This analysis of sales, nutrition, and marketing of children's drinks (i.e., drinks marketed as intended for children) in 2018/19 identified some positive developments. However, sweetened drinks with added sugars and often low-calorie sweeteners continued to dominate sales and advertising of drinks for children.

This analysis identified 23 children's drink brands in the juice, fruit drink, and water categories with \$10 million of sales or more in 2018. These brands offered 67 different sub-brands (or varieties) of children's products as of August 2019. Sub-brands included sweetened drinks (fruit drinks, flavored waters, and drink mixes) and drinks without added sweeteners (100% juice and juice/water blends). We also identified one unsweetened sparkling water for children. Iced teas and sports drinks were not included as there were no children's products in these categories. Sales of children's drinks totaled \$2.2 billion in 2018, with sweetened drinks contributing almost two-thirds (62%) of these sales.

# Positive findings

Despite the predominance of sweetened children's drinks in the market, we did observe some positive trends in nutrition and marketing of drinks without added sweeteners for children, including promotion of lower-sugar juice/water blends and one sparkling water brand. In addition, licensed characters and promotions were rarely found on sweetened children's drinks; they were used primarily to promote 100% juices and juice/water blends. Furthermore, advertising of drinks without added sweeteners relative to sweetened drink categories showed some positive trends.

#### Healthier children's drinks

**Juice/water blends.** The development of juice/water blends by some of the biggest-selling children's drink brands (including Capri Sun, Apple & Eve, Minute Maid, and Mott's) was notable. These products contained juice and water and no additional sweeteners, with a median 46 calories, 10 grams of total sugars, and 50% juice per serving. Juice/water blends all came in single-serving packages (4.23- to 6.75-oz boxes and pouches), and all but one of the 13 packages examined contained no more than the recommended amount of juice for a 1- to 3-year-old. Therefore, these products provide a lower-calorie, lower-sugar option for young children than 100% juice.

Companies also appeared to actively market these products to parents, and parents are purchasing them. Children's juice/water blends represented 34% of all juice/water blend product sales in 2018, and approximately one-quarter of sales of all children's drinks without added sweeteners. Their packages

featured similar nutrition- and health-related claims as 100% juice packages, but more messages about less/low sugar content and organic ingredients. Two products – Capri Sun Refreshers and Mott's Sensibles – were heavily advertised in magazines (a medium directed to adults), while Capri Sun Organic was the only juice/water blend that advertised directly to children on children's TV programming.

As juice/water blend products came in boxes and pouches, they can also provide a convenient and lower-calorie alternative to 100% juice to serve children outside the home. However, a less expensive option for parents who choose to serve 100% juice would be to add their own water. Parents also should read the nutrition facts panel when purchasing these products, as the ingredient list is the only way to differentiate juice/water blends from similar products that contain added sugars and/or low-calorie sweeteners.

Children's sparkling water. The one children's unsweetened water identified – Polar Seltzer Jr. – also deserves attention. Although this product was not supported by advertising, the packaging was clearly designed to attract children's attention. It included more child features than any other unsweetened children's drink, including cartoon images, fun references, and wacky names (e.g., Unicorn Kisses, Yeti Mischief). However, one striking finding was that unsweetened plain and sparkling waters represented 60% of sales of all other (not children's) drinks examined (totaling \$13.8 billion in 2018), but just 0.01% of all children's drink sales. Additional child-directed unsweetened plain water products, especially plain still waters, could help parents in their efforts to get their children to drink more water, as recommended by nutrition and health experts.<sup>2</sup>

#### Marketing

**Licensed characters/promotions.** Another notable development was the small number of promotions (of any type) on sweetened children's drink packages. In 2014, 57% of children's fruit drink packages had featured some type of promotion (including licensed characters).<sup>3</sup> In contrast, only one children's fruit drink in this analysis featured a licensed character (Good 2 Grow Organic 75% Less Sugar with collectible character tops, such as Thomas the Tank Engine, My Little Pony). The only other promotion on sweetened children's drink packages was a corporate-level cause marketing program (Let's Play) found on all Dr Pepper Snapple Group products.

The remaining promotions identified in this analysis appeared on children's 100% juices and juice/water blends. Approximately 20% of these products had licensed characters (including Disney, Sesame Street, and other popular children's media characters). This finding demonstrates the effectiveness of media company pledges to promote healthier choices to children. Both Disney<sup>4</sup> and Sesame Street<sup>5</sup> have policies to

license their children's characters only for use on products that meet nutrition standards that conform with expert recommendations.

**Advertising trends.** From 2010 to 2018, there was a 57% decline in total advertising spending (in all media, including TV, magazines, and digital) for children's sweetened fruit drinks and flavored waters, as well as other sweetened drink brands. At the same time, total advertising of drinks without added sweeteners (including 100% juice, juice/water blends, and plain/sparkling water) remained relatively flat. A 56% decline in advertising for 100% juice from 2010 to 2018 was offset by a 38% increase in advertising for juice/water blends and a 70% increase for plain and sparkling waters.

Advertising spending on children's drinks also showed improvements from 2010 to 2018. In 2018, companies spent 66% more to advertise children's 100% juice and juice/water blends than they spent to advertise fruit drinks and flavored waters (\$34.4 mill vs. \$20.7 mill). In 2018, only one company – Kraft Heinz – advertised sweetened drinks on children's TV programming. The company also advertised one of its juice/water blends – Capri Sun Organic – directly to children on children's TV.

# Opportunities for improvement

The findings in this report also highlight numerous opportunities for improvements in the nutrition and marketing of drinks for children. Common practices may lead to parents' misunderstanding about the ingredients and healthfulness of sweetened children's drinks. In addition, advertising of sweetened drinks directed to children and targeted advertising to Hispanic and Black children continue to raise public health concerns.

### Sweetened children's drinks

Low-calorie sweeteners. One concerning finding was the widespread use of low-calorie sweeteners, including sucralose, acesulfame potassium, neotame, and stevia, in children's drinks. Overall, 74% of children's sweetened drinks contained lowcalorie sweeteners, including 50% of regular sugar-sweetened fruit drinks (i.e., 6 of 12 drinks with >40 kcal per 8-oz serving), all reduced-calorie fruit drinks (5 of 10 also contained added sugar), and 5 of 6 flavored waters. Furthermore, the majority of children's products with low-calorie sweeteners featured lessor low-sugar claims on product packages, but did not indicate that the products contained other types of sweeteners (except in the ingredients list under the nutrition facts panel). None of these drinks used the term "diet" on product packaging and just one (Hawaiian Punch Light) identified itself as "light." Therefore, consumers may not be aware that most sweetened children's drinks contain low-calorie sweeteners.

Although these drinks with low-calorie sweeteners were marketed for children, experts do not recommend serving low-calorie sweeteners to children under age 14,6 and none would meet Smart Snacks in School nutrition standards for sale in elementary or middle schools. In addition, in previous research studies with parents the majority of participants reported that they believe nonnutritive (i.e., low-calorie) sweeteners are not safe for children and prefer to serve drinks with added sugar. Blow-calorie schools panels and know the chemical names for low-calorie sweeteners to know that the product they purchase for their children contains these sweeteners. Therefore, it appears that parents may not be aware that children's drinks often contain low-calorie sweeteners.

**Fruit drinks.** The sugar content in children's fruit drinks raises additional concerns. The American Heart Association (AHA) recommends that children (2-18 years) consume no more than 25 grams of added sugar daily. However, the median total sugar content in one serving of a regular children's fruit drink was 16 grams (ranging from 6-52 g), equal to 4 teaspoons of sugar, whereas the median juice content was 5% (ranging from 0-42%). One serving of 11 of the products analyzed had more than 50% of the recommended amount of daily added sugar for children, including many of the highest-selling brands (Capri Sun Juice Drink, Hawaiian Punch, Sunny D, and Minute Maid Lemonade). Reduced-calorie fruit drinks contained fewer calories (median 15 kcal) and less sugar (median 2 g). However, the majority had 0% juice and low-calorie sweeteners.

Children's fruit drink packages also featured numerous claims that could lead parents to believe these products are healthy choices for their children. For example, more than 80% featured images of fruit (regardless of whether the product contained any fruit juice), and 44% contained messages about Vitamin C (i.e., "good source" or "% daily value" claims). In addition, 60% had some type of sugar message, including "no high fructose corn syrup" as well as less/low sugar claims. Some products claimed lower sugar than unspecified "leading juice drinks" or the "leading regular soda." At the same time, 85% of packages contained on average 2.3 child features (including cartoons, brand characters, fun/cool/extreme references, and wacky names) to appeal directly to children.

**Flavored waters.** Children's products in this category self-identified as a "water beverage" on the product package, but they were similar in nutrition to reduced-calorie children's fruit drinks. Five of the six children's flavored waters qualified as reduced-calorie drinks, with a median of 30 calories and 7 grams of sugar per serving and 0% juice. Apple & Eve Water Fruits was the only product in this category that contained any juice and no low-calorie sweeteners. Marketing messages on product packages were also similar to children's fruit drinks: more than 80% had images of fruit, as well as sugar claims.

They also averaged 2.5 child features on their packages to appeal to children.

However, children's flavored water packages contained more ingredient, health-related, and real claims (e.g., real, natural, organic) than other categories of sweetened children's drinks. They averaged 2.2 sugar claims per package, including "no high fructose corn syrup" (>80%) and "no artificial sweeteners" on products that contained stevia low-calorie sweetener (1/3 of packages). Some health-related messages were also unique to this category, including messages about hydration on more than 80% of packages and exercise promotion messages on one-third. These types of messages may lead parents to believe that these unhealthy products are healthy choices for their children (i.e., health halo effects). In addition, 80% of product packages contained messages about recycling and/ or the environment.

#### Children's drinks without added sweeteners

Among children's 100% juices and juice/water blends, some common marketing practices could also make it more difficult for parents to identify and select healthier products for their children.

100% juice single-serving packages. The smallest single-serving package of 100% juice was a 4.23-oz box (available for 4 of the 13 children's 100% juice brands in our analysis), which is slightly more than the maximum 4 ounces of 100% juice recommended for children ages 1 to 3 years. The smallest packages available for two children's 100% juices contained 6.75 ounces, which would be recommended only for children age 7 and older. Therefore, the majority of 100% juice boxes and pouches available contained more than the recommended daily maximum amount of juice for a toddler, and some children's juice boxes and pouches contained more juice than recommended for preschool-age children. Furthermore, the smallest single-serving containers for two children's 100% juice brands were 10- and 16-ounce bottles, which is more juice than recommended for an adolescent to consume in a day.

### Children's brands with products in multiple categories.

Five of the children's drink brands that offered 100% juice and juice/water blend products also offered sweetened children's drinks: Apple & Eve, Capri Sun, Good 2 Grow, Minute Maid, and Mott's. Package sizes and types, flavor names, fruit images on package fronts, and claims for products offered by these brands were similar across all product categories – including both sweetened drinks and drinks without added sweeteners.

The only message on the package front to distinguish between products by category was "100% juice," which appeared on all 100% juice products. However, for products in other categories, information about percent juice and types of sweeteners contained in the product was only available on the nutrition facts panel on the back of the package. Therefore, cross-branding of products across drink categories may

confuse parents about the ingredients and healthfulness of the products they purchase for their children.

### **Advertising trends**

Despite reductions in advertising spending for sweetened fruit drinks and flavored waters in total, children's drinks in these categories continued to represent a higher proportion of TV advertising than healthier children's drinks. In addition, some children's fruit drinks appeared to target Hispanic and Black children with their advertising.

Children's drink advertising. In 2018, children's sweetened drinks (fruit drinks and flavored waters) spent more to advertise on TV than children's 100% juices and juice/water blends (\$18.5 vs. \$13.6 million). Preschoolers (2-5 years) and children (6-11 years) also saw more than twice as many TV ads for children's sweetened drinks than for drinks without added sweeteners (38.3 vs. 16.7 for preschoolers and 45.4 vs. 19.7 children). Compared to adults, children were more likely to see ads for children's fruit drinks, flavored waters, and juice/water blends, but less likely to see ads for children's 100% juices (which primarily advertised to parents).

From 2010 to 2013, preschoolers' and children's exposure to TV ads for sweetened children's drinks declined by more than 50%, but from 2013 to 2018 exposure declined by just 2% for preschoolers and 7% for children. In contrast, from 2013 to 2018 the amount of time preschoolers and children spent watching TV declined by 35% and 42%, respectively. Therefore, companies appeared to offset the decline in amount of time children spent watching TV by increasing the number of ads that appeared per hour of TV. <sup>15</sup> Of note, only one sweetened children's drink brand (Sunny D) appeared to offset this reduction in TV viewing by allocating a significant amount of its advertising spending to digital media.

In 2018, Kraft Heinz was the only company to advertise children's drinks directly to children on children's TV programming. Two of the three brands it advertised to children were sweetened drinks (Kool-Aid Jammers fruit drink and Capri Sun Roarin' Waters flavored water). Although Kraft Heinz participates in the Children's Food & Beverage Advertising Initiative (CFBAI) industry self-regulatory program, both of these drinks qualified as "exempt" from CFBAI nutrition standards even under the revised nutrition standards to be implemented by 2020, because they were low in calories. However, both contained added sugars plus low-calorie sweeteners. Therefore, neither met HER expert recommendations for healthy beverages for children, and neither could be sold in elementary or middle schools under USDA standards for Smart Snacks in Schools.

In examining preschoolers' and children's exposure to TV ads for all sweetened fruit drinks and flavored waters (children's drinks and other drinks combined), Kraft Heinz brands represented approximately two-thirds of TV ads viewed by preschoolers and children, while Coca-Cola brands

represented another approximately 15%. Total exposure to ads for all drinks without added sweeteners was somewhat less concentrated, with Kraft Heinz, Coca-Cola, PepsiCo, Nestle, and Wonderful responsible for more than 90% of TV ads viewed by preschoolers and children. However, despite the substantial increase in advertising for non-children's brands of plain water and sparkling water directed to adults from 2013 to 2018, the one children's sparkling water brand did not advertise at all in 2018.

**Targeted advertising.** Only three drinks in our analysis advertised on Spanish-language TV in 2018. Two children's fruit drinks (Capri Sun Juice Drink and Sunny D) each devoted approximately one-quarter of their TV advertising spending to Spanish-language TV, and these ads appeared to be directed at children. Notably, under CFBAI nutrition standards (current and revised standards), neither of these products could be advertised in child-directed media. This finding illustrates two limitations of the CFBAI. First, the program is voluntary and Sunny D's parent company (Harvest Hill Beverage Company) does not participate. Second, Spanish-language TV programming does not meet the CFBAI definition of child-directed TV.

Capri Sun Refreshers juice/water blend also spent a small amount (approximately \$100,000) to advertise on Spanish-language TV. However, no other brands in the categories examined in this report (including other, not children's, brands) advertised on Spanish-language TV in 2018.

In comparing TV advertising exposure by race in 2018, Black preschoolers and children saw 79% and 77% more TV ads for all drinks in our analysis compared to White preschoolers and children. The flavored water and sparkling water categories had the biggest differences – Black preschoolers and children viewed approximately 85% more TV ads for these products than their White peers – while plain still water products had the smallest differences (approximately 25%).

A few sweetened drink brands appeared to target Black children directly, as evidenced by exposure to TV ads that was more than twice as high as exposure by White children: Minute Maid Lemonade (a children's fruit drink) and Glaceau Vitamin Water (not a children's drink). Among drinks without added sweeteners, Black preschoolers saw more than twice as many ads for four 100% juice brands, including two children's drinks from Minute Maid (Orange Juice and 100% Juice) and one sparkling water brand.

#### Recommendations

These findings confirm that major beverage manufacturers have made some progress in developing healthier drinks for children (primarily juice/water blends with no added sweeteners) and that companies have substantially reduced total advertising for sweetened fruit drinks and flavored waters (including children's

drink and other brands). However, sweetened fruit drinks and flavored waters continued to represent more than 60% of children's drink sales. Furthermore, many of the marketing practices detailed in this report likely confuse parents about the healthfulness of sweetened children's drinks and suggest that manufacturers may not share public health goals to reduce excess sugar consumption by children and eliminate sugary drinks from their diets.

This report also highlights potential actions by all key stakeholders – including industry, policy makers, advocates, and healthcare providers – to encourage reduced consumption of sugary drinks by children.

#### **Industry**

Beverage manufacturers, retailers, and media companies should do more to ensure that drinks marketed for children are healthy options. Marketing for children's drinks should only encourage children to consume products that meet expert recommendations for healthy children's drinks, and not mislead parents and other caregivers about the healthfulness of products served to children.

- In addition to developing juice/water blends with lower calories and no added sweeteners for children, manufacturers should devote resources to developing and marketing unsweetened plain still waters for children.
- CFBAI nutrition standards for products that cannot be advertised in child-directed media should not exempt lowcalorie drinks that contain added sugars and/or low-calorie sweeteners. CFBAI nutrition standards should conform with expert recommendations for healthy products for children. Furthermore, these standards should apply to advertising of children's products on Spanish-language TV, as well as English-language children's television.
- Media companies that accept child-directed advertising should also implement nutrition standards that comply with expert recommendations for products that can be advertised in their media. Disney and Sesame Street have established nutrition standards for products that can license their characters.<sup>19</sup> As a result, this report shows that the use of licensed characters on sugar-sweetened children's drinks has almost been eliminated.
- The front of children's drink packages should clearly indicate the percent juice and sweetener content, including added sugars and low-calorie sweeteners. To fully inform consumers, these disclosures should accompany all sugar claims, including "less/low sugar" and "no high fructose corn syrup."
- Brands should clearly differentiate their products by category and eliminate cross-branding of sweetened drinks and healthier options, including the use of similar packaging

types, fruit-flavor names and images of fruit, and nutrition-related claims.

Retailers should clearly label children's drinks that contain added sweeteners (e.g., with shelf tags) and/or place sweetened children's fruit drinks and flavored waters in a separate location from 100% juices and juice/water blends to reduce potential consumer confusion.

### **Policy makers**

Federal regulation and state and local actions could also encourage selection of healthier drink options for children.

- Public health campaigns to reduce sugary drink consumption should highlight that children's fruit drinks and flavored waters contain added sugars and often low-calorie sweeteners too, and help educate consumers on how to differentiate them from 100% juice and juice/water blends that do not contain added sweeteners.
- State and local legislators could require retailers to separate children's sweetened fruit drinks and flavored waters from 100% juice and juice/water blends on store shelves.
- The U.S. Food and Drug Administration (FDA) could establish regulations to address unclear labeling practices, such as requiring disclosures of sweeteners (added sugars and low-calorie sweeteners) and juice content on the front of packages. The required disclosure of added sugars on the nutrition facts panel beginning January 2020<sup>20</sup> will help address potential confusion about added versus naturally occurring sugars, but front-of-package disclosures would provide further transparency.
- The FDA could require that products with nutrition-related claims on product packaging meet minimum nutrition standards.
- The FDA could prohibit the use of fruit and vegetable images on drink product packages that contain little or no juice.
- States should increase the price of sugary drinks, including children's fruit drinks and flavored waters, through an excise tax, with tax revenue allocated to local efforts to reduce health and socioeconomic disparities.

# Advocates and health practitioners

Child health advocates and health practitioners can play an important role in raising awareness of potentially harmful marketing practices, educating parents about the best drinks for their children, and persuading industry and policymakers to enact improvements.

- The revised 2020-2025 Dietary Guidelines for Americans should address the full range of children's drink products available on the market, including drinks with low-calorie sweeteners, and USDA should provide clear guidelines and educational materials to help parents identify the healthiest choices for their children, as well as choices that do not meet expert recommendations.
- Healthcare professional organizations and/or public health organizations should provide recommendations and develop campaigns to educate parents about how to identify children's products that contain low-calorie sweeteners to enable them to make informed decisions about whether these products are appropriate for their children.
- Healthcare professionals, including pediatricians, dentists, and nutritionists, should counsel their patients about the sugar content and other ingredients in children's drinks. They should reinforce the importance of providing unsweetened water and milk to children, and the potential risk of introducing sweetened drinks to young children before they have developed a taste for unsweetened options.

In summary, as noted by the American Academy of Pediatrics (AAP) and the American Heart Association (AHA) in their policy statement regarding children's sugary drink consumption, policy strategies are "urgently needed" to address this public health crisis. <sup>21</sup> Manufacturers should ensure that the children's drinks they develop and market to children and their parents do not contribute to the crisis. As detailed in this report, much more is required for beverage manufacturers and other key stakeholders to demonstrate their commitment to reducing children's consumption of sweetened drinks that can harm their health and encouraging children to consume drinks that do not contain added sweeteners.