

Overview of fast food market

Fast food market	Definition
Fast food restaurant	Fast food restaurants feature a common menu above the counter and provide no wait staff. Customers typically pay before eating and choose and clear their own tables. They are also known as quick serve restaurants (QSRs).
2010 report focus	Twelve restaurants analyzed in detail in the Rudd Center 2010 Fast Food FACTS report. ¹
2013 report focus	Eighteen restaurants analyzed in detail in this report, including the restaurants highlighted in the 2010 report, plus six additional restaurants that met at least one of two criteria: 1) ranked among the top 15 in 2012 U.S. sales, or 2) had child-targeted messages on its website and national TV advertising.

Table 3 presents total U.S. sales in 2012 for the top-20 fast food restaurants, as well as six additional restaurants that ranked in the top-25 for advertising spending on national TV in 2012. We also indicate the 12 restaurants that were the focus of the 2010 Fast Food FACTS report and the 18 restaurants detailed in this report.

Total U.S. sales for the 50 fast food restaurants with the most sales reached \$157 billion in 2012 – on average, \$1,335 annually per household.² McDonald's remained number one with \$35.6 billion in sales, almost one-quarter of all sales by the top-50 restaurants and almost three times the sales of Subway, its closest competitor. Sales at both Subway and

Table 3. Fast food restaurant sales

Sales ranking		Parent company	Restaurant	2012 sales (millions)	% change vs 2009	Report focus	
2012	2009					2010 (12)	2013 (18)
1	1	McDonald's	McDonald's	\$35,600	15%	X	X
2	2	Doctor's Associates	Subway	\$12,100	21%	X	X
3	5	Starbucks Corporation	Starbucks	\$10,600	27%	X	X
4	4	Wendy's Company	Wendy's	\$8,600	3%	X	X
5	3	Burger King Holdings	Burger King	\$8,587	-5%	X	X
6	6	Yum! Brands	Taco Bell	\$7,478	10%	X	X
7	7	Dunkin' Brands	Dunkin' Donuts	\$6,264	10%	X	X
8	8	Yum! Brands	Pizza Hut	\$5,666	13%	X	X
9	12	Chick-fil-A	Chick-fil-A	\$4,621	44%		X
10	9	Yum! Brands	KFC	\$4,459	-9%	X	X
11	15	Panera Bread	Panera Bread	\$3,861	38%		X
12	10	Sonic Corp	Sonic	\$3,790	-1%	X	X
13	14	Domino's Pizza	Domino's	\$3,500	15%	X	X
14	13	Jack in the Box	Jack in the Box	\$3,085	0%		X
15	11	Roark Capital Group	Arby's	\$2,992	-7%		X
16	18	Chipotle	Chipotle	\$2,731	48%		
17	17	Papa John's	Papa John's	\$2,402	17%		
18	16	Berkshire Hathaway	Dairy Queen	\$2,300	-13%	X	X
19	20	Popeyes	Popeyes	\$2,253	41%		
20	19	CKE Restaurants	Hardee's	\$1,900	14%		
22	24	Little Caesars	Little Caesars	\$1,684	34%		X
24	23	CKE Restaurants	Carl's Jr.	\$1,400	7%		
32	18	Quiznos	Quiznos	\$838	-53%		
34	32	LJS Partners	Long John Silver's	\$723	3%		
42	41	Boston Market Corporation	Boston Market	\$559	9%		
46	39	CiCi Enterprises	CiCi's Pizza	\$505	7%		X
Focus of 2010 report (12 restaurants)				\$108,944	10%		
Focus of 2013 report (18 restaurants)				\$125,692	11%		
Top 25 national TV advertisers in 2012				\$138,498	13%		
Top 50 restaurants (by sales in 2012)				\$156,875	13%		

Source: *QSR Magazine*.³ includes restaurants that ranked in the top 20 by 2012 U.S. systemwide sales or the top 25 in 2012 advertising spending on national TV

Starbucks exceeded \$10 billion in 2012, and sales of five additional restaurants exceeded \$5 billion (Wendy's, Burger King, Taco Bell, Dunkin' Donuts, and Pizza Hut). In 2012, Chick-fil-A replaced Sonic in the top-ten restaurants by U.S. sales. Chipotle was the only restaurant that ranked in the top 20 in sales, but not the top 25 in spending on national TV.

Sales at the top-50 U.S. fast food restaurants increased 13% on average from 2009 to 2012. Sales at three smaller restaurants

went up by 40% or more (Chipotle, Chick-fil-A, and Popeyes), and sales at two additional restaurants increased 30% or more (Panera Bread and Little Caesars). Starbucks and Subway also had higher-than-average sales increases of 27% and 21%, respectively. The traditional burger restaurants fared less well. McDonald's 15% sales increase was the highest for this segment, but its two largest competitors (Wendy's and Burger King) saw an increase of 3% and a decline of 5%, respectively.

Fast food menu composition

In the menu composition analysis, we first examine kids' meals offered by any of the 18 restaurants in our detailed analysis. We then evaluate changes in nutrition quality of full menus for McDonald's, Subway, Wendy's, Burger King and Taco Bell (the top five in sales for 2012 among traditional fast food restaurants). Finally, we analyze the dollar/value and healthy menus, as well as sizes of soft drinks and french fries, offered by the 18 restaurants in our detailed analysis.

Kids' meals

Kids' meals	Definitions
Kids' meal	A menu of items specifically designed for children. Kids' meals typically contain a main dish, side, and beverage. Many also come with a toy or other giveaway.
Kids' meal combinations	Possible combinations of main dish, side, and beverage that can be ordered in one kids' meal.
Nutrient Profile Index (NPI) score	Measure of overall nutritional quality that considers positive and negative nutrients in foods. Scores range from 0 (very poor) to 100 (excellent). This scoring is based on one developed by researchers in the United Kingdom for the Office of Communications (OFCOM) guidelines prohibiting junk food advertising to children. ⁴ Food products with a score of 64 or higher and beverages with a score of 70 or higher qualify as nutritious products that can be advertised to children in the United Kingdom.
Calorie limits: Children	Maximum acceptable calories for kids' meals, based on the Institute of Medicine (IOM) Committee on School Meals guidelines. ⁵ Kids' meals served to elementary school-age children should not exceed 650 calories and those served to preschool-age children should not exceed 410 calories.
Sodium limits: Children	Maximum acceptable sodium for kids' meals, based on the IOM Committee on School Meals guidelines. ⁶ Kids' meals served to elementary school-age children should not exceed 636 milligrams of sodium and those served to preschool-age children should not exceed 544 milligrams.
Kids LiveWell nutrition standards	Standards of the National Restaurant Association's voluntary program to identify healthful meals for children. Participating restaurants must offer at least one kids' meal combination that meets the following criteria: ⁷ maximum 600 calories and 770 milligrams sodium; no more than 35% of calories from total fat, 10% of calories from saturated fat, and 35% of calories from sugar; and less than 0.5 grams trans fat. Qualifying meals must also contain two sources of fruit, vegetable, whole grain, lean protein, or low fat dairy, but this requirement was not included in our analysis.
Children's Food and Beverage Advertising Initiative (CFBAI) uniform nutrition standards	Participating companies pledge to advertise only foods that meet nutrition standards to children under 12. ⁸ New uniform standards for fast food meals (to be implemented by the end of 2013) require a maximum of 600 calories and 740 milligrams sodium, 10% or less of calories from saturated fat, and less than 20 grams of sugar. ⁹ Qualifying meals must also contain a fruit, vegetable, whole grain, lean protein, low fat dairy, or fortification, but this requirement was not included in our analysis.
Interagency Working Group (IWG) standards	Guidelines recommended by four U.S. government agencies to identify healthful foods and beverages that are appropriate to market to children and adolescents. ¹⁰ Recommended limits per meal include 450 milligrams of sodium, 10% of calories from saturated fat, 0 grams trans fat, and 13 grams of added sugar.

Table 4. Kids' meals offered by restaurant

Restaurant	Kids' meal	CFBAI member	Kids LiveWell member	Notes
McDonald's	Happy Meal, Mighty Kids' Meal	X		The Mighty Kids' Meal comes with larger main dishes and french fries
Subway	Fresh Fit for Kids Meal			
Wendy's	Kids' Meal		X	
Burger King	BK Kids Meal	X	X	
Taco Bell	Kid's Meal			
Chick-fil-A	Kids' Meal		X	
KFC	Kids Laptop Meal			The meal comes with string cheese in addition to a side
Panera Bread	Panera Kids			Beverage must be purchased separately
Sonic	Wacky Pack Kids' Meal		X	
Jack in the Box	Kids' Meal			
Arby's	Kids Menu		X	
Dairy Queen	Kids' Meal		X	The meal comes with a dessert

Source: Menu composition analysis (February 2013)

Twelve restaurants in our detailed analysis offered kids' meals as of February 2013: eight of the 12 restaurants analyzed in 2010, plus Arby's, Jack in the Box, Chick-fil-A, and Panera Bread (see **Table 4**). Restaurants typically provided a main dish, side dish, and beverage in their kids' meals, but there were a few exceptions. Two restaurants also offered snack items: KFC included string cheese and Dairy Queen included a dessert. Beverages had to be purchased separately at Panera Bread, but we included a beverage in the nutrition analysis for uniformity. McDonald's offered two types of kids' meals: Happy Meals and larger Mighty Kids' Meals.

The nutritional quality of kids' meal menu items was relatively consistent from 2010 to 2013, with few changes in the number or proportion of main dishes, sides, or beverages that qualified as healthy according to NPI score (see **Table 5**). For all restaurants except Taco Bell, it was possible to order at least one side dish and one or more beverages with a healthy NPI score. However, main dish items remained the least nutritious component of most kids' meals. Although Subway offered only main dish options with healthy NPI scores, seven of the twelve restaurants did not offer even one. **Appendix Table C1** provides nutrition information for all kids' meal items included in this analysis.

Main dishes. As in 2010, Subway sandwiches were the most nutritious kids' meal main dishes, with a high median NPI score of 74. Other main dish options with a healthy NPI score included the bean burrito from Taco Bell and the grilled chicken strips from Jack in the Box, with scores of 70 and 68, respectively. However, not all grilled chicken items qualified as healthy. For example, grilled chicken kids' meal main dishes from Chick-fil-A and KFC exceeded sodium limits when combined with a side. Grilled cheese sandwiches from Sonic and Dairy Queen had the lowest NPI scores at 32. The macaroni and cheese from Panera Bread and the Jr. Cheeseburger Deluxe from Sonic contained the most calories

at 490 and 450, respectively. Panera Bread's macaroni and cheese also contained the most sodium (1,240 mg). In total, 42 main dish items (58% of total options) contained at least 640 milligrams of sodium, exceeding the IOM recommendation for an entire children's meal.

Side items. Sides remained the most nutritious component of most kids' meals. Most restaurants offered a fruit or non-fried side, typically apple slices, but healthy options also included a banana, applesauce, fruit cup, and green beans or corn. However, french fries were the most common side option. As in 2010, Taco Bell did not offer any kids' meal sides with a healthy NPI score. Wendy's kids' meals had a notable decrease in proportion of sides with a healthy NPI score, from 100% of sides in 2010 to 50% in 2013. The restaurant reformulated its french fries with higher sodium and saturated fat, which substantially reduced the score. NPI scores for french fries varied widely, from 46 at Chick-fil-A to 68 at McDonald's, largely due to differences in sodium and saturated fat content. Dairy Queen also increased the size of its child-sized french fries by 39%, from 71 to 99 grams. McDonald's change in default side options for its kids' meals (including a smaller portion of french fries in Happy Meals and a portion of apples in all kids' meals) reduced the calories in the Happy Meal by 115. However, adding apples increased the calories in its larger-sized Mighty Kids' Meals by 15 as this meal continued to receive the larger portion of french fries. Further, the 34-gram portion of apples included in every Happy Meal does not provide a full serving of fruit, as defined by USDA.¹¹ Also of note, the apple slices offered by McDonald's had a lower NPI score (66) than apple slices from other restaurants (78 at Burger King and 80 at Wendy's) due largely to lower fiber content as the apples are peeled.

Beverages. Every restaurant offered healthy beverages with their kids' meals, ranging from 20% of options at Taco Bell to 100% at Panera Bread. Healthier options included plain low fat

Table 5. NPI scores for kids' meal menu options

Restaurant	Main dishes			
	Median (range)		# of items with a healthy NPI score/total items	
	2010	2013	2010	2013
Subway	71 (64-78)	74 (68-78)	8/8	8/8
Taco Bell	52 (38-68)	61 (38-70)	2/5	2/4
KFC	47 (38-60)	53 (38-62)	0/4	0/4
Arby's	*	50 (48-66)		1/4
Burger King	48 (40-66)	49 (40-64)	1/9	2/6
Jack in the Box	*	48 (36-68)		1/8
McDonald's Happy Meal	45 (40-50)	47 (42-50)	0/3	0/4
McDonald's Mighty Kids' Meal	44 (40-46)	44 (42-48)	0/3	0/3
Wendy's	42 (38-62)	44 (40-50)	0/5	0/5
Panera Bread	*	44 (40-50)		0/6
Sonic	44 (28-48)	44 (32-48)	0/5	0/6
Chick-fil-A	*	42 (34-60)		0/10
Dairy Queen	40 (32-46)	38 (32-44)	0/5	0/4
Restaurant	Sides			
	Median (range)		# of items with a healthy NPI score/total items	
	2010	2013	2010	2013
Subway	71 (70-72)	82 (82)	2/2	1/1
Taco Bell	40 (40)	40 (40)	0/1	0/1
KFC	67 (24-86)	64 (24-86)	5/10	7/14
Arby's	*	68 (54-78)		2/3
Burger King	74 (52-80)	70 (62-78)	3/5	1/2
Jack in the Box	*	58 (50-70)		1/3
McDonald's Happy Meal	66 (66-78)	66 (66-78)	3/3	3/3
McDonald's Mighty Kids' Meal	66 (66-78)	70 (68-78)	3/3	3/3
Wendy's	72 (68-76)	68 (56-80)	2/2	1/2
Panera Bread	*	66 (66)		1/1
Sonic	66 (50-82)	67 (52-82)	3/5	3/4
Chick-fil-A	*	74 (46-78)		2/3
Dairy Queen	68 (58-78)	72 (58-78)	1/2	2/3
Restaurant	Beverages			
	Median (range)		# of items with a healthy NPI score/total items	
	2010	2013	2010	2013
Subway	74 (72-76)	69 (66-76)	2/2	2/4
Taco Bell	66 (66-68)	66 (60-70)	0/9	2/10
KFC	66 (66-70)	68 (66-70)	1/19	10/27
Arby's	*	70 (64-76)		6/10
Burger King	69 (68-70)	68 (66-72)	6/12	6/17
Jack in the Box	*	66 (66-70)		4/12
McDonald's Happy Meal	68 (66-76)	69 (66-76)	4/9	6/12
McDonald's Mighty Kids' Meal	70 (66-76)	70 (66-76)	5/9	7/13
Wendy's	68 (60-72)	66 (60-76)	1/12	6/15
Panera Bread	*	73 (70-78)		4/4
Sonic	66 (64-76)	67 (44-72)	6/37	13/44
Chick-fil-A	*	70 (66-76)		6/10
Dairy Queen	67 (66-68)	66 (64-70)	0/8	2/12

*These restaurants were not included in the 2010 analysis
Source: Menu composition analysis (February 2010, 2013)

milk (offered by 11 restaurants), flavored milk (9 restaurants), and 100% juice (7 restaurants). Kids' meal beverages showed the greatest improvement from 2010 to 2013; the percent of beverages with healthy NPI scores increased for six of eight restaurants. By 2013, at least 30% of kids' meal beverages at every restaurant, except Dairy Queen and Taco Bell, met healthy NPI scores. However, ten of the twelve restaurants also offered fountain drinks with their kids' meals (only Subway and Panera Bread did not) in sizes ranging from 10 ounces at Arby's to 16 ounces at KFC and Taco Bell.

Kids' meal combinations

There were 5,427 possible kids' meal combinations available from the 12 restaurants analyzed in 2013. The number of combinations at the restaurants included in our 2010 analysis increased 54%, from 3,039 to 4,695, and all restaurants but two offered more kids' meal combinations in 2013 than in 2010. This increase was due in large part to more beverage offerings at most restaurants (see **Table 5**). For instance, 44 different beverages could accompany Sonic's Wacky Pack kids' meal, an increase from 37 options three years earlier. On the other hand, Taco Bell reduced available combinations from 45 to

Table 6. Calorie and sodium content of kids' meal combinations

Restaurant	Median (range)	Calories			
		Criteria for preschoolers		Criteria for elementary school-age children	
		Met calorie limits	Signif. diff. from 2010	Met calorie limits	Signif. diff. from 2010
Chick-fil-A***	390 (165-770)	56%		93%	
Subway	455 (285-565)	47%		100%	
Arby's***	440 (205-670)	42%		98%	
McDonald's Happy Meal	455 (270-630)	34%		100%	
KFC	490 (165-790)	32%	*	91%	*
Wendy's	515 (270-760)	23%		88%	**
Burger King	532 (265-820)	23%		79%	
Sonic	565 (235-850)	12%	*	70%	**
Jack in the Box***	608 (200-850)	12%		59%	
Taco Bell	560 (340-760)	8%		78%	
McDonald's Mighty Kids' Meal	685 (360-880)	5%		41%	**
Panera Bread***	555 (460-710)	0%		83%	
Dairy Queen	780 (450-1,040)	0%		14%	*

Restaurant	Median (range)	Sodium			
		Criteria for preschoolers		Criteria for elementary school-age children	
		Met sodium limits	Signif. diff. from 2010	Met sodium limits	Signif. diff. from 2010
Chick-fil-A***	888 (330-1,350)	9%		10%	
Subway	670 (225-960)	25%		41%	
Arby's***	733 (350-1,440)	20%		31%	
McDonald's Happy Meal	708 (480-955)	6%		28%	*
KFC	1,035 (465-1,845)	9%	*	15%	
Wendy's	773 (490-1,170)	9%		25%	
Burger King	771 (415-1,250)	15%		31%	
Sonic	940 (475-1,810)	6%	*	16%	
Jack in the Box***	1,075 (565-1,440)	0%		6%	
Taco Bell	745 (520-1,370)	18%	*	23%	
McDonald's Mighty Kids' Meal	1,010 (790-1,215)	0%		0%	
Panera Bread***	1,058 (510-1,440)	8%		13%	
Dairy Queen	1,095 (810-1,600)	0%		0%	

*Significant increase in percent meeting limits ($p < .05$)

**Significant decrease in percent meeting limits ($p < .05$)

***These restaurants were not included in the 2010 analysis

Source: Menu composition analysis (February 2010, 2013)

Table 7. Kids' meal combinations available and the number that met all nutrition criteria

Restaurant	2010			2013		
	Available combinations	# met all preschool criteria	# met all elementary criteria	Available combinations	# met all preschool criteria	# met all elementary criteria
KFC	760	0	0	1,512	0	0
Dairy Queen	880	0	0	1,440	0	0
Sonic	875	0	0	1,056	0	0
Chick-fil-A	n/a			300	0	0
Jack in the Box	n/a			288	0	2
Burger King	138	6	6	204	5	10
Wendy's	120	0	0	150	0	0
McDonald's Happy Meal	108	0	0	144	0	0
Arby's	n/a			120	11	12
McDonald's Mighty Kids' Meal	81	0	0	117	0	0
Taco Bell	45	0	0	40	0	0
Subway	32	6	9	32	6	9
Panera Bread	n/a			24	0	0
Total	3,039	12(.4%)	15 (.5%)	5,427	22(.4%)	33(.6%)

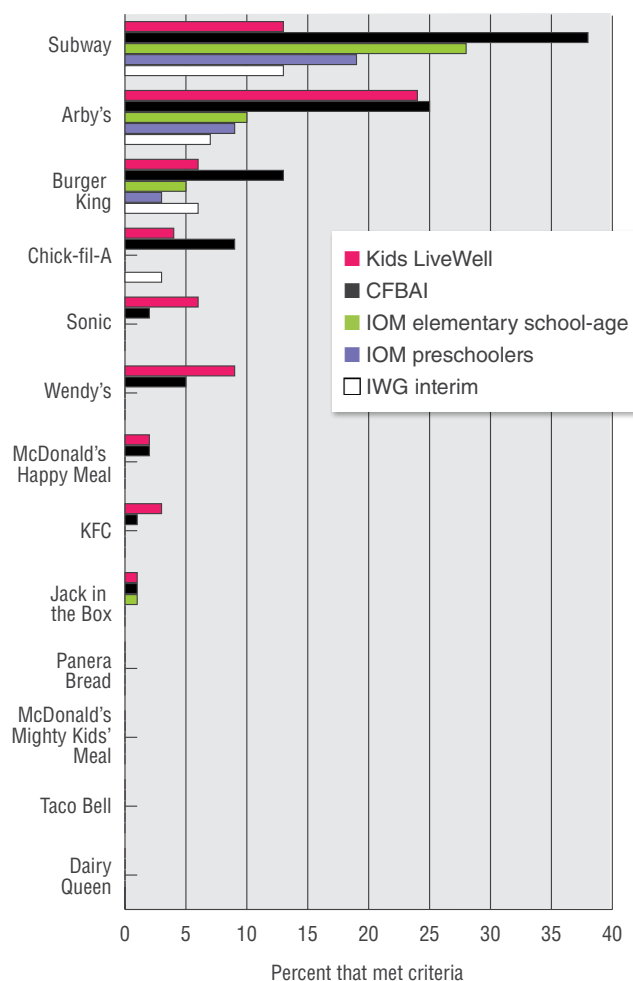
Source: Menu composition analysis (February 2010, 2013)

40, while Subway offered 32 combinations both years. KFC increased side options (from 10 to 14) and beverage options (from 19 to 27), allowing for a possible 1,512 combinations in 2013, the most for any restaurant in our analysis and an increase of 99% versus 2010.

Despite the increase in number of kids' meal combinations, median calorie and sodium content of possible kids' meal combinations did not change at most restaurants (see **Table 6**). Just one in five possible kids' meal combinations met calorie limits for preschoolers and 6% met sodium limits. The majority of combinations (63%) did not exceed the 650 calorie limit for elementary school-age children, but just 12% met the sodium limit.

There were improvements at some restaurants. The percent of combinations that met calorie and sodium criteria for preschoolers increased significantly at KFC and Sonic. Taco Bell also increased the number of combinations that met sodium limits for preschoolers. McDonald's offered a greater proportion of Happy Meals that met sodium limits for elementary school-age children. However, the percent of items that met calorie limits for elementary school-age children decreased significantly at Wendy's, Sonic, and McDonald's (Mighty Kids' Meal).

Further, the total number of kids' meal combinations that met all nutrition criteria did not increase for the restaurants in our 2010 analysis (see **Table 7**). In 2013, only 11 of 4,695 possible combinations (0.2%) met all criteria for preschoolers, down from 12 of 3,039 combinations (0.4%) in 2010. Subway and Burger King remained the only restaurants among those analyzed in 2010 to offer any meals that met all nutrition criteria for preschoolers (19% and 2% of possible combinations, respectively). Arby's (a restaurant that was not analyzed in 2010) also offered 11 qualifying meals, or 9% of its possible combinations, bringing the total number of healthy meal combinations available for preschoolers to 22.

Figure 1. Percent of kids' meals that met various nutrition standards for children

Source: Menu composition analysis (February 2010, 2013)

A few additional meal combinations met all criteria for elementary school-aged children, totaling 33 possible healthy combinations (0.6%). Qualifying meals offered by the restaurants in our 2010 analysis increased from 15 to 19 combinations. In addition to combinations from Subway, Arby's, and Burger King, Jack in the Box offered two options that met all criteria for this age group.

Figure 1 shows the percent of kids' meal combinations with healthy NPI scores that met calorie and sodium limits for preschool and elementary school-age children. This figure also shows the percent of combinations meeting other established nutrition standards. Kids' meals were somewhat more likely to meet the new CFBAI uniform nutrition standards with 153 qualifying combinations (3% of the total). Similarly, 176 kids' meal combinations (3%) met the restaurant industry's Kids LiveWell standards for healthy kids' meals. However, it is notable that 97% of kids' meal combinations *did not* meet the industry's own CFBAI or Kids LiveWell nutrition standards. Not one Dairy Queen, Taco Bell, or Panera Bread kids' meal, or McDonald's Mighty Kids' Meal, met either of these standards. The number of kids' meal combinations that met the IWG nutrition standards (34 possible combinations) was comparable to those meeting the criteria we used for preschool-age children.

Best and worst kids' meal choices

Although few restaurants offered kids' meals that met all nutrition criteria, most offered a range of "better" and "worse" meals. **Ranking Table 1** provides a list of the best kids' meal combinations available at the restaurants included in this

analysis. **Ranking Table 2** provides the least healthy kids' meal combinations at each restaurant.

Arby's, Burger King, and Subway offered the highest-ranking kids' meal combinations. Arby's macaroni and cheese, apple slices, and bottled water, totaling 205 calories and 350 milligrams of sodium, was the lowest-calorie healthy kids' meal. Arby's macaroni and cheese and apple sides could also be combined with plain or flavored milk to meet nutrition standards for preschoolers. At Burger King, a 4-piece chicken nugget meal with sweet and sour sauce, apple slices, and fat free milk was the healthiest option at 265 calories and 430 milligrams of sodium. Subway also offered a few meal combinations that qualified as healthy choices for children, including a Veggie Delite sandwich, side of apples, and 100% juice or plain low fat milk. Some restaurants also offered unsweetened iced tea with their kids' meals, which met the nutrition criteria but may not be appropriate for young children due to caffeine content.

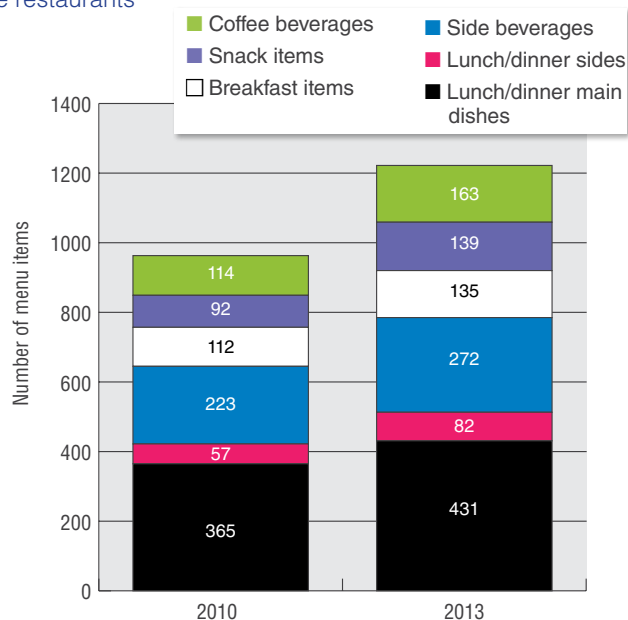
The five least healthy kids' meals were found at McDonald's and Sonic. McDonald's Mighty Kids' Meals contained larger portions of each meal component, such as a McDougle burger or 6-piece Chicken McNuggets, plus a small drink (16 oz) and small fries (71 g) (compared with the 4-piece Chicken McNuggets, 12-ounce drink, and 31-gram fries in its Happy Meal). At Sonic, the Jr. Deluxe cheeseburger or grilled cheese sandwich combined with tots and a slush provided two of the five least nutritious meals in this analysis. Chick-fil-A also offered a very high-calorie meal: its 6-piece chicken (non-grilled) nuggets with buttermilk ranch sauce, waffle fries, and lemonade totaled 770 calories and 1,135 milligrams of sodium.

Main menu items

Main menus	Definitions
Main menu items	Each food or beverage item listed on restaurants' regular menus and posted on their websites in February 2013. ¹² All components of menu items are evaluated as a single item, even when listed separately on the menu. For example, salads include dressing and croutons, and chicken nuggets include sauce. All sizes and flavors of each food or beverage are listed as separate menu items, as well as foods with different available options (e.g., egg sandwiches with egg whites or whole eggs, mashed potatoes with or without gravy). Food items customized by the customer (e.g., deli sandwiches) are listed as two menu items: the most and the least healthy versions. Foods sold as family-sized items are converted to one-person portion sizes.
Lunch/dinner main dishes	Individual menu items and meals typically consumed for lunch or dinner.
Lunch/dinner sides	Menu items typically consumed with a main dish for lunch or dinner.
Side beverages	Individual beverages typically consumed together with a main dish (e.g., soft drinks, juices, milk).
Breakfast items	Individual main dish and side breakfast foods, including breakfast platters.
Snack items	Individual items suggested as a snack, including sweet snacks (desserts) and snack beverages (e.g. shakes and frozen beverages).
Coffee beverages	Specialty coffee drinks, including cappuccinos, lattes, mochas, and flavored coffees (hot or iced). Plain coffee is categorized as a side beverage, and frozen coffee drinks are categorized as snack beverages.

We analyzed 1,222 menu items from the full menus of the top-five traditional fast food restaurants: McDonald's, Burger King, Subway, Taco Bell, and Wendy's. Complete

Figure 2. Number of menu items offered by type for the top-five restaurants



Source: Menu composition analysis (February 2010, 2013)

nutrition information for these menu items is available at fastfoodmarketing.org/menuitems.

Figure 2 shows the number of menu items by type offered in 2010 and 2013. Total items available at these five restaurants increased 27%. Snack items and coffee beverages increased the most (51% and 43%, respectively), but overall restaurants offered more of every type of menu item. Further, there were few changes in menu composition. Lunch/dinner main dishes comprised slightly more than one-third of menu items both years, followed by side beverages at 22% of items in 2013. Breakfast items, snack items, and coffee beverages each made up 11 to 13% of total menu items, while lunch/dinner sides comprised the smallest proportion of total items available (7%). Of note, the proportion of snack items on the menus increased from 9% in 2010 to 12% in 2013.

The total number of menu items per restaurant ranged from 125 at Wendy's to 335 at Subway. Four of the five restaurants increased the size of their menus by 71 items on average (+35%) from 2010 to 2013 (see **Table 8**). Only Wendy's reduced the number of menu items offered (-16%). Burger King had the biggest overall increase (+66%), offering more than double the number of side and coffee beverages and snack items. Taco Bell began to offer breakfast items and almost tripled available snack items and lunch/dinner sides. Snack items at McDonald's increased 73%.

Table 8. Number of menu items per restaurant

Restaurant	All items		Lunch/dinner main dishes		Lunch/dinner sides		Side beverages		Breakfast items		Snack items		Coffee beverages	
	# of items in 2013	Change from 2010	# of items in 2013	Change from 2010	# of items in 2013	Change from 2010	# of items in 2013	Change from 2010	# of items in 2013	Change from 2010	# of items in 2013	Change from 2010	# of items in 2013	Change from 2010
McDonald's	331	28%	55	25%	7	17%	44	33%	28	-7%	57	73%	140	24%
Subway	335	26%	170	21%	36	57%	53	4%	65	51%	11	22%	0	0%
Burger King	275	66%	89	24%	15	36%	70	141%	36	13%	43	105%	22	2100%
Wendy's	125	-16%	46	39%	13	-7%	53	-24%	0	-100%	13	-48%	0	0
Taco Bell	156	27%	71	-7%	11	267%	52	30%	6	n/a	15	275%	1	n/a
Total	1,222	27%	431	18%	82	44%	272	22%	135	21%	139	51%	163	43%

Source: Menu composition analysis (February 2013)

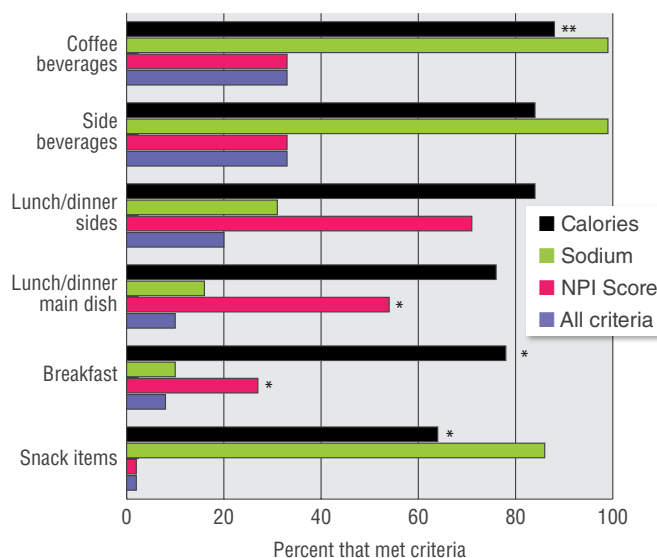
Nutritional quality of main menu items

Main menu nutritional quality

Definitions

Nutrient Profile Index (NPI) score	Measure of overall nutritional quality that considers positive and negative nutrients in foods. Foods with a score of 64 or higher and beverages with a score of 70 or higher qualify as healthy choices.
Calorie limits: teens	Based on the IOM Committee on School Meals guidelines for a moderately active 13- to 17-year-old. ¹³ Calories per item should not exceed 700 for lunch/dinner main dishes, 500 for breakfast main dishes, and 350 for sides, snack items, and beverages.
Sodium limits: teens	Based on the IOM Committee on School Meals guidelines for 13- to 17-year-olds, sodium milligrams per item should not exceed 720 for lunch/dinner main dishes, 480 for breakfast main dishes, and 340 for sides, snack items, and beverages. ¹⁴

Figure 3. Percent of menu items by type that met nutrition criteria



*Significant increase vs. 2010 ($p < .05$)

**Significant decrease vs. 2010 ($p < .05$)

Source: Menu composition analysis (February 2013)

Overall nutritional quality of different types of main menu items was evaluated using NPI scores, and calories and sodium criteria based on appropriate levels for a moderately active teen (13-17 years) (see **Figure 3**). In 2013, the majority of all types of menu items met calorie limits. Most coffee and side beverages also met sodium limits, but just one-third had healthy NPI scores. On the other hand, the majority of lunch/dinner sides had healthy NPI scores, but just 31% met sodium limits. Similarly, approximately one-half of lunch/dinner main dishes had healthy NPI scores, but 16% met sodium limits. Breakfast and snack items were least likely to meet all nutrition criteria (8% and 2%, respectively) due to low NPI scores, as well as high sodium in breakfast items.

Despite large increases in menu items offered by most restaurants from 2010 to 2013, there were few significant changes in the percent of items that met nutrition criteria. Snack items meeting calorie limits improved the most (from 48% to 64%). There were also significant increases in breakfast items meeting calorie limits (74% to 78%) and breakfast items and lunch/dinner main dishes with healthy NPI scores (9% to 27% and 46% to 54%, respectively). However, the percent of coffee beverages that met calorie limits declined significantly (99% to 88%). There were no significant changes in percent of menu items meeting sodium limits.

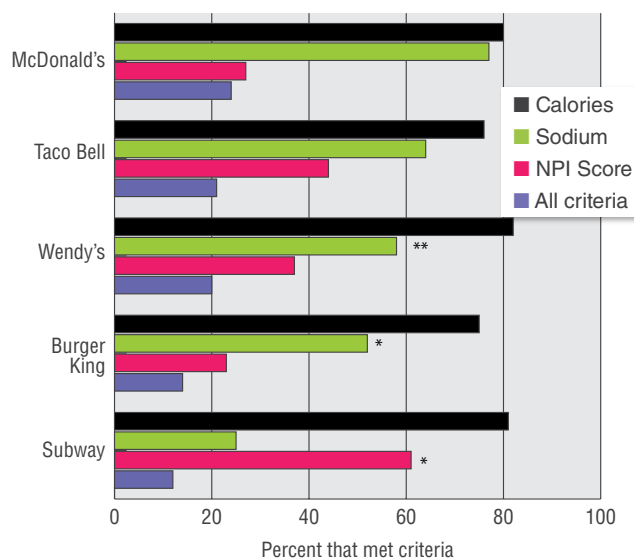
Overall, there were no significant changes in the percent of any type of menu item that met all nutrition criteria. Just 15% of menu items met all nutrition criteria for teens, compared with 14% of items offered by these five restaurants in 2010. Snack items remained the least nutritious type of menu item, only 2% met all nutrition criteria. Side beverages and coffee beverages were most likely to meet all criteria at 33% each.

Differences by restaurant

Ranking Table 3 provides nutrition information for each menu item type from the five restaurants in the detailed menu analysis. Taco Bell's lunch/dinner sides were the healthiest options at any restaurant, with 55% meeting all nutrition criteria. Lunch/dinner sides from McDonald's were the second healthiest menu items with 43% meeting all criteria. Wendy's lunch/dinner sides and lunch/dinner main dishes followed at 31% and 30% of items meeting all criteria, respectively. For all other restaurants and types of menu items, 14% or fewer items met all criteria. Only one snack item (snack-size Fruit and Walnut Salad from McDonald's) met all nutrition criteria, and it was not possible to order a breakfast item from Taco Bell or lunch/dinner main dish from Wendy's that met all nutrition criteria. Beverage nutrition information for the five restaurants in the detailed menu analysis is provided in **Ranking Table 4**. Side and coffee beverages from every restaurant were more likely to meet nutrition criteria, but Burger King was the only restaurant to offer any snack beverages that met all nutrition criteria (8%).

Table 9 summarizes the nutrient content of menu items at the five restaurants. Subway and Taco Bell offered the most food items with healthy NPI scores (approximately two-thirds of menu items). However, the median NPI score for food at McDonald's, Burger King, and Wendy's remained well below the healthy threshold of 64. Subway offered the overall healthiest drink choices (45% of beverage menu items had healthy NPI scores), followed by Wendy's with 33% and McDonald's with 30%. Taco Bell had the fewest healthy drinks at only 10%. The majority of menu items (75% or more) met calorie limits at all restaurants, but the percent of menu items

Figure 4. Percent of menu items by restaurant that met nutrition criteria



*Significant increase vs. 2010 ($p < .05$)

**Significant decrease vs. 2010 ($p < .05$)

Source: Menu composition analysis (February 2013)

Table 9. Nutrient content of all menu items by restaurant

	NPI score (foods)				
	2010		2013		
Restaurant	Median (range)	Met criteria	Median (range)	Met criteria	Signif. change
McDonald's	46 (18-74)	23%	48 (18-80)	22%	
Taco Bell	56 (38-80)	56%	66 (24-84)	67%	
Wendy's	52 (24-80)	37%	54 (32-76)	41%	
Burger King	46 (24-74)	14%	46 (18-78)	21%	
Subway	64 (18-78)	52%	65 (20-82)	64%	*
	NPI score (beverages)				
	2010		2013		
Restaurant	Median (range)	Met criteria	Median (range)	Met criteria	Signif. change
McDonald's	68 (40-78)	30%	68 (44-78)	30%	
Taco Bell	66 (66-70)	10%	66 (64-76)	10%	
Wendy's	66 (44-72)	24%	66 (48-72)	33%	
Burger King	68 (54-76)	35%	68 (48-76)	25%	
Subway	68 (66-76)	47%	68 (66-76)	45%	
	Calories (kcal)				
	2010		2013		
Restaurant	Median (range)	Met criteria	Median (range)	Met criteria	Signif. change
McDonald's	235 (0-1,370)	85%	260 (0-1,150)	80%	
Taco Bell	340 (0-1,000)	81%	310 (0-2,040)	76%	
Wendy's	230 (0-1,330)	75%	277 (0-1,060)	82%	
Burger King	400 (0-1,310)	67%	340 (0-1,510)	75%	
Subway	405 (0-1,420)	74%	342 (0-1,420)	81%	
	Sodium (mg)				
	2010		2013		
Restaurant	Median (range)	Met criteria	Median (range)	Met criteria	Signif. change
McDonald's	140 (0-2,335)	79%	150 (0-2,260)	77%	
Taco Bell	650 (10-2,380)	55%	355 (10-3,600)	64%	
Wendy's	220 (0-3,150)	72%	160 (0-2,020)	58%	**
Burger King	765 (0-2,350)	35%	390 (0-2,920)	52%	*
Subway	1,180 (0-5,520)	27%	990 (0-4,490)	25%	

*Significant increase in percent meeting criteria vs. 2010 ($p < .05$)

**Significant decrease in percent meeting criteria vs. 2010 ($p < .05$)

Source: Menu composition analysis (February 2010, 2013)

that met sodium limits varied widely. For example, just 25% of menu items at Subway met sodium criteria, compared with 75% of items at McDonald's. The median sodium content of Subway menu items was nearly 1,000 milligrams, and all restaurants offered at least one menu item in excess of 2,000 milligrams, nearly the recommended maximum amount for adults to consume in an entire day.¹⁵

There were few significant changes in the nutritional quality of menu items from 2010 to 2013 at any of the five restaurants. Subway showed improvement in menu items with healthy NPI scores. Menu items that met sodium limits also improved at Burger King, but decreased at Wendy's. There were no significant changes in the percent of menu items that met calorie criteria at any of the restaurants. Further, there were no significant changes in the percent of menu items that met all

nutrition criteria at any of the restaurants. McDonald's had the highest percent of menu items that met all nutrition criteria at 24%, followed by Taco Bell at 21% and Wendy's at 20% (see **Figure 4**). At Burger King and Subway, 14% and 12% of menu items, respectively, met all criteria.

In an examination of individual menu items, Burger King's White Chocolate Macadamia Nut cookie and McDonald's Sugar and Soft Baked Chocolate Chip cookies scored lowest in overall nutrition, with an NPI score of 18. Top scoring items were whole foods, including KFC's corn on the cob (with an NPI score of 86), Taco Bell's black beans and pintos n' cheese (84), and apple slices from Wendy's, Subway, and Sonic (82). Burger King's Ultimate Breakfast Platter had more calories than any other menu item in our analysis at 1,450; it also contained 2,920 milligrams of sodium. Subway offered many

high-calorie sandwiches, including the Footlong Pastrami Melt with cheese and mayo and the Footlong Meatball Marinara, with 1,400 or more calories. Many snack beverages also had low NPI scores and excessive calories, such as the Chocolate

and Strawberry McCafe Shakes from McDonald's with NPI scores of 44 and 46, respectively, and 74% of calories from sugar and saturated fat.

Special menus

Special menu	Definition
Special menu	Restaurant-designated subset of menu items (e.g., dollar/value menus, healthy menus).
Dollar/value menu	Individual menu items that are offered at a special price and promoted together as a group. Special menus offered for a limited time or only available at some locations are not included.
Healthy menu	Individual menu items that are designated by the restaurant as healthier in some way, including low(er) in calories.

We identified all dollar/value menus and healthy menus offered by the restaurants in our detailed analysis as of February 2013, excluding pizza and coffee restaurants (see **Table 10**). Nine restaurants offered dollar/value menus and four had some type of healthy menu. There were some changes in special menus offered from 2010 to 2013. KFC discontinued its dollar/value and healthy menus, while McDonald's added a healthy menu ("Favorites Under 400"). Sonic's healthy menu changed from "395 Calorie Combo" to "Sonic Favorites 450 Calories and Under."

Dollar/value menus

Dollar/value menus continued to offer primarily items marketed as a bargain or "value" sized portions of main menu items. Only Subway offered a larger-sized portion of standard menu items at a discounted price. Dollar/value menus ranged in size from nine items at Taco Bell, Arby's, and Jack in the Box, to 49 items at Burger King (see **Table 11**). The average number of dollar/value menu items declined slightly from 23.7 in 2010

to 22.3 in 2013, although both Burger King and Wendy's increased the number of items on their dollar/value menus (by 172% and 65%, respectively). Lunch/dinner main dishes and snack items continued to be the most common items offered on this type of menu, at 37% and 28% of items, respectively.

Table 10. Special menus by restaurant

Restaurant	Value menu	Healthy menu
McDonald's	Dollar Menu	Favorites Under 400
Subway	Every Day Values, \$5 Footlongs	Fresh Fit Choices
Burger King	Value Menu	
Taco Bell	Why Pay More!	Fresco menu
Wendy's	Right Price Right Size	
Sonic	Everyday Deals	Sonic Favorites 450 Calories and Under
Dairy Queen	Sweet Deals	
Arby's	Value Menu	
Jack in the Box	Value Menu	

Source: Menu composition analysis (February 2013)

Table 11. Menu items on dollar/value menus

Restaurant	Total # of items		Items offered by type in 2013					
	All items in 2010	All items in 2013	Lunch/dinner main dishes	Lunch/dinner sides	Side beverages	Breakfast items	Snack items	Coffee beverages
McDonald's	21	14	2	2	2	4	3	1
Subway	16	10	8	0	0	2	0	0
Burger King	18	49	8	2	18	5	11	5
Wendy's	20	33	14	4	13	0	2	0
Taco Bell	11	9	6	1	0	0	2	0
Sonic	49	13	5	2	0	1	5	0
Arby's	*	9	2	1	0	0	6	0
Jack in the Box	*	9	9	0	0	0	0	0
Dairy Queen	31	28	4	4	10	0	10	0
Total	166	156	58 (37%)	16 (10%)	43 (28%)	12 (8%)	39 (23%)	6 (4%)

*Arby's and Jack in the Box were not included in the 2010 report

Source: Menu composition analysis (February 2010, 2013)

Table 12. Nutrient content of menu items available on dollar/value menus

	NPI score (foods)				
	2010		2013		
Restaurant	Median (range)	Met criteria	Median (range)	Met criteria	Signif. change
Subway	59 (38-76)	44%	67 (42-78)	60%	
Taco Bell	52 (38-72)	27%	62 (38-70)	33%	
Jack in the Box	***		46 (32-64)	22%	
McDonald's	50 (24-70)	38%	50 (18-68)	18%	
Wendy's	44 (38-64)	11%	44 (38-76)	17%	
Dairy Queen	56 (40-80)	10%	56 (36-76)	11%	
Sonic	54 (40-64)	18%	44 (36-64)	8%	
Burger King	44 (24-70)	17%	46 (24-64)	5%	
Arby's	***		45 (32-54)	0%	
	NPI score (beverages)				
	2010		2013		
Restaurant	Median (range)	Met criteria	Median (range)	Met criteria	Signif. change
McDonald's	69 (66-70)	50%	68 (62-70)	33%	
Wendy's	66 (66-70)	36%	66 (60-70)	40%	
Dairy Queen	67 (66-70)	20%	66 (66-70)	20%	
Sonic	66 (64-76)	34%	***		
Burger King	70 (70-76)	100%	68 (52-76)	34%	**
Arby's	***		58 (58)	0%	
	Calories (kcal)				
	2010		2013		
Restaurant	Median (range)	Met criteria	Median (range)	Met criteria	Signif. change
Subway	960 (460-1,400)	19%	730 (460-1,060)	30%	
Taco Bell	260 (170-550)	100%	270 (170-550)	100%	
Jack in the Box	***		410 (320-570)	100%	
McDonald's	150 (0-430)	100%	165 (0-430)	100%	
Wendy's	120 (0-390)	100%	240 (0-390)	100%	
Dairy Queen	240 (0-400)	97%	240 (0-400)	93%	
Sonic	150 (0-420)	100%	440 (210-600)	62%	**
Burger King	255 (5-490)	94%	160 (0-580)	94%	
Arby's	***		350 (210-520)	62%	
	Sodium (mg)				
	2010		2013		
Restaurant	Median (range)	Met criteria	Median (range)	Met criteria	Signif. change
Subway	2,515 (830-4,240)	0%	1,845 (620-3,480)	10%	
Taco Bell	640 (200-1,640)	64%	450 (200-1,270)	78%	
Jack in the Box	***		920 (640-1,310)	22%	
McDonald's	160 (0-1,080)	47%	355 (0-1,080)	50%	
Wendy's	28 (0-880)	80%	250 (0-1,080)	61%	
Dairy Queen	105 (10-920)	84%	105 (10-930)	75%	
Sonic	30 (0-790)	98%	470 (220-1,350)	62%	**
Burger King	393 (5-1,090)	50%	125 (0-1,090)	84%	*
Arby's	***		280 (200-900)	78%	

*Significant increase in percent meeting criteria vs. 2010 ($p < .05$)

**Significant decrease in percent meeting criteria vs. 2010 ($p < .05$)

***Restaurants did not offer these products or were not included in the 2010 analysis

Source: Menu composition analysis (February 2010, 2013)

Table 12 shows the nutrient content of items on dollar/value menus in 2010 and 2013 and the percent of items that met nutrition criteria for teens. The majority of Subway dollar/value menu food items had a healthy NPI score. However, items on other restaurants' menus were less nutritious. Just one-third of Taco Bell dollar/value menus had healthy NPI scores; approximately one in five food items at Jack in the Box, McDonald's, and Wendy's; and 11% or fewer food items on Dairy Queen, Sonic, and Burger King dollar/value menus. Arby's did not offer any dollar/value menu items with a healthy NPI score. As most items on dollar/value menus were smaller-sized portions, a high percent did meet calorie limits, including 100% of items at McDonald's, Jack in the Box, Taco Bell, and Wendy's. In contrast, two-thirds of Subway items were high in calories. Subway was also least likely to offer items that met sodium limits, and Jack in the Box dollar/value menu items had a very high median sodium content of 920 milligrams. In contrast, at least one-half of menu items at all other restaurants met sodium limits.

The only significant improvement in dollar/value menu items from 2010 to 2013 was at Burger King: one-half of items met sodium limits in 2010 versus 84% in 2013. In contrast, there was a significant decline in the percent of Sonic dollar/value menu items that met sodium limits and calorie limits. Further, Burger King beverages were less likely to have healthy NPI scores in 2013 than in 2010.

Approximately one-quarter of items on the dollar/value menus at Wendy's and Burger King met all three nutrition criteria, compared with 11% or less of dollar/value menu items at other restaurants. Items on McDonald's, Burger King, and Sonic dollar/value menus were less likely to meet nutrition criteria in 2013 than in 2010. At Burger King, 39% of items qualified as healthy in 2013 versus 22% in 2010, and 7% of McDonald's items met all criteria in 2013 versus 25% in 2010. At Sonic, just 8% of dollar/value menu items qualified as healthy in 2013 compared with 31% in 2010.

Healthy menus

As with dollar/value menus, the average number of menu items available on healthy menus also declined from 29.3 in 2010 to 24.0 in 2013. McDonald's new "Favorites under 400 Calories" menu was relatively large at 43 items, exceeded only by Sonic with 47 "Favorites 450 Calories and Under" options (see **Table 13**). Taco Bell had the fewest items on its "Fresco" menu at seven. As in 2010, the majority of items on healthy menus were main dishes (44%), but Sonic also offered many snack items on its healthy menu (47% of items).

Table 14 shows the nutrient content and percent of healthy menu items that met nutrition criteria. Taco Bell and Subway had the most nutritious healthy menus with 80% or more of items meeting healthy NPI scores and calorie criteria, although just 28% of Subway items met sodium limits. Sonic had the least nutritious healthy menu; just four food items had healthy NPI scores and less than one-half met calorie limits. Food items on McDonald's new "Favorites Under 400" menu had a relatively low median NPI score of 50, with approximately one-third qualifying as healthy. However, the majority of McDonald's healthy menu items met calorie and sodium limits for teens.

Taco Bell's healthy menu remained the "healthiest," with more than one-half of menu items (57%) meeting all three criteria, an improvement from the 43% that met all criteria in 2010. However, just four out of ten items on McDonald's healthy menu met all nutrition criteria. Approximately one-quarter (28%) of Subway healthy menu items met all criteria, a decline from 48% in 2010. In addition, Sonic's healthy menu became considerably less healthy. At 4% of healthy menu items meeting all nutrition criteria, it was even less nutritious than the restaurant's dollar/value menu.

Table 13. Number of menu items on healthy menus

Restaurant	Total # items		Items offered by type in 2013					
	All items in 2010	All items in 2013	Lunch/dinner main dishes	Lunch/dinner sides	Side beverages	Breakfast items	Snack items	Coffee beverages
McDonald's	n/a	43	15	5	8	5	8	2
Subway	29	18	16	1	1	0	0	0
Taco Bell	7	7	7	0	0	0	0	0
Sonic	52	47	13	10	0	1	22	1
Total	88	115	51 (44%)	16 (14%)	9 (8%)	6 (5%)	30 (26%)	3 (3%)

Source: Menu composition analysis (February 2010, 2013)

Table 14. Nutrient content of menu items available on healthy menus

	NPI score (foods)				
	2010		2013		
Restaurant	Median (range)	Met criteria	Median (range)	Met criteria	Signif. change
Taco Bell	68 (64-74)	100%	72 (66-76)	100%	
Subway	70 (50-76)	74%	72 (62-82)	82%	
McDonald's	***		50 (36-80)	39%	
Sonic	68 (64-82)	100%	45 (34-70)	14%	**
	NPI score (beverages)				
	2010		2013		
Restaurant	Median (range)	Met criteria	Median (range)	Met criteria	Signif. change
Subway	70 (70-72)	100%	70 (70)	100%	
McDonald's	***		70 (68-72)	83%	
Sonic	70 (60-76)	78%	54 (42-56)	0%	**
	Calories (kcal)				
	2010		2013		
Restaurant	Median (range)	Met criteria	Median (range)	Met criteria	Signif. change
Taco Bell	180 (150-340)	100%	170 (140-350)	100%	
Subway	280 (0-540)	100%	350 (0-540)	100%	
McDonald's	***		250 (0-390)	98%	
Sonic	10 (0-670)	88%	390 (110-450)	49%	**
	Sodium (mg)				
	2010		2013		
Restaurant	Median (range)	Met criteria	Median (range)	Met criteria	Signif. change
Taco Bell	740 (350-1,410)	43%	500 (290-1,020)	57%	
Subway	750 (0-1,690)	48%	890 (0-1,650)	28%	
McDonald's	***		300 (0-1,040)	70%	
Sonic	30 (0-1,513)	92%	230 (60-2,310)	60%	**

*Significant increase in percent meeting criteria vs. 2010 ($p < .05$)

**Significant decrease in percent meeting criteria vs. 2010 ($p < .05$)

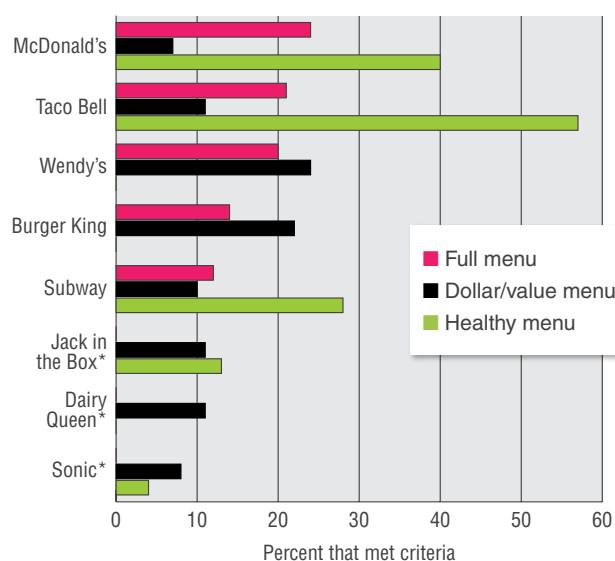
***Restaurant did not offer a healthy menu in 2010

Source: Menu composition analysis (February 2010, 2013)

Comparison of special menus

Figure 5 shows the percent of menu items that met all nutrition criteria from the dollar/value menus and healthy menus in our special menu analysis, as well as the full menus for the five restaurants included in our detailed menu analysis.

Healthy menus at McDonald's, Taco Bell, and Subway were more likely to meet all nutrition criteria than the restaurants' full menus. However, only the dollar/value menus at Wendy's and Burger King were more likely to meet all nutrition criteria. Items on McDonald's value/menu were as likely to meet all nutrition criteria as the restaurant's full menu, while Taco Bell and Subway's value menus were less likely to meet all nutrition criteria. This marks a change from 2010 findings when ordering from the dollar/value menu was more likely to result in choosing a healthier item. However, in 2013, consumers were still more likely to select an item that met calorie limits when selecting items from the special menus at each of these restaurants.

Figure 5. Percent of items that met all nutrition criteria from full menus and special menus

*Full menus were not analyzed for these restaurants

Source: Menu composition analysis (February 2013)

Sizes of soft drinks and french fries

Table 15 shows portion sizes of soft drinks and french fries by restaurant in 2013. There were few changes over the three-year period. Arby's, Chick-fil-A, and Jack in the Box were new to our analysis this year, but offered drink sizes comparable to other restaurants. The greatest variation in drink sizes between restaurants continued to be found in the large size, ranging from 27 to 42 ounces. Six of the twelve restaurants offered 40-ounce drinks or larger, equivalent to five servings. KFC continued to offer the largest drink, the 64-ounce "Mega Jug" containing up to 850 calories. Of note, Subway reduced the size of its large and extra-large soft drinks by 2 to 4 ounces.

Sizes of french fries also varied widely. Arby's child size (128 g, 360 kcal) was considerably larger than the child size at any other restaurant and four times the size of McDonald's child-size fries. Small fries ranged from 71 grams at McDonald's and Sonic to 128 grams at Burger King and Arby's (340-360

kcal), while large fries exceeded 150 grams at all restaurants, reaching 201 grams and 610 calories at Arby's. Six of the seven restaurants offered sides of french fries totaling 500 calories or more.

Table 16 shows changes in soft drink sizes from 2002 to 2013 for McDonald's, Burger King, and Wendy's. McDonald's soft drink sizes have remained consistent since the Supersize was discontinued after 2002, and the only change in its french fries was the addition of the smaller 31-gram child size in the Happy Meal. Burger King reduced the size of its small, medium, and large drinks by 1 to 2 ounces, but increased the gram weight of every size of fries by 5 to 15%. Wendy's did not change the size of its soft drinks, but made several changes to portion sizes of french fries, including increasing the size of its child fries and adding an equivalent size to its value menu. The restaurant also slightly reduced the size of its small and large fries.

Table 15. Sizes of soft drinks and french fries by restaurant

Restaurant	Soft drinks											
	Child		Value		Small		Medium		Large		Extra-large	
	Size (oz)	Calories (kcal)	Size (oz)	Calories (kcal)	Size (oz)	Calories (kcal)	Size (oz)	Calories (kcal)	Size (oz)	Calories (kcal)	Size (oz)	Calories (kcal)
McDonald's	12	120			16	160	21	240	32	350		
Subway					16	220	21	288	30	411	40	550
Burger King	12	105	16	180	21	240	30	360	40	470		
Wendy's	8	110	11	150	13	230	20	277	27	374		
Taco Bell	16	220			16	220	20	280	30	410	40	550
KFC	16	190			16	190	20	250	30	390	64	850
Sonic					14	160	20	190	32	310	44	420
Dairy Queen	12	170			16	190	21	240	32	360		
Arby's	10	140			15	200	21	285	27	360		
Chick-fil-A	12	150			14	170	20	230	32	340		
Jack in the Box	12	158	16	210	20	260	32	420	42	550		

Restaurant	French fries									
	Child		Value		Small		Medium		Large	
	Size (oz)	Calories (kcal)	Size (oz)	Calories (kcal)	Size (oz)	Calories (kcal)	Size (oz)	Calories (kcal)	Size (oz)	Calories (kcal)
McDonald's	31	100			71	230	117	380	154	500
Burger King	89	240	89	240	128	340	153	410	190	500
Wendy's	77	230	77	230	108	320	142	420	176	530
Sonic	71	220			71	220	120	360	156	470
Dairy Queen	99	190					113	310	184	500
Arby's	128	360			128	360	170	480	201	610
Jack in the Box	95	330			95	330	130	450	177	610

Bold numbers indicate a change from the 2010 serving size
Source: Menu composition analysis (February 2010, 2013)

Table 16. Changes in sizes of soft drinks and french fries

Soft drinks								
	2002		2006		2010		2013	
	Name	Fl oz	Name	Fl oz	Name	Fl oz	Name	Fl oz
McDonald's	Child	12	Child	12	Child	12	Child	12
	Small	16	Small	16	Small	16	Small	16
	Medium	21	Medium	21	Medium	22	Medium	22
	Large	32	Large	32	Large	32	Large	32
	Supersize	42						
Burger King	Kiddie	12	Kiddie	12	Kiddie	12	Kid	12
	Small	16	Small	16	Value	16	Value	16
	Medium	21	Medium	21	Small	21	Small	20
	Large	32	Large	32	Medium	32	Medium	30
	King	42	King	42	Large	42	Large	40
Wendy's	Kid	12	Kid	12	Kid	8	Kid	8
	Small	16			Value	11	Value	11
	Medium	20	Small	20	Small	13	Small	13
	Biggie	32	Medium	32	Medium	20	Medium	20
			Large	42	Large	27	Large	27
French fries								
	2002		2006		2010		2013	
	Name	Gr	Name	Gr	Name	Gr	Name	Gr
McDonald's							Child	31
	Small	68	Small	68	Small	71	Small	71
	Medium	150	Medium	113	Medium	117	Medium	117
	Large	179	Large	170	Large	154	Large	154
	Supersize	201						
Burger King	Small	74	Small	74	Value	74	Value	89
	Medium	116	Medium	116	Small	116	Small	128
	Large	162	Large	147	Medium	147	Medium	153
	King	196	King	181	Large	181	Large	190
Wendy's	Kids'	91	Kids'	91	Kids'	71	Kids'/Value	77
	Medium	142	Small	142	Small	113	Small	108
	Biggie	159	Medium	159	Medium	142	Medium	142
	Great Biggie	190	Large	190	Large	184	Large	176

Bold indicates a change from the previous year

Source: Young & Nestle (2007)¹⁶ and menu composition analysis (February 2010, 2013)

Summary of fast food nutritional quality

Kids' meals

Despite a dramatic increase in the number of main dish, side, and beverage options available in kids' meals from 2010, it was even more difficult to find a kids' meal with nutritious items that met appropriate calorie and sodium limits for preschool and elementary school-age children in 2013. At the restaurants in our 2010 analysis, the proportion of kids' meal combinations that met all nutrition criteria for elementary school-age children declined from .5% in 2010 to .4% in 2013. Just 33 possible meals out of 5,427 met all nutrition criteria

for older children, and eight of the twelve restaurants in this analysis did not offer even one. Further, 97% of kids' meal combinations did not meet even the industry's own CFBAI or Kids LiveWell nutrition standards for healthy kids' meals.

Despite the overall poor quality of kids' meals, it was possible to find a nutritious kids' meal at some restaurants. Subway, Burger King, and Arby's each offered five or more combinations that were appropriate for preschool-age children, and Jack in the Box offered two additional combinations that met criteria for elementary school-age children. Most restaurants offered at least one healthy side and beverage option. However, main dishes tended to be the least nutritious kids' meal component, largely due to high levels of sodium and/or saturated fat.

Kids' meals nutritional quality

Signs of progress

- All restaurants except Taco Bell offered at least one healthy side option with their kids' meals. McDonald's new Happy Meal with apples and a smaller portion of french fries reduced calories in the default meal by 115.
- Additional milk and low-calorie beverage options increased the percent of kids' meal beverages with a healthy NPI score at six of the eight restaurants examined in 2010.
- A higher proportion of possible kids' meal combinations from KFC and Sonic met calorie limits for preschool-age children in 2013 than in 2010. Taco Bell, KFC, Sonic, and McDonald's Happy Meals delivered some improvements in the percent of kids' meal combinations that met sodium limits.

Continued reasons for concern

- Seven of the twelve restaurants did not offer even one main dish option with a healthy NPI score in their kids' meals. Sodium content was especially high; 58% of main dishes exceeded the sodium limit for the entire meal (640 mg).
- Even with the addition of a small side of apples, several Mighty Kids' Meal combinations from McDonald's ranked among the worst kids' meal options analyzed with up to 880 calories and 1,085 milligrams of sodium per meal.
- French fries remained the most common side option offered with kids' meals. Wendy's reformulated its french fries with more sodium and saturated fat, while Dairy Queen increased the size of its kids' meal portion of french fries by 39%.
- Despite a 54% increase in the number of kids' meal combinations available in 2013 (for the restaurants also analyzed in 2010), just 22 of 5,427 possible meals met all nutrition criteria for preschoolers and only 33 met criteria for elementary school-age children.
- Nearly all kids' meal combinations (97%) failed to meet the industry's own CFBAI and Kids LiveWell nutrition standards.
- Subway, Burger King, and Arby's were the only restaurants to offer any kids' meal combinations that met all criteria for preschool-age children. Jack in the Box was the only additional restaurant to offer options that met all criteria for elementary school-age children.
- Wendy's, Sonic, and McDonald's Mighty Kids' Meal offered fewer calorie-appropriate kids' meal combinations for elementary school-age children in 2013 than in 2010.

Main menu items and special menus

As found with kids' meal menus, the number of main menu items available at many restaurants greatly increased, with few changes in overall nutritional quality. Four of the top-five traditional fast food restaurants increased their offerings by approximately one-third from 2010 to 2013. However, the percent of menu items that met all nutrition criteria did not change at any of these restaurants. McDonald's menu was

healthiest overall, with 24% of items meeting all nutrition criteria. Further, the nutritional quality of menu items available on several restaurants' healthy and dollar/value menus declined from 2010 to 2013, including the McDonald's and Burger King dollar/value menus and both special menus from Sonic. Subway's dollar/value menu was the only special menu to improve in nutritional quality, with 10% of items meeting all nutrition criteria in 2013.

Main menu items and special menus nutritional quality

Signs of progress

- Two-thirds of foods offered at Subway and Taco Bell had healthy NPI scores, three-quarters or more of menu items at the top-five restaurants met calorie limits for a moderately active 13- to 17-year-old, and three-quarters of McDonald's menu items met sodium limits.
- There were significant improvements in some measures of nutrition quality at some restaurants from 2010 to 2013. The percent of food items with a healthy NPI score increased at Subway, and the percent of items that met sodium limits improved at Burger King.
- Four restaurants in our analysis offered menus that highlighted healthier and/or lower calorie items. Items on healthy menus at McDonald's, Taco Bell, and Subway were more likely to meet all nutrition criteria than items on the restaurants' full menus. Taco Bell had the "healthiest" healthy menu, with 57% of items meeting all criteria, an improvement versus 2010.
- The nutritional quality of Subway's \$5 Footlongs value menu improved somewhat, with 10% of items meeting all nutrition criteria in 2013 compared with 0% in 2010.

Continued reasons for concern

- The top-five traditional fast food restaurants increased the size of their menus by 27% items on average (52 additional menu items per restaurant). The number of snack items offered increased the most (+51%).
- Despite substantial increases in number of menu items, the percent that met all nutrition criteria did not change at any restaurant. McDonald's had the highest proportion of menu items that met all criteria (24%), while 20% of items or fewer qualified as nutritious options at Wendy's, Subway, and Burger King.
- Healthy menus were less likely to meet nutrition criteria in 2013 than in 2010. Less than one-half of menu items on healthy menus at McDonald's, Subway, and Sonic met all nutrition criteria. The majority of McDonald's healthy menu items did not have healthy NPI scores, while Subway items had high levels of sodium. Just 4% of Sonic items met all nutrition criteria, making its "healthy" menu less nutritious than its dollar/value menu. Further, the nutritional quality of Subway and Sonic healthy menus declined, with fewer items meeting all nutrition criteria in 2013 than in 2010.
- Less than one-quarter of items on all restaurants' dollar/value menus met all nutrition criteria. Items on McDonald's, Burger King, and Sonic dollar/value menus were less likely to meet nutrition criteria in 2013 than in 2010.
- There were few changes in serving sizes of soft drinks and french fries. All restaurants continued to offer large and extra-large soft drink sizes that contained 350 to 850 calories in one serving. Large sizes of french fries contained 470 to 610 calories in one serving.

Traditional media advertising

In this section, we examine traditional advertising by fast food restaurants in 2012 and changes versus 2009 when available. We first present advertising spending in measured media, including TV, radio, outdoor, and the internet. We then provide data on child and teen exposure to TV advertising in total and by restaurant. Sections on marketing to children and teens describe the product types and specific menu items in TV advertising viewed most often by these age groups, as well as advertising that appears to be targeted to them specifically. For most of these analyses, we focus on the 25 restaurants with the most advertising spending on national TV in 2012.

Advertising spending

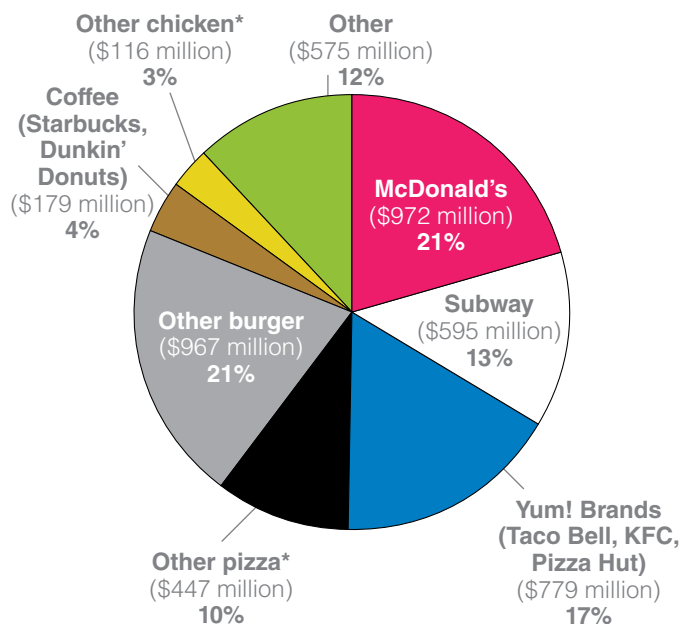
Advertising spending	Definition
Advertising spending	Amount spent on all measured media, including TV, magazines, internet, radio, newspapers, FSI coupons, and outdoor.

Total advertising spending by fast food restaurants reached \$4.6 billion in 2012, an 8% increase over the \$4.3 billion spent in 2009. A total of 266 fast food restaurants advertised in at least one measured media during 2012, although spending continued to be highly concentrated among a few restaurants. Ten fast food restaurants were responsible for 73% of advertising spending in 2012, while 25 restaurants accounted for 93% of spending.

Ranking Table 5 presents advertising spending in 2009 and 2012 by the 25 restaurants with the most national TV advertising spending in 2012 and examines dollars allocated to TV, radio, outdoor, and internet in 2012. McDonald's alone spent \$972 million, accounting for nearly one-quarter of the total (see **Figure 6**). McDonald's spent 63% more than the second ranked restaurant, Subway, which spent \$595 million or 13% of total spending. Five restaurants spent between \$200 and \$300 million: Taco Bell, Wendy's, KFC, Pizza Hut,

and Burger King. Combined, the three Yum! Brand restaurants (Taco Bell, KFC, and Pizza Hut) spent a total of \$779 million, or 17% of all spending. Although Burger King had been the third largest advertiser in 2009, it dropped to seventh place in 2012. Combined, pizza restaurants in the top 25 (Pizza Hut, Domino's, Papa John's, Little Caesars, and CiCi's) accounted for 15% of total advertising spending. Of note, the two coffee restaurants in the top 25, Starbucks and Dunkin' Donuts, accounted for just 4%.

Fifteen of the top twenty-five restaurants increased advertising spending from 2009 to 2012, but Subway was the only restaurant in the top ten with a higher-than-average increase (+39%). Although they each represented less than 3% of total fast food spending in 2012, four additional restaurants exhibited noteworthy growth. Little Caesars increased spending more than four-fold, Boston Market increased nearly three-fold, and Panera Bread more than doubled its

Figure 6. Total fast food advertising spending

*In the top-25 restaurants with national TV advertising spending
Source: Nielsen (2012)

spending. In addition, Starbucks posted a 56% increase. In contrast, four of the top-ten restaurants decreased advertising spending versus 2009. Burger King reduced total spending by 17%, and Sonic, Wendy's, and KFC decreased their budgets by 3 to 7%.

TV continued to be the dominant medium accounting for 88% of all fast food advertising spending (\$4.1 billion in 2012). Consistent with 2009, all other media, including radio, outdoor, and internet, each accounted for 5% or less of total advertising spending (\$226 million, \$199 million, and \$68 million, respectively). **Ranking Table 5** also summarizes allocation of spending by media for the 25 restaurants in our analysis. While TV represented three-quarters or more of advertising spending for most restaurants, a few dedicated a greater proportion of their budget to other types of media. Starbucks, for example, spent 10% of its advertising dollars on the internet and 29% on magazines, but only 40% on TV advertising. The proportions of Panera Bread's budget allocated to radio and outdoor advertising were higher than average at 19% and 23%, respectively, and Chick-fil-A dedicated 26% of spending to outdoor advertising.

Overview of TV advertising exposure

TV advertising exposure Definitions

Gross rating points (GRPs)	Measure of the per capita number of TV advertisements viewed by a specific demographic group over a period of time across all types of programming. GRPs for specific demographic groups are also known as targeted rating points (TRPs).
Average advertising exposure	GRPs divided by 100. Provides a measure of the number of ads viewed by individuals in a specific demographic group, on average, during the time period measured.

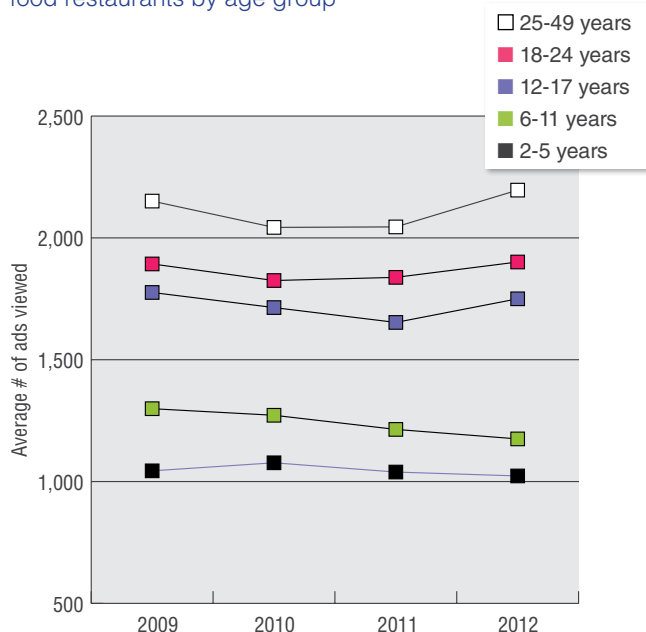
As **Figure 7** illustrates, changes in exposure to fast food TV advertising from 2009 to 2012 varied by age group. On average, youth under 18 viewed fewer fast food ads in 2012 than they had in 2009, while adults viewed somewhat more. Advertising to children (6-11 years) showed a steady decline, from 3.6 ads viewed per day in 2009 to 3.2 ads-per-day in 2012 (a 10% reduction). However, advertising to preschoolers (2-5 years) and teens (12-17 years) remained constant: 2.9 versus 2.8 ads viewed per day by preschoolers in 2009 and 2012 and 4.9 versus 4.8 ads-per-day viewed by adolescents. Of note, the number of ads viewed by teens increased 6% from 2011 to 2012, reversing a downward trend from 2009 to 2011.

Ranking Tables 6 and **7** detail the average number of ads viewed by preschoolers, children and teens by restaurant. As with advertising spending, TV advertising exposure was highly concentrated among a few fast food restaurants (see **Figure 8**). The top-25 restaurants were responsible for 97% of ads viewed by preschoolers and children and 98% of ads viewed by teens. The top-five restaurants advertised to children under 12 (McDonald's, Subway, Burger King, Domino's and Pizza

Hut) placed approximately one-half of all TV ads viewed by youth, while one restaurant (McDonald's) accounted for over one-quarter of ads viewed by children and 16% of ads viewed by adolescents. On average, preschoolers saw 5.1 ads-per-week for McDonald's in 2012, 6- to 11-year-olds saw 6.1, and adolescents saw 5.2.

Subway ranked a distant second with approximately two TV ads viewed per week by preschoolers and children, 60% fewer ads than McDonald's. Both preschoolers and children also viewed on average one or more ads per week for Burger King, Domino's, Pizza Hut, Wendy's, and Taco Bell. These same seven restaurants were the top advertisers to teens on TV. However, teens saw approximately double the number of ads that children saw for every restaurant except McDonald's. The top-three advertisers were the same for all youth, but Taco Bell replaced Domino's as the fourth most frequent advertiser to teens. In total, pizza restaurants accounted for 18 to 20% of all ads viewed by preschoolers, children, and teens in 2012. One pizza restaurant, Little Caesars, had not advertised on national TV in 2010 but ranked tenth in advertising to children in 2013.

Figure 7. Trends in exposure to TV advertising for all fast food restaurants by age group



Source: Nielsen (2009-2012)

Combined, Yum! Brands restaurants (Taco Bell, Pizza Hut, KFC) were responsible for 15 to 16% of ads viewed by children and 22% of ads viewed by teens. On average, teens saw one TV ad for a Yum! Brands restaurant every day in 2012.

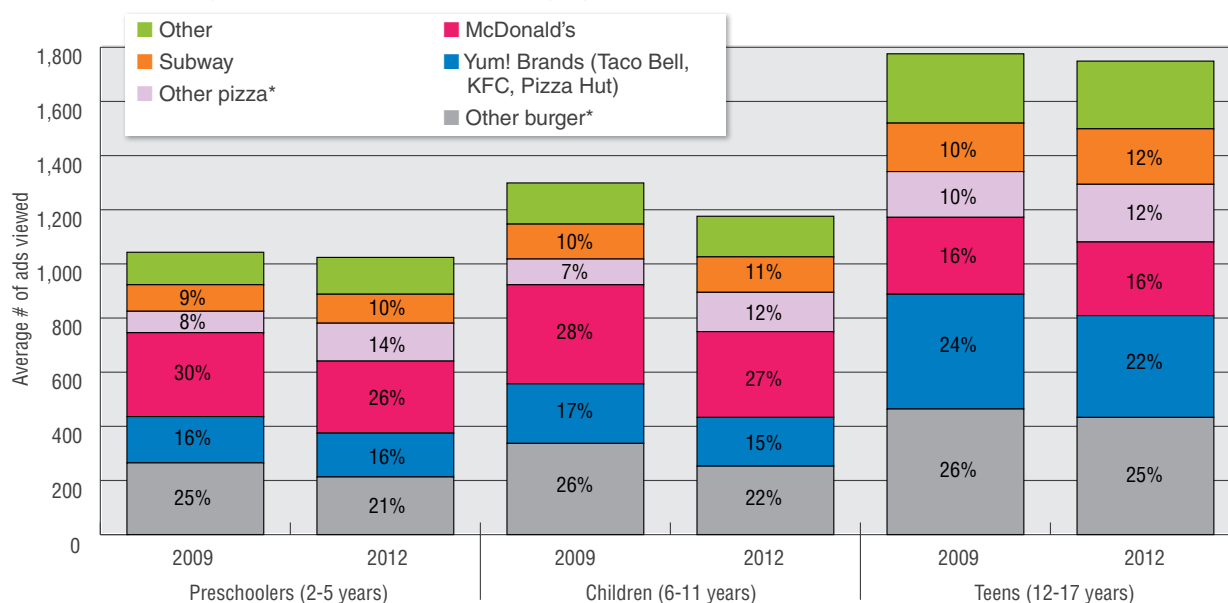
Changes in the number of ads viewed from 2009 to 2012 varied by restaurant and, in some cases, by age group. Of note, some restaurants had substantially greater increases in ads viewed by preschoolers and children than by teens. For example, preschoolers and children saw 44 to 59% more ads for Domino's

in 2012 versus 2009, but teens viewed just 7% more. Similarly, exposure to Wendy's ads increased 24% among preschoolers and 13% among older children, but just 2% among teens. Of note, the number of Wendy's ads viewed by preschoolers and children steadily increased from 2009 to 2012. The increase in number of ads viewed for Arby's and Popeyes between 2009 and 2012 was notably high for all youth: Arby's ads went up 57% for preschoolers, 38% for children, and 34% for teens, while Popeyes ads increased 41% for preschoolers, 30% for children, and 24% for teens. Preschoolers viewed 10 to 20% more ads for Dairy Queen, Pizza Hut, and Sonic in 2009 than in 2012, while teens viewed 10 to 20% more ads for Subway and Sonic.

In contrast, other restaurants reduced TV advertising to youth from 2009 to 2012, including the top-two advertisers in 2009. McDonald's ads to children under 12 decreased every year from 2009 to 2012, a reduction of 13 to 14% over the three-year period. Due to the large number of McDonald's ads, these reductions translated to 44 fewer ads viewed by preschoolers and 49 fewer ads viewed by children (almost one less ad per week). Exposure to TV ads for Burger King declined substantially for all youth. Children under 12 saw 47 to 50% fewer Burger King ads in 2012 than in 2009, and teens saw 21% fewer. The number of ads for all Yum! Brands restaurants also decreased by 5% among preschoolers, 18% for children, and 11% for teens due primarily to reductions in exposure to KFC ads of 28 to 38%.

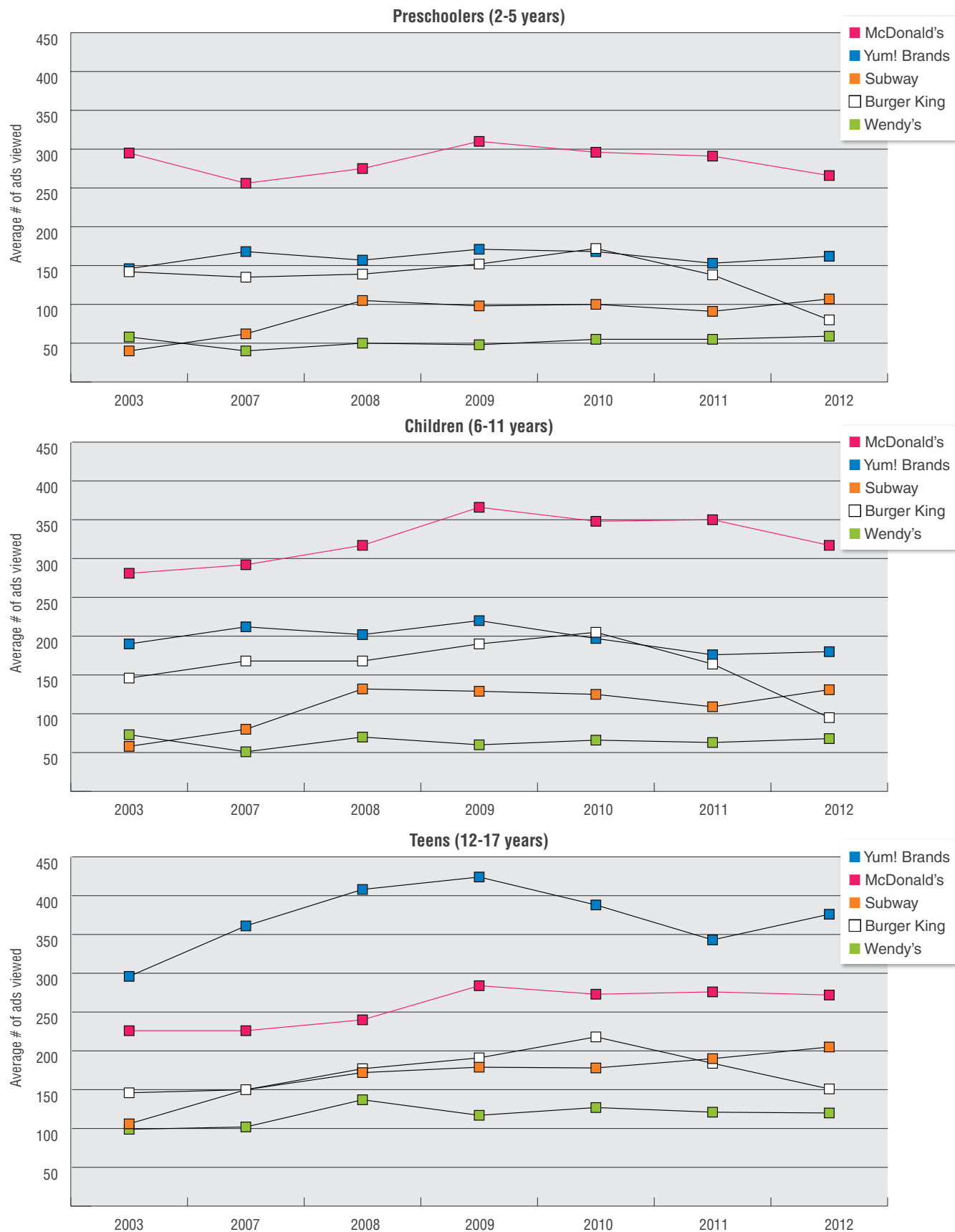
Figure 9 presents trends in advertising exposure for the top advertisers from 2003 to 2012. During the entire period, McDonald's remained the top advertiser to children under 12. In 2012, Subway replaced Burger King as the restaurant that ranked second in advertising to all youth age groups. However, the three Yum! Brand restaurants combined ranked second in advertising to children under twelve and were advertised most to teens.

Figure 8. TV advertising exposure by restaurant and age group



*In the top-25 restaurants with national TV advertising spending

Source: Nielsen (2009, 2012)

Figure 9. Trends in exposure to TV advertising by restaurant and by age groupSource: Powell et al. (2010);¹⁷ Nielsen (2008-2012)

TV advertising to children

TV advertising to children

Definition	
Targeted ratios: Preschooler:adult and child:adult	Provide a measure of relative exposure by youth versus adults, calculated by dividing GRPs for youth age groups (preschoolers or children) by GRPs for adults (25-49 years).
Product type	Describes the main type of product featured in the TV ad.
Kids' meals	Any ad for kids' meals, including those that do not picture a specific kids' meal menu item.
Branding only	The restaurant as a whole is the main point of the ad. Food may be pictured in the ad but no specific food products are mentioned.
Healthy options	Any ad that features a healthy menu, menu items, or healthy version of a meal.
Promotion only	Only a promotion is mentioned in the ad. Food may be pictured in the ad, but not mentioned.
Value menu/combo meals	Any ad that features a value menu, dollar menu, or other special pricing for a group of individual menu items.
Types of menu items featured	Any ad that features specific menu items, including breakfast items, coffee beverages (including hot and frozen varieties), lunch/dinner items (including main dishes, sides, and side beverages), and snacks/desserts (including snack beverages).

Ranking Table 6 provides child:adult targeted ratios for the top-25 advertisers. In 2012, preschoolers and children viewed one-half the number of fast food ads that adults viewed in total. McDonald's was the only restaurant that advertised more to children than adults. Children (6-11 years) viewed 8% more ads for McDonald's than adults viewed, and preschoolers viewed just 9% fewer than adults. Domino's and Burger King had the next highest child:adult targeted ratios at .64 and .59 respectively. The average preschooler:adult targeted ratio was .47 and the average child:adult targeted ratio was .54.

Advertising by product type

In addition to measuring total TV advertising exposure, we examined national TV advertising exposure by the type of product featured in the ads for the 18 restaurants that are the

focus of this report. **Table 17** presents the average number of ads viewed by preschoolers and children for each product type as well as targeted ratios to identify those that may have been targeted to these age groups.

Not surprisingly, ads for kids' meals were highly targeted to preschoolers and children. Preschoolers saw almost five times as many ads for kids' meals than adults saw, while children saw almost six times more. However, kids' meals accounted for just one-quarter of fast food ads seen by children, while ads featuring lunch/dinner items accounted for almost one-half of ads viewed, averaging approximately one ad per day. Value menu/combo meals represented one in ten fast food ads viewed by children and preschoolers. Although branding-only ads and ads for promotions each accounted for less than 5% of fast food ads viewed, they had higher-than-average child:adult targeted ratios: children were almost as likely to see these ads compared with adults.

Table 17. Child exposure to TV advertising by product type and age group

Product type	Preschoolers (2-5 years)			Children (6-11 years)		
	Average # of ads viewed	% of total ads viewed	Preschooler:adult targeted ratio	Average # of ads viewed	% of total ads viewed	Child:adult targeted ratio
Lunch/dinner items	394.0	48%	0.41	448.5	47%	0.47
Kids' meals	192.6	24%	4.60	238.7	25%	5.70
Value menu/combo meals	87.9	11%	0.41	90.1	9%	0.42
Snacks/desserts	36.3	4%	0.36	43.5	5%	0.44
Branding only	28.6	3%	0.68	36.2	4%	0.86
Promotion only	25.9	3%	0.72	33.9	4%	0.94
Breakfast items	21.5	3%	0.35	25.8	3%	0.42
Healthy options	17.1	2%	0.40	20.2	2%	0.47
Coffee beverages	12.9	2%	0.35	14.7	2%	0.40

Highlighting indicates higher-than-average child:adult targeted ratios

Source: Nielsen (2012), National TV only

Table 18. Restaurant and product types advertised most often to preschoolers and children

Restaurant	Product type	Preschoolers (2-5 years)		Children (6-11 years)	
		Average # of ads viewed	Preschooler:adult targeted ratio	Average # of ads viewed	Child:adult targeted ratio
McDonald's	Kids' meals	177.2	4.98	218.9	6.16
Domino's	Lunch/dinner items	59.9	0.54	70.9	0.64
Subway	Lunch/dinner items	46.2	0.39	55.6	0.47
Wendy's	Lunch/dinner items	41.6	0.43	48.1	0.50
Pizza Hut	Lunch/dinner items	42.9	0.39	47.4	0.43
Taco Bell	Lunch/dinner items	39.5	0.37	46.2	0.44
Burger King	Lunch/dinner items	29.9	0.35	33.8	0.39
Little Caesars	Lunch/dinner items	32.7	0.45	33.1	0.46
KFC	Lunch/dinner items	27.3	0.33	29.8	0.36
McDonald's	Lunch/dinner items	26.1	0.36	29.0	0.40
Burger King	Promotion only	16.2	1.49	22.3	2.05
Arby's	Lunch/dinner items	18.6	0.42	21.8	0.49
Pizza Hut	Value menu/combo meals	19.9	0.38	20.9	0.40
Subway	Branding only	14.0	1.26	20.8	1.88
Sonic	Lunch/dinner items	16.7	0.41	20.6	0.51
Burger King	Kids' meals	12.4	5.85	15.0	7.11
CiCi's Pizza	Value menu/combo meals	14.6	0.90	9.1	0.57
McDonald's	Branding only	4.4	0.59	5.7	0.76
Subway	Kids' meals	3.1	0.74	4.8	1.13
Domino's	Branding only	0.4	1.67	0.6	2.29
CiCi's Pizza	Lunch/dinner items	3.7	1.40	1.5	0.55

Highlighting indicates higher-than-average targeted ratios

Source: Nielsen (2012), National TV only

Table 18 details the average number of ads viewed by children and preschoolers in 2012 for each restaurant and product type highlighted in these ads, including products with 20 or more ads viewed by children or preschoolers in 2012 and those with a child:adult targeted ratio of .75 or higher.

Children saw more ads for McDonald's kids' meals than any other product type, averaging 3.4 ads per week for preschoolers and 4.2 for children. However, nine of the top-ten product types advertised to children were lunch/dinner items. Children saw approximately one ad per week for lunch/dinner items from Domino's and Subway. Further, children saw more ads for Burger King lunch/dinner items and promotions than they saw for the restaurants' kids' meals, and more ads for Subway lunch/dinner items and branding ads than ads for Subway kids' meals.

Targeted ratios indicate that ads for all kids' meals were targeted to children: preschoolers and children saw five to seven times more ads for McDonald's and Burger King kids' meals, compared with adults. Burger King promotions also appeared to be targeted to children, who saw 1.5 to 2 times more of these ads than adults, as well as Subway branding ads, which were viewed 30 to 90% more often by preschoolers and children. Targeted ratios for Subway's kids' meals were much lower than those of other restaurants kids' meals at .74 for preschoolers and 1.13 for children. In total, TV ads that appeared to be targeted to children (with targeted ratios > 1.0) represented 27% of preschoolers' total fast food advertising exposure and 30% of older children's exposure.

Content analysis of advertising on children's networks

TV advertising content analysis	Definitions
Children's networks	Networks with an average audience of 35% or more children under 12 that accept advertising, including Cartoon Network, Disney XD, Hub, Nickelodeon and NickToons.
Selling points	Any direct benefit of the product communicated in the ad, including new/improved, value/cheap, health/nutrition, quality food, and limited time special offers.
Product associations	Any indirect attributes or messages about the product implied in the ad, including physical activity, fun/cool, humor, and adults as negative or incompetent.
Main characters in the ad	Apparent age of purchasers and consumers or main characters (in absence of purchasing or consumption behaviors) depicted in the ad. Age categories include children (0 to 12 yrs), teens/young adults (13 to 29 yrs), older adults (30 and older), and parents (buying food for children).
Third party tie-ins	Featured appearances by outside (non brand-related) persons, characters or other companies/organizations, including celebrities, movies/TV shows/video games, and licensed characters.
Brand spokes-characters	Brand-specific characters (e.g. Ronald McDonald, Wendy).
Eating behaviors presented	Portrayals or suggestions of eating behaviors in the ad, including time and place of food consumption and whether food was a primary focus in the ad.

To assess the messages presented in TV ads targeted to children, we analyzed the content of all ads from any fast food restaurant that aired on children's networks in 2012. A total of 203 English-language ads first appeared on these networks between January 1, 2012 and December 31, 2012. After removing duplicates, we obtained 76 unique ads for content analysis. The content analysis examined the products featured, as well as common selling points used, product associations, main characters in the ad, the use of third parties and brand spokes-characters, eating behaviors presented, and references to websites.

Only five fast food restaurants advertised on children's networks in 2012: Burger King, McDonald's, Sonic, Subway,

and Wendy's (see **Table 19**). Burger King and McDonald's placed ads on all five networks, whereas Subway and Wendy's did not advertise on NickToons or Disney XD. Sonic aired just one ad on Nickelodeon.

More than one-half of the ads that appeared on children's networks promoted kids' meals (59%), and McDonald's and Burger King only promoted their kids' meals on children's networks. However, Subway, Wendy's, and Sonic also advertised other types of products directly to children. Eleven of the twenty ads that Subway aired promoted its kids' meals, but Subway ads targeted to children also promoted \$5 Footlongs (2 ads) and other Footlong sandwiches (3 ads). Subway also aired four branding ads that did not focus on a

Table 19. Product types advertised on children's networks

	# of ads analyzed	Networks where ads appeared				
		Nickelodeon	NickToons	Cartoon Network	The Hub	Disney XD
McDonald's						
Kids' meals	31	X	X	X	X	X
Subway	20					
Kids' meals	11	X		X		X
Branding only	4	X		X		X
Lunch/dinner items	3					X
Value menu/combo meals	2					X
Wendy's	20					
Lunch/dinner items	16	X		X	X	
Branding only	2	X		X	X	
Value menu/combo meals	1			X	X	
Snacks/desserts	1	X		X	X	
Burger King						
Kids' meals	4	X	X	X	X	X
Sonic						
Lunch/dinner items	1	X				

Source: TV advertising content analysis (2012)

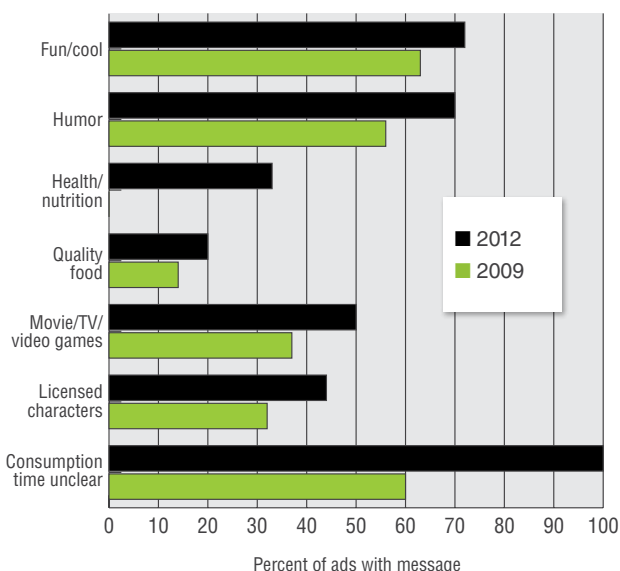
specific menu item. Of note, not one of Wendy's 20 ads that aired on children's networks featured its kids' meal. Wendy's targeted ads for 12 different products to children, ranging from salads and "signature sides" to Frosty's and Baconator and Son of Baconator burgers. Sonic's one child-targeted ad featured its Holy Guacamole and Chili Cheese Fritos Coney hot dogs. **Appendix Table C2** provides a list of items and nutrition information for all products that were advertised on children's networks in 2012.

Content of kids' meal ads

Figure 10 depicts the most common messages used in advertising for kids' meals in 2009 and 2012. McDonald's, Burger King, and Subway were the only restaurants to advertise kids' meals each year. Consistent with 2009, food was not the primary focus of these ads. Rather, product associations (primarily fun/cool and humor) were most common. However, due to new kids' meal advertising by McDonald's, health/nutrition was mentioned in one-third of kids' meal ads in 2012; this message did not appear in 2009 advertising. Other notable changes from 2009 include an increase in the use of the fun/cool message by all restaurants, as well as unclear portrayal of time of consumption in all ads (compared with 60% of ads in 2009). In addition, adults had been portrayed in a negative light in one-quarter of 2009 ads, but this message was not used in 2012. About 17% of kids' meal ads directed children to websites in 2012, about one-half the frequency of website referrals in 2009.

McDonald's kids' meal ads. McDonald's aired 31 different TV ads that promoted its Happy Meals. McDonald's was the only restaurant to use health/nutrition as a selling point. Almost one-half (45%) of ads touted health in some way, focusing

Figure 10. Messages in advertising for kids' meals on children's TV networks



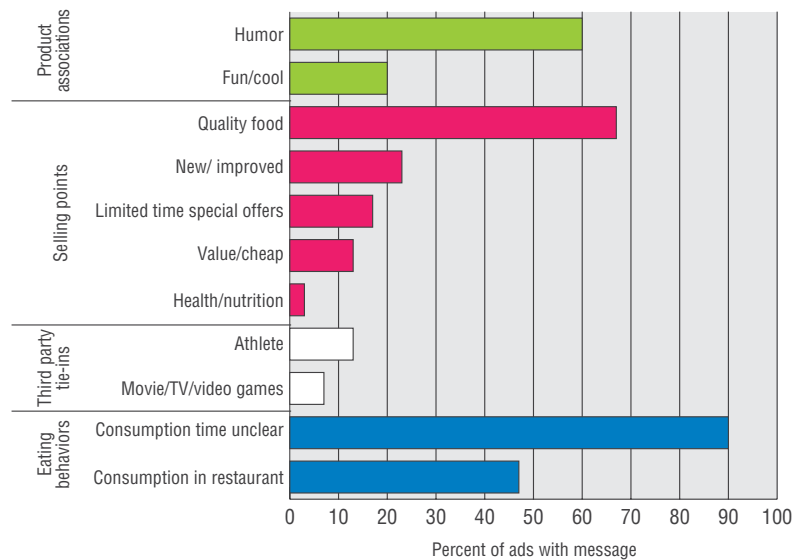
Source: TV advertising content analysis (2009, 2012)

on apple slices. A farm-fresh food theme carried throughout many of these ads. "Ferris's Funky Farm" ads depicted a boy on his farm, implying the source of the Happy Meal. These ads, as well as others, asserted that "eating well is about balance" or that "eating right can be magical when you choose milk and have fruit in your Happy Meal...along with a toy." A cartoon picture was repeatedly shown, depicting a farm in the background with bread, carrots, a chicken leg, an apple, and milk in the foreground. Approximately 36% of McDonald's ads featured promotions with two animated feature films: "Hotel Transylvania" and "Rise of the Guardians."



McDonald's Happy Meal ads depicting farm-fresh food

Subway kids' meal ads. Subway promoted its kids' meals in 11 different ads using quality food as a selling point in 82% of ads, consistent with the focus of its 2009 ads. It also used a fun/cool message in 55% of ads, an increase from 2009, but

Figure 11. Messages in advertising for other products on children's TV networks

Source: TV advertising content analysis (2012)

did not promote physical activity, which had been featured in the majority of its 2009 kids' meal ads. Approximately nine out of ten Subway ads featured a cross-promotion with an animated feature film, including Disney's "Brave" and "Wreck it Ralph." In addition, 55% of ads directed children to websites, including Subway.com, SubwayKids.com, and Disney.com/SubwayFreshTake, more often than other restaurants' ads. For example, ads instructed children to purchase a "Wreck it Ralph" collectors' edition Subway Fresh Fit for Kids meal to get a code to unlock exclusive bonuses in the online game "Hero's Duty" at Disney.com/SubwayFreshTake.

Burger King kids' meal ads. All Burger King ads focused on a fun/cool message, an increase from 2009. These ads touted "imagination is King" and encouraged children to "choose your own adventure." Two of the four Burger King ads directed children to BkCrown.com, an advergame site for children (replacing ClubBK.com, which was promoted in 2009). One Burger King ad promoted a crown design contest: the winner's design was featured on an actual BK crown, and the child won a trip to LegoLand.

Content of ads for other products

Figure 11 presents the most common messages used in advertising for other products that appeared on children's networks in 2012 from Wendy's, Subway, and Sonic. Quality food was the most common selling point used in two-thirds of these ads. In contrast to kids' meal ads, a health/nutrition message was rarely used. Also in contrast to ads for kids' meals, only 20% of these ads used a fun/cool message, although humor was used in the majority of both types of ads. Almost one-half of ads for other products showed food being consumed in the restaurant, compared with about 20% of kids' meal ads. Roughly one-quarter of these ads directed viewers to websites, somewhat more often than ads for kids' meals.

Although these ads aired on children's networks, they appeared to be designed to appeal to a much broader audience than the ads for kids' meals appearing on these same networks. For example, one-third of Subway's other child-targeted ads (not for kids' meals) featured a "Subprize Party" price promotion to celebrate Subway's birthday. During the month of September, "favorites" such as the Italian BMT were offered at only five dollars. About 44% of Subway's other ads promoted physical activity and featured celebrity athletes, including Michael Phelps. One ad boasted that Subway was "the official training restaurant of Robert Griffin III and athletes everywhere." The quality of Wendy's food was promoted in 60% of its ads that appeared on children's networks. Approximately one-quarter featured a teen or young adult as the main character in the ad, and 15% directed children to visit the restaurant late at night, "Better later: Open 1am or later." Sonic's one ad was a version of its long-running humorous campaign depicting two men eating in a car and discussing how the restaurant has reinvented itself for the summer.



Subway ads featured celebrity athletes and promoted physical activity

TV advertising to teens

TV advertising to teens Definition

Teen:adult targeted ratio Provides a measure of relative exposure by teens versus adults, calculated by dividing GRPs for teens (12-17 years) by GRPs for adults (25-49 years).

Ranking Table 7 provides teen:adult targeted ratios for the top-25 restaurants to identify TV advertising that may have been targeted to a teen audience. On average, teens saw 20% fewer fast food ads compared to adults (average targeted ratio of .80), but teens also watched 30% fewer hours of TV in 2012 than adults watched.¹⁸ Further, six restaurants had teen:adult targeted ratios of .90 or higher, indicating that teens saw more of these ads than expected given their TV-viewing habits. Starbucks advertising had the highest targeted ratio (1.26), although the average number of ads viewed by teens was low (approximately 10 ads per year). Teens saw nearly the same number of ads as adults for McDonald's, Burger King, Taco Bell, Sonic, and Popeyes.

Table 20 summarizes the number of ads that teens viewed by type of product for the 18 restaurants we focus on in this report. The majority of fast food ads viewed by teens promoted lunch/dinner items, which accounted for 59% of all ads viewed (compared to 47-48% of ads viewed by children). On average, teens saw two of these ads per day. Value/combo meals accounted for 12% of ads viewed by teens, more than double the number of these ads viewed by children. Ads for kids' meals represented less than 10% of ads seen by teens; not surprisingly, teens saw about one-third fewer kids' meal ads than children saw. The two product types with the highest overall teen:adult targeted ratios were also targeted to children: kids' meals and promotion-only ads.

Table 21 details the average number of ads viewed by teens in 2012 on national TV for each restaurant and product type, including products with 20 or more ads viewed on average and those with a teen:adult targeted ratio of .90 or higher. Ads for

Table 20. Teen exposure to TV advertising by product type and age group

Product type	Teens (12-17 years)		
	Average # of ads viewed	% of total ads viewed	Teen: adult targeted ratio
Lunch/dinner items	832.0	59%	0.86
Value menu/combo meals	175.0	12%	0.82
Kids' meals	119.6	8%	2.86
Snacks/desserts	87.9	6%	0.88
Breakfast items	53.6	4%	0.88
Promotion only	39.5	3%	1.09
Branding only	39.2	3%	0.93
Healthy options	35.4	3%	0.83
Coffee beverages	31.5	2%	0.86

Highlighting indicates higher-than-expected teen:adult targeted ratios

Source: Nielsen (2012), National TV only

Table 21. Restaurants and product types advertised most often to teens

Restaurant	Product type*	Teens (12-17 years)	
		Average # of ads viewed	Teen: adult targeted ratio
Taco Bell	Lunch/dinner items	112.8	1.07
McDonald's	Kids' meals	107.8	3.03
Subway	Lunch/dinner items	96.8	0.83
Domino's	Lunch/dinner items	96.6	0.87
Pizza Hut	Lunch/dinner items	94.0	0.85
Wendy's	Lunch/dinner items	86.2	0.89
Burger King	Lunch/dinner items	73.2	0.85
KFC	Lunch/dinner items	60.5	0.74
McDonald's	Lunch/dinner items	52.0	0.72
Little Caesars	Lunch/dinner items	51.7	0.71
Sonic	Lunch/dinner items	43.6	1.07
Arby's	Lunch/dinner items	42.0	0.95
Pizza Hut	Value menu/combo meals	41.5	0.80
Subway	Value menu/combo meals	30.9	0.81
KFC	Value menu/combo meals	30.8	0.80
Burger King	Snacks/desserts	29.8	0.83
Subway	Breakfast items	24.0	0.88
Dairy Queen	Snacks/desserts	21.7	0.81
McDonald's	Value menu/combo meals	20.8	0.72
Dairy Queen	Lunch/dinner items	20.4	0.87
Burger King	Promotion only	18.8	1.73
Taco Bell	Value menu/combo meals	18.5	1.01
Subway	Branding only	15.8	1.43
Sonic	Snacks/desserts	15.8	1.27
Wendy's	Healthy options	15.1	1.03
Sonic	Breakfast items	11.1	1.16
Starbucks	Coffee beverages	8.1	1.50
Burger King	Kids' meals	7.0	3.30
Burger King	Value menu/combo meals	5.8	0.94
Burger King	Breakfast items	5.7	0.90
Arby's	Promotion only	5.5	1.12
Subway	Kids' meals	4.8	1.15
Wendy's	Snacks/desserts	2.7	1.20
Taco Bell	Branding only	2.3	0.94
Burger King	Branding only	1.4	1.11
Sonic	Branding only	0.9	2.17
Dairy Queen	Promotion only	0.8	1.02

*Includes products with 20 or more ads viewed by teens on average and those with a teen:adult targeted ratio of .90 or higher
Highlighting indicates menu items that appear to be targeted to teens

Source: Nielsen (2012), National TV only

Taco Bell's individual lunch/dinner menu items were viewed most frequently by teens, followed by McDonald's kids' meals (more than two ads per week). Adolescents also saw one to two ads per week for lunch/dinner items from Subway, Domino's, Pizza Hut, Wendy's, Burger King, KFC, McDonald's, and Little Caesars.

Kids' meal and promotion-only ads were targeted to teens as well as children. However, several restaurants also appeared to target teens with advertising for at least one of their menu items. Teens saw more ads than adults saw for Taco Bell lunch/dinner items and value/combo meals; Sonic lunch/dinner items, snacks/desserts, and breakfast items; Wendy's healthy options and snacks/desserts; and Starbucks coffee beverages. Starbucks coffee drinks had the highest targeted ratio of any type of menu item: adolescents saw 50% more of these ads compared to adults. In total, all ads that appeared to be targeted to teens (i.e., targeted ratios > 1.0) accounted for 28% of the total number of fast food ads they viewed.

TV advertising nutrient content analysis

Table 22 presents the 20 individual restaurant menu items seen most often by children (2-11 years) and teens (12-17 years) in TV advertising. Children viewed ads for McDonald's Happy Meal with Chicken McNuggets almost eight times

more than ads for any other menu item, averaging 3.6 ads per week. Burger King's Chicken Nuggets Kids' Meal and Dairy Queen Blizzards ranked second and third in ads viewed by children. Children viewed more ads for KFC biscuits and buckets of chicken and Burger King Real Fruit Smoothies than ads for Subway's Fresh Fit Kids' Meal.

The list of individual menu items in ads viewed most often by teens was similar to menu items viewed by children. Teens also saw more ads for Happy Meals than any other individual menu item, although they viewed 46% fewer of these ads than children. Teens also viewed fewer ads for Burger King and Subway kids' meals compared with children. However, teens saw at least twice as many ads for most other menu items compared to children. Wendy's ads for Baconators, fountain drinks, and french fries were an exception; teens saw just 60% more of these ads compared with children. Of note, these ads also aired on children's networks in 2012.

We also examined the nutrient content of menu items that appeared in ads seen by youth in 2012. The nutritional quality of items most often viewed in ads by children and teens varied widely by restaurant. As measured by NPI score, Taco Bell's options had the highest overall nutrition quality: all items scored higher than the minimum NPI score to be classified

Table 22. Menu items advertised most often to children and teens

Restaurant	Menu item	Average # of ads viewed		NPI score	Calories (kcal)	Sodium (mg)
		Children (2-11 years)	Teens (12-17 years)			
McDonald's	Happy Meal (Chicken McNuggets)	185.0	99.4	44-72	370-380	735-745
Burger King	BK Kids' Meal (Chicken Nuggets)	23.4	12.3	46-78	355-450	540-715
Dairy Queen	DQ Blizzard	22.9	45.0	40-60	570-1,070	230-690
KFC	Biscuits	18.3	38.1	24	180	530
Burger King	Real Fruit Smoothies	14.6	33.6	66-68	200-450	20-95
KFC	Bucket of Chicken	14.2	29.3	40-60	260-490	820-1,040
Subway	Fresh Fit Kids' Meal (no specific sandwich)	13.6	10.4	55-82	285-565	325-960
KFC	Original Recipe Chicken Bites	13.0	28.0	62	330	1,100
KFC	Mashed Potatoes	12.9	26.9	60	120	530
Burger King	French Fries	12.8	31.1	60-62	340-500	480-710
KFC	Cole Slaw	11.5	23.8	70	180	150
Burger King	Sweet Potato Fries	11.1	25.0	60	250	550
Taco Bell	Doritos Locos Taco	10.6	28.0	64	170	340
Taco Bell	Chicken Cantina Bowl	9.7	25.6	72	560	1520
Taco Bell	Doritos Locos Taco Supreme	9.4	26.0	66	200	370
McDonald's	20-piece Chicken McNuggets	7.9	15.1	44-50	290-340	640-800
Subway	Footlong Italian BMT	7.4	15.4	44-64	820-1,140	2,600-4,040
Wendy's	Baconator, Son of Baconator	7.3	11.8	32-34	700-970	1,760-2,020
Wendy's	Fountain Drink	7.1	11.3	64-70	0-374	0-72
Wendy's	French Fries	7.1	11.3	64-66	230-530	250-570
McDonald's	McChicken Sandwich	7.0	13.8	50	360	800
Dairy Queen	French Fries	7.0	13.6	58	310	640
Wendy's	Bacon Portabella Melt	6.9	13.5	36	660	1450
KFC	Macaroni and Cheese	6.9	14.1	60	160	720
Burger King	Texas BBQ Whopper	6.8	16.6	48	760	1,600

Highlighting indicates that children viewed more ads than teens viewed
Source: Nielsen (2012), National TV only

Table 23. Total nutrient content of items in TV ads viewed by youth every day

	Total calories (kcal)			Proportion of calories from sugar and saturated fat	
	2009	2012	Change	2009	2012
Preschoolers (2-5 years)	948	790	-17%	40%	28%
Children (6-11 years)	1,186	937	-21%	39%	28%
Teens (12-17 years)	1,715	1,436	-16%	37%	28%
	Total sodium (mg)				
	2009	2012	Change		
Preschoolers (2-5 years)	1,734	1,545	-11%		
Children (6-11 years)	2,193	1,818	-17%		
Teens (12-17 years)	3,353	2,937	-12%		

Source: Nielsen (2009, 2012 ad exposure data); menu composition analysis (February 2013)

as healthy. In contrast, only one of the six items commonly featured in KFC ads qualified as healthy (cole slaw). Overall, three-quarters of items viewed most often were of poor nutritional quality. Calorie and sodium content were also high; five items exceeded 700 calories and eight items had sodium levels greater than 1,000 milligrams.

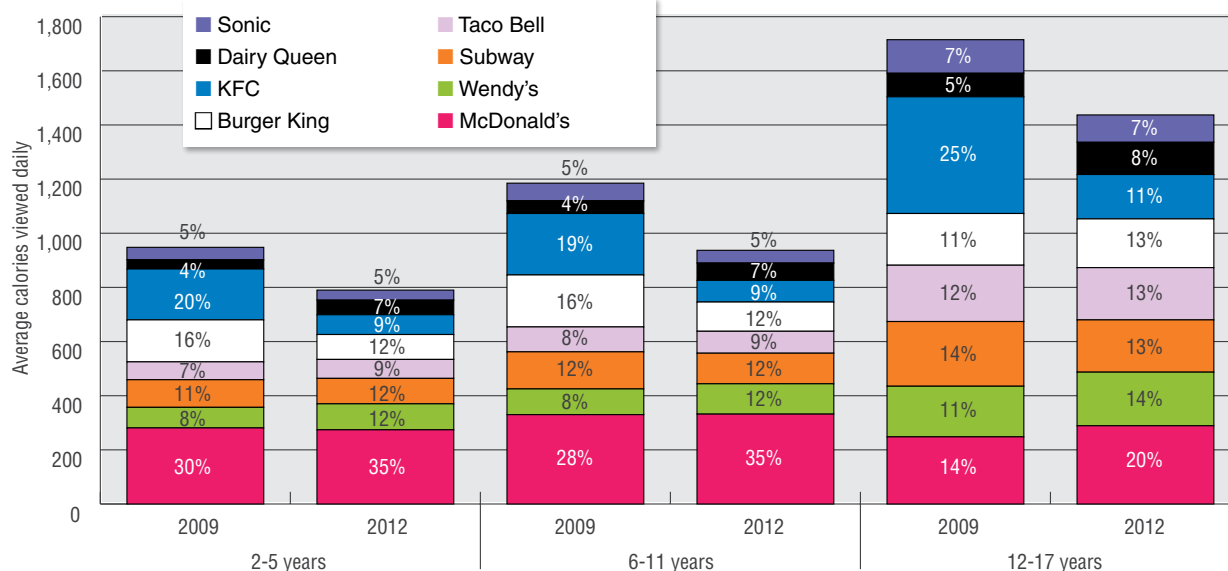
We also examined calories and sodium of all menu items presented in ads from the restaurants included in our 2009 analysis, excluding the pizza and coffee restaurants (eight restaurants, consistent with the nutrition analysis). **Table 23** shows the total calories, sodium, and calories from sugar and saturated fat viewed in fast food ads on average every day by preschoolers, children, and teens in 2009 and 2012.

Total calories and sodium in daily ads viewed decreased across all age groups from 2009 to 2012. Calories decreased at a somewhat greater rate than decreases in total ads viewed (which were -14%, -18%, and -6%, for preschoolers, children, and teens, respectively for these eight restaurants), indicating reductions in calorie content of the menu items featured in the ads. Children saw the biggest decline in average calories, with a 21% reduction. The proportion of calories viewed from sugar and saturated fat also decreased from 37 to 40% of total calories to 28%, indicating that menu items featured in TV advertising tended to contain fewer empty calories. Reductions in sodium content were comparable to the reductions in ad exposure.

Table 24. Average calories and sodium in TV ads viewed by children and teens

	Average calories per ad viewed (kcal)					
	Children (6-11 years)			Teens (12-17 years)		
	2009	2012	Change	2009	2012	Change
Dairy Queen	777	908	17%	775	911	18%
KFC	1,242	691	-44%	1,196	696	-42%
Wendy's	631	657	4%	626	649	4%
Sonic	763	605	-21%	752	602	-20%
Taco Bell	566	549	-3%	570	537	-6%
Subway	493	540	10%	635	566	-11%
Burger King	407	486	20%	439	495	13%
McDonald's	457	454	-1%	454	480	6%
	Average sodium per ad viewed (mg)					
	Children (6-11 years)			Teens (12-17 years)		
	2009	2012	% change	2009	2012	% change
Dairy Queen	623	1,260	102%	632	1,281	103%
KFC	2,008	1,753	-13%	1,967	1,767	-10%
Wendy's	1,518	1,360	-10%	1,491	1,352	-9%
Sonic	978	1,358	39%	959	1,354	41%
Taco Bell	1,367	1,125	-18%	1,374	1,103	-20%
Subway	1,399	1,456	4%	1,854	1,590	-14%
Burger King	607	776	28%	742	813	9%
McDonald's	800	746	-7%	821	799	-3%

Source: Nielsen (2009, 2012 ad exposure data); menu composition analysis (February 2013)

Figure 12. Calories viewed daily in TV ads for fast food restaurants

Source: Nielsen (2009, 2012 ad exposure data); menu composition analysis (February 2013)

However, the nutritional quality of menu items in fast food advertising viewed by children and teens varied widely by restaurant (see **Table 24**). Dairy Queen advertised the highest calorie items, averaging over 900 calories per ad, while Burger King and McDonald's ads contained the fewest calories, likely due to the higher proportion of lower-calorie kids' meals featured in ads for these two restaurants. In 2012, Dairy Queen and KFC were the only restaurants with an average calorie content in ads viewed by 6- to 11-year-olds that was higher than the 650 calorie limit for meals served to elementary school-age children.¹⁹ KFC ads viewed by teens had the highest sodium content at 1,767 milligrams viewed per ad, or 77% of the maximum recommended daily intake for adults,²⁰ while Burger King and McDonald's ads had the lowest sodium content. However, the average sodium per ad viewed exceeded meal standards for elementary school-aged children for every restaurant.²¹

From 2009 to 2012, changes in average calories and sodium per ad also varied widely by restaurant. Calories per KFC ad viewed showed the greatest improvement, with decreases of 42 to 44%. Average calories also decreased by approximately 20% in Sonic ads. Smaller reductions occurred in Taco Bell ads viewed by children and teens, as well as Subway ads viewed by teens. Sodium followed a similar trend, with decreases in sodium per ad viewed by all youth at KFC, Wendy's, Taco Bell, and McDonald's. However, calories per ad viewed increased by as much as 18% at Dairy Queen, as well as at Burger King and Wendy's, for both age groups. Calories per ad viewed by teens also increased for McDonald's. Dairy Queen had the largest increase in sodium, double the sodium per ad in 2009, and Sonic and Burger King substantially increased the sodium content in their ads.

Figure 12 shows the breakdown of calories viewed daily by restaurant. McDonald's and Wendy's contributed a greater

proportion of calories viewed by preschoolers and children in 2012 than in 2009, while the proportion of calories viewed decreased for Burger King and KFC. Trends were similar for teens with one exception: Burger King contributed a greater proportion of the calories in ads they viewed in 2012 versus 2009.

Summary of traditional media advertising

In 2012, fast food restaurants continued to spend billions of dollars in advertising on traditional media. Positively, the total number of ads viewed by children (6-11 years) declined by 10% versus 2009. However, children still saw 3.2 ads per day, and preschoolers' exposure did not change (2.8 ads per day). Further, teens saw more ads in 2012 than they had in 2011, reversing a downward trend starting in 2009. However, there was variation in changes in advertising by restaurant. Both Burger King and KFC substantially reduced advertising to all youth, and McDonald's reduced its advertising to children. On the other hand, Wendy's and Domino's greatly increased advertising to children, but increased advertising to teens just slightly.

Ads for lunch/dinner items continued to account for the highest proportion of ads viewed by all youth, even though they did not appear to be targeted to them specifically. However, several restaurants did continue to target children and teens with advertising for specific product types. For example, ads featuring most restaurants' kids' meals were viewed two to seven times more often by children than adults, and teens were 1.5 times more likely than adults to see ads for Starbucks.

The nutritional quality of ads most often viewed by children and teens showed some improvement. Total calories in fast food ads viewed daily decreased across all age groups, with greater reductions for children. Menu items featured in TV

advertising also tended to contain fewer empty calories in 2012 as compared with 2009. However, more than 75% of individual items featured in ads most often viewed by children and teens still promoted unhealthy products. Dairy Queen advertised the highest calorie items, averaging over 900 calories per ad, and KFC ads had the highest sodium content, at 1,767 milligrams viewed per ad. In contrast, McDonald's and Burger King ads focused on lower-calorie kids' meals and thus had the lowest calorie and sodium content, although average calories increased for Burger King ads viewed by teens and children and McDonald's ads viewed by teens.

Messages in ads for kids' meals were similar to those found in 2009, although McDonald's ads also included messages about health and nutrition in 2012, which did not occur previously. Subway and Burger King also advertised kids' meals to children. However, our analysis of all ads that aired on children's networks in 2012 showed that Wendy's, Subway, and Sonic also targeted ads for other products (i.e., not kid's meals) to children. For example, Wendy's ads on children's networks featured its Baconator sandwiches and signature Frosty, while Subway advertised Footlong sandwiches to children.

Traditional media advertising

Signs of progress

- The number of fast food TV ads viewed by older children (6-11 years) declined by 10%, from 3.6 ads-per-day in 2009 to 3.2 ads-per-day in 2012.
- Both of the top advertisers in 2009 reduced their TV advertising to children in 2012. Children saw 50% fewer TV ads for Burger King and 13% fewer ads for McDonald's, resulting in a reduction of almost three ads viewed per week. Children also saw fewer TV ads for KFC.
- Preschoolers and children saw more TV ads for McDonald's healthier kids' meals than any other product type from any restaurant, accounting for 17 to 19% of all TV ads viewed in 2012.
- In compliance with their CFBAI pledges, McDonald's and Burger King only advertised their healthier kids' meals on children's TV networks. Many of McDonald's ads encouraged children to select the healthier apples and milk.
- Total calories in fast food ads viewed by children and teens went down by 11% or more from 2009 to 2012. Empty calories from sugar and saturated fat in featured menu items decreased from 37 to 40% of total calories in 2009 to 28% in 2012. The average number of calories in KFC and Sonic ads went down substantially (approximately 40% and 20%, respectively). Calories in Taco Bell and Subway ads viewed by teens also went down 6% and 11%.

Continued reasons for concern

- Total fast food advertising spending reached \$4.6 billion in 2012, an 8% increase versus 2009. Fifteen of the top twenty-five restaurants spent more in 2012 than in 2009, and four restaurants (Little Caesars, Boston Market, Panera Bread, and Starbucks) increased spending by 50% or more.
- In contrast to the trends in advertising to children (6-11 years), the number of fast food TV ads viewed by preschoolers (2-5 years) and teens (12-17 years) did not change from 2009 to 2012. In 2012, on average, preschoolers saw 2.8 fast food ads daily, and teens saw 4.8 ads per day.
- Despite an overall reduction in TV advertising to 6- to 11-year-olds, 11 of the top-25 restaurants increased advertising to children by 10% or more, including Domino's (+44%), Arby's (+38%), and Wendy's (+13%).
- Preschoolers saw more TV ads in 2012 versus 2009 for 19 of the top-25 restaurants, and teens saw more ads for 15 of the top 25. Preschoolers viewed 9% or more ads in 2012 from eight of the top-12 advertisers, while advertising to teens increased 7% or more for seven restaurants.
- McDonald's was the only restaurant to advertise more to children than to older age groups. Children (6-11 years) saw 16% more TV ads for McDonald's than teens saw and 8% more than adults saw.
- Ads for healthier kids' meals represented just one-quarter of fast food TV ads seen by preschoolers and children. Children saw more ads for lunch/dinner items from Domino's, Subway, Wendy's, Pizza Hut, Taco Bell, Burger King, KFC, McDonald's, Arby's, and Sonic, than they saw for Burger King or Subway kids' meals.
- Wendy's appeared to target children directly with advertising for its regular menu items. Despite a 3% decline in advertising spending from 2009 to 2012, preschoolers and children viewed 24% and 13% more Wendy's TV ads, respectively, while advertising to teens increased just 2%. Wendy's did not advertise its kids' meals on children's TV networks, but it did air 20 different ads for other products (including Frosty and Baconator burgers) on Nickelodeon, Cartoon Network, and The Hub.
- Burger King and Subway targeted promotional and branding ads to children that did not advertise a specific food product. Subway also advertised its Footlong sandwiches on children's TV networks.

- Overall, teens saw 20% fewer TV ads for fast food restaurants compared with adults. However, these numbers are higher than expected given that teens watch 30% fewer minutes of television than adults watch. A few restaurants appeared to target teens directly with ads for several product types. Starbucks coffee had the highest targeted ratio: teens saw 50% more of these ads than adults saw. Compared with adults, teens also saw more ads for Taco Bell lunch/dinner items and value/combo meals; Sonic lunch/dinner items, snacks/desserts, and breakfast items; and Wendy's healthy options and snacks/desserts.
- The average number of calories in Dairy Queen, Subway, and Burger King ads viewed by children and Dairy Queen and Burger King ads viewed by teens went up by 10% or more from 2009 to 2012. Dairy Queen averaged more than 900 calories per ad in 2012.

Digital media marketing

In this section, we examine four types of fast food marketing that occur in digital media: websites sponsored by fast food companies, display advertising on third-party websites, marketing on mobile devices (i.e., smartphones and tablets), and social media marketing. We report on the marketing practices of the 18 fast food restaurants that are the focus of this report.

Website exposure

Website exposure	Definitions
Average monthly unique visitors ²²	Average number of different individuals visiting the website each month. Data are reported for the following demographic groups: children (2-11 years) and teens (12-17 years).
Average visits per month ²³	Average number of times each unique visitor (in each demographic group) visits the website each month.
Average pages per month ²⁴	Average number of pages viewed each month by each visitor (in each demographic group) to the website.
Average minutes per visit	Average number of minutes each visitor (in each demographic group) spends on the website each time he or she visits.
Targeted index by age ²⁵	The percent of visitors to the website that are children or teens divided by the percent of child or teen visitors to the internet in total. A targeted index greater than 100 indicates that children or teens are more likely to visit the website compared to other websites.

The 18 restaurants sponsored 32 different websites with enough youth visitors (2-17 years) to obtain 2012 exposure data from comScore (see **Ranking Table 8**). Additionally, two Papa John's websites were included in this analysis due to very high visits by youth to the restaurant's main website, for a total of 34 websites. One new website was introduced since our 2009 analysis (McDonald's PlayatMcD.com), while 14 sites were discontinued or no longer had enough unique visitors to be measured by comScore, including three previously popular children's sites: WendysKids.com (Wendy's), ClubBK.com (Burger King), and DeeQs.com (Dairy Queen).

Table 25 describes the 20 websites with the most youth visitors in 2012. The most common features found on these sites included menus, nutrition information, promotions, and store locators. Online ordering was also featured on many of the most popular sites for youth, including PizzaHut.com, Dominos.com, PapaJohns.com, and Subway.com. TacoBell.com and JackInTheBox.com further engaged youth by prominently

displaying social media features, including the restaurants' Facebook feeds and YouTube videos. HappyMeal.com was the only site on this list that contained content specifically targeting children, including games, videos, and toy promotions.

Of the 34 sites with data in 2012, two pizza websites (PizzaHut.com and Dominos.com) and two McDonald's sites (McDonalds.com and HappyMeal.com) had the most youth visitors. PapaJohns.com, Subway.com, and Starbucks.com followed, each with over 100,000 unique youth visitors per month. Engagement with PapaJohns.com was higher than that of any other fast food website in 2012: young visitors to the site spent on average six minutes per visit and visited eleven pages per month. Two other pizza websites, PizzaHut.com and Dominos.com, also had high youth engagement: young people visited five pages per month on average and spent three to five minutes per visit to these sites.

Table 25. Twenty fast food restaurant websites with the most youth visitors

Website	Average monthly unique youth visitors in 2012 (000)	Change from 2009	Content of website
PizzaHut.com	351.8	-20%	Menu, nutrition, promotions, online ordering, store locator
McDonalds.com	306.9	19%	Menu, nutrition, promotions
Dominos.com	293.6	-32%	Menu, nutrition, coupons, online ordering, store locator
HappyMeal.com	160.6	-35%	Child-targeted games, videos, and toy promotions
PapaJohns.com*	147.6		Menu, nutrition, promotions, online ordering, store locator
Subway.com	121.4	50%	Menu, nutrition, promotions, online ordering, store locator
Starbucks.com	110.1	25%	Menu, nutrition, promotions, online store, store locator
McState.com	89.1	42%	Store locator
TacoBell.com	79.7	19%	Menu, store locator, nutrition, social media, restaurant news
BurgerKing.com	77.0	-8%	Menu, nutrition, promotions, online ordering, store locator
Wendys.com	51.5	-40%	Menu, nutrition, promotions, store locator
KFC.com	49.1	-42%	Menu, nutrition, promotions, store locator, catering
PaneraBread.com*	45.6		Menu, promotions, store locator, nutrition, catering
Chick-fil-A.com*	40.5		Menu, nutrition, store locator, events, child and family activities
Arbys.com*	19.9		Menu, nutrition, promotions, restaurant news, store locator
DairyQueen.com	32.1	-34%	Menu, nutrition, promotions, store locator
DunkinDonuts.com	31.0	-46%	Menu, nutrition, promotions, store locator, online store,
LittleCaesars.com*	30.7		Menu, nutrition, promotions, store locator
JackInTheBox.com*	29.7		Menu, nutrition, promotions, store locator, social media
SonicDriveIn.com	23.8	-70%	Menu, nutrition, promotions, store locator

*These sites were not included in our 2009 analysis

Source: comScore Media Metrix Key Measures Report (January-December 2012)

Child visitors to websites

In 2012, HappyMeal.com replaced PizzaHut.com as the fast food website that attracted the most child visitors (see **Ranking Table 8**). The site averaged 118,000 unique 2- to 11-year-olds per month in 2012, three times as many as PizzaHut.com. As in 2009, Dominos.com ranked third in popularity among children. However, the average number of child visitors to the top sites declined substantially from 2009 to 2012. Child visitors to HappyMeal.com went down 37%, while child visitors to PizzaHut.com and Dominos.com decreased more than 75%. Two other McDonald's sites that had ranked in the top five for child visitors in 2009 had reductions in the number of children visiting of almost 90%: McDonalds.com and McWorld.com. Unique child visitors to all McDonald's websites remained high (159,000 per month), but 39% fewer 2- to 11-year-olds visited these sites in 2012 than in 2009.

PapaJohns.com was not included in our 2009 analysis, but this site averaged 14,000 unique child visitors per month in

2012, ranking fourth in child visitors to restaurant websites. SubwayKids.com was the only site analyzed in 2009 with an increase in visits by 2- to 11-year-olds. The site launched at the end of 2008 and ranked fifth overall in child exposure in 2012. ClubBK.com had been seventh in child exposure for 2009, but no longer existed by the end of 2012. Burger King introduced a new child-targeted site, BKCrown.com (ClubBK.com currently redirects to this site), but the site did not have enough unique visitors to measure exposure in 2012.

Three of the 34 websites in our analysis appeared to target children under 12. These sites offered advergames (i.e., branded games with advertising messages embedded within the game) tied to kids' meals and were more likely to be visited by children (see **Table 26**). Children were 3 or more times as likely to visit HappyMeal.com and McWorld.com, which is consistent with 2009 results. Children were also more than twice as likely to visit SubwayKids.com compared with other websites.

Table 26. Websites with relatively high compositions of child visitors

Rank	Restaurant	Website	Average monthly unique child visitors in 2012 (000)	Targeted index
1	McDonald's	McWorld.com	10.1	333
2	McDonald's	HappyMeal.com	118.7	308
3	Subway	SubwayKids.com	13.3	231

Source: comScore Media Metrix Key Measures Report (January-December 2012)



HappyMeal.com "Be a Yummivore" game



'Superopolis' from McDonald's child- and teen-targeted McWorld.com



SubwayKids.com promotion for Disney's "Gravity Falls" TV show



PlayatMcD.com promoted McDonald's "Monopoly" sweepstakes

Teen visitors to websites

In contrast to declining website visits by 2- to 11-year-olds, teen visitors (12-17 years) increased for the majority of fast food websites (see **Ranking Table 8**). More than one-half of the sites examined in both 2009 and 2012 showed an increase in unique teen visitors, including eight of the ten sites with the highest teen exposure in 2012. Consistent with 2009, PizzaHut.com, McDonalds.com, and Dominos.com attracted the most unique teen visitors. These sites gained 27%, 75%, and 5% more monthly unique teen visitors, respectively. In addition, teen visitors to Subway.com more than doubled from 2009 to 2012. PapaJohns.com averaged 134,000 unique teen visitors per month in 2012, ranking fourth for teens as well as children. Teen visitors to Starbucks.com increased over 90%, and visitors to McDonald's Latino-targeted site, MeEncanta.com, almost quadrupled. A new McDonald's site hosted the restaurant's Monopoly game, PlayAtMcD.com, and was popular with teens. It launched at the end of the third quarter and attracted over 74,000 unique teen visitors per month in the fourth quarter alone. As a result, the site ranked

sixth in teen exposure for the fourth quarter of 2012, although it did not make the top-20 sites for the full year. McDonald's averaged more than 462,000 monthly unique teen visitors to all of its websites in 2012, an increase of 48% from 2009.

Teen visitors to some sites did decline, but most reductions were small. For instance, average monthly teen visitors to Wendys.com decreased by 3%, and the site remained in the top 12 for teen exposure. Teen visitors to KFC.com and DunkinDonuts.com both declined 10%. SonicDriveIn.com and HappyMeal.com had more substantial declines of -43% and -28%, respectively.

Teens made up a relatively high proportion of visitors to eight of the thirty-four websites in our analysis, including six McDonald's sites, KFCScholars.org (KFC's philanthropy site), and SubwayKids.com (see **Table 27**). Teens were almost 1.8 times more likely to visit McWorld.com and 1.2 to 1.4 times more likely to visit MeEncanta.com, RMHC.org, KFCScholars.org, and McState.com (McDonald's restaurant locator site).

Table 27. Websites with relatively high compositions of teen visitors

Rank	Restaurant	Website	Average monthly unique teen visitors in 2012 (000)	Targeted index
1	McDonald's	McWorld.com	5.3	176
2	McDonald's	MeEncanta.com	13.3	138
3	McDonald's	RMHC.org	9.7	134
4	KFC	KFCScholars.org	1.9	129
5	McDonald's	McState.com	86.9	118
6	Subway	SubwayKids.com	6.4	111
7	McDonald's	HappyMeal.com	41.9	108
8	McDonald's	McDonalds.com	104.9	102

Source: comScore Media Metrix Key Measures Report (January-December 2012)

Display advertising on third-party websites

Display advertising exposure

Definitions

Third-party websites	Websites from other companies where fast food restaurants place their advertising.
Display advertising	Comparable to “banner advertising” (reported in the 2009 analysis), these ads appear on third-party websites as rich media (SWF files) and traditional image-based ads (JPEG and GIF files). They are usually placed in a sidebar or “banner” at the top of a web page. On Facebook, these ads appear on the side of the screen, next to the newsfeed. Text, video, and html-based ads are not included.
Kids' websites	Third-party websites where 20% or more of total unique visitors are 2-11 years old.
Youth websites	Third-party websites defined by comScore as “entertainment websites for youth” and websites with a percent of youth visitors (2-17 years) that exceeds the percent of youth visitors on the total internet in 2012 (19%).
Unique viewers per month ²⁶	Average number of unique viewers exposed to a restaurant's display advertisements each month.
Ads viewed per viewer per month ²⁷	Average number of display advertisements viewed per unique viewer each month.
Proportion of ads viewed on kids' websites, youth websites, and Facebook ²⁸	Percent of a restaurant's total display advertisements that appear on each of these types of websites.
Average number of ad views on kids' websites, youth websites, and Facebook per month ²⁹	Total number of display advertisements viewed on each of these types of websites on average every month in 2012.

Ranking Table 9 presents exposure to display ads placed by the 18 restaurants in this analysis on kids' and youth websites, as well as on Facebook. On average, 246 million fast food ads appeared on youth websites every month in 2012, 6% of all fast food display ads placed on third-party websites; while 88 million of these ads appeared on kids' websites (2% of fast food display ads). From 2009 to 2012, the number of display ads on youth websites declined by 55% for the 12 restaurants analyzed in 2009. However, restaurants placed almost 6 billion ads on Facebook in 2012, or 19% of all display advertising, making Facebook the primary website for fast food advertising placements in 2012.

Examination of display advertising for individual restaurants demonstrates different internet marketing strategies. Domino's remained the top fast food advertiser on youth websites, although its advertising declined from 181 million ads viewed per month in 2009 to 84 million ads in 2012 (down 54%). As in 2009, McDonald's and Pizza Hut ranked second and third in fast food advertising on youth websites, but average monthly ads viewed also declined substantially for these restaurants (-37% and -80%, respectively). Wendy's reduced advertising on youth websites by 94%, but 54% of its 2012 display ads were placed on Facebook. Similarly, Dunkin' Donuts appeared to shift its advertising to Facebook, accounting for 68% of ads viewed, while its advertising on youth websites declined 73%.



Special offers by pizza restaurants dominated online advertising

Despite overall declines, three of the restaurants in our 2009 analysis substantially increased their advertising on youth websites, moving up in the ranking table. KFC ranked fourth in display advertising on youth websites in 2012, with 18 million ads viewed per month on average (138% increase over 2009); Subway ranked fifth (17 million ads viewed, up 450%); and Starbucks ranked seventh (9.5 million ads viewed, up 330%). Four restaurants that were not examined in 2009 rounded out the top-ten list: Panera Bread (#6), Arby's (#8), CiCi's (#9), and Little Caesars (#10).

Display advertising to children

To identify advertising targeted to children under 12 online, we first analyzed display advertising that promoted child-targeted websites and/or kids' meals. In 2009, three restaurants advertised four different child-targeted websites online, totaling over 52 million ads viewed per month (see **Ranking Table 9**). With the subsequent discontinuation of three of these sites, HappyMeal.com was the only child-targeted fast food website to advertise on third-party websites in 2012. However, average monthly display ads promoting HappyMeal.com on all third-party websites increased by 63%: from 20.7 million in 2009 to 33.7 million in 2012. Three-quarters of Happy Meal ads were viewed on youth websites in 2012, as compared to 57% in 2009. Additionally, Subway and Wendy's advertised their kids' meals on third-party websites in 2012 (5.4 and 1.8 million monthly ads viewed, respectively), but not in 2009. Two-thirds of Subway kids' meal advertisements were placed on kids' websites, while one-half of ads for Wendy's kids' meals were placed on Facebook.



Display ads for HappyMeal.com ranged from illustrations of the food to celebrity endorsements and movie promotions

We also analyzed all display advertising that appeared on websites targeted to children (see **Table 28**). Although just 2% of fast food display ads appeared on kids' websites in 2012, they averaged 87.5 million ads viewed per month or 1.1 billion ads per year. More than 80% of these ads (approximately 875 million display ads) appeared on just four sites: Nick.com, Roblox.com (a Lego's site), Disney Online websites, and CartoonNetwork.com. Only four restaurants *did not* advertise on kids' websites (Jack in the Box, Dunkin' Donuts, Taco Bell, and Chick-fil-A).



Wendy's promoted its \$1.99 Kids' Meal offer online

Table 28. Top kids' websites with fast food display ads

Third-party kids' website	2012 yearly ad views (million)	Proportion of total unique visitors	
		Ages 2-17	Ages 2-11
Nick.com	390.4	70%	40%
Roblox.com	211.1	73%	49%
Disney Online websites	172.9	31%	20%
CartoonNetwork.com	101.3	62%	47%
Coolmath-Games.com	61.5	54%	36%
MiniClip.com	51.7	50%	29%
NeoPets.com	51.0	50%	26%
GirlsGoGames.com	31.4	54%	35%

Source: comScore AdMetrix Advertiser Report (January-December 2012)

Table 29 presents the average monthly display ad views on kids' websites for individual products with more than 50,000 average monthly ad views. Ads for McDonald's Happy Meal were viewed on kids' websites more often than any other menu

Table 29. Display ads viewed on kids' websites by menu item

Restaurant	Menu item	Average monthly ad views on kids' websites (000)	Proportion of ads viewed on kids' websites
McDonald's	Happy Meal	25,268.3	75%
Subway	Kids' meal	3,649.4	67%
McDonald's	Filet-o-fish	2,087.5	2%
McDonald's	McCafe	700.7	2%
McDonald's	Chicken McBites	329.4	4%
Wendy's	Frosty	266.2	1%
Wendy's	Hamburgers	221.2	1%
McDonald's	Chicken McNuggets	176.2	1%
Wendy's	Value Menu	150.3	2%
McDonald's	Dollar Menu	128.9	1%
Wendy's	Kids' Meal	112.6	6%
Little Caesars	Pizza Kit	67.7	1%

Source: comScore AdMetrix Advertiser Report (January-December 2012)

item or product: more than 25 million times per month in 2012. On average, 6 million unique viewers saw 5.4 ads for Happy Meals per month. Ads for Subway kids' meals were a distant second at 3.6 million monthly ad views. The majority of ads for both restaurants' kids' meals appeared on kids' websites.

Although kids' websites represented a small proportion of display ads viewed for most restaurants in 2012, there were a few notable ad placements. The top fast food items advertised on kids' websites included five McDonald's menu items that were not approved for child-directed advertising by the company's CFBAI pledge, as well as four non-kids' meal menu items from Wendy's. Of note, McDonald's Filet-o-fish sandwich ranked third in ads viewed on kids' websites, averaging more than 2 million per month, and its McCafe drinks ranked fourth.

Display advertising targeted to teens

More than 25 million fast food display advertisements appeared on sixteen other youth websites in 2012 (see **Table 30**). Approximately one-third or more of visitors to some of these sites were youth under 18, including DeviantART.com, AddictingGames.com, WeeWorld.com, and IMVU.com. Although Facebook did not qualify as a youth website according to its audience composition, it was very popular with young visitors. The site averaged over 18 million monthly visitors ages 2 to 17, 42% of all youth on the internet, in 2012.³⁰

On average, 6% of fast food restaurant display advertisements appeared on youth websites every month in 2012, down from

Table 30. Ad views on Facebook and top third-party youth websites

Third-party website	2012 yearly ad views (million)	Proportion of total unique visitors	
		Ages 2-17	Ages 2-11
Facebook.com	5,974.6	12%	3%
DeviantART.com	280.3	40%	5%
AddictingGames.com	165.6	31%	12%
MeetMe.com	153.2	15%	0%
MyYearBook.com	120.8	23%	0%
MangaHere.com	99.2	19%	2%
GaiaOnline.com	79.7	27%	2%
WeeWorld.com	74.8	35%	10%
IMVU.com	64.5	41%	5%
Playlist.com	55.4	19%	1%
Video2MP3.net	39.6	19%	0%
FanFiction.net	38.2	25%	1%
Damn101.com	37.1	21%	0%
Flvto.com	27.9	20%	1%
FunnyJunk.com	26.8	19%	1%
AnimeFreak.tv	26.1	25%	2%
ShockWave.com	25.7	26%	12%

Source: comScore AdMetrix Advertiser Report (January-December 2012)

Table 31. Menu items with the most display advertising on Facebook.com and youth websites

Restaurant	Menu item/product	Monthly average ad views (000)		Proportion of total monthly ad views	
		Facebook	Youth websites*	Facebook	Youth websites*
Wendy's	Frosty	297,196.7	85.4	54%	0%
Starbucks	Coffee	132,012.1	2,319.6	20%	4%
McDonald's	Filet-o-fish	73,222.3	3,400.1	6%	3%
Wendy's	Hamburgers	55,221.0	639.0	23%	3%
Arby's	Burgers	41,350.0	0	18%	0%
Taco Bell	Feed the Beat	37,668.0	0	87%	0%
McDonald's	McCafe	29,755.0	3,214.5	7%	9%
Wendy's	Value Menu	28,185.0	106.7	30%	1%
McDonald's	MeEncanta.com	25,144.0	97.2	32%	2%
Little Caesars	Pizza Kit	21,152.0	215.3	29%	4%
KFC	Sauceless Hot Wings	16,492.3	0	75%	0%
Taco Bell	Fourth Meal	12,716.0	0	81%	0%
Jack in the Box	Burgers	12,002.6	0	17%	0%
Wendy's	Kids' Meal	11,275.0	54.4	51%	3%
Taco Bell	Big Bell Box Meal	10,063.0	0	73%	0%
McDonald's	Chicken McNuggets	8,668.0	442.9	4%	3%
McDonald's	Chicken McBites	7,535.0	759.6	8%	9%
McDonald's	Dollar Menu	5,680.0	1,123.9	4%	9%
McDonald's	Happy Meal	5,197.0	58.7	1%	0%
McDonald's	Monopoly	2,096.0	96.6	3%	2%
McDonald's	McRib	1,389.4	298.0	4%	10%
Starbucks	Frappuccino	1,091.6	205.9	2%	6%

*Excludes advertising on kids' websites

Source: comScore AdMetrix Advertiser Report (January-December 2012)

23% in 2009. However, a few restaurants placed a higher-than-average proportion of ads on youth websites, including McDonald's (14% of display ads viewed), Domino's (10%), Burger King (9%), and Dairy Queen (9%), indicating that these restaurants likely targeted their internet advertising to a youth audience (see **Ranking Table 9**). In addition, six restaurants placed more than one-quarter of their display ads on Facebook: CiCi's, Little Caesars, Sonic, Wendy's, Dunkin' Donuts, and Taco Bell.

Table 31 shows display ads viewed for individual restaurant products with more than 1 million average monthly ad views on Facebook. This list excludes restaurants that only placed general advertisements not highlighting a specific product. Wendy's Frosty was the most advertised product on Facebook, followed by Starbucks coffee, McDonald's Filet-o-fish, and Wendy's hamburgers. Ads for McDonald's Filet-o-fish appeared most often on youth websites (excluding kids' sites), followed by McDonald's McCafe, Starbucks coffee, and McDonald's Dollar Menu.



Frosty Waffle Cone ad appearing on Facebook



McDonald's McCafe promotion



Starbucks ad appearing on Facebook

Mobile advertising

Mobile advertising exposure	Definitions
Mobile website	Any website accessed on an internet-equipped mobile device, such as a smartphone or iPad.
Unique visitors per month	Average number of different individuals visiting a mobile website each month. These numbers include data from mobile applications and mobile websites accessed through the Android and iOS platforms.
Monthly ad instance	The number of times an advertisement appears on a mobile website during the course of one month.
Mobile application	A software application designed to run on mobile devices, including smartphones and tablets.

As marketing in mobile media is relatively new, there are fewer data available to measure exposure to mobile advertising and no reliable sources of exposure by youth under 18. However, we examined the incidence of marketing by fast food restaurants via mobile media in three ways: unique visitors to fast food mobile websites, fast food advertising on other mobile websites, and iPhone applications developed by fast food restaurants.

Mobile websites

We collected data from comScore to identify the top fast food websites visited by mobile device users (see **Table 32**). Data were available only for mobile users over 18 years old. We compared these results to unique visitors (ages 2+) to the restaurants' traditional websites.

Table 32. Average monthly unique visitors to mobile and traditional fast food websites

Website	Mobile websites			Traditional websites
	Average monthly unique visitors (ages 18+) (000)	Minutes per visitor per month	# of months with data	Average monthly unique visitors (ages 2+) (000)
Starbucks.com	3,413.8	3.9	12	2,282.2
PizzaHut.com	2,681.9	8.1	12	5,195.0
PapaJohns.com	2,267.9	10.2	12	3,519.7
Dominos.com	1,682.6	6.9	12	4,475.8
Subway.com	1,393.7	4.0	12	2,000.3
McDonalds.com	1,003.7	2.4	11	3,384.3
PaneraBread.com	764.2	3.1	12	1,374.4
TacoBell.com	679.9	4.2	12	996.8
DunkinDonuts.com	600.1	3.2	12	549.4
McState.com	579.0	3.1	12	741.9
BurgerKing.com	548.4	3.0	12	857.8
Wendys.com	482.7	3.5	12	716.2
KFC.com	449.9	2.4	12	717.5
Chick-fil-A.com	433.6	3.1	12	657.4
Arbys.com	405.8	3.0	12	542.1
SonicDriveIn.com	397.0	3.0	12	367.3
DairyQueen.com	392.4	3.1	12	429.5
LittleCaesars.com	310.3	2.4	12	396.8
PapaJohns-Specials.com	278.8	1.1	12	44.9
JackintheBox.com	183.3	2.9	11	383.6
CiCisPizza.com	140.6	2.4	9	186.4
Popeyes.com	114.7	2.6	7	246.0
Hardees.com	51.4	1.3	4	146.5
SubwayKids.com	20.1	0.2	1	58.4
HappyMeal.com	13.0	0.5	1	390.8
LimeadesforLearning.com	11.9	0.3	1	39.6

Highlighting indicates that there were more visitors to the mobile website than the traditional website

Source: comScore Mobile Metrix report (March 2012-February 2013), comScore Key Measures report (January-December 2012)

In contrast to traditional restaurant websites where McDonald's and pizza restaurants attracted the most unique visitors, Starbucks had the most unique visitors of any mobile site: over 3 million visitors per month. Nevertheless, pizza restaurants made up three of the four most popular mobile sites, and McDonald's ranked sixth. There were three child-targeted mobile websites on the list (HappyMeal.com, SubwayKids.com, and Sonic's LimeadesforLearning.com), but these sites only had enough data to measure visitors during one month of the period analyzed (June 2012).

Although the numbers cannot be compared directly as unique visitors under age 18 were not tracked for mobile websites, most of the restaurants in our analysis had more unique visitors to their traditional websites than their mobile sites. However, there were a few exceptions: Starbucks.com, DunkinDonuts.com, PapaJohns-Specials.com, and SonicDriveIn.com each had more unique mobile visitors. On average, visitors to most of the mobile websites spent less than 3 minutes per visit, but visitors to the three top pizza mobile sites spent 7 to 10 minutes per visit on average. By comparison, visitors to restaurants' traditional websites spent 6 minutes or less per visit. Thus the mobile sites appeared to be more engaging for visitors.

Mobile display advertising

We also used comScore data to collect information about display ads viewed on mobile devices. The numbers were collected somewhat differently, so direct comparisons are not possible. However, two of the top-three advertisers on traditional websites were also among the top-three mobile advertisers: McDonald's and Pizza Hut. In contrast, Domino's placed the most traditional display ads, but advertised the least on mobile websites. Although Burger King reduced its display advertising on traditional websites from 2009 to 2012, it was the top advertiser on mobile devices during the time period examined. However, as a whole, very few display ads

Table 33. Mobile display ad instance by restaurant

Restaurant	Monthly average ad instance
Burger King	21,446
McDonald's	14,865
Pizza Hut	5,889
Subway	5,719
Wendy's	4,343
Starbucks	3,817
Dunkin' Donuts	2,039
Taco Bell	1,468
Panera Bread	688
Sonic	542
Arby's	450
KFC	233
Domino's	37

Source: comScore Mobile AdMetrix report (March 2012-February 2013)

Table 34. Mobile display ad instance by menu item or product

Restaurant	Product promoted	Monthly average ad instance
McDonald's	Filet-o-fish	10,003
Wendy's	Hamburgers	3,841
Starbucks	Coffee	1,311
McDonald's	Dollar Menu	722
Wendy's	Value Menu	495
Arby's	Burgers	450
McDonald's	365Black	367
McDonald's	Chicken McNuggets	228
McDonald's	McCafe	210
McDonald's	Happy Meal	197
McDonald's	Monopoly	155
McDonald's	Chicken McBites	87
McDonald's	McRib	78
Domino's	Pizza	32
Taco Bell	Quad Steak Burrito	25
Wendy's	Frosty	7
McDonald's	MyInspirAsian	2
Pizza Hut	WingStreet	1

Source: comScore Mobile AdMetrix report (March 2012-February 2013)

were viewed on mobile websites compared with traditional third-party websites.

Table 34 shows the top menu items and products advertised on mobile devices. This list excludes restaurants that only placed general advertisements, but did not highlight a specific product. McDonald's Filet-o-fish was the most advertised product on mobile devices. Two of the remaining top-four products advertised on Facebook also topped the list of products advertised on mobile devices: Wendy's hamburgers and Starbucks coffee. Additionally, McDonald's and Wendy's dollar/value menus advertised relatively more often on mobile than on traditional websites.

Smartphone applications

As of August 15, 2013, ten of the eighteen fast food restaurants in our analysis plus Papa John's offered smartphone applications available for download by iPhone users. Four fast food restaurants launched new applications since 2009 (McDonald's, Wendy's, Domino's, and Chick-fil-A), while KFC and Dairy Queen discontinued their applications. In addition to their mobile websites, Papa John's and Pizza Hut also had popular mobile applications with almost 700,000 average monthly unique users each.

Two mobile applications featured child-targeted advergames: McDonald's "McPlay" and Wendy's "Pet Play Games," a tie-in with "Animal Planet." On "McPlay," children could try to get the Happy Ball into the Happy Meal Box while gathering food groups, including dairy, fruit, and protein along the way. On "Pet Play Games," children could select one of six pet games

Table 35. Mobile smartphone applications

Restaurant	Application name	Restaurant locator	Games	Ordering	Special offers	Nutrition info	Social media features*
McDonald's	McDonald's	X			Promotions for new products	X	
	McPlay		X				
Subway	Subway Express	X		X			
Burger King	Burger King Rewards	X			Coupons		
Pizza Hut	Pizza Hut	X		X	Coupons/deals		
Taco Bell	Taco Bell	X				X	FB, TW, YT
Wendy's	My Wendy's	X		X		X	
	Pet Play Games		X				
Domino's	Domino's Pizza USA	X		X	Coupons		
Dunkin' Donuts	Dunkin'	X			Coupons	X	FB, TW
Starbucks	Starbucks	X				X	FB
Papa John's	Papa John's Pizza	X		X	Coupons/deals		
Chick-fil-A	CFA Ordering	X		X			

*FB = Facebook, TW = Twitter, YT = YouTube

Source: Analysis of mobile applications (July 2013)

and use their fingers to guide their pet to achieve the goal of the game.



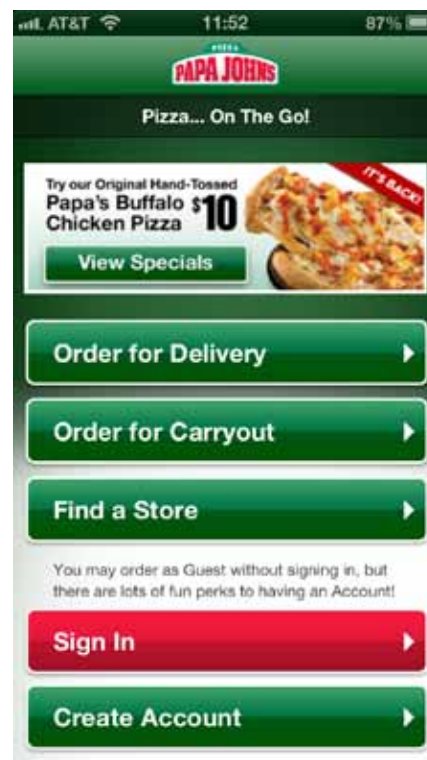
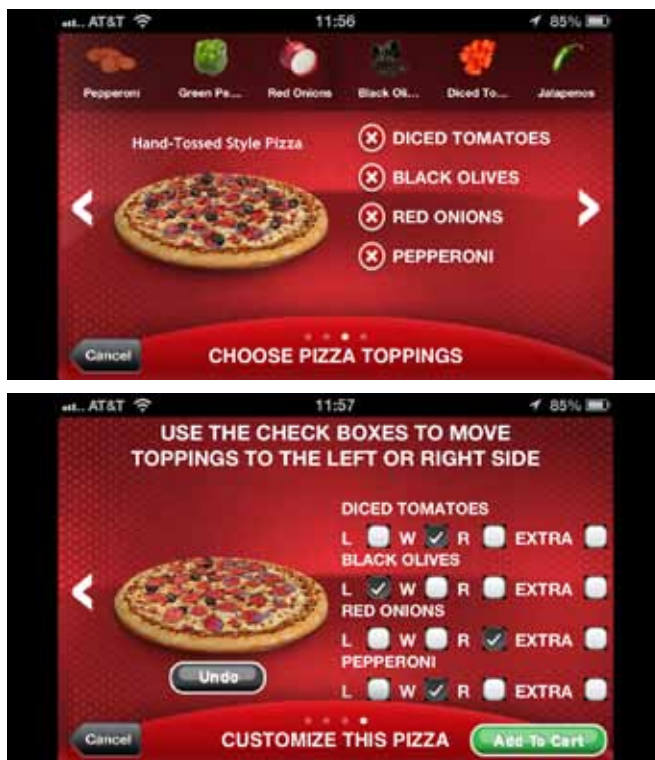
McDonald's child-targeted advergame mobile application

As in 2009, restaurant locators were a popular feature of mobile applications. All restaurants allowed users to click a button to submit the current location of the phone and receive a list of nearby restaurants. Ordering and special offers were more widely available on smartphone applications in 2013, compared to 2009. Some ordering applications were very engaging. For example, Pizza Hut, Domino's, and Papa John's application users could fully customize their pizzas by adding toppings and selecting a crust to create a virtual pizza on the phone screen. These apps also offered a choice of "delivery" or "carryout." Pizza Hut users could add sauce or cheese to a virtual bowl if pasta or wings were desired. "Special offer" functions provided coupons or deals that could be presented to cashiers upon ordering. McDonald's

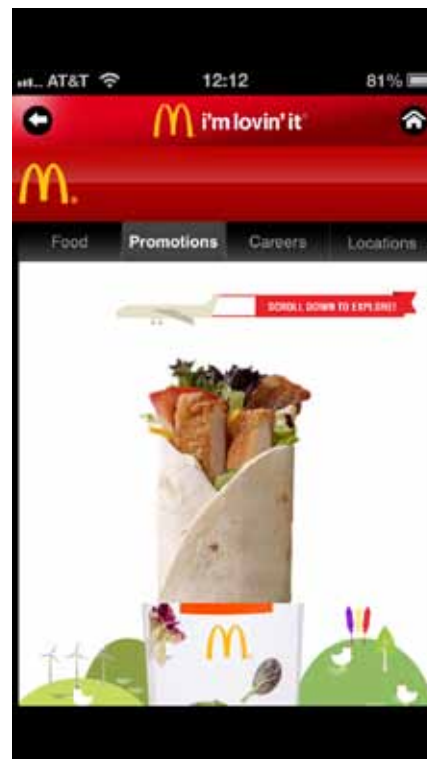


Wendy's child-targeted advergame mobile application

"Promotions" featured deals on new individual menu items. In addition, five restaurants allowed users to look up nutrition information on their mobile phones (up from one in 2009).



Pizza Hut's smartphone application allowed users to customize orders; Papa John's offered ordering options



Burger King's application provided coupons; McDonald's promoted its new Premium McWrap



McDonald's and Starbucks applications provided detailed nutrition information

McDonald's smartphone application provided detailed nutrition information, even including iron and vitamin A content of menu items. The application also allowed users to customize menu item options and recalculate nutritional values. The Starbucks application provided detailed profiles

of coffee products and nutrition information for all menu items. The Taco Bell and Dunkin' Donuts applications facilitated social interaction. Users could create personal profiles to share feelings or feedback by registering on the application or signing into their social media account on Facebook or Twitter.

Social media marketing

Social media marketing Definitions

Facebook	Restaurants maintain Facebook pages where they present information about their restaurants and products, share links to other sites, upload photos and videos, and post messages. A typical restaurant Facebook page contains multiple tabs with a variety of content (e.g. notes, messages, polls, photos, videos, applications).
Facebook likes	Facebook users can "like" a restaurant and incorporate it into their network of friends (formerly called "fans"). Thumbnail photos of these individuals appear on the restaurant's Facebook page in the "people who like this" section. When the restaurant modifies its page, a notification may appear on the "newsfeed" (i.e., Facebook home page) of individuals who like the restaurant. The restaurant also shows up on these individuals' Facebook pages as something that they "like."
Facebook post	A message that the restaurant posts to its "timeline." These messages can be straightforward text or incorporate images, videos, links to other pages within Facebook, links to other websites, and polls. Posts also may appear on the "newsfeed" of individuals who like the restaurant for their friends to see. Individuals may also share restaurant posts, and they will appear on their friends' newsfeeds.
Twitter	Restaurants maintain Twitter accounts where they publish 140-character messages called "tweets" that are posted on their own profile pages. Individuals can "follow" restaurants. "Followers" receive copies of restaurants' tweets on their own Twitter home pages. Followers may also receive tweets on their mobile devices, through text messages, third-party Twitter applications, or Twitter's own mobile platform.
YouTube	YouTube is a website that enables restaurants to upload and share videos for the public to view. Restaurants maintain their own YouTube channels with playlists of videos available for viewing. Any internet user can watch the videos, but users can also "subscribe" to a channel and receive alerts whenever the restaurant posts a new video. YouTube reports the number of videos that have been "uploaded" on restaurants' YouTube channels and the number of views of uploaded videos.

For the 18 restaurants in our detailed analysis, we examine marketing activity on the three most popular social media sites: Facebook, Twitter, and YouTube. We also evaluate changes in popularity of these sites from July 2010 to July 2013 (see **Ranking Table 10**). In addition, we analyze the amount and content of activity on restaurants' Facebook and Twitter accounts. We also briefly describe marketing activity on other popular social media sites.

Facebook

In 2010, 11 of the 12 restaurants in our analysis maintained a Facebook page (only Burger King did not). By July 2013, all 18 restaurants in this analysis had one. **Ranking Table 10** compares restaurants' Facebook likes (previously known as fans) in July of 2010 and 2013. Starbucks retained its number one spot, with approximately 35 million likes. McDonald's replaced Subway as the Facebook page that ranked second in popularity with more than 29 million likes, while Subway had almost 24 million. Taco Bell, Pizza Hut, and Dunkin' Donuts ranked fourth, fifth, and sixth with approximately 10 million likes each.

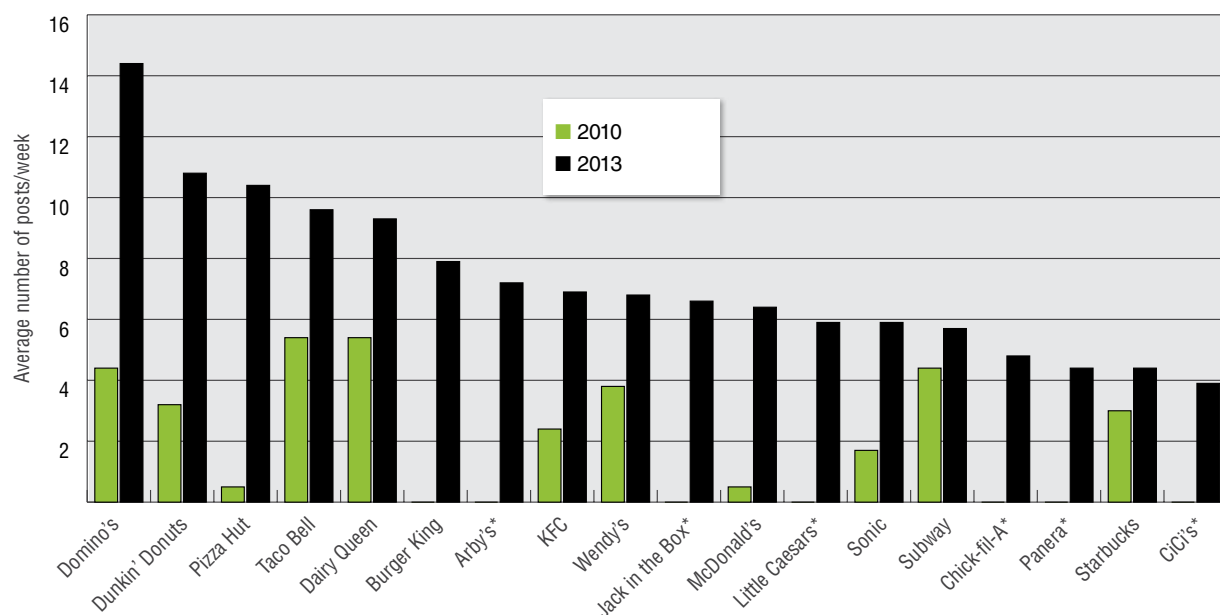
The popularity of these pages grew exponentially from 2010 to 2013. Of the restaurants examined in 2010, Starbucks had the lowest growth rate, increasing by just 208%, while Domino's had the biggest increase in popularity, with almost 16 times as many likes in 2013 as it had fans in 2010. Other notable increases include McDonald's (11-fold increase), Sonic (9-fold increase), and Subway and Pizza Hut (more than 7-fold increases). Burger King's relatively new Facebook page grew to 6.3 million likes in 2013.

To measure activity on Facebook, we collected and analyzed the content of all restaurant posts over a three-month period (December 1, 2012 through February 28, 2013). A total of 1,689 posts were coded. Inter-rater reliability was good. Cohen's Kappa coefficients for each variable ranged from good to almost perfect agreement (0.52 to 1.0).³¹ As in 2010, restaurants differed widely in level of activity on Facebook. Although Subway, Dairy Queen, and Taco Bell had been most active in 2010, Domino's, Dunkin' Donuts, and Pizza Hut led in 2013 (see **Figure 13**).

Across the board, the average number of weekly posts increased from 2010 to 2013, more than doubling in many cases. In 2010, restaurants averaged three posts per week, with no restaurant posting more than six times per week. During the 2012/2013 time period measured, restaurants posted seven times per week on average, and no restaurant posted less than approximately four times weekly. In 2012/2013, Domino's posted the most, on average 14 times per week, compared with about four messages per week in 2010. Dunkin' Donuts and Pizza Hut averaged 10 to 11 posts each, up from three or fewer posts in 2010.

Engagement devices in Facebook posts. As in 2010, Facebook pages continued to encourage fans to engage with the restaurants in many ways. Of note, Facebook transitioned to a "Timeline" format in 2011 and 2012. This format provides a more dynamic and visually appealing page that is well-suited for advertising. In addition to the small profile picture that had served as the focal point of a restaurant's page, a cover shot now fills the top portion of the page. This picture

Figure 13. Average number of posts per week on restaurants' Facebook pages



*Restaurants not included in the 2010 analysis.

Source: Analysis of Facebook posts (2010; December 2012-February 2013)



Facebook cover shots are well-suited for advertising messages

often changed, and restaurants used it to promote specific limited-time menu items and special offers, such as the Mint Chocolate Chip iced coffee from Dunkin' Donuts or the Hot Mess burger from Jack in the Box.

The most common tactics used to engage Facebook users who like a restaurant included showing a picture (74% of all posts), asking a question (39%), providing a link to an outside website (27%), and linking to the restaurant's own website (17%). Some of these engagement devices were very creative. For example, Chick-fil-A linked to a Facebook event, the "First 100 and Grand Opening" in 26% of its posts. This event rewarded the first 100 guests to the grand opening of a new store with one free Chick-fil-A meal per week for a year. Subway referred viewers to a contest in 23% of posts. One contest, the "Footlong Frenzy," promoted game codes available on 30-ounce promotional cups and bags of Doritos purchased at the restaurant. Codes could be entered online for a chance to win cash, cars, trips, and free Footlongs for life.

McDonald's and Taco Bell asked viewers to watch a video in 22% and 15% of posts, respectively. For example, one McDonald's video featured a look at its apple suppliers on a family farm. A Taco Bell video, "Grandpa Goes Wild - 2013 Taco Bell Game Day Commercial Teaser" featured "an 87-year-old with an appetite for adventure joyrides through a football field on a souped-up, high-speed mobility scooter." McDonald's was most likely to direct users to its company websites, in 67% of its Facebook posts, including links to pages featuring new or limited-time menu items (e.g. McRib,



Upholding family tradition, one hand-picked apple at a time.



Examples of engagement features in restaurant Facebook posts

Shamrock Shake) and others exploring the "real stories" of its suppliers of apples, fish, beef, lettuce, and potatoes.

Menu items featured on Facebook posts

In addition to advertising non-food promotions, restaurants frequently mentioned specific menu items in their Facebook timelines. **Table 36** shows the top-two food items in posts by each restaurant. While most restaurants advertised a wide range of items, some focused on certain products. For example, one-quarter of Burger King posts featured its Whopper sandwich and 19% of Taco Bell posts promoted its Doritos Locos Taco. Nearly 25% of McDonald's posts featured either Fish McBites or Chicken McNuggets.

Table 36. Menu items featured most often in Facebook posts

Restaurant	Menu items featured*	# posts
Burger King	Whopper	26
Taco Bell	Doritos Locos Taco	23
Wendy's	Mozzarella Chicken Supreme	17
Dunkin' Donuts	Hot Chocolate	13
Arby's	Chocolate Molten Lava Cake	12
Dairy Queen	Shakes/Blizzards	12
McDonald's	Fish McBites	11
Wendy's	Right Price Right Size Menu	11
Dunkin' Donuts	Coffee/Iced Coffee	11
Sonic	Shakes	11
Pizza Hut	Big Pizza Sliders	10
McDonald's	Chicken McNuggets	9
Pizza Hut	Big Dinner Box	9
Little Caesars	Hot 'n Ready Pizzas	9
Subway	\$5 Footlongs	8
Burger King	BK Coffee	8
Chick-fil-A	Chicken Tortilla Soup	8
KFC	Gameday Bucket	8
Arby's	Curly Fries	8
Dairy Queen	DQ Cakes	8
Starbucks	Blonde Roast Coffees	6
Jack in the Box	Hot Mess Burger	6
Sonic	Cherry Limeade	5

*Includes the top-two items featured in five or more posts from each restaurant

Source: Content analysis of Facebook posts (December 2012-February 2013)

Child-targeted content. Although Facebook's terms of agreement do not allow children under 13 to maintain accounts, younger children often visit the site. In 2012, at least 5.6 million Facebook users were under the age of 13.³² Of note, Facebook posts from Subway and Wendy's appeared to be directly targeted to children. In addition to placing display ads on Facebook, Wendy's also promoted its kids' meals in its Facebook posts. Seven of eighty-eight posts (8%) advertised its limited-time kids' meal



Examples of child-targeted content in Facebook posts

\$1.99 promotion. Although just two Subway posts referenced its kids' meal, the content of these posts appeared to be specifically directed to children. One asked viewers to "like" the post if they were fans of "Phineas and Ferb," a popular show on the Disney Channel.

Twitter

All 18 restaurants in this analysis also maintained Twitter accounts as of July 2013, although CiCi's profile was not available for public access. Starbucks was the first to join Twitter in 2006, while Arby's and Burger King joined most recently in 2010. Some restaurants maintained multiple Twitter accounts (including McDonald's, Starbucks, and Taco Bell), while others maintained a single account. An examination of total Twitter followers by restaurant shows that three restaurants dominated Twitter in 2013 (see **Ranking Table 10**). As in 2010, Starbucks was first in number of followers with over 4 million. McDonald's and Subway followed with 1.5 million and 1.4 million followers, respectively. Taco Bell had over 700,000 followers, while the rest had fewer than 500,000. As seen on Facebook, all restaurants greatly accumulated Twitter followers from 2010 to 2013. Starbucks had the lowest rate of growth (quadrupling in number, from approximately one million in 2010), and Subway had the greatest increase with 65 times more followers in 2013 than in 2010. In addition, McDonald's followers increased by almost 40-fold, and ten of the twelve restaurants examined in 2010 saw increases of 10 times or greater.

We also examined five months of activity on restaurants' main Twitter profiles from March 1 to August 1, 2013 (see **Table 37**). Average tweets per day for the top-ten restaurants totaled ten or more. @pizzahut averaged 356 tweets per day, far surpassing all other restaurants. @dominos and @Wendys came in second and third averaging 74 and 60 tweets per day, respectively. @panerabread and @TacoBell were fourth and fifth with an average of 41 and 38 tweets per day.

Of note, while @Starbucks, @McDonalds, and @SUBWAY had far more Twitter followers than other restaurants, these restaurants were not the most active tweeters. @McDonalds averaged 25 tweets per day, placing it in sixth place, while @Starbucks and @SUBWAY ranked eleventh and twelfth with an average of eight tweets per day. However, McDonald's also maintained five other Twitter accounts. One of those accounts, @McDonaldsCorp, focused on McDonald's history, people, food, and restaurants around the world, and averaged 38 tweets per day. Wendy's also maintained another active account, @IamBaconator, which focused on its Baconator sandwiches and averaged 18 tweets per day.

Measures of Twitter engagement. Some restaurants consistently replied to users who mentioned them in a tweet, making direct interaction with followers a focus of their Twitter activity. More than 86% of tweets from the top-five restaurants' main Twitter accounts were replies to users. In addition, 87% of @Starbucks' average eight tweets per day were replies to users. Of the remaining eleven restaurants in the analysis, ten

Table 37. Activity on restaurants' main Twitter profiles

Restaurant	Handle	Average # of tweets per day	Proportion of all tweets			Total analyzed tweets
			Replies to other users	Retweeted by other users	Favorited by other users	
Pizza Hut	@pizzahut	355.6	99%	64%	57%	3,200
Domino's	@dominos	74.4	97%	31%	33%	3,200
Wendy's	@Wendys	60.4	97%	30%	38%	3,200
Panera Bread	@panerabread	40.5	96%	19%	24%	3,199
Taco Bell	@TacoBell	38.0	86%	74%	87%	3,189
McDonald's	@McDonalds	25.4	65%	69%	67%	3,196
KFC	@kfc	18.3	65%	59%	54%	2,816
Arby's	@Arbys	16.8	69%	45%	51%	2,587
Dunkin' Donuts	@DunkinDonuts	11.0	74%	47%	50%	1,693
Little Caesars	@littlecaesars	10.7	63%	35%	33%	1,654
Chick-fil-A	@ChickfilA	8.3	79%	52%	44%	1,270
Starbucks	@Starbucks	7.9	87%	66%	81%	1,221
Subway	@SUBWAY	7.6	64%	63%	59%	1,171
Dairy Queen	@DairyQueen	6.6	70%	53%	56%	1,016
Sonic	@sonicdrive_in	3.8	69%	47%	46%	592
Burger King	@BurgerKing	2.3	26%	61%	65%	346
Jack in the Box	@JackBox	1.3	52%	69%	69%	193

Includes tweets posted March-August 2013 or the most recent 3,200 tweets as of August 1, 2013
 CiCi's Pizza maintains a protected Twitter account and its activity was not accessible for analysis
 Source: Twitonomy analysis (March-August 2013).

restaurants replied to more than one-half of tweets. Only 26% of @BurgerKing's tweets were replies to users, making it the least responsive restaurant on Twitter.

There was also variation in the percent of restaurants' tweets that were retweeted by their Twitter followers. Retweeting is an indicator of engagement and highly desirable as it exponentially increases the reach of restaurants' Twitter activity. @TacoBell had the highest retweet rate at 74%, followed by @McDonalds, @JackBox, @Starbucks, @pizzahut, @SUBWAY and @BurgerKing whose tweets were retweeted 61 to 69% of the time. @panerabread had the lowest rate of retweets at 19%. Twitter users can also mark tweets as "favorites," which are then saved to a list on that user's profile page. A user's "favorites" can be viewed by other users, thus marking a restaurant's tweet as a "favorite" is an indication that users find the tweet of interest or value. @TacoBell and @Starbucks had the highest proportion of tweets marked as "favorites" (87% and 81%, respectively). Tweets by @DairyQueen, @pizzahut, @SUBWAY, @BurgerKing, @McDonalds, and @JackBox were classified as favorites more than 55% of the time, while @panerabread had the lowest rate of favorites at 24%.

YouTube

In 2010, 11 of the 12 restaurants in our analysis maintained a YouTube channel (only Subway did not). By July 2013, 17 of the 18 restaurants analyzed had one (only Chick-fil-A did not).

Ranking Table 10 compares YouTube video upload views in July of 2010 and 2013. Taco Bell replaced Starbucks as the most viewed channel in 2013, with just under 14 million views. Starbucks ranked second in popularity with over eight million views, and McDonalds ranked third at just under eight million. Pizza Hut, KFC, and Domino's ranked fourth, fifth and sixth with two to three million views each.

Restaurants posted far more videos in 2012 than they had in 2009. Starbucks posted the most videos in 2009 at 61, followed by Domino's with 14 videos. In 2012, McDonald's, Panera Bread, and Starbucks uploaded 57, 53, and 45 videos, respectively to their YouTube channels. Subway, Pizza Hut, and Sonic also uploaded 24 or more videos in 2012. Further, the number of upload views on restaurant YouTube channels grew exponentially from 2010 to 2013. Of the restaurants examined in 2010, only two had fewer total views of uploaded videos in 2013. Burger King and Domino's saw the biggest decrease in views of 75% and 45%, respectively. Pizza Hut had the biggest increase in views, almost 200 times as many in 2013 versus 2010. McDonald's followed with the second greatest increase, videos on its channel had more than 67 times as many views in 2013 compared with 2010. Other notable increases include Taco Bell, Dairy Queen, and Sonic with increases of 400 to 600%.

Newer social media platforms

Fast food restaurants have also become active marketers on newer social media platforms, including Vine, Instagram, and

Tumblr. These types of marketing are difficult to track and data are not available to analyze them systematically. Nevertheless, it will be important to monitor restaurants' activity on these social media as they may provide a substantial opportunity to expand the reach of marketing activities.

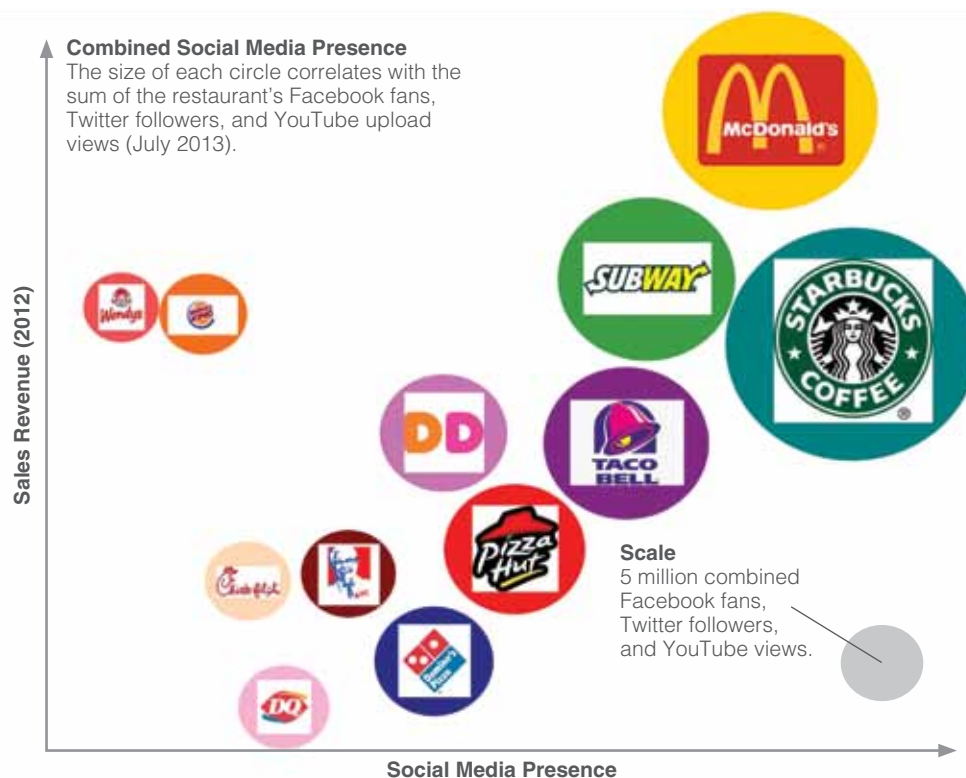
Tumblr is a platform that allows users to post text, photos, quotes, links, music, and videos to a short-form blog. Tumblr launched in 2007 and began accepting paid advertising in 2012. In 2013, 13 of the 18 fast food restaurants in our social media analysis placed advertising on Tumblr.³³ Launched in 2010, Instagram enables users to apply digital filters to pictures and videos and share them on a variety of other social networking sites, such as Facebook, Twitter, and Tumblr. Both Taco Bell and Starbucks were highlighted as brands that have mastered the use of Instagram, noting Taco Bell's creative depictions of its products and Starbucks' use of fan-submitted photos of its coffee.³⁴ In January 2013, Twitter introduced a new video application called Vine. Vine allows users to create 6-second looping video clips and share them on networks such as Twitter, Facebook, or the Vine app itself. Taco Bell used Vine in February to announce the introduction of its new Cool Ranch Doritos Locos Tacos.³⁵

Some restaurants have successfully integrated multiple platforms in their social media campaigns. For example, Wendy's campaign for its Pretzel Bacon Cheeseburger encouraged Twitter and Facebook users to add #PretzelLoveSongs to tweets.³⁶ It then composed songs using some of the tweets, and famous singers performed them in music videos posted on Wendy's YouTube channel and Facebook page. During the summer of 2013, Jack in the Box ran a campaign using Vine and other social media platforms consisting of 101 videos that showed how to "Go Big" as part of its advertising campaign promoting big menu additions, such as Big Stack, Big Waffle Stack, Loaded Chili Cheese Wedges, and Really Big Chicken Sandwich.³⁷ The videos were accessible on Jack in the Box's website and Vine and promoted on its Twitter and Facebook accounts.

Summary of digital marketing

The most noticeable change since 2009 is that many restaurants appear to have shifted their youth-targeted marketing from children under 12 to older children and teens. The number of child visitors to fast food websites decreased significantly, even for sites such as HappyMeal.com, Dominos.com, and PizzaHut.com which ranked highest in child exposure in both 2009 and 2012. Additionally, the popular children's sites, DeeQs.com (Dairy Queen), ClubBK.com (Burger King), and LineRider.com (McDonald's) have been discontinued. As a result, child exposure to fast food company websites and display advertising on third-party youth websites has decreased.

Despite these declines, McDonald's and Subway continued to target children with sites like HappyMeal.com, McWorld.com, and SubwayKids.com. These websites offered advergames tied to kids' meals and were two to three times more likely to be

Figure 14. Social media footprint

Source: Facebook, Twitter, and YouTube social media analysis (July 2013)

visited by children compared to other websites. McDonald's also focused its display advertising on younger children. Seventy-five percent of Happy Meal ads were viewed on kids' websites.

In contrast, teen exposure to fast food websites increased for the majority of websites in our analysis. Six websites averaged 100,000 or more unique teen visitors per month in 2012. Additionally, a greater number of sites targeted teens as compared with children under 12. A shift in marketing focus also occurred in display advertisements. Overall, the number of display ads on youth websites decreased from 2010 to 2013. However, the majority of restaurants in our analysis placed the largest proportion of their display ads on Facebook, a popular medium for engaging young viewers. Wendy's had a particularly strong presence on Facebook, placing over half of its ads for kids' meals on the social network, as compared to 6% of kids' meal ads on youth websites.

As usage of smartphones and tablets has increased, so have the ways that restaurants place advertisements on mobile platforms. Most of the restaurants in our analysis still focus on

traditional PC advertisements, but the number of mobile ads is growing. Restaurants now offer mobile users numerous ways to interact with their brands, from simply finding a location nearby, to ordering online and playing child-targeted games. The increase in mobile advertisements and applications represents the importance of new media for engaging with potential customers and utilizing the "always on" nature of the internet.

In social media marketing, Starbucks continued to far surpass other restaurants in total reach (see **Figure 14**). However, the popularity of most other restaurants on Facebook, Twitter, and YouTube grew exponentially from 2010 to 2013, with typical increases of 500% or more. McDonald's ranked second in popularity on all social media with some of the highest rates of growth for any restaurant in our analysis. Subway, Taco Bell, and Pizza Hut rounded out the list of most popular restaurants on social media, each with 10 million or more Facebook likes.

Digital marketing

Signs of progress

- Three popular children's websites have been discontinued: DeeQs.com (Dairy Queen), LineRider.com (McDonald's), and ClubBK.com (Burger King). McDonald's also discontinued its website targeted to preschoolers (Ronald.com).
- The average number of child visitors declined for 95% of restaurants' websites. In 2009, two pizza websites and two McDonald's websites averaged 100,000 to 200,000 child visitors every month compared with just one website in 2012 (HappyMeal.com).
- The number of display ads placed on third-party youth websites decreased by almost one-half, representing 25% of all fast food display ads in 2009 versus 6% in 2012.

Continued reasons for concern

- McDonald's, Subway, and Burger King continued to target children with advergame websites promoting kids' meals. Burger King's site (BKCrown.com) did not have enough youth visitors to measure, but HappyMeal.com averaged 119,000 unique child visitors per month in 2012. SubwayKids.com had an 850% increase in child visitors since 2009 and ranked fifth in overall child exposure in 2012.
- Two restaurants also offered new mobile applications with child-targeted advergames: McDonald's "McPlay" and Wendy's "Pet Play Games."
- McDonald's, Subway, Burger King, and Wendy's advertised their child-targeted websites and/or kids' meals on third-party websites in 2012. McDonald's placed 33.7 million ads per month for HappyMeal.com, a 63% increase from 2009, and three-quarters were placed on kids' websites such as Nick.com, Roblox.com, CartoonNetwork.com, and Disney Online sites. On average, 6 million unique viewers saw 5.4 ads for Happy Meals per month.
- Just four of the eighteen restaurants in this analysis *did not* advertise on kids' websites in 2012, but only three of the twelve fast food products advertised most often were kids' meals. In addition to its Happy Meals, McDonald's advertised main menu items such as Filet-o-fish and McCafe coffee drinks, while Wendy's advertised its Frosty, hamburgers, and dollar menu.
- More than one-half of restaurant websites showed an increase in number of teen visitors. Teen visitors to Subway.com, Starbucks.com, and McDonald's MeEncanta.com (Spanish-language site) increased by over 90%.
- Websites such as DeviantART.com, where 35% or more of visitors are 2-17 years old, ranked among the highest in yearly display ad views, and three restaurants substantially increased display advertising on youth websites: KFC (+138%), Subway (+450%), and Starbucks (+330%). Fast food products advertised most often on these sites included McDonald's Filet-o-fish and coffee drinks and Starbucks coffee.
- Display advertising on Facebook appears to have substantially replaced advertising on third-party youth websites for many restaurants. For example, Dunkin' Donuts placed 68% of its display advertising on Facebook, and Wendy's placed 54%. Ads on Facebook totaled almost 6 billion and represented 19% of fast food display advertising in 2012.
- Starbucks.com was the most popular mobile website, averaging 3.4 million unique visitors per month and exceeding the number of visitors to Starbucks' traditional website. Some popular mobile websites were also more engaging than restaurants' traditional websites. Time spent on PizzaHut.com, PapaJohns.com, and Dominos.com mobile websites exceeded the average time spent on any restaurant's traditional websites.
- Ten restaurants offered branded applications for mobile devices. Six allowed users to order from their smartphones (Subway, Pizza Hut, Wendy's, Domino's, Papa John's, and Chick-fil-A), and six provided special offers via smartphone apps (McDonald's, Burger King, Pizza Hut, Domino's, Dunkin' Donuts, and Papa John's). Papa John's and Pizza Hut mobile applications were very popular, with more than 700,000 average monthly unique users.
- The popularity of fast food restaurant social media accounts grew exponentially from 2010 to 2013. For example, 17 of the 18 restaurants we evaluated had 1 million or more Facebook likes (compared with nine in 2010), and six had more than 10 million. Starbucks maintained its position as the top restaurant in social media overall, while McDonald's became the second most popular restaurant on Facebook and Twitter with an 11-fold increase in Facebook likes and 67-fold increase in Twitter followers from 2010. Taco Bell overtook Starbucks as the most popular restaurant on YouTube with almost 14 million video uploads.

Marketing to Hispanic and black youth

This section documents exposure to fast food advertising by Hispanic and black children and teens and compares their exposure to that of other youth. Hispanic targeted marketing includes advertising on Spanish-language TV. A few restaurants also maintained websites targeted to a specific racial or ethnic group (e.g., McDonald's MeEncanta.com and MyInspirAsian.com). In addition, we compare TV advertising and website exposure for black and Hispanic youth to that of other youth. If Hispanic or black youth view relatively more fast food advertising than their non-Hispanic or white peers viewed, companies may have specifically targeted minority youth with their advertising.

Advertising on Spanish-language TV

TV advertising to Hispanic youth

Definition

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

Table 38 provides Spanish-language TV advertising spending by restaurant. In 2012, total spending by fast food restaurants on Spanish-language TV reached \$239 million, an 8% increase over 2009. The number of restaurants advertising on Spanish-language TV also increased from 12 restaurants in 2009 to 14 in 2012. Of the top-ten restaurants by sales, only Dunkin' Donuts and Chick-fil-A did not advertise on Spanish-language TV. Little Caesars, Starbucks, Taco Bell, and CiCi's advertised on Spanish-language in 2012 but not 2009, while Jack in the Box had advertised in 2009 but did not in 2012. Fast food restaurants dedicated on average 6% of their TV advertising budgets to Spanish-language programming.

McDonald's maintained its position as the top Spanish-language TV advertiser, spending \$76 million or 10% of its total TV advertising budget in this medium, representing almost one-third of all fast food restaurant spending on Spanish-language TV. Four additional restaurants (Burger King, Domino's, Popeyes, and Starbucks) dedicated a higher-than-average proportion of spending to Spanish-language TV. Burger King ranked second in spending on Spanish-language TV at \$36 million, 17% of its TV budget in 2012. Of note, Burger King reduced total advertising spending by 17% from 2009 to 2012, but increased spending on Spanish-language TV by 41%. Domino's and Popeyes spent 15% and 20% of their TV budgets on Spanish-language, respectively. Starbucks allocated \$3 million, accounting for nearly one-fifth of its total TV budget.

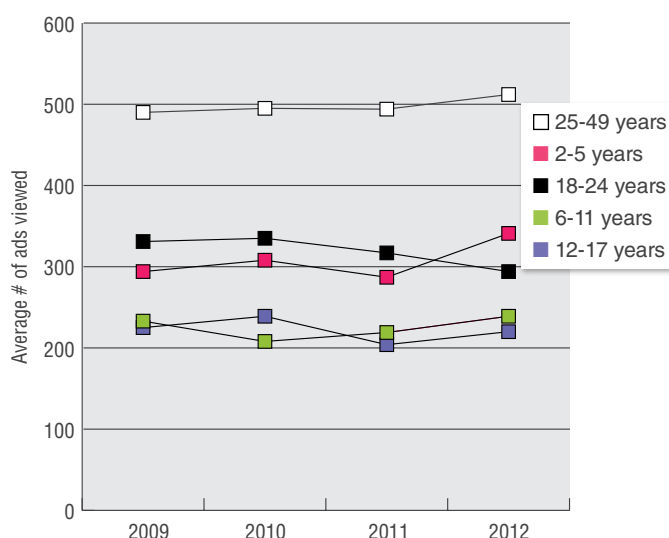
Table 38. Spending on Spanish-language TV advertising

	Spending on Spanish-language TV advertising (\$000)			% of total TV advertising spending in 2012
	2009	2012	Change	
McDonald's	\$77,419	\$75,520	-3%	10%
Burger King	\$25,539	\$35,972	41%	17%
Domino's	\$23,471	\$27,166	16%	15%
Subway	\$20,281	\$23,643	17%	5%
Wendy's	\$18,508	\$15,641	-16%	7%
Sonic	\$18,944	\$14,020	-26%	8%
KFC	\$9,849	\$13,313	35%	5%
Popeyes	\$15,213	\$13,280	-13%	20%
Pizza Hut	\$9,880	\$9,979	1%	4%
Little Caesars	\$0	\$4,398		6%
Starbucks	\$0	\$3,313		18%
Taco Bell	\$13	\$1,169	8756%	0%
Papa Johns	\$619	\$1,121	81%	1%
CiCi's Pizza	\$0	\$677		5%
Jack in the Box	\$1,216	\$0	-100%	
Total	\$220,953	\$239,216	8%	6%

Highlighting indicates a higher-than-average proportion of spending on Spanish-language TV in 2012

Source: Nielsen (2009, 2012)

Figure 15. Trends in exposure to TV advertising on Spanish-language TV by age group



Source: Nielsen (2009 to 2012)

Youth exposure to Spanish-language TV advertising

Preschoolers viewed more fast food advertising on Spanish-language TV than any other group of Hispanic youth. They saw on average 340 ads in 2012 or almost one ad per day (see **Figure 15**). This finding contrasts with English-language TV where teens saw more advertising for fast food restaurants compared with children. Further, Hispanic preschoolers saw 16% more Spanish-language fast food ads in 2012 than in 2009,

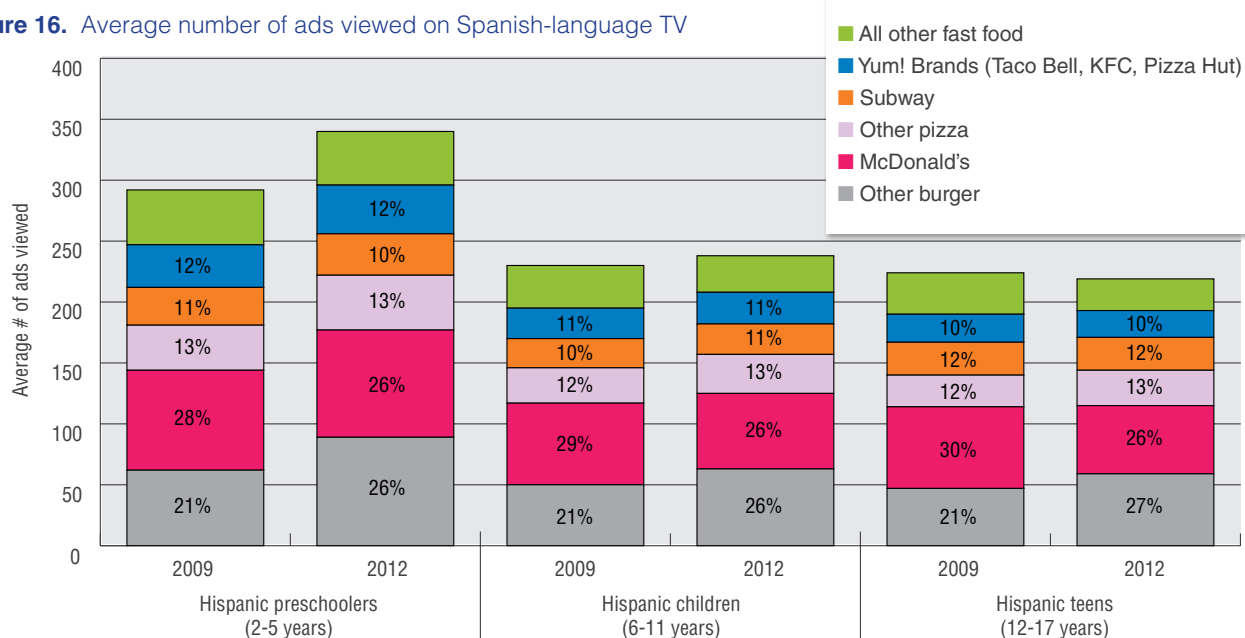
while adults (25-49 years) saw just 4% more. Preschoolers were the only Hispanic youth to experience a significant change in exposure. By comparison, older children saw 238 ads in 2012, just 2% more versus 2009, and teens saw 219 ads, a decrease of 3%.

McDonald's was responsible for approximately one-quarter of fast food ads viewed by Hispanic youth (see **Figure 16**). Preschoolers saw 6% more Spanish McDonald's ads in 2012 versus 2009, whereas ads viewed by children and teens decreased 7% and 17%, respectively. Burger King accounted for 18% of Spanish-language ads viewed by Hispanic youth with substantial increases versus 2009: +73% for preschoolers, +46% for children, and +44% for teens. Changes in Spanish-language TV advertising exposure by Hispanic youth for other restaurants also differed by age. For example, Hispanic preschoolers saw 7% more Spanish-language ads for Subway in 2012 compared with 2009, while teens' exposure increased 1%. Teens saw 15% more ads for Wendy's and preschoolers saw 7% more, while older children's exposure decreased by 1%. Further, Hispanic preschoolers saw 23% more ads for KFC and 6- to 11-year-olds saw 14% more, whereas ad exposure for teens increased 2%.

Products advertised on Spanish-language TV

As on English-language TV, lunch/dinner items were the most common types of fast food products advertised on Spanish-language TV (see **Table 39**). However, these ads accounted for a higher proportion of Spanish-language ads – nearly two-thirds compared with approximately one-half of English-language ads viewed. In contrast, ads featuring kids' meals were viewed far less frequently on Spanish-language TV. They represented one-quarter of fast food ads seen by preschoolers and children on English TV, but just 5% of ads viewed on Spanish TV. Value

Figure 16. Average number of ads viewed on Spanish-language TV



Source: Nielsen (2009, 2012)

Table 39. Hispanic youth exposure to Spanish-language TV advertising by product type

	Hispanic preschoolers (2-5 years)		Hispanic children (6-11 years)		Hispanic teens (12-17 years)	
	Average # of ads viewed	% of total ads viewed	Average # of ads viewed	% of total ads viewed	Average # of ads viewed	% of total ads viewed
Lunch/dinner items	193.4	60%	135.3	60%	124.6	60%
Value menu/combo meals	42.1	13%	28.7	13%	26.0	13%
Snacks/desserts	24.6	8%	16.9	8%	15.1	7%
Kids' meals	14.9	5%	10.8	5%	10.1	5%
Coffee beverages	11.7	4%	8.3	4%	7.6	4%
Promotion only	10.1	3%	7.7	3%	7.2	3%
Healthy options	9.8	3%	7.5	3%	7.4	4%
Branding only	6.8	2%	4.6	2%	4.0	2%
Breakfast items	6.6	2%	4.5	2%	4.2	2%

Source: Nielsen (2012)

Table 40. Twenty individual menu items viewed most often by Hispanic youth in ads on Spanish-language TV

Restaurant	Menu item	Average # of ads viewed		Nutritional quality		
		Children (2-11 years)	Teens (12-17 years)	NPI score	Calories (kcal)	Sodium (mg)
KFC	Biscuits*	12.9	9.2	24	180	530
KFC	Bucket of Chicken*	11.3	8.0	40-60	260-490	820-1,040
KFC	Mashed Potatoes	10.8	7.6	60	120	530
Burger King	French Fries	9.5	7.3	60-62	340-500	480-710
Burger King	Sweet Potato Fries	9.0	7.6	60	250	550
KFC	Cole Slaw	8.1	5.5	70	180	150
McDonald's	Happy Meal (Chicken McNuggets)	7.8	5.8	44-72	370-380	735-745
Burger King	Real Fruit Smoothies	7.7	6.0	66-68	200-450	20-95
McDonald's	20-piece Chicken McNuggets*	7.5	5.9	44-50	290-340	640-800
Burger King	Frozen Lemonade	5.7	5.0	70	80	10
Burger King	Crispy Chicken Strips	5.7	4.1	34-40	285-750	995-2,570
Dairy Queen	Jumbo Popcorn Chicken**	5.5	3.2	--	--	--
Burger King	Texas BBQ Whopper	5.3	4.5	48	760	1,600
McDonald's	Filet-o- Fish	5.2	3.8	64	390	590
Dairy Queen	Asiago Chicken Caesar Sandwich**	4.7	3.3	--	--	--
Burger King	Chicken, Apple and Cranberry Garden Fresh Salad	4.4	3.4	64-72	560-700	980-1,090
McDonald's	Spicy Chicken McBites*	4.4	3.9	44	270	600
Subway	Footlong Italian BMT	4.3	3.9	44-64	820-1,140	2,600-4,040
Burger King	Carolina BBQ Whopper	4.1	3.6	38	760	1620
McDonald's	Favorites Under 400 Menu	3.8	3.5	36-80	0-380	0-1,000
McDonald's	Chicken McBites*	3.5	2.2	42-44	285-288	634-678
Subway	Fresh Fit Kids' Menu	3.5	3.5	55-82	285-565	325-960

*Nutrition information based on one-person serving

**Nutrition data not available

Source: Analysis of Nielsen data (2012); Menu composition analysis (February 2013)

menu/combo meals accounted for another 13% of ads viewed by Hispanic youth. Snacks/desserts accounted for 8% of Spanish-language fast food ads viewed, compared with 4 to 6% of ads viewed by youth on English-language TV.

Table 40 presents the 20 individual menu items seen most often by either Hispanic children (2-11 years) or teens (12-17 years). Many of these same menu items appeared on the list of

products advertised most often to youth on English-language TV, including KFC biscuits, bucket of chicken, mashed potatoes, and cole slaw; and Burger King french fries, sweet potato fries, and Real Fruit Smoothies. Of note, McDonald's Happy Meals and Burger King's kids' meals topped the list of ads seen by children on English-language TV, but Happy Meal ads were seen relatively less often by Hispanic children on Spanish-

language TV. Of note, Burger King's kids' meals did not make the top-20 list. DQ Blizzards ranked third in ads viewed by youth on English TV, but these ads did not air frequently on Spanish-language TV. Rather Dairy Queen advertised more of its lunch/

dinner items on Spanish-TV. In contrast to English-language TV, there were no menu items from Taco Bell or Wendy's on the top-20 list of items viewed on Spanish-language TV.

Exposure to TV advertising by black youth

TV advertising to Hispanic and black youth Definitions

Targeted ratio: Black:white children	GRPs for black children (2-11 years) divided by GRPs for white children (2-11 years). Provides a measure of relative exposure to TV advertising for black children compared to white children.
Targeted ratio: Black:white teens	GRPs for black teens (12-17 years) divided by GRPs for white teens (12-17 years). Provides a measure of relative exposure to TV advertising for black teens compared with white teens.

In 2012, black children (2-11 years) saw on average 1,440 fast food ads, or 3.9 ads per day, while black teens saw 2,302, or 6.3 ads per day (see **Ranking Table 12**). In contrast, white children and teens saw 914 and 1,439 fast food ads in 2012, respectively. Therefore, black children and teens saw 58 to 60% more ads compared to their white peers. These differences were similar to those recorded in 2009 (61-62%) and can partially be explained by differences in amount of TV viewing. On average, black children watched 42% more TV than white children watched in 2012 (4 hrs:48 min vs. 3 hrs:23 min daily), while black teens watched 68% more (4 hrs:55 min vs. 2 hrs:55 min daily).³⁸

Changes in the number of ads viewed in 2012 versus 2009 were comparable for black and white youth. Black children saw 4% fewer ads in 2012 and black teens saw 4% more ads, while white children saw 1% fewer and white teens saw 5% more.

TV ads viewed disproportionately more often by black versus white youth

Some restaurants appear to have placed their advertising during programming viewed disproportionately more often by black youth than by white youth (see **Table 41**). Although exposure to Starbucks advertising was low relative to other restaurants, black children and teens saw twice as many ads for this restaurant compared with white children and teens, the highest targeted ratio in our analysis. Black children also saw twice as many ads for Popeyes compared with white children. Seven additional restaurants had high black:white targeted ratios of 1.75 or more for children and/or teens.

Twenty-two product types offered by the eighteen restaurants in our analysis also had high targeted ratios of 1.75 or more for children and/or teens (see **Table 42**). Starbucks' coffee drinks were the products most highly targeted to black youth, while three Burger King product types were among the top five: value menu/combo meals, breakfast items, and branding only ads that focused on the restaurant and not specific menu items. Targeted ratios for black children also were high for Sonic and Wendy's ads featuring snacks/desserts. Of note, black:white targeted ratios for nearly all product types were higher for children than for teens.

Table 41. Restaurants with the highest black:white targeted ratios

Restaurant	Black children (2-11 years)		Black teens (12-17 years)	
	Average # of ads viewed	Black:white targeted ratio	Average # of ads viewed	Black:white targeted ratio
Starbucks	7.9	2.17	17.5	2.03
Popeyes	36.4	2.00	64.9	1.81
Papa John's	35.4	1.79	61.6	1.80
Domino's	97.7	1.67	148.8	1.78
Wendy's	93.5	1.76	177.1	1.75
Burger King	137.0	1.71	231.3	1.75
Taco Bell	84.2	1.79	191.9	1.59
Sonic	49.1	1.81	103.1	1.57
Carl's Jr.	3.9	1.75	7.0	1.34

Source: Nielsen (2012), National TV only

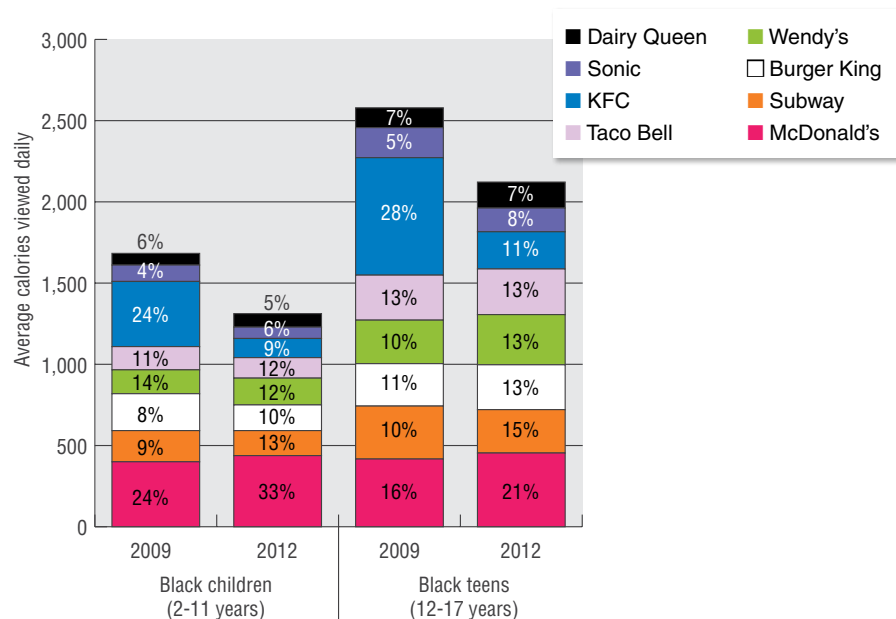
Table 43 presents total calories and sodium in ads viewed daily by black children and teens. As found in advertising to all youth, the average number of calories per ad viewed declined from 2010 to 2013 by 10 to 13% for black youth. Although average nutrient content of ads viewed by white and black youth did not differ, black youth saw 60% more calories and sodium per day in fast food advertising compared with their white peers. This difference was comparable to the differences in their higher exposure to fast food advertising.

Figure 17 shows the average number of calories viewed daily by black children and teens in TV ads for eight restaurants. From 2009 to 2012, the proportion of calories viewed increased for two restaurants. McDonald's ads represented 33% of calories viewed by black children and 16% viewed by black teens in 2012 versus 24% and 16% in 2009. The proportion of calories viewed in Wendy's ads also increased for both black children (9 % to 13%) and teens (10% to 15%). On the other hand, KFC represented a much smaller proportion of calories viewed by black youth in 2012 versus 2009, decreasing from 24 to 9% for children and 28 to 11% for teens.

Table 42. Restaurant product types with the highest black:white targeted ratios

Restaurant	Product type	Black children (2-11 years)		Black teens (12-17 years)	
		Average # of ads viewed	Black:white targeted ratio	Average # of ads viewed	Black:white targeted ratio
Starbucks	Coffee beverages	6.6	2.68	15.6	2.27
Burger King	Value menu/combo meals	4.9	2.43	9.8	1.96
Burger King	Breakfast items	4.5	2.17	9.0	1.85
Burger King	Branding only	0.9	2.06	2.3	1.95
Sonic	Snacks/desserts	10.8	2.00	23.1	1.61
Wendy's	Snacks/desserts	2.3	1.98	4.6	1.88
Burger King	Lunch/dinner items	55.9	1.92	114.6	1.78
McDonald's	Coffee beverages	15.5	1.92	28.0	1.79
Taco Bell	Value menu/combo meals	12.7	1.91	27.7	1.70
McDonald's	Value menu/combo meals	19.1	1.88	35.0	1.81
Burger King	Snacks/desserts	22.2	1.87	45.2	1.70
Wendy's	Healthy options	13.1	1.85	24.4	1.85
McDonald's	Snacks/desserts	13.8	1.84	26.8	1.79
Taco Bell	Branding only	1.4	1.83	3.0	1.42
Burger King	Healthy options	6.0	1.81	12.0	1.72
Sonic	Breakfast items	7.5	1.80	16.2	1.58
McDonald's	Breakfast items	6.6	1.78	12.6	1.80
Sonic	Branding only	0.4	1.77	1.0	1.26
Taco Bell	Lunch/dinner items	70.1	1.77	161.2	1.58
Sonic	Lunch/dinner items	30.4	1.75	62.8	1.56
Wendy's	Lunch/dinner items	71.6	1.75	135.6	1.74
Domino's	Lunch/dinner items	97.2	1.68	148.2	1.78

Source: Nielsen (2012), National TV only

Figure 17. Calories viewed daily by black children and teens in TV ads for fast food

Source: Nielsen (ad exposure data, 2009 and 2012); menu composition analysis (February 2013)

Table 43. Total nutrient content of items in TV ads viewed by black youth every day

	Black children (2-11 years)			Black teens (12-17 years)		
	2009	2012	Change from 2009	2009	2012	Change from 2009
Calories (kcal) per ad viewed	600	542	-10%	654	569	-13%
Total calories (kcal)	1,682	1,312	-22%	2,579	2,123	-18%
% of calories from sugar and saturated fat	39%	28%	-	38%	28%	-
Total sodium (mg)	3,136	2,568	-18%	4,968	4,311	-13%

Source: Nielsen (ad exposure data, 2009 and 2012); menu composition analysis (February 2013)

Targeted marketing on the internet

Internet targeted marketing

Definitions

Targeted website	A website that is designed to appeal to a specific racial or ethnic audience (e.g., Hispanics, blacks, Asians).
Hispanic youth targeted index	The percent of Hispanic youth (6-17 years) visiting the website divided by the percent of all youth (6-17 years) visiting. For example, if the Hispanic youth targeted index for a website is 200, then Hispanic youth are twice as likely to visit the website compared with all youth.
Black youth targeted index	The percent of black youth (6-17 years) visiting the website divided by the percent of all youth (6-17 years) visiting.

To identify targeted marketing on the internet, we examine fast food restaurant websites specifically designed to appeal to different racial or ethnic groups. In addition, we quantify exposure by black and Hispanic youth (6-17 years) to all websites and identify those visited disproportionately more often by minority youth compared to all youth.

Targeted websites

In 2012, McDonald's was the only restaurant to maintain websites targeting specific racial or ethnic minority groups: MeEncanta.com, a Spanish-language website for Latino visitors; MyInspirAsian.com, targeting Asian visitors; and 365Black.com, targeting black visitors (now a sub-site of McDonalds.com). In 2009, KFC had also offered Pride360.com celebrating black culture, but that site was discontinued.

MeEncanta.com and 365Black.com were the only targeted websites with enough youth visitors to measure exposure, although the numbers of visitors were low compared to other fast food websites (see **Ranking Table 7**). MeEncanta.com averaged 1,000 unique child visitors and 13,300 unique teen visitors per month in 2012, ranking 23 out of 36 fast food websites. However, the number of teen visitors to the site increased four-fold from 2009. In contrast, 365Black.com had 2,500 monthly unique teen visitors in 2012, one-half the number of teen visitors in 2009, and not enough children visited the site to measure.

From 2009 to 2012, the total number of display ads viewed decreased substantially for McDonald's MeEncanta.com and 365Black.com, but increased for MyInspirAsian.com (see **Table 44**). Most of these ads included flash animation and advertised specific menu items, such as the McDonald's Dollar Menu.

Table 44. Exposure to racial and ethnic targeted display ads

Restaurant	Website	Average # of ads viewed per month (000)			2012 average proportion of ads viewed			
		2009	2012	Change	On Facebook	On youth websites	On kids' websites	Per viewer per month
McDonald's	MeEncanta.com	11,727.6	6,475.0	-45%	32%	2%	0%	3.9
McDonald's	MyInspirAsian.com	818.0	1,335.0	-63%	0%	1%	0%	5.2
McDonald's	365Black.com	402.4	48.0	-88%	0%	0%	0%	3.5
KFC	Pride360.com	2,549.3	0					

Source: comScore AdMetrix Advertiser Report (January-December 2012)

Calidad en McDonald's



Sólo las mejores papas del mundo pueden hacer Papitas Mundialmente Famosas(TM).

McDonald's



Los McNuggets de McDonald's son lo mejor con el Fútbol Americano. ¡Agárralos hoy!

McDonald's Spanish-language ads on Facebook

Dollar M Menu						i'm lovin' it®	
Dollar M Menu	\$1 McDouble® 					i'm lovin' it®	
Dollar M Menu	\$1 McDouble® 	\$1 McChicken® 				i'm lovin' it®	
Dollar M Menu	\$1 McDouble® 	\$1 McChicken® 	\$1 Parfait 			i'm lovin' it®	
Dollar M Menu	\$1 McDouble® 	\$1 McChicken® 	\$1 Parfait 	\$1 Side Salad 		i'm lovin' it®	
Dollar M Menu	I fold money for fun, pero seryoso ako sa paghanap ng quality food for \$1 (Click here to learn more) <small>At participating McDonald's®. ©2012 McDonald's.</small>						i'm lovin' it®

Asian targeted ad promoting McDonald's Dollar menu

Hispanic youth exposure to fast food websites

Table 45 presents data for the fifteen fast food websites with the most unique Hispanic youth visitors (6-17 years) and those sites that were more likely to be visited by young Hispanics compared to all youth. Two of the top-three websites in youth exposure overall (PizzaHut.com and Dominos.com) also had the most Hispanic youth visitors. HappyMeal.com ranked third in Hispanic youth visitors, compared to fourth for all youth. Subway.com, PapaJohns.com, and McDonald's.com ranked among the top-six websites visited by Hispanic as well as by all youth.

Not surprisingly, McDonald's Latino-targeted MeEncanta.com had the highest Hispanic targeted index. Hispanic youth were 4.5 times more likely to visit the site compared to all youth. Hispanic youth also were 3.7 times more likely to visit Dunkin' Donuts' DunkinAtHome.com and nearly two times as likely to visit KFCScholars.org, although the absolute number of visitors to both sites were low. In addition, Hispanic youth were 30% more likely to visit McDonald's and Subway children's sites, including HappyMeal.com, SubwayKids.com, and RMHC.org (Ronald McDonald House charities). On average, Hispanic youth were 10% more likely to visit all fast food restaurant websites compared with all youth.

Table 45. Hispanic youth visitors to fast food websites

Restaurant	Website	Average monthly Hispanic youth (6-17 years) unique visitors (000)	Targeted index
Pizza Hut	PizzaHut.com	52.2	92
Domino's	Dominos.com	48.8	103
McDonald's	HappyMeal.com	33.3	130
Subway	Subway.com	18.5	95
Papa John's	PapaJohns.com	16.3	68
McDonald's	McDonalds.com	14.2	77
Burger King	BurgerKing.com	14.2	115
McDonald's	McState.com	12.4	86
Taco Bell	TacoBell.com	11.4	88
Starbucks	Starbucks.com	10.9	63
McDonald's	MeEncanta.com	10.6	457
KFC	KFC.com	8.2	103
Wendy's	Wendys.com	7.9	94
Panera Bread	PaneraBread.com	6.1	84
Jack in the Box	JackInTheBox.com	5.8	121
Dunkin' Donuts	DunkinAtHome.com	0.9	368
KFC	KFCScholars.org	0.6	188
McDonald's	RMHC.org	2.1	130
Subway	SubwayKids.com	4.2	130
McDonald's	365Black.com	0.5	117

Highlighting indicates a higher-than-average targeted index for Hispanic youth

Source: comScore Media Metrix Key Measures Report (January-December 2012)

Table 46. Black youth visitors to fast food websites

Restaurant	Website	Average monthly black youth (6-17 years) unique visitors (000)	Targeted index
McDonald's	McDonalds.com	51.3	93
Pizza Hut	PizzaHut.com	51.0	100
Domino's	Dominos.com	37.2	88
McDonald's	HappyMeal.com	32.8	144
McDonald's	McState.com	25.0	194
Papa John's	PapaJohns.com	19.8	93
Subway	Subway.com	16.8	96
Burger King	BurgerKing.com	13.8	126
Taco Bell	TacoBell.com	12.3	107
Wendy's	Wendys.com	11.9	159
Starbucks	Starbucks.com	10.1	65
KFC	KFC.com	9.5	134
Chick-fil-A	Chick-fil-A.com	6.6	113
Little Caesars	LittleCaesars.com	5.0	114
Sonic	SonicDriveIn.com	4.1	119
Dairy Queen	BlizzardFanClub.com	0.4	316
Arby's	Arbys.com	3.9	134
KFC	KFCScholars.com	0.4	133
Subway	SubwayKids.com	3.0	106

*Includes the top-15 sites by number of unique black youth visitors

Highlighting indicates a higher-than-average targeted index for black youth

Source: comScore Media Metrix Key Measures Report (January-December 2012)

Black youth exposure to fast food websites

Table 46 presents data for the fifteen websites with the most unique black youth visitors and those sites more likely to be visited by black youth compared with all youth. The three websites with the most black youth visitors (PizzaHut.com, Dominos.com, and HappyMeal.com) also had the most youth visitors overall. Of note, McDonald's black-targeted 365Black.com did not make this list; however, data for black youth visitors to the site were only available from comScore for the first and third quarters in 2012. The site has since been moved to McDonalds.com/365Black.

Of the 34 fast food restaurant websites examined in this analysis, almost one-half (44%) were more likely to be visited by black youth as compared with all youth. Dairy Queen's BlizzardFanClub.com had the highest black:white targeted index; black youth visited the site 3.1 times more often than all youth visited. Additionally, the percent of black youth visiting McDonald's McState.com (a restaurant finder website) was nearly twice the percent of all 6- to 17-year-olds visiting, and the site had the fourth highest number of black youth visitors. HappyMeal.com was visited by black youth 44% more often than all youth. The two main restaurant websites with the lowest targeted indices were Panera Bread and Starbucks, at 55 and

65, respectively. However, on average black youth were 24% more likely to visit fast food restaurant websites compared with all youth.

Summary of marketing to Hispanic and black youth

Twelve fast food restaurants spent \$239 million to advertise on Spanish-language TV in 2012, an increase of 8% versus 2009. Three restaurants were new to Spanish-language TV (Little Caesars, CiCi's, and Starbucks), and two restaurants (Burger King and KFC) increased their presence on Spanish-language TV despite reductions in English-language advertising. From 2009 to 2012, the total number of ads viewed by Hispanic preschoolers increased by 16% and they continued to see more fast food ads than any other Hispanic youth group.

As in 2009, black youth continued to view 58 to 60% more TV ads for fast food restaurants than white youth. While variances in TV viewing partially explained these differences, a few restaurants appeared to target TV advertising for some or all of their products to black youth. For example, black children saw more than twice as many ads for Starbucks and Popeyes

than white children saw. They also saw more than twice as many ads for Burger King value/combo meals, breakfast items, and branding only ads, as well as Sonic ads for snacks/desserts. Targeted ratios for black teens were slightly lower.

Hispanic and black youth also continued to visit several fast food websites disproportionately more often than all youth.

One-third of fast food websites were more likely to be visited by Hispanic youth in 2012, while black youth were more likely to visit almost one-half (44%) of fast food websites. HappyMeal.com was the only website that both black and Hispanic youth were more likely to visit compared with all youth. This child-targeted site also ranked in the top four in number of both black and Hispanic youth visitors in 2012.

Marketing to Hispanic and black youth

Signs of progress

- Spanish-language TV ads viewed for McDonald's decreased by 7% among Hispanic children (6-11 years) and 17% among teens (12-17 years). Two additional restaurants reduced or stopped advertising on Spanish-language TV across all age groups (Popeyes and Jack in the Box).
- As found in TV ads viewed by all youth, average calories and sodium in ads viewed by black youth declined by 10% or more from 2009 to 2012.

Continued reasons for concern

- Fast food restaurants spent 8% more to advertise on Spanish-language TV in 2012 than in 2009. Exposure to these ads increased more for preschoolers than for other age groups. In total, Hispanic preschoolers saw 16% more fast food ads on Spanish-language TV in 2012 than they had in 2009 (reaching almost one ad per day), compared to a 4% increase among adults (25-49 years) and changes of 2 to 3% among older children and teens. Preschoolers also saw more fast food ads than Hispanic children or teens saw. Healthier kids' meals represented just 5% of fast food ads on Spanish-language TV.
- Despite reductions in McDonald's ads viewed by older children on Spanish-language TV, Hispanic preschoolers saw 6% more ads for McDonald's in 2012 than in 2009.
- Two restaurants reduced advertising to children on English-language TV, but increased Spanish-language advertising. Burger King increased advertising to Hispanic preschoolers (+73%), children (+46%) and teens (+44%), and accounted for 18% of all ads viewed in 2012 by all Hispanic youth. Hispanic preschoolers also saw 23% more ads for KFC on Spanish-language TV in 2012 versus 2009, and 6- to 11-year-olds saw 14% more.
- As in 2009, black children and teens saw approximately 60% more fast food ads on TV compared with white children and teens. Much of this difference was due to greater TV viewing by black youth. However, black children and teens saw twice as many ads for Starbucks and Popeyes, as well as 75% or more additional ads for seven other restaurants. These differences were higher than expected given their TV-viewing habits.
- One-third of fast food websites were more likely to be visited by Hispanic youth as compared with all youth. Black youth were more likely to visit almost one-half (44%) of fast food websites. The one remaining large child-targeted website, HappyMeal.com, was visited 30% more often by Hispanic youth and 44% more often by black youth.