as well as the average number of these messages per package (only for packages containing these messages). Ingredient claims, natural claims, calorie labels, and other health-related messages were coded separately and combined for total nutritionrelated messages per package. Percentage of packages with promotions and any child features, as well as the average number of child features per package were also calculated.

## Traditional media

To analyze advertising spending and TV advertising exposure, we licensed data from Nielsen for 2010 through 2013 in the following non-alcoholic beverage categories: drink product, soft drink, regular soft drink, diet soft drink, drinks-isotonic, bottled water, fruit drinks, fruit juice, iced tea, drink mix, iced tea mix, and drink mix-isotonic. These Nielsen categories incorporate all of the sugary drink and diet drink categories in our analysis, as well as $100 \%$ juice and plain water.

However, the Nielsen categories and brands do not always correspond directly with the categories and brands in our analyses. For example, Nielsen's drink-isotonic category includes both energy drinks and sports drinks, and its bottled water category includes both plain and flavored water. Therefore, we used the descriptions provided by Nielsen to assign each Nielsen brand to the appropriate brand, category, and subcategory (if applicable) in our analysis. In some cases, the description could apply to more than one brand and/or category or subcategory (e.g., Coca-Cola soft drinks, Capri Sun drink products). When brands included products
in more than one category or subcategory and the Nielsen data did not specify the product advertised, we assigned the brands to one of two brand-level categories. In some cases, Nielsen identified only a company and not a specific brand. We categorized these as company advertising.

- The soda brand category includes brand-level advertisements that cannot be classified as either regular or diet soda advertising. Soda brands sometimes advertise both regular and diet versions of the brand in the same advertisement, or they advertise the brand (e.g., CocaCola) but not a specific product (e.g., Coca-Cola Classic or Diet Coke). In these instances, Nielsen classifies the category as "soft drink" or "drink products."
- Brand-level advertising that promotes products in other (not soda) drink categories are categorized as other sugary drink brand advertising. For example, some Snapple advertising is classified by Nielsen as "drink products," or product placements just show the Snapple logo. This advertising supports Snapple products in multiple categories, including fruit drinks, regular iced tea, and diet iced tea products.
- Company advertising includes advertising that promotes a company but does not identify a specific brand (e.g., Dr Pepper Snapple Group). These ads are categorized as "drink products" by Nielsen.
In all marketing analyses, brand-level advertising is identified separately, unless otherwise noted. Company-level advertising is included in total advertising for the company, but not included in advertising for the specific brands.


## Advertising spending

Nielsen tracks total spending to purchase advertising in 18 different media including TV (including Spanish-language TV), internet, radio, magazines, newspaper, free standing insert coupons (FSIs), and outdoor advertising. These data provide a measure of advertising spending. We licensed these data for all non-alcoholic beverage categories for the four-year period and report these numbers by brand, company, and category.

## TV advertising exposure

To measure exposure to TV advertising, we also licensed gross rating points (GRP) data from Nielsen for the same period and beverages. GRPs measure the total audience delivered by a brand's media schedule. It is expressed as a percent of the population that was exposed to each commercial over a specified period of time across all types of TV programming. It is the advertising industry's standard measure to assess audience exposure to advertising campaigns, and Nielsen is the most widely used source for these data. ${ }^{8}$ GRPs, therefore, provide an objective assessment of advertising exposure. In addition, GRPs can be used to measure advertisements delivered to a specific audience, such as an age or other demographic group (also known as target rating points or TRPs), and provide a per capita measure to examine relative
exposure between groups. For example, if a sugary drink brand had 2,000 GRPs in 2013 for 2- to 11-year-olds and 1,000 GRPs for 25- to 49-year-olds, then we can conclude that children saw twice as many ads for that brand in 2013 compared with adults.

The GRP measure differs from the measure used to evaluate food industry compliance with their CFBAI pledges. The pledges apply only to advertising in children's TV programming as defined by audience composition (e.g., programs in which at least $35 \%$ of the audience are younger than age 12); however, less than one-half of all advertisements viewed by children younger than 12 occur during children's programming. ${ }^{9}$ In contrast, GRPs measure children's total exposure to advertising during all types of TV programming. Therefore, evaluating GRPs indicates whether participating companies reduced total TV advertising to this age group.

In the TV advertising analyses, we obtained 2010 through 2013 GRP data by age group and race. We first obtained total GRPs for the following age groups: preschoolers (2-5 years), children (6-11 years), teens (12-17 years), young adults (1824 years), and adults (25-49 years). These data provide total exposure to national (network, cable, and syndicated) and local (spot market) TV combined. We also obtained GRPs for advertising viewed by black and white youth in the same age groups on national TV only, as Nielsen does not provide spot market GRPs for blacks by age group. Spot TV advertising accounted for $2 \%$ to $3 \%$ of all beverage advertising viewed by children and teens during 2013. ${ }^{10}$ Therefore, these data reflect an estimated $97 \%$ to $98 \%$ of black youth exposure to all beverage advertising on TV. To assess exposure by Hispanic youth to Spanish-language advertising, we provide GRP data for advertising that occurred on Spanish-language TV.

Nielsen calculates GRPs as the sum of all advertising exposures for all individuals within a demographic group, including multiple exposures for individuals (i.e., gross impressions), divided by the size of the population, and multiplied by 100. GRPs can be difficult to interpret. Therefore, we also use GRP data to calculate the following TV advertising measures:

- Average advertising exposure. This measure is calculated by dividing total GRPs for a demographic group during a specific time period by 100. It provides a measure of ads viewed by individuals in that demographic group during the time period measured. For example, if Nielsen reports 2,000 GRPs for 2 - to 5 -year-olds for a brand in 2013, we can conclude that on average all 2- to 5 -year-olds viewed 20 ads for that brand in 2013.
- Targeted GRP ratios. As GRPs provide a per capita measure of advertising exposure for specific demographic groups, we also used GRPs to measure relative exposure to advertising between demographic groups. We report the following targeted GRP ratios:
- Preschooler:adult targeted ratio = GRPs for 2-5 years/ GRPs for 25-49 years
- Child:adult targeted ratio $=$ GRPs for 6-11 years/GRPs for 25-49 years
- Teen:adult targeted ratio = GRPs for 12-17 years/GRPs for 25-49 years
- Black:white child targeted ratio = GRPs for blacks 2-11 years/GRPs for whites 2-11 years. This measure uses only national GRPs.
- Black:white teen targeted ratio = GRPs for blacks 1217 years/GRPs for whites 12-17 years. This measure only uses national GRPs.

A targeted ratio greater than 1.0 indicates that on average persons in the group of interest (e.g., children in the child:adult ratio) viewed more advertisements than persons in the comparison group (i.e., adults). A targeted ratio of less than 1.0 indicates that the person in the group of interest viewed fewer ads. For example, a child-to-adult targeted ratio of 2.0 indicates that children viewed twice as many ads as adults viewed. If this ratio is greater than the relative difference in the amount of TV viewed by each group, we can conclude that the advertiser likely designed a media plan to reach this specific demographic group more often than would occur naturally. The average weekly amount of time spent viewing TV in 2012 was obtained from Nielsen Market Breaks for each age and demographic group in the analysis.

Brand appearances on prime-time TV
Nielsen data also were used to quantify beverage brand appearances that aired during prime-time TV programming from January 2010 through December 2013 for the same Nielsen non-alcoholic beverage categories used in the TV advertising exposure analysis. Nielsen defines a brand appearance as any occasion when a brand or product is conveyed, visually and/or audibly, or used in a particular way within a program. To be counted as a visual hit, $50 \%$ or more of a brand logo or product name must be visible. Each time a brand is conveyed in a program in a different manner (e.g., on a product package, apparel, screen graphic) it is counted as a separate brand appearance. If a brand appears multiple times in a program in the same manner (e.g., beverage bottle only), it is counted as one occurrence. Although most brand appearances in TV programming are product placements, Nielsen cannot determine whether appearances are the result of paid efforts by advertisers. Therefore, we use the term brand appearances unless the news media or other sources have identified specific appearances as paid product placements.

Nielsen recorded all TV programming from 6:00 p.m. to 12:00 a.m. daily (i.e., prime-time) that aired on 16 of the most frequently viewed broadcast and cable TV channels: ABC, CBS, NBC, FOX, CW, A\&E, Bravo, DSC, ESPN, FX, LIFE, NAN, TBS, TLC, TNT, and USA. Data analysts reviewed the recordings using standardized identification procedures to count all brand appearances. The data exclude appearances on sports, news magazine, and holiday programming; made-for-TV movies and theatrical movies aired on TV; documentaries and non-fiction reports; programming on
children's TV networks; and repeat episodes. Nielsen also provides the screen time, or number of seconds, that each brand appearance lasted, as well as the number of telecasts featuring brand appearances.

Nielsen's brand descriptions were used to assign brand appearances to the brands, companies, and categories in our analyses. There were some differences between the Nielsen categories for TV advertising and brand appearances. First, we included brand appearances in the Nielsen category "Corp-Gen" for corporate sponsorships that clearly promoted drink products. Second, we assigned some appearances designated by Nielsen as company-level advertising to brandlevel advertising when our review of the product appearances showed that these appearances promoted specific brands. We also used the other sugary drink brand category to indicate brands with products in multiple categories (e.g., Snapple includes fruit drinks and iced teas).

In addition to total number of telecasts featuring product appearances, we also report average length per telecast, calculated by dividing total screen time by total number of telecasts with appearances. We also used Nielsen GRP data to quantify exposure to brand appearances on average for children (2-11 years), teens (12-17 years), and adults (18-49 years) by brand, company, and category. Total GRPs for each age group were divided by 100 to obtain the number of brand appearances viewed on average by persons in each age group.

## Digifal media markefing

We document three types of digital marketing to youth: beverage company websites, display advertising on other (i.e., third-party) websites, and social media marketing. Additionally, we provide examples of mobile apps offered by sugary drink brands.

As in traditional advertising, digital marketing also includes brand-level marketing messages. Some of these brand-level messages feature multiple products (e.g., Pepsi, Diet Pepsi, and Pepsi NEXT) in different drink categories or marketing that just shows a brand logo but does not specify a product. To determine the accurate product categories for digital marketing, researchers examined actual advertisements or marketing messages, such as company websites, display ads, and social media posts. If the marketing promoted just one drink category within a brand, that marketing was assigned to the specific brand and category promoted (e.g., Pepsi regular soda, Snapple iced tea). However, if the marketing promoted an overall soda brand (and did not specify a product) or promoted both diet and sugar-sweetened versions of the soda brand, it was categorized as soda brand advertising. Similarly, if the marketing promoted products for the same brand in multiple drink categories, it was categorized as other sugary drink brand advertising (e.g., Snapple, Welch's, Arizona). If the marketing promoted the company as a whole (e.g., Coca-Cola Company) or multiple brands from the same company, it was categorized as company advertising.

Beverage company website exposure
To identify beverage company websites, we obtained a list of websites from comScore Media Metrix for the companies in our analysis that existed during January through December 2013. For the purposes of this analysis, a website is defined as all pages containing the same stem URL. For example, Pepsi.com is the website of interest, and http://www.pepsi. com/en-us/d/thegame is an example of a secondary page contained within the site.

We obtained data on exposure to these websites from comScore Media Metrix Key Measures Report. ${ }^{11}$ The company captures the internet behavior of a representative panel of about 250,000 users in the United States. ${ }^{12}$ It is the nation's largest existing internet audience measurement panel. The firm collects data at both the household and individual level using Session Assignment Technology, which can identify computer users without requiring them to log in. The company uses these panel data to extrapolate its findings to the total U.S. population. Companies participating with comScore can also have census tags placed on their web content and advertisements to further refine audience estimates. Using the comScore panel, we identified individuals' exposure to beverage company websites, including exposure for both children and adults in the same household. The Media Metrix database provides internet exposure data for all websites visited by at least 30 of their panel members in a given quarter. ${ }^{13}$ Media Metrix also provides exposure information by visitor age, ethnicity, and race for higher volume websites.

For each quarter during the January through December 2013 period, we also used the Media Metrix Key Measures Report to collect the following data for available beverage company websites: total unique visitors, total visits, average minutes per visit, and average visits per unique visitor. In addition, when enough website traffic was recorded in a given quarter we collected these measures separately for children, teens, and all youth, and for black and Hispanic youth.

In July 2013, comScore changed the age breaks available for different demographic groups. As a result, the specific ages reported differ by quarter as follows:

| Demographic <br> group | Age range: <br> Jan-June 2013 | Age range: <br> July-Dec 2013 |
| :--- | :--- | :--- |
| Children | 2-11 years | $2-12$ years |
| Teens | $12-17$ years | $13-17$ years |
| All youth | $2-17$ years, 6-17 years* | $2-17$ years |
| Black youth | $6-17$ years | $2-17$ years |
| Hispanic youth | $6-17$ years | $2-17$ years |

*For comparison to black and Hispanic youth

For each website in our analysis, we report the following website exposure measures:

- Average unique visitors per month for children (2-11/12 years), teens (12/13-17 years), all youth (2/6-17 years), and black and Hispanic youth (2/6-17 years). This measure was calculated by adding average total unique visitors per month (reported quarterly by comScore, from January through December 2013) for each demographic group divided by four (for four quarters).
- Average visits per month, ${ }^{14}$ average pages per month, and average time spent (min) per visit for each unique visitor. Average monthly numbers (reported quarterly by comScore, from January through December 2013) were divided by the number of quarters for which data were available for each website.

For each of the demographic groups with data, we also report a targeted index, which measures the extent to which child or teen visitors to a website are over- or underrepresented compared to visitors to the internet overall and the extent to which black or Hispanic youth visitors to a website are overor underrepresented compared to all youth visitors. Targeted indices greater than 100 signify that the demographic group was overrepresented on a website in relation to the comparison group; and targeted indices less than 100 signify that it was underrepresented. For example, if $40 \%$ of black youth visited Sprite.com, but $20 \%$ of all youth visited Sprite.com, the black youth targeted index for Sprite.com would be 200.

■ Child and teen targeted indices were calculated by dividing the percent of visitors to the website who were children (2-11/12 years) or teens (12/13-17 years) by the percent of child and teen visitors to the total internet. First, the percent of visitors exposed to the website from each age group (2-11/12 years or 12/13-17 years) was obtained by averaging the number of monthly unique visitors to the website for that age group for the four quarters of 2013 and dividing that number by all average monthly unique visitors to the website (ages 2+). The same calculations were done for visitors to the total internet during the four quarters of 2013 for the same age group. The percent of child or teen visitors to the website was then divided by the percent of child or teen visitors to the total internet and multiplied by 100 to get the targeted index.

- Black youth and Hispanic youth targeted indices were calculated by dividing the percent of black or Hispanic youth (2/6-17 years) who visited the website by the percent of all youth (2/6-17 years) who visited the website. First, the percent of black or Hispanic youth who visited the website was obtained by averaging the number of monthly unique visitors to the website for that group for the four quarters of 2013 and dividing that number by all black or Hispanic youth visitors to the total internet. The same calculations were done for all youth visitors to the website during the four quarters of 2013. The percent of black or Hispanic youth who visited the website was then divided by the percent of all youth who visited the website and multiplied by 100 to get the targeted index.

Display advertising on third-party websites
Data for exposure to beverage company advertising on thirdparty websites (i.e. websites sponsored by other companies) were extracted from the comScore Ad Metrix Advertiser Report. ${ }^{15}$ comScore Ad Metrix monitors the same panel of users as comScore Media Metrix but tracks advertisements that are completely downloaded and viewable on a user's web browser. Ad Metrix measures individual exposure to display ads presented in rich media (SWF files) and traditional imagebased ads (JPEG and GIF files). It does not capture text, video, or html-based ads. Ad Metrix also identifies the unique user viewing the advertisement, the third- party website on which the advertisement was viewed, and the company sponsoring the advertisement.

Third-party website data were collected for January through December 2013. During the time period of our analysis, Ad Metrix did not report demographic information about the individuals who were exposed to these advertisements. Consequently, we cannot differentiate between exposure by any specific age group, including children, teens, Hispanics, or black youth.

The Product Dictionary from comScore was used to determine the display advertisements for the beverage companies in our analysis. comScore provides display ad data for brands, websites, and promotions (e.g., My Coke Rewards) in its dictionary that were viewed at least ten times by comScore panel members on the internet or on a specific publisher site. Ad Metrix captures copies of the actual display ads (i.e. creatives) that appeared on third-party websites. Researchers reviewed the creatives to identify the appropriate drink category to assign brands with products in multiple categories. Review of the creatives also revealed that some brands included display ads that were incorrectly assigned to the brand. For those brands, we calculated the proportion of creatives that portrayed the correct brand and adjusted the display ad measures as required. If $80 \%$ or more of the display ads for a given brand were accurate, we included all the display ads in our calculations. If less than $80 \%$ of the ads were accurate, we adjusted the number of ads by multiplying total display ads provided by comScore by the percent of accurate ads. All adjustments were made before calculating the measures below.

Measures available from comScore for each month include total display ads viewed (i.e., the number of advertisements fully downloaded and viewed on publisher websites), advertising exposed unique visitors (i.e., the number of different individuals exposed to advertisements on a publisher website), and average frequency of ads viewed per unique visitor by beverage company advertiser. This information is available for the total internet and for individual publisher (i.e., third-party) websites.

As we could not separate ads viewed by age group, we identified third-party websites on which the advertisements
appeared that were disproportionately visited by youth (i.e., youth websites) and children (i.e., children's websites). comScore Key Measures Report ${ }^{16}$ was used to extract the average number of unique visitors to third-party websites. For each website, we calculated the proportion of total unique visitors who were youth and children by dividing the average number of unique youth (2-17 years) and child (2-11/12) visitors ${ }^{17}$ by total unique visitors ( $2+$ years) to the same website. ${ }^{18}$

We defined a youth website as a website that met one of two conditions: 1) It was identified by comScore as Family \& Youth - Kids and/or Teens; or 2) the percentage of visitors ages 2-17 to the website exceeded the total percentage of visitors to the internet ages 2-17 during the time period examined. From this list of youth websites, we also identified websites that were targeted to children. We defined a children's website as a youth website that met two conditions: 1) over $20 \%$ of the unique visitors to the website were ages 2-11/12 years; and 2) the website had over 1 million beverage display ads. Because we are unable to differentiate between ads viewed by youth under 18 years or by children versus adults, we instead assume that advertising on youth and children's websites will be viewed by disproportionately more young people.

From the comScore data, we calculated the following measures for each brand (including websites and promotions) for which display advertising was found:

- Average unique visitors per month ${ }^{19}$ was calculated by adding the number of unique visitors exposed to advertising for a brand or promotion reported monthly from January through December 2013 and dividing by 12.
- Average number of ads viewed per viewer per month was calculated by averaging the number of ads viewed per viewer for the brand or promotion for each month from January through December 2013.
- Percentage of ads viewed on youth websites, children's websites, Facebook and YouTube were calculated by dividing the total display ad impressions for the brand or promotion on each type of website by the total display ad impressions that appeared on all websites from January 2013 through December 2013.
- Average monthly ads viewed on youth websites, children's websites, Facebook and YouTube were calculated by adding display ad impressions for the brand or promotion appearing on each type of website reported monthly from January through December 2013 and dividing by 12.

Social media
We measured brands' marketing presence on five popular social media platforms: Facebook, Twitter, YouTube, Instagram, and Vine. In addition, we examined brand activity and engagement with users on Twitter.

We identified all available social media pages sponsored by beverage companies in a variety of ways. First, we identified
all social media links from beverage company and brand websites. We then searched within each of the five social media platforms using the company and brand as keywords. This search identified hundreds of social media accounts. To narrow down the list of accounts for analysis, we excluded: 1) pages with less than 10,000 likes/followers on Facebook or Twitter; 2) pages not created or managed by the brand or company (e.g., Facebook community pages); 3) pages that had not been updated with posts or tweets since January 1, 2013; 4) pages that included food brands as well as beverages (e.g., Welch's, Starbuck's, and PepsiCo); and 5) pages for non-U.S. users or with the majority of content in a foreign language. We did include global brand pages in the analysis. Our search identified some social media pages for high-profile promotions (e.g., My Coke Rewards, Red Bull X-Fighters). Promotional social media pages were included in the analyses if they met the other criteria. One additional Instagram account was identified when the brand's main Instagram account "suggested' the account to follow.

In June 2014, we recorded the number of likes for each Facebook page in the analysis, the number of followers on Twitter pages, and the number of viewers on YouTube channels. To measure marketing on Instagram and Vine, we calculated the number of followers for individual accounts and examined the posts on each platform.

For Facebook and Twitter, we also calculated the changes in likes and followers, respectively, from 2011 to 2014. However, YouTube recently changed its methods for calculating views, ${ }^{20} 21$ therefore we could not compare 2011 to 2014 YouTube views. On October 2, 2014 we utilized Social Baker, ${ }^{22}$ an online analytics tool, to assess the average number of views per video currently uploaded on each of the top-ten YouTube sugary drink and energy drink brand channels.

To measure marketing on Twitter, we further examined each brand's engagement with its followers. We used Twitonomy to track activity on brands' Twitter accounts from January 2013 through June 2014. Twitonomy is a web-based Twitter analytics program that analyzes the tweets of any user with a public Twitter account (with a maximum of the most recent 3,200 tweets per account analysis). ${ }^{23}$ Twitter activities analyzed include average number of tweets per day, percent of tweets that were replies to users, and proportion of tweets that were retweeted or favorited by other users. Replies are direct responses by brands to tweets sent by other Twitter users. Retweets are brand tweets that users have re-posted for their own followers to see. Users have the ability to mark a tweet as a favorite, thereby saving it in a special section on their profile page. A user's favorites can be viewed by other users, and indicates that the user finds the tweet of interest or value.

## Smartphone applications

We used iTunes to identify smartphone applications available for download during August, 2014. Apps that represented an
official product offered by a beverage company were identified by determining whether the brand or company was listed as a copyright owner, developer or seller. Apps that listed a recognized company partner (e.g., McDonald's, Viacom) as the lead developer/seller and apps from developers that listed the sugary drink company as a client on its site were also included. In-app purchases and download costs were determined using iTunes. iTunes also lists the date on which the application was last updated. Apps that had not been updated in 2013 or later were excluded. Applications designed in a foreign language or explicitly for non-US markets were also excluded from the analysis.

After viewing screenshots of the apps and/or downloading them, a content analysis of the applications was conducted to designate apps with child-targeted features according to the following criteria:

- Promotes child-oriented events, themes, activities, incentives, products, or media;

■ Includes mentions of "child," "young children," "kid," "childoriented themes," or similar language in the app description or title;

- Features game play appropriate for the skill level of children, with activities such as matching, coloring, or others with low level of complexity;
- Prominently features child-oriented animated or licensed characters; and/or
- Prominently features a celebrity endorser popular with children.

These criteria provide a conservative estimate of childtargeting, as games with more realistic graphics also can have strong appeal for children.

## Endnotes

1. Harris JL, Schwartz MB, Brownell KD, Javadizadeh J, Weinberg M, Sarda V, et al. (2011). Sugary Drink FACTS: Evaluating sugary drink nutrition and marketing to youth. www.sugarydrinkfacts. org/ resources/SugaryDrinkFACTS_Report.pdf.
2. IRI (2014). www.iriworldwide.com/About.aspx
3. Schneider MB, Benjamin HJ (2011). Sports drinks and energy drinks for children and adolescents: Are they appropriate? Pediatrics, 127(6), 1182-1189.
4. Institute of Medicine (2007). Nutrition standards for foods in schools: Leading the way toward healthier youth. www.iom.edu/ Reports/2007/Nutrition-Standards-for-Foods-in-Schools-Leading-
the-Way-toward-Healthier-Youth.aspx.
5. Healthy Eating Research (2013). Recommendations for Healthier Beverages. http://www.rwjf.org/en/research-publications/find-rwjf-research/2013/03/recommendations-for-healthier-beverages. html
6. Gigwalk Mobile Marketplace (2014). www.Gigwalk.com
7. Harris et al. (2011).
8. Nielsen (2010). Nielsen Monitor Plus AdViews. www. nielsenmedia.com.
9. Harris JL, Sarda V, Schwartz MB, Brownell KD (2013). Redefining "child-directed advertising" to reduce unhealthy television food advertising. American Journal of Preventive Medicine, 44(4), 358-364.
10. Rudd Center analysis of Nielsen data (2014).
11. comScore (2013). Media Metrix. Available at www.comscore. com/Products/Audience_Analytics/Media_Metrix.
12. comScore (2012). State of the Internet in 2012. Slide 8. http://www.slideshare.net/indigitalmd/comscore-state-of-us-internet-q1-2012.
13. comScore (2013). Media Metrix: Description of Methodology. http://www.journalism.org/files/2014/03/comScore-Media-Metrix-Description-of-Methodology.pdf.
14. The data used for average visits per month is comScore Media Metrix Key Measures Report's data for the measure: Average Visits per Visitor.
15. comScore (2013). Ad Metrix. Retrieved from www.comscore.net/ Products_Services/Product_Index/Ad_Metrix
16. comScore (2013, January 2014). Media Metrix - Key Measures, retrieved from http://www.comscore.com/Products/Audience-Analytics/Media-Metrix
17. comScore AdMetrix \& Key Measures for youth and child visitors to websites (January -December 2013)
18. comScore Key Measures for total audience visitors to third-party youth websites (February 2013- January 2014). comScore Key Measures for total audience visitors to social media sites (March 2013- February 2014).
19. The data used for monthly unique viewers is comScore Ad Metrix Advertiser Report's data for the measure: Advertising exposed unique visitors.
20. Simply Measured (2013). simplymeasured.com/blog/2013/04/08/ youtube-changes/
21. Google Online Security (2014). googleonlinesecurity.blogspot. ca/2014/02/keeping-youtube-views-authentic.html
22. Social Baker (2014). www.socialbakers.com/youtube-statistics/
23. Twitonomy (2014). www.twitonomy.com




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$\qquad$ Orange
Peach
Pinapple
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Cherry Vanilla Dr Pepper | Dr Pepper Cherry |
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| Dr Pepper Made with Cane Sugar |
| Black Cherry |
| Cherry Limeade Soda |
| Cream Soda |
| Root Beer |
| RC Cherry Cola | RCola Singer Ale

Ruby Red Citrus Berry Soda Squirt Cherries ' N Cream Cream Soda Ginger Beer Gey Lime Orange N Cream Original Root Beer
Peach Soda Wishniak Black Cherry Sun Drop Cherry Limeade Lemonade Orange Pineapple宕
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Variety
Pina Sol - Pineapple Orange

Strawberry
Fruit Punch Mountain Dew Game Fuel - Electrifying Berry Mountain Dew Throwback Mountain Dew Throwback Moutain Dew Moutain Dew White Out
Orange Citrus Cream Soda

Root Beer Pepsi NEXT
Sierra Mist Cranberry Splash

Grape
Orange
Strawberry
Birch Beer
Black Cherry Cape Cod Cranberry Dr
Cola Cream Soda

Fruit Punch Ginger Ale Golden Ginger Ale
Grape Orange Dry Pineapple

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[^0]:    *Analysis of changes over time for brands that were included in the 2011 report, including new products introduced since 2011 and products that are not necessarily included in our 2014 product list (due to low sales)
    **Calories and sugar for sugar-sweetened energy drinks only
    +Formerly Hansen Beverage Company
    Source: Nutritional content analysis $(2011,2014)$

[^1]:    *Analysis of changes over time for brands that were included in the 2011 report, including new products introduced since 2011 and products that are not necessarily included in our 2014 product list (due to low sales)
    Source: Nutritional content analysis $(2011,2014)$

[^2]:    *Other sugary drinks and brands include sports drinks, iced teas, fruit drinks, and brands with products in these categories

[^3]:    *comScore changed its age breaks for black youth in 2013. From Jan-June 2013 the demographic group included 6- to 17-year-olds, but it included 2- to 17-year-olds from July-Dec 2013.

[^4]:    Includes brands with 100,000+ Facebook likes or YouTube views
    *Brand or company was not included in 2011 social media marketing analysis
    ${ }^{* * *}$ Facebook fans in 2011, YouTube changed its method of counting views so cannot compare to 201
    Shading indicates children's product
    Source: Social media marketing analysis (June, 2014

[^5]:    Shading indicates children's product
    Source: Rudd Center analysis of Nielsen data (2014)

