

Are Fast-Food Restaurants Keeping Their Promises to Offer Healthier Kids' Meals?

AUTHORS:

Jennifer Harris, PhD, MBA
Maia Hyary, MPA
Nicole Seymour, MSW
Yoon-Young Choi, MS

ACKNOWLEDGMENTS:

Support for this study was provided by Healthy Eating Research, a national program of the Robert Wood Johnson Foundation. Peer review was provided by Christina D. Economos, PhD, Professor, Friedman School of Nutrition Tufts University, Director, ChildObesity180; and Brian Elbel, PhD, MPH, NYU School of Medicine, and NYU Wagner School of Public Service.

Summary

To address public health concerns about the negative impact of children's fast food consumption, some of the largest U.S. fast-food restaurants – McDonald's, Burger King, Subway, Wendy's, KFC, and Dairy Queen – have pledged to remove sugar-sweetened fountain drinks from menu boards and /or offer healthier drinks and side dishes with kids' meals. In this research, we evaluated restaurants' implementation of their healthier kids' meal pledges by analyzing: (1) kids' meal drink and side items listed on restaurants' websites; (2) kids' meal drink and side items listed and pictured on menu boards and featured on signs inside and outside restaurants; and (3) drinks and sides offered by restaurant personnel at the point-of-sale with kids' meal orders. To assess changes over time, data were collected in 2010, 2013, and 2016.

In 2016, kids' meal menus on restaurant websites consistently reflected restaurants' healthier kids' meal pledges. As pledged, none of the websites listed fountain drinks as part of their kids' meal online menus, a notable improvement compared with 2013. Subway alone pledged to offer only healthier kids' meal sides, and was the only restaurant that did not list unhealthy sides (such as french fries and desserts) on its kids' meal online menu. McDonald's fulfilled its pledge to introduce new healthier kids' meal sides, while all restaurants in this evaluation listed at least one healthier kids' meal side option (such as applesauce or apple slices) on their websites.

In contrast, some individual locations of all restaurant chains evaluated continued to promote unhealthy kids' meal drinks and sides on menu boards and /or signs inside the restaurants, including items that were not listed on their kids' meal online menus. Approximately one-third of McDonald's, Burger King, Wendy's, and Subway restaurants visited in 2016 listed fountain drinks with kids' meals on their menu boards, despite their pledges to remove them from menu boards. In addition, some Burger King and Subway locations featured unhealthy sides on kids' meal menu boards and signs that were not included on their kids' meal online menus.

Fast-food restaurants — including McDonald's, Subway, Burger King, Wendy's, KFC, and Dairy Queen — have promised to remove sugary drinks from kid's meal menu boards.

However, restaurants did not consistently implement their pledges at all restaurant locations.

When mystery shoppers visited individual restaurants and ordered a kids' meal, there was wide variation in how often restaurant personnel offered healthier kids' meal drink and side options. In 2016, restaurant personnel offered at least one healthier drink option with more than 80% of kids' meal orders at McDonald's, Burger King, and Subway restaurants, compared with 56% of orders at Wendy's and KFC and 33% at Dairy Queen. Yet, some personnel at all restaurant chains continued to automatically provide customers with a cup for a fountain drink without offering any healthier drink options, including one-half of orders at Dairy Queen.

There was even more variation in how often restaurants offered any of their healthier side options with kids' meal orders, ranging from 80% or more of orders at McDonald's, Subway, and KFC, to 22% at Wendy's and 8% at Burger King. Although Burger King had removed french fries from its kids' meal online menu, restaurant personnel automatically provided fries with 90% of Burger King kids' meal orders. Furthermore, all McDonald's orders included a reduced-portion size of french fries, in addition to healthier sides.

These results indicate that restaurants listed healthier drinks and/or sides on their kids' meal online menus as promised, but pledges to remove unhealthy drinks from kids' meal menus were inconsistently implemented at individual restaurants. Many of these restaurants continued to offer fountain drinks and french fries as the default with kids' meals at the point-of-sale, whereas healthier options usually were offered as a choice (often together with unhealthy options).

Advocates should continue to work with restaurants to encourage expansion of healthier kids' meal policies, focusing on removing unhealthy sides and main dishes in addition to drinks, and making healthier options the default, not one of both healthy and unhealthy choices. They must also monitor implementation at individual restaurants and insist that restaurants consistently implement the healthier kids' meal pledges that they publicly promote, as well as introduce campaigns to increase parents' demand for healthier kids' meal choices. Policy makers should also consider legislation or regulation to require that all restaurants serve healthier kids' meals.

One-third of children consume fast food on a given day, and frequent fast food consumption negatively affects children's diets and increases calories consumed.

Background

Frequent fast food consumption negatively affects children's diets, weight, and health. One-third of children consume fast food on a given day,¹ contributing 126 additional calories, increased sugar, saturated fat, sodium and sugary drink intake, and reduced milk intake on those days.² Furthermore, a majority of kids' meal main dishes offered by top fast-food restaurants exceed dietary recommendations for the percent of calories from fat, saturated fat, and sodium.^{3,4} A recent study concluded that fast-food meals purchased for children containing sugar-sweetened beverages added an average of 179 calories to the meal and increased added sugar consumption when compared to meals purchased without these drinks.⁵ Fast food consumption also contributes to health disparities affecting black and Hispanic youth⁶ due to greater access to fast food and more negative effects of fast food consumption on diet quality for lower-income children.^{7,8} Therefore, policies that reduce calories and improve the nutritional quality of foods and beverages consumed by children at fast-food restaurants will likely improve children's health, with even greater benefits for lower-income, black, and Hispanic populations.

Some fast-food restaurants have added healthier side and drink menu items on kids' meal menus, but the majority of options remain nutritionally inadequate.⁹ A Rudd Center analysis of kids' meal menu items offered in 2013 found improvements in kids' meal options compared with 2010, with most restaurants adding new healthy drinks and sides.¹⁰ However, nearly all kids' meal items exceeded recommended levels of calories, saturated fat, sodium, and /or sugar, while fewer than 1% of kids' meal combinations met recommended nutrition standards. A recent study of changes in the nutrient content of menu items in children's meals at 45 chain restaurants from 2012 to 2015 found a reduction in soda on children's menus, which was offset by an increase in flavored milk, and few changes in the nutrient content of main dish and side items.¹¹

To date, restaurants' voluntary pledges have been the primary mechanism for implementing healthier kids' meal policies. Since 2013, McDonald's,¹² Burger King,¹³ Wendy's,¹⁴ and Dairy Queen¹⁵ have pledged to remove fountain drinks from their kids' meal menu boards. McDonald's also pledged to introduce and advertise new healthier kids' meal drink and side items. Subway has only listed healthier sides and drinks as options with its kids' meals since at least 2010,^{16,17} but the restaurant further committed to offering apples as a side and water or low-fat milk as the default drink with its kids' meals after joining the Partnership for a Healthier America in 2014.¹⁸ In 2014, KFC introduced its Li'l Bucket Kids' Meal with healthier sides and drinks.¹⁹

Questions remain about the effectiveness of fast-food restaurants' pledges to offer healthier drinks and /or sides with their kids' meals. For example, do individual restaurants consistently implement these practices? In addition, do they actively promote healthier items and not promote unhealthy items in other ways, such as through signs at restaurants and pictures on menu boards? Research is required to answer these questions and help determine the potential effectiveness of voluntary restaurant policies, or whether government regulation is required.

Restaurants' pledges to offer and promote healthier drinks and sides with their kids' meals since 2013.

Restaurant	Healthier kids' meal pledges
McDonald's	<p>In September 2013, McDonald's issued a pledge through the Alliance for a Healthier Generation²⁰ to commit to the following actions evaluated in this report:</p> <ul style="list-style-type: none"> • Feature only water, milk and juice as the beverage in Happy Meals on menu boards and in-store and external advertising directed to children. • For Happy Meals, remove all soda logos and images of cups with soda from the Happy Meal section of menu boards (where they exist) and all in-store and external advertising directed to children. Soda will still be available as a beverage option. • Offer new fruit, vegetable, low- / reduced-fat dairy or water options in the Happy Meal beginning in 2014. <p>McDonald's pledge called for phasing out the listing of soda on the Happy Meal section of the menu board, beginning in 2014, with interim goals for market-level compliance in 2016 and 2018. The final goal is to fulfill all commitments in 20 major markets, which represent more than 85% of the company's global sales, by 2020.*</p>
Burger King	<p>In 2015, the President of Burger King North America emailed a statement, published in USA TODAY,²¹ stating that:</p> <ul style="list-style-type: none"> • Instead of soft drinks on menu boards, the BK menu for kids will offer fat-free milk, 100% apple juice, and low-fat chocolate milk.
Wendy's	<p>In a statement emailed to Consumerist in January 2015,²² a Wendy's representative confirmed the following steps taken by the restaurant:</p> <ul style="list-style-type: none"> • Remove carbonated soft drinks from the kids' meal listing on menu boards, both inside restaurants and at pick-up windows (as of fall 2014). • This pledge states, "Beverage options now listed for kids' meals are 1% white or chocolate milk, bottled water and 100% juice."
Subway	<p>In January 2014, Subway joined the Partnership for a Healthier America and issued a press release²³ stating that it would:</p> <ul style="list-style-type: none"> • Only offer items on its kids' meal menu that meet strong nutritional guidelines informed by federal standards for the national school lunch program, including offering apples as a side and low-fat or non-fat milk or water as a default beverage.
Dairy Queen	<p>In May 2015, the American Dairy Queen Corporation released a letter²⁴ stating that the following changes would be effective September 1, 2015 when new menu boards arrive at franchise locations:</p> <ul style="list-style-type: none"> • Remove soft drinks from kids' meal menu boards at Dairy Queen locations across the U.S., and drinks such as milk and bottled water would solely be listed as menu options at DQ locations.
KFC	<p>In March 2013, Nation's Restaurant News published an article introducing the new KFC kids' meals²⁵ and in March 2014, the National Restaurant Association provided comments to the Dietary Guidelines Committee citing the KFC kids' meal.²⁶</p> <ul style="list-style-type: none"> • KFC now offers the Li'l Bucket Kids Meal that comes with green beans, GoGo squeeze applesauce, and a Capri Sun Roarin' Water.

*Although McDonald's goal was to fulfill all its pledges in 20 markets by 2020, a 2014 progress report by the Alliance for a Healthier Generation concluded that these commitments were fulfilled in the U.S. by July 2014.²⁷

This research

This evaluation assessed whether fast-food restaurants consistently implemented their healthier kids' meal pledges and promoted healthier choices at individual restaurants, including changes from 2010 to 2016.

The purpose of this evaluation was to determine whether restaurants consistently implemented their healthier kids' meal pledges and promoted healthier choices at individual restaurants in other ways. We examined six restaurants that have made pledges since 2013: McDonald's, Burger King, Wendy's, Subway, Dairy Queen, and KFC. We collected data in April 2016. We also compared results for four restaurants (McDonald's, Burger King, Wendy's, and Subway) to results from data collected in 2010 and 2013, using the same methods, to measure changes following policy implementation. [Appendix A](#) provides detailed methods used in each analysis.

Evaluating healthier kids' meal pledges

Analysis	Methods
1) Kids' meal online menu listings	Research personnel recorded all drink and side items listed on menus posted on the kids' meal section of restaurants' websites in February 2013 and March and April of 2016, including nutrition information. Six restaurants were included in this analysis: McDonald's, Burger King, Wendy's, Subway, KFC, and Dairy Queen.
2) Menu boards and signs at individual restaurants	Mystery shoppers from an independent market research firm were hired to visit a representative cross-sectional sample of McDonald's, Burger King, Wendy's, and Subway restaurants in 20 markets across the U.S. in 2010, 2013, and 2016 ($n=100$ restaurants per chain per year). At each restaurant, field personnel recorded all menu items listed on the kids' meal section of the menu board, as well as menu items pictured on the kids' meal menu board. They also recorded all menu items pictured on signs inside and outside the restaurant that mentioned the kids' meal.
3) Items offered with kids' meal orders	At a subset of McDonald's, Burger King, Wendy's, and Subway restaurants visited for the menu board analysis, mystery shoppers also placed an order for a kids' meal. This cross-sectional sample included $n=50$ restaurants per chain per year. Additional data were collected for KFC and Dairy Queen in 2016 only ($n=18$ restaurants per chain). At these restaurants, mystery shoppers ordered a kids' meal, but did not specify a side or drink choice. After receiving their order, shoppers recorded all side and drink options offered by restaurant employees (i.e., choices) or whether they were automatically provided a specific side or drink without being offered options (i.e., by default).

To evaluate restaurants' healthier kids' meal pledges, we designated sugar-sweetened soda and other fountain drinks, diet soda, fried vegetables, and desserts as unhealthy options. Healthier drinks and sides included water, plain milk, non-fried fruits and vegetables, and other options that restaurants have identified as healthier drinks and sides. However, it should be noted that not all nutrition professionals agree that some of these options – such as 100% juice, flavored milk, and Capri Sun Roarin' Waters (which contains non-nutritive sweeteners) – are nutritious options for children.

Healthier kids' meal options offered by restaurant chains in 2016*

Restaurant	Healthier drinks	Healthier sides
McDonald's	Plain 1% low-fat milk or skim, 100% juice, fat-free chocolate milk jug	Mandarin oranges, apple slices, Go-Gurt Yogurt
Burger King	Capri Sun 100% juice, low-fat chocolate milk, fat-free plain milk	Applesauce
Wendy's	Plain 1% milk, 1% chocolate milk, bottled water, Honest Kids Fruit Punch	Apple slices
Subway	Plain low-fat milk, chocolate flavored reduced fat milk	Apple slices
Dairy Queen	Plain 1% milk, bottled water	Applesauce, banana
KFC	Capri Sun Roarin' Waters Tropical Fruit, 1% chocolate milk, plain 2% milk, plain 1% milk	Green beans, GoGo squeeZ applesauce, sweet kernel corn, corn on the Cob, BBQ baked beans, coleslaw, mashed potatoes without gravy

*Includes menu items listed on restaurant chains' online menus in the kids' meal section of their websites and / or items offered at restaurants.

Results

The evaluation of healthier kids' meal pledges included three parts: 1) Drink and side options listed on restaurant chains' kids' meal online menus; 2) Drink and side items listed and pictured on menu boards and signs at individual restaurants; and 3) Drink and side options offered by restaurant personnel with kids' meal orders.

Kids' meal online menus

Kids' meal items listed on restaurant chains' websites (i.e., kids' meal online menus) reflected their pledges to remove fountain drinks and add healthier side options to their kids' meals. However, in 2013 and 2016 all restaurants except Subway also continued to list fried potatoes and other unhealthy sides or desserts on their kids' meal menus.

Drink options

All drink options listed on kids' meal online menus in 2016 were healthier choices for children (see [Table 1](#) and details in [Appendix Table B1](#)). All restaurants offered low-fat plain milk. Four restaurants (McDonald's, Burger King, Wendy's, and KFC) also offered flavored milk, while two (McDonald's and Burger King) offered 100% juice. Two restaurants (Wendy's and Dairy Queen) introduced plain bottled water to their kids' meal menus after 2013. Two restaurants also offered fruit drinks without added sugar – Honest Kids Super Fruit Punch at Wendy's (a juice drink with water and fruit juice concentrate) and Capri Sun Roarin' Waters at KFC (a low-calorie flavored water with fruit juice and non-nutritive sweeteners).

Table 1. Drink options on kids' meal online menus

Restaurant	2013		2016	
	Calories	# healthier* (total) drinks	Calories	# healthier* (total) drinks
McDonald's	0-135	3 (5)	80-130	3 (3)
Burger King	0-160	2 (4)	80-160	3 (3)
Wendy's	140	3 (5)	150	4 (4)
Subway	100-300	3 (3)	100	1 (1)
KFC	0-170	2 (4)	30-180	4 (4)
Dairy Queen	0-190	1 (3)	0-110	2 (2)

*Healthier options include low-fat flavored and plain milk, 100% juice, water, and other options restaurants have identified in their pledges (e.g., Capri Sun Roarin' Waters and Honest Kids Fruit Punch).

All kids' meal drink options listed on the websites of restaurants in our evaluation were healthier choices — including low-fat milk, 100% fruit juice, and plain water — a significant improvement from 2013 to 2016.

There was an increase in the number of healthier drink options between 2013 and 2016, while the number of restaurants serving zero-calorie options decreased as a result of removing diet fountain drinks from their menus.

None of the restaurants listed fountain drinks (sugar-sweetened or diet) on their kids' meal online menus in 2016, a notable improvement compared to 2013 when all restaurants except Subway listed them. Notably, Wendy's beverage menu continued to list "kids' meal" sizes for all sugar-sweetened and diet soda fountain drinks, even though these drinks were not listed on its "Wendy's Kids' Meal" menu on the restaurant's website. Although Frosty Jr.'s (frozen drink) were not listed as a beverage on the kids' meal online menu, Frosty Jr.'s can be substituted for a drink.

Side and other options

Only McDonald's and Subway explicitly pledged to offer healthier sides with kids' meals (see Restaurants' pledges). Yet all restaurants offered at least one healthier side with their kids' meals in 2016. KFC and McDonald's offered the greatest number of healthier side options, seven and three, respectively. In 2016, the number of side and dessert options offered by restaurants in our analysis varied widely, ranging from one option (Subway) to twelve options (KFC) (see [Table 2](#) and details in [Appendix Table B2](#)).

Table 2. Side and dessert options on kids' meal online menus

Restaurant	2013		2016	
	Calories	# healthier* (total) options	Calories	# healthier* (total) options
McDonald's Happy Meal	15-100	1 (2)	15-110	3 (4)
McDonald's Mighty Kids Meal	15-230	1 (2)	15-230	3 (4)
Burger King	30-240	1 (2)	50-190	1 (3)
Wendy's	40-230	1 (2)	50-190	1 (2)
Subway	35	1 (1)	35	1 (1)
KFC	25-290	6 (14)	25-270	7 (12)
Dairy Queen	90-240	2 (8)	80-250	2 (6)

*Healthier items include fresh fruit, applesauce, yogurt, and non-fried vegetables. A nutrition profiling model was used to identify healthier KFC side items (see [Appendix A](#) for detailed methods).

In 2016, the majority of menu boards at the restaurants visited listed healthier kids' meal drinks, but approximately one-third or more of restaurant menu boards also listed unhealthy drinks for kids' meals.

However, all restaurants except Subway also listed at least one unhealthy side on their kids' meal online menus. Burger King was the only other restaurant that did not list french fries or another type of fried potatoes as a kids' meal side, but it did list cookies and soft-serve ice cream as kids' meal items (on a PDF, available on its website, with nutrition information for all menu items). Dairy Queen also offered an ice cream cone as a treat with its kids' meal. McDonald's provided two sides with its kids' meals: a healthier side together with kids' size fries in Happy Meals and a larger-portion small fries in Mighty Kids' meals. All restaurants except Subway and Burger King also offered kids' meal sides with more than 200 calories, including McDonald's small fries (included in Mighty Kids' Meals); Wendy's and Dairy Queen kids' fries; and KFC baked beans and potato wedges.

Compared with 2013, McDonald's, Burger King, and KFC added new healthier kids' meal side options (mandarin oranges and yogurt at McDonald's and applesauce at Burger King and KFC). In addition, Wendy's reduced the saturated fat and sodium in its french fries, Burger King removed french fries from its kids' meal online menu, and KFC reduced saturated fat or sodium or increased fiber in several of its side items. In contrast, Dairy Queen increased the size of its kids' fries (from 190 kcal to 250 kcal), and Burger King introduced two new dessert items.

Menu boards and signs at individual restaurants

Kids' meal drinks and sides listed on menu boards and appearing on signs at individual restaurant locations in our sample¹ often did not correspond to the kids' meal items listed on restaurants' online menus. Restaurants at all chains consistently listed healthier drink options on kids' meal menu boards. However, despite their pledges to remove fountain drinks from their kids' meal menus (see Restaurant pledges), approximately one-third or more of restaurants in each chain also continued to list fountain drinks on kids' meal menu boards inside the

Table 3. Drinks on kids' meal menu boards in 2016

Restaurant	Healthier drinks		Fountain drinks
	Avg # listed on menu boards	% of menu boards with pictures	% of menu boards listing
McDonald's	2.50	21%	32%
Burger King	2.38	12%	30%
Wendy's	3.22	61%	42%*
Subway	1.57	41%	39%

* A Frosty Jr. can be substituted for a drink and was listed on 36% of kids' meal menu boards.

¹ Only McDonald's, Burger King, Wendy's, and Subway were included in the analysis of menu boards and signs at individual restaurants.

restaurants. There was significant variation between restaurant chains in the number of healthier and unhealthy kids' meal sides listed on menu boards, as well as in healthier drinks and sides featured on kids' meal signs inside and outside individual restaurants.

Drinks and sides listed and pictured on kids' meal menu boards

The four restaurants in the menu board analysis listed approximately two or more healthier drinks for kids' meals on menu boards inside restaurants (see [Table 3](#) and details in [Appendix Table B3](#)). Some menu boards also listed healthier drinks that were not included on restaurants' kids' meal online menus, including plain bottled water (McDonald's, Burger King, and Subway) and flavored milk and juice at Subway. However, there was wide variation between restaurants in how often menu boards included pictures of healthier kids' meal drinks. The most frequently pictured kids' meal drinks on menu boards included Honest Kids Super Fruit Punch at Wendy's (pictured on 48% of menu boards) and low-fat milk at Subway and McDonald's (36% and 18% of menu boards, respectively). Although none of the restaurant chains listed fountain drinks as an option on their kids' meal online menus, approximately one-third of restaurants at each chain listed fountain drinks as a kids' meal option on their menu boards. Wendy's also listed its Frosty Jr. (frozen drink) on 36% of menu boards.

[Table 4](#) details the number of healthier and unhealthy sides listed and pictured on kids' meal menu boards inside restaurants (see [Appendix Table B4](#) for details). McDonald's restaurants listed the greatest number of healthier sides and the fewest unhealthy sides compared with the other restaurants. The majority of Wendy's restaurants listed both apple slices and french fries on their menu boards. However, at both McDonald's and Wendy's, more than one-half of menu boards pictured healthier sides, and just 5 to 6% pictured french fries (the only unhealthy side available) with kids' meals. Of note, the majority of Burger King menu boards listed both applesauce and french fries as kids' meal options, even though the restaurant did not list french fries as an option on its kids' meal online menu. Some Burger King restaurants also listed desserts as kids' meal options, while just 6% pictured its healthier kids' meal side on the menu board. Approximately three-quarters of Subway menu boards listed apple slices as a kids' meal

Only McDonald's and Subway pledged to offer healthier sides with kids' meals. However, all restaurants examined offered at least one healthier kids' meal side. While all restaurants (including McDonald's and Subway) also continued to list unhealthy kids' meal side options on menu boards inside restaurants.

Table 4. Side items on kids' meal menu boards in 2016

Restaurant	Healthier sides		Unhealthy sides	
	Avg # listed on menu boards	% of menu boards with pictures	Avg # listed on menu boards	% of menu boards with pictures
McDonald's	2.50	62%	0.53	5%
Burger King	0.88	6%	1.11	12%
Wendy's	0.93	55%	0.89	6%
Subway	0.78	37%	1.04	9%

option, and 37% included pictures. However, Subway menu boards also frequently listed chips and cookies as kids' meal side options, even though the restaurant does not list these sides as options on its kids' meal online menu.

Healthier sides and drinks on kids' meal signs

In 2016, McDonald's restaurants featured the most kids' meal menu items on signs at restaurants, and Burger King restaurants featured the fewest. Healthier drinks and sides comprised 56% of kids' meal menu items on signs in McDonald's, followed by 48% at Wendy's and 45% at Subway (see [Table 5](#)). The majority of drinks pictured on kids' meal signs were healthier options, but all restaurants continued to include fountain and other drinks on kids' meal signs in some restaurants. The majority of sides pictured on kids' meal signs at McDonald's, Wendy's, and Subway were healthier options. However, two-thirds of sides featured on kids' meal signs at Burger King were unhealthy options. Notably, a few Subway restaurants also featured unhealthy sides on their kids' meal signs.

Table 5. Menu items featured on kids' meal signs at restaurants*

Restaurant	Total menu items	Healthier drinks		Healthier sides	
	Avg # of menu items featured on kids' meal signs**	Avg # of healthier drinks	% of all drinks featured	Avg # of healthier sides	% of all sides*** featured
McDonald's	2.61	0.60	80%	0.86	81%
Burger King	1.21	0.25	58%	0.10	32%
Wendy's	1.82	0.42	76%	0.46	88%
Subway	1.92	0.50	72%	0.36	73%

* Per restaurant in our sample (n=100 each)

** Includes main dishes, sides, and drinks.

*** Dessert items (e.g., ice cream, cookies) are included as sides.

In 2016, restaurant personnel offered healthier drink choices with most kids' meal orders at the point-of-sale. However, some personnel at all restaurant chains continued to automatically offer unhealthy drinks as the default.

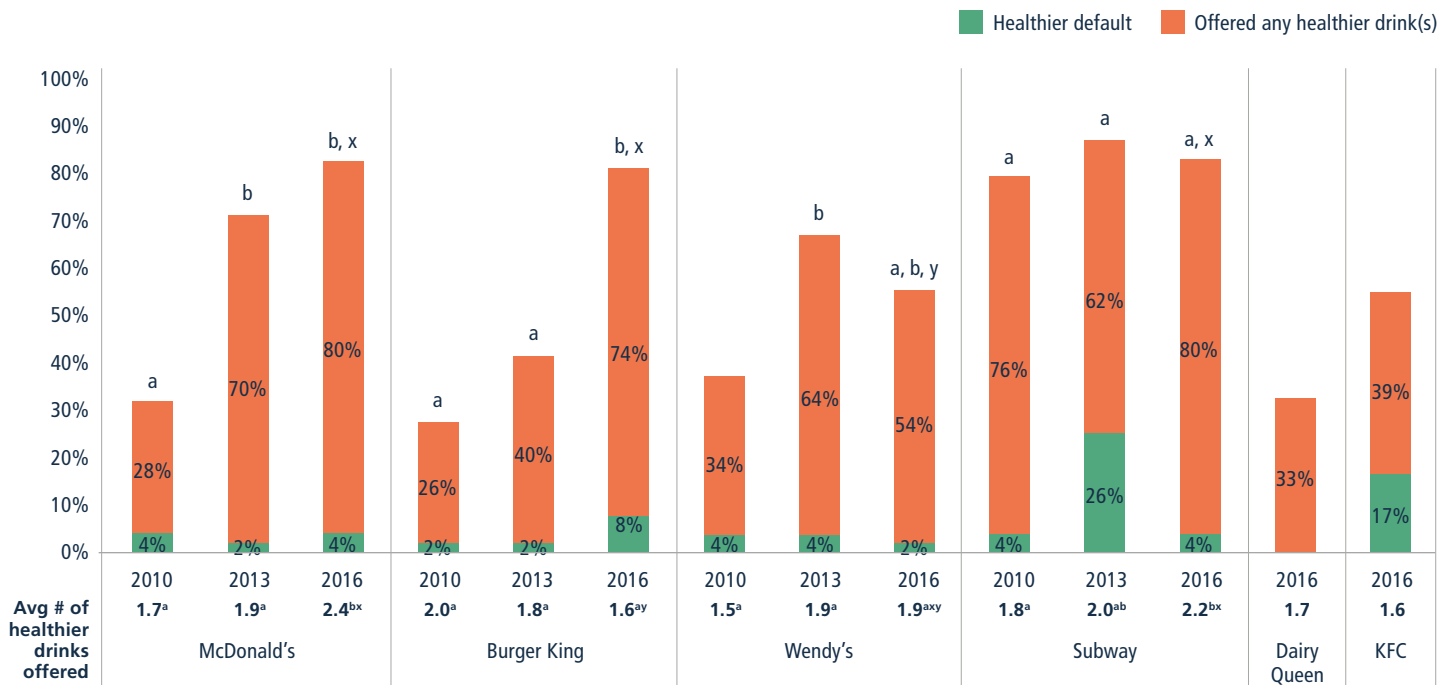
Items offered with kids' meal orders

There was also wide variation between restaurant chains in the frequency that restaurant personnel offered healthier drinks and/or sides with kids' meal orders at individual restaurants sampled. At most restaurant chains, the majority of orders were offered at least one healthier drink and side. However, the majority of orders also were offered an unhealthy side choice, and some restaurant personnel at all chains continued to provide fountain drinks as the default with kids' meal orders.

Drinks offered with kids' meal orders

In 2016, restaurant personnel offered at least one healthier drink option with 82 to 84% of kids' meal orders at McDonald's, Burger King, and Subway. Significantly fewer orders at Wendy's (56%), KFC (56%), and Dairy Queen (33%) were offered a healthier drinkⁱⁱ (see [Figure 1](#)). However, at most restaurants fewer than 10% of orders automatically received a healthier drink (i.e., restaurant personnel provided the healthier drink by default without asking the customer what option he/she wanted). Most of the time, restaurant personnel offered a choice of more than one healthier drink, with McDonald's and Subway offering a significantly greater number of healthier drink options (2.4 and 2.2, respectively) than the other restaurants.

Figure 1. Healthier drinks offered with kids' meal orders



Letters a, b, c denote a statistically significant difference between 2010, 2013, and 2016 for the restaurant, $p < .05$. Letters x, y, z denote a statistically significant difference between restaurants in 2016, $p < .05$.

ⁱⁱ These orders were offered at least one healthier drink option, but may have also been offered an unhealthy option.

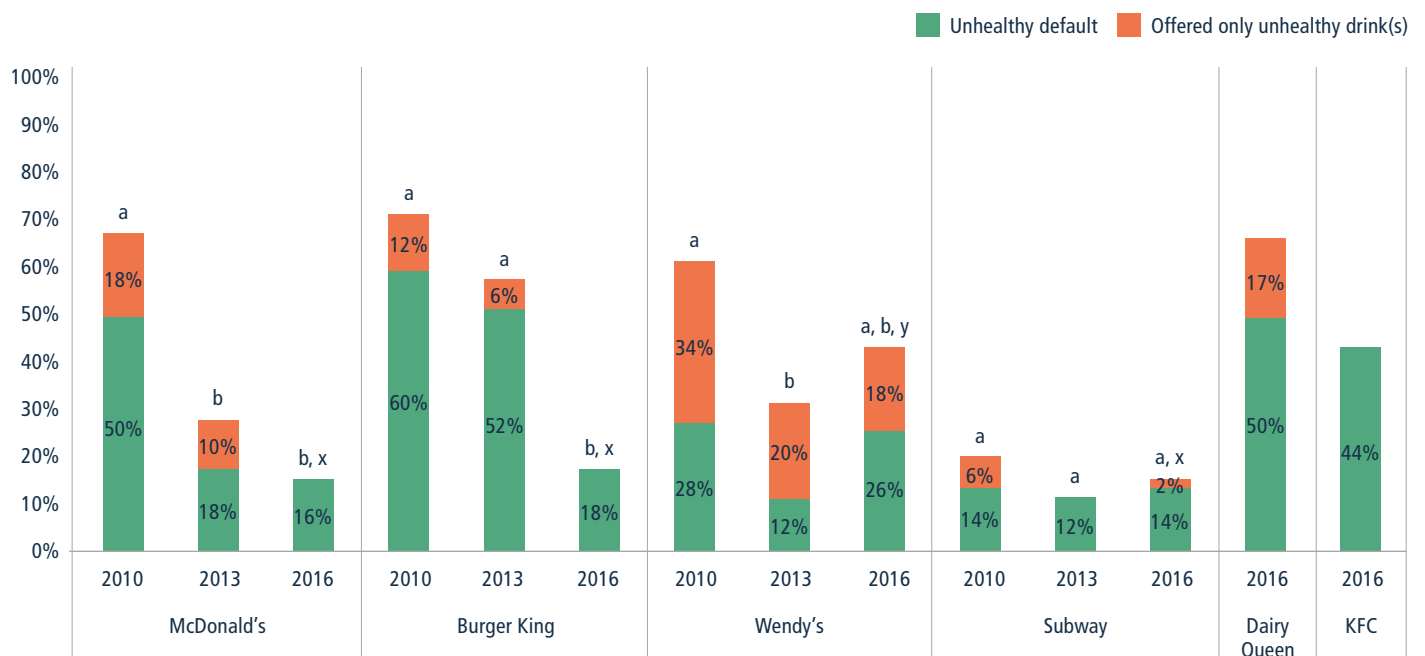
Between 2010 and 2016, the proportion of kids' meal orders that were offered healthier drinks increased at McDonald's and Burger King, and remained consistently high at Subway. There was no improvement at Wendy's.

Compared with 2010, there was a significant increase in the number of kids' meal orders that were offered any healthier drinks at McDonald's, Burger King, and Wendy's. This improvement occurred from 2010 to 2013 for McDonald's and Wendy's and from 2013 to 2016 for Burger King. The average number of healthier drink options offered at McDonald's and Subway also increased from 2013 to 2016. In all three years examined, 80% or more of orders at Subway were offered healthier drink options.

However, personnel at all restaurants chains continued to offer fountain and other unhealthy drink options with some kids' meal orders in 2016, ranging from 16 to 18% of orders at McDonald's, Burger King, and Subway, to 44% of orders at KFC and Wendy's, and 67% of Dairy Queen orders.ⁱⁱⁱ At McDonald's, Burger King, and KFC, restaurant personnel only offered unhealthy drink options by default (i.e., typically providing the customer with a cup to select their own fountain drinks) (see [Figure 2](#)). At Wendy's and Dairy Queen, some restaurant personnel offered a choice of different unhealthy drink options, without offering any healthier options (18% and 17% of orders, respectively).

In 2016, there was no significant difference between restaurants offering unhealthy drinks as the default, but Wendy's personnel were more likely to offer only unhealthy drink options compared with the other restaurants. There was a significant reduction in the percent of orders providing unhealthy drinks as the default for McDonald's (compared with 2010) and for Burger King (compared with 2013). In contrast, the percent of kids' meal orders at Wendy's that were provided unhealthy drinks as the default declined significantly from 2010 to 2013 and then returned to 2010 levels in 2016. The proportion of orders at Subway that were only offered unhealthy drinks did not change over the three years.

Figure 2. Kids' meal orders that were only offered fountain and/or other unhealthy drinks



Letters a, b, c denote a statistically significant difference between 2010, 2013, and 2016 for the restaurant, $p < .05$.

Letters x, y, z denote a statistically significant difference between restaurants in 2016, $p < .05$.

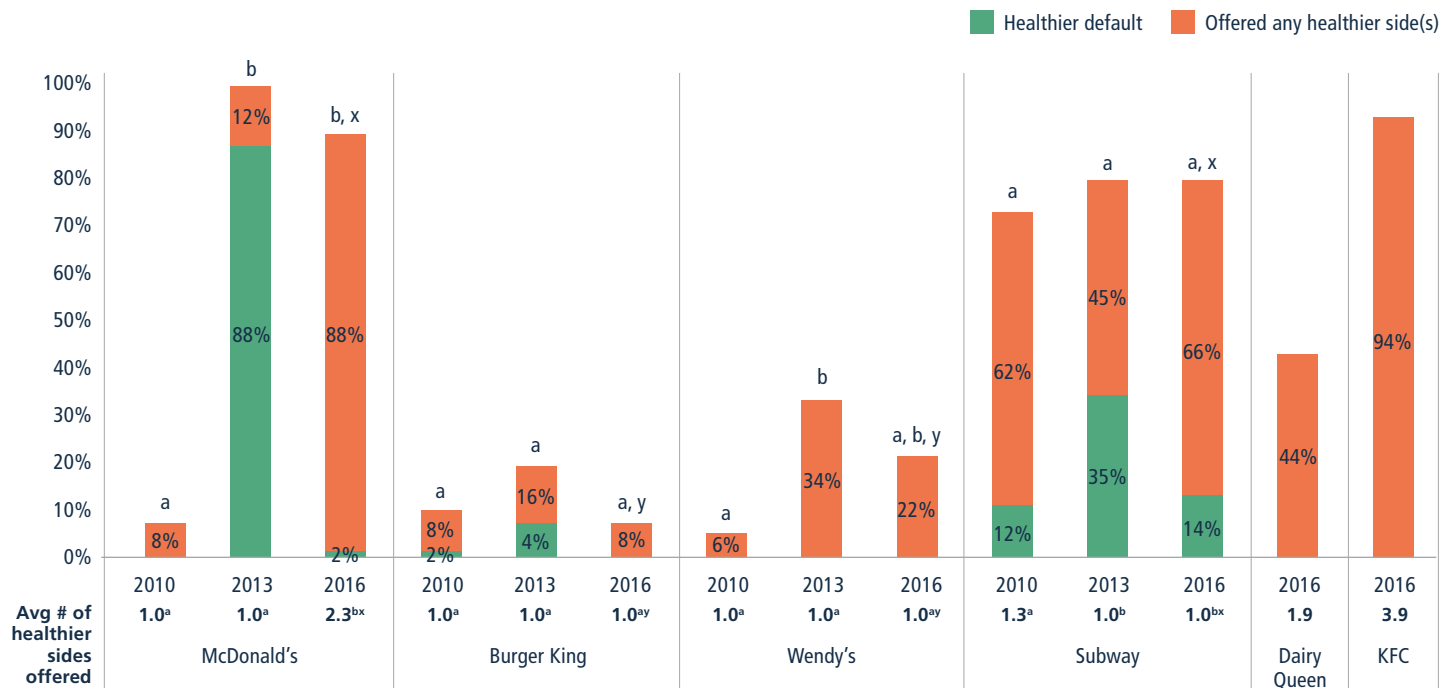
ⁱⁱⁱ These orders were only offered unhealthy drink options; no healthier options were offered.

Although available on the menu, restaurant personnel did not offer healthier kids' meal side options with most orders at Burger King, Wendy's, or Dairy Queen.

Sides offered with kids' meal orders

Although all restaurants listed healthier side options on their kids' meal online menus in 2016, not all restaurants regularly offered these options as a choice with kids' meal orders. Restaurant personnel at McDonald's, Subway, and KFC^{iv} restaurants offered a healthier side option with 80 to 94% of orders, significantly more often than did the other restaurants. In contrast, personnel at Wendy's and Dairy Queen offered at least one healthier side option in just 22% and 44% of kids' meal orders, respectively, and Burger King personnel offered one in just 8% of orders (see [Figure 3](#)). Compared with 2010, McDonald's was the only restaurant with a significant increase in the percentage of orders offered at least one healthier side. Furthermore, ten McDonald's kids' meal orders came with two healthy sides in 2016, compared with just one order in 2013. McDonald's was also the only restaurant with a significant increase in the number of healthier side options offered per order (from 2013 to 2016). Wendy's personnel offering healthier sides increased from 2010 to 2013, but then declined in 2016. However, few restaurants offered a healthier choice as the default. In 2013, 88% of McDonald's kids' meal orders automatically included a healthier side (apple slices) by default in 2013, but this percentage declined to 2% with the addition of mandarin orange and yogurt side options in 2016. Even Subway did not regularly offer apple slices automatically as the side with its kids' meals, even though apple slices was the only side option listed on the restaurant's kids' meal online menu.

Figure 3. Healthier sides offered with kids' meal orders



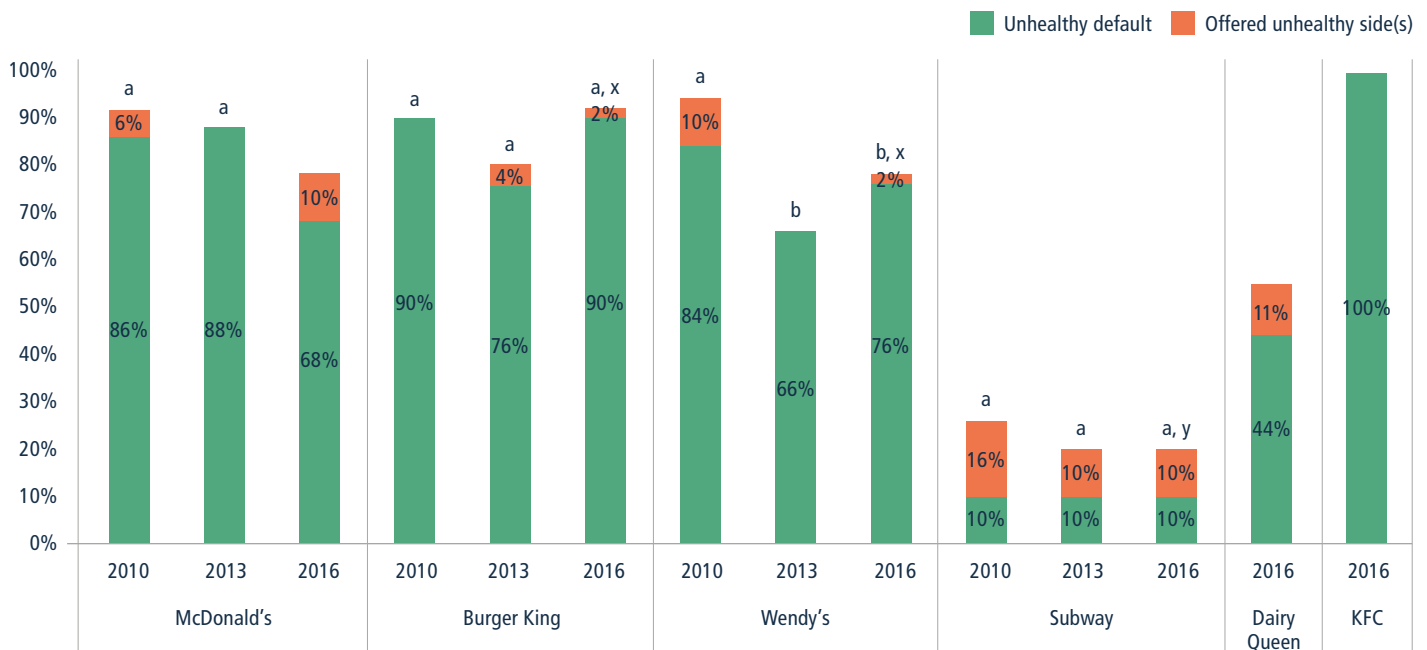
Letters a, b, c denote a statistically significant difference between 2010, 2013, and 2016 for the restaurant, $p < .05$. Letters x, y, z denote a statistically significant difference between restaurants in 2016, $p < .05$.

^{iv} Analysis of healthier sides offered with KFC kids' meals included six of twelve side items. Mashed potatoes were coded as unhealthy because the majority of orders came with gravy and therefore did not meet the healthier side criteria according to the nutrient profiling model used.

In 2016, restaurant personnel automatically provided unhealthy sides with the majority of kids' meal orders at McDonald's, Burger King, and Wendy's.

With the exception of Subway, all restaurants continued to offer unhealthy side options in the majority of kids' meal orders. In most instances, restaurant personnel automatically provided unhealthy sides by default, including 68% of McDonald's, 90% of Burger King, 76% of Wendy's, and 44% of Dairy Queen orders (see [Figure 4](#)). Both McDonald's and KFC offered two sides with most kids' meal orders. The majority of McDonald's orders included both french fries and a choice of healthier sides (in compliance with the restaurant's pledge), while KFC offered a choice of both healthy and unhealthy sides with most orders. Restaurant personnel at Subway were significantly less likely to offer an unhealthy side compared with other restaurants, although personnel offered chips or cookies with 20% of Subway kids' meal orders even though the restaurant did not officially offer these sides on its kids' meal online menu. From 2010 to 2013, the percentage of orders that were offered only unhealthy side options declined significantly at Wendy's, while the percentage of orders at McDonald's that automatically received an unhealthy side declined from 2013 to 2016. However, there were no other changes in unhealthy side options offered with kids' meal orders during the time periods examined.

Figure 4. Kids' meal orders that were only offered unhealthy sides*



*McDonald's and KFC kids' meals come with two sides; this figure shows results for the second side at these restaurants

Letters a, b, c denote a statistically significant difference between 2010, 2013, and 2016 for the restaurant, $p < .05$.

Letters x, y, z denote a statistically significant difference between restaurants in 2016, $p < .05$.

Implementation of healthier kids' meal pledges

Restaurant	Healthier kids' meal pledges	2016 evaluation results
McDonald's	<ul style="list-style-type: none"> • Feature only water, milk, and juice as the beverage in Happy Meals on menu boards and phase out the listing of soda on the Happy Meal section of the menu board. • For Happy Meals, remove all soda logos and images of cups with soda from the Happy Meal section of menu boards. • For Happy Meals, remove all soda logos and images of cups with soda from all in-store and external advertising directed to children. • Offer new fruit, vegetable, low- / reduced-fat dairy or water options in the Happy Meal. 	<ul style="list-style-type: none"> • McDonald's did not list any fountain drinks as options on its kids' meal online menu in 2016, but 32% of kids' meal menu boards at McDonald's locations visited ($n=100$) listed fountain drinks as a kids' meal option. • Kids' meal menu boards pictured fountain drinks at 9% of locations, while 21% pictured healthier drinks. • The majority of drinks featured on kids' meal signs at restaurants were for healthier options (80%). • Compared with 2013, McDonald's introduced new healthier kids' meal side options (mandarin oranges and yogurt) to its kids' meal online menu. Menu boards at the majority of restaurants visited listed these new side items, and 11% listed bottled water as a drink option.
Burger King	<ul style="list-style-type: none"> • Remove fountain drinks from kids' meal menu boards • Instead of soft drinks, the BK menu for kids will offer fat-free milk, 100% apple juice, and low-fat chocolate milk. 	<ul style="list-style-type: none"> • Burger King did not list any fountain drinks as options on its kids' meal online menu in 2016, but 31% of kids' meal menu boards at Burger King locations visited ($n=100$) listed fountain drinks. • The majority of kids' meal menu boards listed healthier drinks as an option.
Wendy's	<ul style="list-style-type: none"> • Beverage options now listed for kids' meals are 1% white or chocolate milk, bottled water, and 100% juice. • Remove carbonated soft drinks from kids' meals on menu boards. 	<ul style="list-style-type: none"> • Wendy's only listed healthier drinks as options on its kids' meal online menu in 2016, and the majority of kids' meal menu boards at Wendy's locations visited ($n=100$) listed healthier drinks as an option. • Approximately one-third of kids' meal menu boards at locations visited listed fountain drinks as an option, and 36% listed Frosty Jr. as an option. Furthermore, 22% of drinks pictured on kids' meal menu boards were fountain drinks or Frosty Jr.'s.
Subway	<ul style="list-style-type: none"> • Only offer apple slices as a side with kids' meals. • Only offer low-fat or non-fat milk or water as the default beverage with kids' meals. 	<ul style="list-style-type: none"> • In 2016, 80% of kids' meal orders at Subway restaurants visited ($n=50$) were offered a healthier side, but just 14% of orders automatically came with apple slices and 20% were offered chips or a cookie. Kids' meal menu boards at Subway listed on average one unhealthy side option. • Restaurant personnel offered customers at least one healthier drink with 84% of kids' meals orders, but just 4% of orders were provided a healthier drink as the default and 16% were offered an unhealthy drink. In addition, 39% of kids' meal menu boards at Subway featured fountain drinks.

Conclusions

These results indicate that the restaurant chains examined have fulfilled parts of their healthier kids' meal pledges, but that implementation at individual restaurant locations was inconsistent. All restaurants removed fountain drinks from the kids' meal online menus posted on their websites, a significant improvement from 2013 to 2016. Most restaurants also added healthier side options to their kids' meals, including restaurants that did not pledge to do so. However, approximately one-third of menu boards inside restaurants at all chains continued to list unhealthy drinks as an options with kids' meals, despite restaurants' pledges to remove them. Subway was the only chain pledging to offer only healthier kids' meal sides, but some individual Subway restaurant locations also listed unhealthy sides on their kids' meal menu boards and signs. In addition, some restaurant locations at other chains listed unhealthy kids' meal side items on menu boards and signs that were not on the restaurants' online menus. Furthermore, there was wide variation between restaurant chains in how often restaurant personnel offered healthier drinks and sides with kids' meal orders. Only Subway and McDonald's offered both healthier drinks and sides with the majority of kids' meal orders placed in this analysis.

These results also demonstrate that voluntary healthier kids' meal pledges by fast-food restaurants have increased the number of healthier options available, but inconsistent implementation at restaurants suggest considerable room for improvement. Although all restaurants now offer healthier sides and drinks, the actual choices available and promoted at restaurants were not always the same options listed on restaurant chains' official kids' meal online menus. Furthermore, most of the healthier options were offered as a choice (that often included unhealthy choices as well) not by default, while the majority of restaurants at most fast-food chains continued to automatically provide fountain drinks or french fries as the default with kids' meal orders.

Restaurant chains also varied widely in how well individual locations implemented their stated policies. We cannot determine the reasons that individual restaurants did not consistently offer the chain's healthier kids' meal options or continued to offer unhealthy options that were not listed on their online menus. Perhaps restaurant staff were not properly trained or management or franchise owners at individual restaurants may have chosen to continue to offer fountain drinks and/or unhealthy sides with kids' meals. However, this finding demonstrates that voluntary policies may disadvantage restaurants that implement their policies well, compared with restaurants with poor or inconsistent policy implementation. It is interesting to note that Subway and McDonald's were the only restaurants to publish official healthier kids' meal policy statements that are publicly available, and these restaurants also offered healthier drinks and sides with kids' meal orders more consistently compared with the other restaurants that have not published official statements.

Recommendations

Recent healthier kids' meal pledges and healthier kids' meal drinks and sides introduced by fast-food restaurants are laudable. However, advocates should continue to encourage restaurants to introduce more effective healthy kids' meal policies, including

- Focus on improving the nutrition of all side options and main dish items, in addition to drinks;
- Encourage restaurants to introduce healthier options as the default, not just another choice among both healthy and unhealthy options, and remove unhealthy items from menu boards and kids' meal online menus;
- Insist that restaurants provide written policy statements that are available to the public, in addition to making statements to press outlets;
- Monitor and insist that restaurants consistently implement their healthier kids' meal pledges at individual locations; and
- Educate consumers about healthier choices in kids' meals to increase demand and purchases of these items.

Fast food restaurants have not consistently implemented their healthier kids' meal pledges. Policy makers should consider legislation or regulation to require that all restaurants offer healthier kids' meals.

Policy makers should also consider legislation or regulation to require that all restaurants deliver healthier kids' meals. For example, municipalities in California (including Davis and Stockton) have passed healthy default kids' beverage ordinances.²⁸ However, these policies must be crafted to account for possible unintended responses from restaurants that could reduce their effectiveness, such as restaurants deciding to discontinue offering smaller-sized kids' meals (as Taco Bell did in 2013²⁹) or offering a free dessert in place of a kids' meal toy (as did some Burger King restaurants in this analysis).

The findings in this report suggest that both voluntary industry and government-initiated policies to promote healthier kids' meal options at fast-food restaurants could positively impact children's diets and health. However, all policies must be monitored for successful implementation.

REFERENCES:

- ¹ Powell L, Nguyen BT, Han E (2012). Energy intake from restaurants: Demographic and socioeconomic, 2003-2008. *American Journal of Preventive Medicine*, 43(5), 498-504.
- ² Powell LM, Nguyen BT (2013). Fast-food and full-service restaurant consumption among children and adolescents: Effect on energy, beverage and nutrient intake. *JAMA Pediatrics*, 167(1), 14-20.
- ³ Deierlein AL, Peat K, Claudio L (2015). Comparison of the nutrient content of children's menu items at US restaurant chains, 2010-2014. *Nutrition Journal*, 14(1), 1-7.
- ⁴ Quader Z, Gillespie C, Sliwa SA, et al. (2017). Sodium intake among U.S. school-aged children: National Health and Nutrition Examination Survey, 2011-2012. *Journal of the Academy of Nutrition and Dietetics*, 117(1), 36-47.
- ⁵ Cantor J, Breck A, Elbel B (2016). Correlates of sugar-sweetened beverages purchased for children at fast-food restaurants. *American Journal of Public Health*, 106(11), 2038-2041.
- ⁶ Kumanyika SK, Grier S (2006). Targeting interventions for ethnic minority and low-income populations. *The Future of Children*, 16(1), 187-207.
- ⁷ Powell & Nguyen (2013).
- ⁸ Fleischhacker SE, Evenson KR, Rodriguez DA, Ammerman AS (2011). A systematic review of food access studies. *Obesity Reviews*, 12(5), e460-e471.
- ⁹ Deierlein et al. (2015).
- ¹⁰ Harris JL, Schwartz MB, Munsell C, et al. (2013). Fast Food FACTS 2013: Measuring progress in nutrition and marketing to children and teens. www.fastfoodmarketing.org.
- ¹¹ Moran AJ, Block JP, Goshev SG, Bleich SN, Roberto CA (2017). Trends in nutrient content of children's menu items in U.S. chain restaurants. *American Journal of Preventive Medicine*, in press.
- ¹² McDonald's-Alliance partnership (2014). Executive Summary. 2014 Progress report. corporate.mcdonalds.com/content/dam/AboutMcDonalds/2.0/pdfs/McDonalds_Alliance_Partnership_on_CGL_Commitment_Executive_Summary.pdf
- ¹³ Horovitz B (March 9, 2015). Burger King drops soft drinks from kids' meals. *USA TODAY*. www.usatoday.com/story/money/2015/03/09/burger-king-fast-food-restaurants-soft-drinks-beverages/24661959/
- ¹⁴ Morran C (January, 15 2015) Wendy's Dropping Soda From Kids' Meals. *Consumerist*. consumerist.com/2015/01/15/wendys-reportedly-dropping-soda-from-kids-meals/
- ¹⁵ American Dairy Queen Corporation (May 11, 2015). aaf1a18515da0e792f78-c27f-dabe952dfc357fe25ebf5c8897ee.ssl.cf5.rackcdn.com/1927/dq-response-5-11.pdf
- ¹⁶ Harris JL, Schwartz MB, Brownell KD, et al. (2010). Fast Food FACTS: Evaluating fast food nutrition and marketing to youth. www.fastfoodmarketing.org.
- ¹⁷ Subway (2014). Subway Restaurants Answers First Lady Michelle Obama's Call to Market Healthier Choices to Kids [Press release]. www.subway.com/PressReleases/PHA.pdf
- ¹⁸ *ibid*
- ¹⁹ Brandau M (March 28, 2013). KFC introduces kids' meals. *Nation's Restaurant News*. www.nrn.com/latest-headlines/kfc-introduces-kids-meals
- ²⁰ McDonald's-Alliance partnership (2014).
- ²¹ Horovitz (2015).
- ²² Morran (2015).
- ²³ Subway (2014). Subway Restaurants Answers First Lady Michelle Obama's Call to Market Healthier Choices to Kids [Press release]. Retrieved from <http://www.subway.com/PressReleases/PHA.pdf>
- ²⁴ American Dairy Queen Corporation. (2015).
- ²⁵ Brandau (2013).
- ²⁶ National Restaurant Association (March 3, 2014). http://www.restaurant.org/Downloads/PDFs/advocacy/201403_dgac_nra_comments_industryprogress
- ²⁷ McDonald's-Alliance partnership (2014).
- ²⁸ Public Health Advocates (2016). City of Stockton passes second in nation 'healthy-by-default' kids' beverage ordinance. www.publichealthadvocacy.org/2016/06/press-release-city-stockton-passes-second-in-nation-healthy-default-kids-beverage-ordinance/
- ²⁹ Tuttle B (July 25, 2013). The real reason Taco Bell killed kids meals. *Time*. business.time.com/2013/07/25/the-real-reason-taco-bell-killed-kids-meals/

Methods

Utilizing the same methods as previous Rudd Center research on fast food kids' meals conducted in 2010 and 2013,¹ we measured changes over time for the four largest fast-food restaurants pledging to offer healthier drinks with their kids' meals: McDonald's, Burger King, Wendy's, and Subway. We supplemented these analyses with additional examinations of Dairy Queen and KFC, which also now offer healthier sides and/or beverages with their kids' meals.

Kids' meal menu listings online

We identified all items available on kids' meals from the restaurants in our analysis as indicated on restaurant websites as of March to April 2016. All items were coded as a main dish, drink, side item, or other. Researchers also obtained nutrition information for each kids' meal item listed, including serving size (g), calories (kcal), fat (g), saturated fat (g), sugar (g), sodium (mg), fiber (g), and protein (g). Researchers called companies' customer service helplines when nutrition and/or serving size was not provided online. One restaurant (Wendy's) did not provide serving size in grams, so researchers purchased kids' meal items at a local restaurant to determine serving size.

We designated all sugar-sweetened soda and other fountain drinks, diet soda, fried vegetables, and desserts as unhealthy options. We also identified side and drink items that restaurants designated as "healthier" choices, including water, plain and flavored milk, and fruits. However, it should be noted that not all nutrition professionals agree that some of these options -- such as 100% juice, flavored milk, and Capri Sun Roarin' Waters (which contains added sugar and a non-nutritive sweetener) -- are nutritious options for children. In addition, we used a nutrient profiling model (NPI score) to evaluate the nutrition of KFC's side items, which included a number of different non-fried vegetable options but that the restaurant did not specifically indicate were healthy options. A detailed analysis of the model and its advantages is available in the previous Rudd Center Fast Food FACTS report.² According to the model, foods with an NPI score of 64 or higher qualify as a healthy food and KFC side items with an NPI score of 64 or higher were designated as healthier options in this analysis.

Menu boards and signs at individual restaurants and items offered with kids' meal orders

To evaluate the menu boards and signs at individual restaurants and the items offered with kids' meal orders, we conducted two analyses. We measured the number and proportion of healthier versus unhealthy drinks and sides featured with kids' meals on menu boards and signs in restaurants. We also conducted an audit of the drinks and sides offered by restaurant personnel when kids' meals were ordered. This analysis identified the proportion of kids' meal orders that received a healthy drink automatically, were offered at least one healthy option, or were not offered any healthy options. Healthy side offerings were assessed similarly. Outcomes were compared across restaurant chains and to 2013 outcomes for McDonald's, Burger King, Wendy's, and Subway.

We collected these data using two national market research firms specializing in this type of research. At McDonald's, Burger King, Wendy's, and Subway, we utilized Test Track, the same firm that conducted the research in 2010 and 2013. The firm maintains a nationwide network of trained, experienced field personnel in major metropolitan areas. To examine kids' meal marketing at KFC and Dairy Queen restaurants, we crowdsourced data collection through Field Agent, a firm specializing in retail research conducted through a nationwide network of smartphone users in major metropolitan areas. Users download the Field Agent app and are able to select projects based on their geographic location and ability to execute the task. Both firms maintain a comprehensive quality control program to ensure the collection of accurate data, which includes spot checking the original data and calculations, and restaurant rechecks when necessary.

As in 2010 and 2013, we evaluated kids' meal signs and menu boards in a representative sample of 400 fast-food restaurants in 20 markets across the United States, including 100 different locations for McDonald's, Burger King, Wendy's, and Subway. Data were collected from Monday through Friday during the week of April 25, 2016. Kids' meal order audits were conducted at one-half of the same restaurants (50 restaurants per chain). Kids' meal order audits were also conducted at 18 KFC and Dairy Queen locations each from July 1 to July 10, 2016.

Kids' meal menu boards and signs

To identify healthy kids' meal drinks and sides featured on menu boards and signs inside the restaurant, field personnel received detailed field forms customized by restaurant that listed 20 kids' meal menu items, including all healthier drinks and sides, compiled from the restaurants' online menus. The form included space to write in any individual menu items that were not listed on the field form. Field personnel recorded all menu items listed on the kids' meal section of the menu board, all menu items pictured on the kids' meal section of the menu board, and all menu items pictured on signs inside or outside the restaurant that mentioned the kids' meal. Kids' meal menu signs were identified in three areas of the restaurant: 1) **ordering/counter area**, which included all areas in front of, around and behind the counter inside the restaurant, as well as all signs in direct view of customers standing in line; 2) **all other indoor areas**, which included all other areas inside the location other than the ordering/counter area; and 3) **outdoor areas**, which included the parking lot, main marquee sign, roof, ground and any signs posted in the restaurant windows facing the outside, but excluded the drive-thru area.

Audit of kids' meal orders

Field personnel placed orders for a predetermined kids' meal without specifying a desired side or beverage. They followed a detailed script and used the same data collection methods and forms used in 2010 and 2013. Forms did not differ by restaurant, with the exception of the type of kids' meal ordered. Similar kids' meals were ordered at all restaurants: a hamburger kids' meal at McDonald's, Burger King, and Wendy's; a roast beef mini for kids at Subway; a chicken little kids' meal at KFC; and a cheeseburger kids' meal at Dairy Queen. If the employee asked whether the customer wanted a particular side(s) or drink(s) (e.g., "Would you like fries or onion rings

with that?”), field personnel ordered the first side or beverage offered. If the employee asked an open-ended question about what side or beverage the shopper wanted, the field personnel asked, “What sides/drinks can I get?” and ordered the first side or beverage suggested. Field personnel also recorded if they were offered a dessert or other type of item.

Field personnel placed all orders at the counter inside the restaurant and did not identify the purpose of their orders. After the order was completed, they completed the field forms at a location outside the restaurant. Field personnel recorded whether the restaurant employee automatically included a specific side and/or drink with the meal without asking any further questions (i.e., the default item) or if the employee inquired about the side and drink desired. Researchers provided field personnel with information about the healthier side and drink options available at each restaurant; and field personnel recorded all healthy sides and drinks offered by the employee during the conversation. Field personnel also recorded the side and drink received.

Data analysis

Chi-square tests with Bonferroni corrections were used to identify significant differences between menu items offered by year (2010, 2013, 2016) and by restaurant.

REFERENCES:

¹Harris JL, Schwartz MB, Munsell C et al. (2013). Fast Food FACTS 2013: Measuring progress in nutrition and marketing to children and teens; Harris JL, Schwartz MB, Brownell KD et al. (2010). Fast Food FACTS: Evaluating fast food nutrition and marketing to youth. Available at www.fastfoodmarketing.org.

²Rayner M, Scarborough P, Lobstein T (2013). The UK Ofcom Nutrient Profiling (NP) Model. In Harris JL, Schwartz MB, Munsell C et al. (2013). Fast Food FACTS 2013: Measuring progress in nutrition and marketing to children and teens (pp. 112-116). www.fastfoodmarketing.org.

TABLE 1. NUTRITION OF DRINKS OFFERED ON KIDS' MEAL ONLINE MENUS

	2013	2016					Notes
	Calories	Calories	Serving size (g)	Saturated fat (g)	Sugar (g)	Sodium (mg)	
McDonald's							
Minute Maid 100% apple juice	100	80	177	0	19	15	Serving size decreased
Plain milk – 1%	100	100	236	1.5	12	125	
Chocolate milk – fat-free	130	130	236	0	22	135	
Sugary fountain drink - child size	70 - 135	N/A	N/A	N/A	N/A	N/A	No longer listed with kids' meals
Diet fountain drink - child size	0	N/A	N/A	N/A	N/A	N/A	No longer listed with kids' meals
Burger King							
Capri Sun Apple 100% juice	N/A	80	177	0	20	25	New item
Plain milk – fat-free	90	90	236	0	12	125	
Chocolate milk – 1%	160	160	236	1.5	25	150	
Sugary fountain drink - kids	68 - 135	N/A	N/A	N/A	N/A	N/A	No longer listed with kids' meals
Diet fountain beverage - kids	0 - 4	N/A	N/A	N/A	N/A	N/A	No longer listed with kids' meals
Wendy's							
Plain milk – low-fat	100	90	207	1.5	10	105	
Nestle Pure Life bottled water	N/A	0	502	0	0	0	New item
Chocolate milk – low-fat	140	150	207	1.5	23	170	
Honest Kids Super Fruit Punch	N/A	35	177	0	8	15	New item
Chocolate Frosty Jr.	200	200	128.7	3	27	90	Frosty Jr. can be substituted for a drink
Vanilla Frosty Jr.	190	190	131	3	27	95	Frosty Jr. can be substituted for a drink
Diet fountain drink - child size	0 - 5	N/A	N/A	N/A	N/A	N/A	No longer listed with kids' meals

CONTINUES ON THE NEXT PAGE >

TABLE 1. NUTRITION OF DRINKS OFFERED ON KIDS' MEAL ONLINE MENUS (CONTINUED)

	2013	2016					Notes
	Calories	Calories	Serving size (g)	Saturated fat (g)	Sugar (g)	Sodium (mg)	
Sugary fountain drink - child size	90 - 110	N/A	N/A	N/A	N/A	N/A	No longer listed with kids' meals*
Juicy Juice apple juice	90	N/A	N/A	N/A	N/A	N/A	No longer available
Subway							
Plain milk – low-fat	160	100	236	1.5	12	120	
100% juice box	100	N/A	N/A	N/A	N/A	N/A	No longer listed with kids' meals
Flavored milk (chocolate, strawberry) – reduced-fat	300	N/A	N/A	N/A	N/A	N/A	No longer listed with kids' meals
KFC							
Plain milk – 1%	N/A	110	207	1.5	13	140	New item
Plain milk – 2%	170	170	207	4	16	180	
Capri Sun Roarin' Waters Tropical Fruit	30	30	177	0	8	15	
Chocolate milk – 1%	N/A	180	207	1.5	26	210	New item
Sugary fountain drink (16-oz)	120 - 190	N/A	N/A	N/A	N/A	N/A	No longer listed with kids' meals
Diet fountain drink (16-oz)	0	N/A	N/A	N/A	N/A	N/A	No longer listed with kids' meals
Dairy Queen							
Plain milk – low-fat	110	110	246	3	12	115	Nutrition information for whole milk is listed on the restaurant website
Dasani bottled water	N/A	0	231	0	0	0	New item, Kids LiveWell menu
Sugary fountain drink - small	150- 210	N/A	N/A	N/A	N/A	N/A	No longer listed with kids' meals
Diet fountain drink - small	0	N/A	N/A	N/A	N/A	N/A	No longer listed with kids' meals

*Note. Wendy's online kids' meal menu does not list fountain drinks as an option. However, Wendy's beverage menu lists a "Kids' Meal" size for its sugar-sweetened and diet soda fountain drinks.

TABLE 2. NUTRITION OF SIDES AND OTHER ITEMS OFFERED ON KIDS' MEAL ONLINE MENUS

	2013	2016					Notes
	Calories	Calories	Serving size (g)	Saturated fat (g)	Sugar (g)	Sodium (mg)	
McDonald's							
Individual side items							
Apple slices	15	15	34	0	3	0	
Cuties	N/A	35	62	0	6	0	New item
Yoplait Go-Gurt (low-fat, strawberry)	N/A	50	64	0	6	35	New item
Kids' fries	100	110	38	1	0	80	
Small fries	230	230	71	1.5	0	160	
Happy Meal							
Cuties and kids' fries	N/A	145	100	1	6	80	New option
Yoplait Go-Gurt and kids' fries	N/A	160	102	1	6	115	New option
Apple slices and kids' fries	115	125	72	1	3	80	
Mighty Kids' Meal							
Apple slices and small fries	245	245	105	1.5	3	160	
Yoplait Go-Gurt and small fries	N/A	280	135	1.5	6	195	New option
Cuties and small fries	N/A	265	133	1.5	6	160	New option
Burger King							
Mott's natural applesauce	N/A	50	111	0	11	0	New item
Chocolate chip cookie	N/A	160	38	4	15	125	New item
Soft-serve ice cream cone	N/A	160	100	2.5	20	130	New item

CONTINUES ON THE NEXT PAGE >

TABLE 2. NUTRITION OF SIDES AND OTHER ITEMS OFFERED ON KIDS' MEAL ONLINE MENUS (CONTINUED)

	2013	2016					Notes
	Calories	Calories	Serving size (g)	Saturated fat (g)	Sugar (g)	Sodium (mg)	
Apple slices	30	N/A	N/A	N/A	N/A	N/A	No longer available
French fries - value	240	N/A	N/A	N/A	N/A	N/A	No longer listed with kids' meals
Wendy's							
Apple slices	40	35	68	0	7	0	Serving size decreased
Kids' fries (value fries in 2013)	230	230	103.1	2	0	230	Saturated fat and sodium decreased
Subway							
Apple slices	35	35	71	0	7	0	
KFC							
Sweet kernel corn	100	110	115.8	0	4	0	Saturated fat decreased
Corn on the cob	70	70	126.1	0	3	0	Protein and fiber decreased
BBQ baked beans	210	240	N/A	0	18	820	Protein increased
Green beans	25	25	110.8	0	0.5	260	
GoGo Squeez applesauce	N/A	60	90	0	12	0	New item
Cole slaw	180	170	171.5	2	10	180	Sugar and calories decreased
Mashed potatoes without gravy	90	90	124.9	0.5	0	320	
Mashed potatoes with gravy	120	120	142.4	1	0	500	Saturated fat decreased
Macaroni and cheese	160	170	153.3	1.5	2	830	
Potato wedges	290	270	139.8	1.5	0	700	Sodium and calories decreased, fiber increased
Cornbread muffin	210	210	N/A	1.5	11	240	Fiber increased

CONTINUES ON THE NEXT PAGE >

TABLE 2. NUTRITION OF SIDES AND OTHER ITEMS OFFERED ON KIDS' MEAL ONLINE MENUS (CONTINUED)

	2013	2016					Notes
	Calories	Calories	Serving size (g)	Saturated fat (g)	Sugar (g)	Sodium (mg)	
Biscuit	180	180	50.1	7	2	540	
Potato salad	210	N/A	N/A	N/A	N/A	N/A	No longer available
Macaroni salad	190	N/A	N/A	N/A	N/A	N/A	No longer available
Sargento light string cheese	50	N/A	N/A	N/A	N/A	N/A	No longer available
Dairy Queen							
Banana	110	110	118	0	14	0	Kids LiveWell menu
Applesauce	90	80	113.4	0	17	0	Calories and sugar decreased
Kids' fries	190	250	99	1.5	0	510	Serving size increased
Kids' vanilla cone	170	170	99.51	3	18	65	
Kids' chocolate cone	180	N/A	N/A	N/A	N/A	N/A	No longer listed with kids' meals
Kids' chocolate dipped cone	220	N/A	N/A	N/A	N/A	N/A	No longer listed with kids' meals
DQ sandwich	190	N/A	N/A	N/A	N/A	N/A	No longer listed with kids' meals
Dilly bar (multiple flavors)	190 - 240	N/A	N/A	N/A	N/A	N/A	No longer listed with kids' meals

*Note. Burger King's online kids' meal menu does not list dessert items. However, its online pdf for nutrition information lists soft-serve ice cream cone and cookie under "Kids' Meal."

TABLE 3. DRINKS LISTED AND PICTURED ON KIDS' MEAL MENU BOARDS IN 2016

Restaurant	Drink	Listed on kids' meal menu board (% of restaurants sampled)	Pictured with kids' meal (% of restaurants sampled)	Healthier kids' meal drink*	Item not listed on kids' meal menu online*
McDonald's	Plain milk – low-fat	92%	18%	x	
	Minute Maid Apple Juice	81%	3%	x	
	Chocolate milk – fat-free	77%	0%	x	
	Sugary fountain drinks	24%	8%		x
	Bottled water	11%	4%		x
	Diet fountain drinks	8%	1%		x
Burger King	Plain milk – fat-free	89%	8%	x	
	Capri Sun Apple Juice	75%	4%	x	
	Chocolate milk – 1%	74%	0%	x	
	Sugary fountain drinks	22%	8%		x
	Diet fountain drinks	8%	5%		x
	Bottled Water	7%	4%		x
	Orange juice	1%	0%		x
Wendy's	Honest Kids Fruit Punch	85%	48%	x	
	Plain milk – low-fat	84%	6%	x	
	Chocolate milk – low-fat	78%	2%	x	
	Bottled water	75%	5%	x	
	Frosty Jr. (Chocolate, Vanilla)**	36%	9%		
	Sugary fountain drinks***	33%	10%		x
	Diet fountain drinks***	9%	3%		x

*Restaurants' online kids' meal menu

**Frosty Jr. can be substituted for a drink

***Item is not pictured with kids' meal online but is listed as a kids' meal item in the online nutrition tables.

CONTINUES ON THE NEXT PAGE >

TABLE 3. DRINKS LISTED AND PICTURED ON KIDS' MEAL MENU BOARDS IN 2016 (CONTINUED)

Restaurant	Drink	Listed on kids' meal menu board (% of restaurants sampled)	Pictured with kids' meal (% of restaurants sampled)	Healthier kids' meal drink*	Item not listed on kids' meal menu online*
Subway	Plain milk – low-fat	75%	36%	x	
	100% juice box	48%	3%		x
	Chocolate milk – low-fat	34%	2%		x
	Sugary fountain drinks	23%	9%		x
	Diet fountain drinks	13%	4%		x
	Bottled water	12%	2%		x
	Other bottled drinks	3%	3%		x

*Restaurants' online kids' meal menu

TABLE 4. SIDES LISTED AND PICTURED ON KIDS' MEAL MENU BOARDS IN 2016

Restaurant	Drink	Listed on kids' meal menu board (% of restaurants sampled)	Pictured with kids' meal (% of restaurants sampled)	Healthier kids' meal drink*	Item not listed on kids' meal menu online*
McDonald's	Apple slices	92%	18%	x	
	Yoplait Go-Gurt yogurt	87%	6%	x	
	Cuties mandarin	71%	38%	x	
	French fries	53%	5%		
Burger King	Applesauce	88%	6%	x	
	French fries	85%	8%		x
	Soft-serve ice cream cone**	18%	0%		
	Chocolate chip cookie**	8%	4%		
Wendy's	Apple slices	93%	55%	x	
	French fries	89%	6%	x	
Subway	Apple slices	78%	37%	x	
	Chips - Baked Lays	43%	4%		x
	Cookies (any flavor)	43%	3%		x
	Chips - all others	18%	2%		x

*Restaurants' online kids' meal menu

**Item is not pictured with kids' meal online but is listed as a kids' meal item in the online nutrition tables.