

In 2010, the Yale Rudd Center for Food Policy & Obesity issued *Fast Food FACTS*.¹ The report examined the nutritional quality of fast food menus, advertising on TV and the internet, and marketing practices inside restaurants. The report focused on the 12 largest fast food restaurants and highlighted marketing targeted to children, teens, and black and Hispanic youth in 2009.

The results demonstrated that fast food marketing contributes to poor diet and obesity among young people (see **Table 1**). Although all restaurants studied did offer some nutritious options, most fast food menu items – including kids' meal items – contained higher than recommended levels of calories, fat, sugar, and/or sodium. The industry spent \$4.2 billion on advertising to encourage frequent visits to fast food restaurants, while marketing inside the restaurants, including

signs, pricing, and default options, encouraged purchases of higher-calorie and less nutritious menu options. Children as young as two years old were frequent targets of marketing for kids' meals, and several restaurants targeted teens and minority youth with advertising for high-calorie and nutritionally poor items. Further, fast food advertising to youth increased by more than one-third from 2003 to 2009, and the majority of fast food ads viewed by children and teens promoted restaurants' regular menu items – not their kids' meals.

The 2010 *Fast Food FACTS* report also documented the consequences of aggressive marketing of nutritionally poor foods and beverages. Most children (84%) visited fast food restaurants at least once per week. McDonald's child-directed advertising was especially effective: customers reported that 41% of children under 12 asked to go to McDonald's at least once per week and 15% asked to go every day. Once inside McDonald's, Burger King, and Wendy's, customers automatically received french fries and soft drinks when

Table 1. Fast Food FACTS 2010: Key findings

Fast food menu nutritional quality

- Only 12 of 3,039 possible kids' meal combinations met nutrition criteria for preschoolers; 15 met nutrition criteria for older children.
- Of the 2,900 regular menu items examined, just 17% qualified as healthy choices for teens.
- Eight restaurants promoted healthy menus, and these menus contained items that were more likely to meet nutrition criteria. Some restaurants also offered dollar/value menu items with smaller portions (and fewer calories) at a lower price.
- Five restaurants offered 40-ounce or larger fountain drinks (470+ calories) and three offered french fries in a 180-gram or larger size (500+ calories).

Traditional advertising to children and teens

- Advertising spending was highly concentrated with seven restaurants responsible for 60% of spending. McDonald's alone spent \$900 million, 21% of the total.
- On average, preschoolers (2-5 years) saw 2.8 TV ads per day for fast food in 2009; children (6-11 years) saw 3.5; and teens (12-17 years) saw 4.7.
- Children's and teens' exposure to fast food TV ads increased from 2007 to 2009, including ads for McDonald's and Burger King. These restaurants had pledged to improve advertising to children through the Children's Food and Beverage Advertising Initiative (CFBAI).
- Child-targeted TV advertising did not promote healthy eating. McDonald's ads featured the smiling Happy Meal box, while Burger King ads focused on kids' meal promotions.
- Just one-third of TV ads viewed by children promoted healthier kids' meals. Children also frequently saw ads for lunch/dinner items (30% of ads viewed) and dollar/value menus (15%).
- Taco Bell and Burger King targeted teens with their TV advertising. Dairy Queen, Sonic, and Domino's targeted teens with ads for desserts and snacks.
- Snacks and desserts marketed directly to teens contained as many as 1,500 calories, five times the recommended calories for snacks consumed by active teens.

Digital marketing to children and teens

- McDonald's maintained 13 different websites that attracted 365,000 unique child visitors and 294,000 unique teen visitors per month.
- McDonald's also offered a website targeted to preschoolers (Ronald.com), and McDonald's and Burger King offered sophisticated child-targeted websites with advergames and virtual worlds (McWorld.com, HappyMeal.com, and ClubBK.com). Subway and Dairy Queen also targeted children online.
- On average, restaurants placed one-quarter of their banner advertising on youth-targeted websites. Domino's and Pizza Hut placed the most banner ads, seen on average seven times by 70 million viewers per month.
- Starbucks' Facebook page had more than 11 million Facebook fans as of July 2010, while eight other restaurants had more than one million fans. Four restaurants had more than one million video views on their YouTube channels.
- Eight fast food restaurants offered smartphone apps to reach young people anytime, anywhere.

Marketing targeted to black and Hispanic youth

- Hispanic preschoolers saw 290 fast food ads on Spanish-language TV in 2009. McDonald's was responsible for one-quarter of this exposure.
- Black children and teens saw at least 50% more TV ads for fast food than their white peers. McDonald's and KFC specifically targeted black youth with TV ads, targeted websites, and banner ads on third-party websites.
- Approximately one-half of fast food websites (20 of 39) were visited more often by black youth than by white youth.

Source: Fast Food FACTS (2010)

ordering a kids' meal. Not surprisingly, children were most likely to get chicken nuggets, french fries, and a sugary soft drink when they visited a fast food restaurant. Further, teens purchased 800 to 1,200 calories in an average fast food meal, with 30% or more of those calories consisting of sugar and saturated fat.

Continued concerns about fast food marketing to youth

Since Fast Food FACTS came out in 2010, new studies have further demonstrated harmful effects of consuming fast food. More than one-third of youth consumed fast food on the previous day, including 33% of children (2-11 years) and 41% of teens (12-17 years).² On days when they eat fast food, children consume 126 additional calories and teens consume 310 more.³ Fast food consumption also increases child and teen intake of sugar, saturated fat, total fat, sodium, and sugary drinks, while reducing milk intake. Middle school students (7th and 8th graders) who attend a school within one kilometer of a fast food restaurant have a worse overall diet than students in other schools.⁴

Recent research also shows that exposure to fast food advertising is associated with increased fast food consumption by young people. An increase in TV ads for fast food viewed by children is associated with a subsequent rise in fast food visits, as well as increased BMI for children already at risk of overweight.⁵ In Quebec, advertising targeted to children under age 13 is banned. As a result, researchers estimate that fast food visits by French Canadian households have been reduced by 13% per week and these households consume 5.6 to 7.8 billion fewer fast food calories per year.⁶

Despite evidence of its harmful effects, fast food restaurants continue to target children and teens in their marketing. The fast food category represented the highest proportion of food ads viewed by youth in 2011 on all child- and youth-oriented networks, except Nickelodeon (where children viewed cereal ads more often).⁷ Fast food represented 34 to 44% of food ads viewed on MTV, FX, and Adult Swim (programming that airs at night on the Cartoon Network channel). From 2006 to 2009, fast food marketing expenditures targeted to children and teens (excluding the cost of kids' meal toys) increased 22%, and TV advertising expenditures aimed at children increased 60%.⁸

Additional evidence demonstrates that fast food marketing disproportionately affects low-income, black, and Hispanic youth who are also at greater risk for overweight and obesity.⁹ A meta-analysis of studies measuring fast food restaurant prevalence found significantly greater access to fast food for young people living and/or going to school in low-income and minority neighborhoods.¹⁰ There was a stronger association between attending school near a fast food restaurant and higher body weight for black and Hispanic youth in low-income urban schools compared with white youth attending high-income, non-urban schools.¹¹ Fast food restaurants

located in lower-income areas and those with higher black and Latino populations also had more exterior advertising, which was more likely to promote dollar/value menus (i.e., the lowest priced items).¹² In the analysis of fast food consumption and diet quality among youth, lower-income children and teens also exhibited greater negative effects from consuming fast food than their higher-income peers.¹³ Further, fast food ads represented almost one-half of food ads that appear on Spanish-language children's TV¹⁴ and 30% of food ads viewed by Hispanic youth on Spanish-language TV,¹⁵ significantly higher than rates of fast food advertising on English-language TV.

However, marketing designed to increase children's consumption of healthier fast food choices could also be effective. In one experimental study, young children (3-8 years old) were randomly assigned to watch a McDonald's commercial that featured either apple dippers or french fries.¹⁶ Children were subsequently more likely to choose a coupon for the advertised side, whether or not their parent encouraged them to select the "healthy choice" or "whatever you want" (as randomly instructed by the researcher). This study also demonstrates how difficult it can be for parents to counteract the effects of unhealthy food advertising on their children. Another study showed that children (6-12 years old) were twice as likely to select a kids' meal with apples and water versus fries and a soda when only the meals with the healthy options were offered with a toy.¹⁷

Fast food industry actions

In light of powerful evidence that extensive fast food marketing to children and teens negatively affects their diet, the Rudd Center made a number of recommendations in our 2010 report to improve fast food nutritional quality and marketing to children and teens (see **Table 2**). Public health advocates also have called for improvements in restaurant menus and youth-targeted marketing practices. Both Santa Clara County and the city of San Francisco enacted legislation to require that kids' meals with toys meet minimum nutrition standards.¹⁸ The Food Marketing Workgroup, a coalition of more than 180 organizations and experts dedicated to improving the food marketing landscape to children, recently called on Dairy Queen and other restaurants to improve the nutritional quality of kids' meals.¹⁹ Corporate Accountability International has demanded that McDonald's retire its iconic "Ronald McDonald" clown character,²⁰ and the Center for Science in the Public Interest (CSPI) urged restaurants to include healthier options as the default items in kids' meals.²¹

Some fast food restaurants appear to have heard these concerns and have taken actions to address them, such as offering healthier kids' meal options. For example, in July 2011 McDonald's announced that it would reduce the portion size of french fries by more than half and automatically include a small portion of apples in its Happy Meals.²² Also in 2011, the National Restaurant Association launched its Kids LiveWell

Table 2. Fast Food FACTS 2010: Recommendations**Establish meaningful standards for child-targeted marketing**

- Apply standards to all fast food restaurants, not just to restaurants that voluntarily participate in the CFBAI (i.e., McDonald's and Burger King).
- Apply nutrition criteria to kids' meals served, not just items pictured in child-targeted advertising.
- Expand the definition of child-targeted marketing beyond marketing exclusively targeted to children under 12 to include TV ads for non-kids' meal products and other forms of marketing commonly viewed by children.

Stop marketing directly to preschoolers

- McDonald's was the only restaurant to exhibit this practice in 2009.

Develop more lower calorie and nutritious menu items

- Increase the number of healthy items on menus.
- Reformulate popular main dish items to decrease saturated fat, sodium, and calories.
- Develop kids' meal options that are appropriate for both preschoolers and older children.

Do more to promote lower calorie and more nutritious menu items inside restaurants

- Make healthier sides and beverages the default option when ordering kids' meals.
- Make the smallest size and healthier versions of all menu items the default.
- Make menu item portion sizes (e.g., small, medium, large) consistent across restaurants.

Source: Fast Food FACTS (2010)

program, in which participating fast food and other restaurants pledged to offer at least one full children's meal and one other individual menu item that met the program's standards for healthful menu options.²³ In 2012, Chick-fil-A announced that it would offer grilled chicken nuggets in its kids' meals to reduce calories by more than one-half.²⁴ Burger King also introduced healthier options to its regular menu, including chicken wraps, smoothies, and Caesar salads,²⁵ and Wendy's introduced a line of "Garden Sensation" salads.²⁶

Offering healthier options appears to be good for restaurants' business. *QSR Magazine* listed "healthy kids' meals" and "more fruits and vegetables" as two trends that are most likely to impact quick-service restaurants this year.²⁷ Chain restaurants that increased the number of lower-calorie items sold from 2006 to 2011 demonstrated a greater same-store sales increase than restaurants that did not increase sales of lower-calorie items.²⁸ McDonald's 2011 announcement that it was changing the default side options in its Happy Meals significantly increased the restaurant's "buzz score" among parents (i.e., they responded positively to the news).²⁹

In contrast, other recent developments raise questions about restaurants' commitments to increasing the overall nutritional quality of the products they sell. In addition to healthier trends, *QSR Magazine* also listed "snacks as meals" (i.e., offering smaller options for "around-the-clock eating") and "innovative beverages" (including juices, energy drinks, and soda options) as top trends for 2013.³⁰ McDonald's executives cited some of the less nutritious items on its menu (i.e., breakfast options, McCafe drinks, and Chicken McBites) as key drivers of sales growth in 2011.³¹ Restaurants also have introduced extreme items such as Taco Bell's Doritos Locos Tacos with a shell made out of Doritos,³² Dunkin' Donuts' glazed-doughnut breakfast sandwich,³³ and Burger King's Bacon sundae.³⁴ The Doritos Locos Taco launch was accompanied by an augmented reality smartphone app and extensive promotion via Facebook and Twitter "to amp up the social buzz around

the event," expected to be the "biggest launch in Taco Bell's 50-year history."³⁵

The low cost of items on restaurants' dollar/value menus also appears to have cut into sales of kids' meals as parents continue to purchase fewer kids' meals and more value menu items for their children³⁶ (which also tend to be higher calorie and less nutritious than kids' meal options³⁷). In a 2010 survey of parents who took their 2- to 11-year-old child to one of four fast food restaurants for lunch or dinner, 70% of parents ordered a kids' meal.³⁸ However, this number varied widely by restaurant and age of child. For example, 82% of parents ordered a kids' meal for their young child (2-5 years old) at McDonald's, but just 27% of parents ordered a kids' meal at Subway for their older child (6-11 years old). Orders of dollar/value menu items for their children ranged from 20% (for young children at McDonald's) to 47% (for older children at Subway). In 2012, the NPD Group reports that kids' meals were purchased at just 44% of visits to burger restaurants with children under 6 and 31% of visits with 6- to 12-year-olds.³⁹

Research also demonstrates that nutritious options remain a small proportion of restaurant menus. In an evaluation of the full menus of five popular fast food restaurants, all scored lower than 50 out of a possible 100 points on the Healthy Eating Index, a measure of diet quality.⁴⁰ Restaurants scored especially poorly on availability of total fruit, whole grains, and sodium. A comprehensive analysis of changes in menus offered by eight fast food restaurants over 12 years showed a 54% increase in the number of food items offered (from 85 items per restaurant on average in 1997/98 to 130 items in 2009/10), and median calories per item increased or remained stable for six of these restaurants.⁴¹ Despite improvements, even most kids' meal options do not qualify as healthy. An analysis of 400 chain restaurants found that just 11% of kids' meal main dishes and 33% of sides met the restaurant industry's Kids LiveWell standards in 2009.⁴² Similarly, CSPI examined the 50 top restaurant chains in 2012 and found that 97% of the 3,494

possible kids' meal combinations offered did not meet expert nutrition standards for children's meals; 91% did not meet the restaurant industry's Kids LiveWell standards.⁴³

Some restaurants also have promised to market more responsibly to children. In 2011, Burger King announced that french fries and soda would no longer be the default for its kids' meals, rather parents would be asked to select a side and beverage (from choices that also included healthier sides and beverages).⁴⁴ In its advertising to kids, McDonald's committed to adding messages about healthy lifestyles or nutrition benefits in 2012.⁴⁵ It also launched "Champions of Play," a campaign to promote children's wellness, in connection with its sponsorship of the Olympic Games.⁴⁶ Participants in Kids LiveWell agree to promote or identify the healthy items on their kids' menus.⁴⁷ However, McDonald's and Burger King remain the only two restaurants that participate in the voluntary CFBAI program to improve food advertising to children under 12.⁴⁸ Finally, restaurants have not made any commitments to improve marketing to children older than age 11.

Measuring progress

Given this conflicting evidence of fast food restaurants' progress in improving the nutritional quality and marketing of kids' meals and other menu items to children and teens, objective and transparent data are necessary. The purpose of this report is to quantify changes in the nutritional quality and marketing of fast food to children and teens over the past three years and to identify further opportunities for improvement.

We focus our analyses on 18 restaurants, the 12 restaurants highlighted in the 2010 Fast Food FACTS report plus six additional restaurants that ranked among the top-15 fast food restaurants in U.S. sales and/or had child-targeted messages on their websites and national TV advertising in 2012. Nutrition data were collected in February 2013, and marketing analyses primarily evaluate data through 2012.

Utilizing the same methods as the first Fast Food FACTS report, we measure changes in:

- The nutritional quality of:
 - Kids' meal individual menu items and combinations of main dishes, sides, and beverages;
 - All regular menu items for the top-five traditional fast food restaurants; and
 - Dollar/value menus, healthy menus, and advertised products for the 18 restaurants;
- Advertising spending and TV advertising exposure, including advertising targeted to children and teens;
- Messages and products promoted in advertising that appeared on children's TV networks;
- Child and teen visits to restaurants' websites;
- Advertising on third-party websites, including kids' sites, youth websites, and Facebook;
- Fast food advertising on mobile websites and through mobile apps;
- Social media marketing on Facebook, Twitter, and YouTube; and
- Targeted marketing to black and Hispanic youth, including Spanish- and English-language TV advertising, restaurant websites, and advertising on third-party websites.

As part of her Let's Move campaign, First Lady Michelle Obama has called on restaurants to help create a "marketing environment that supports, rather than undermines, the efforts of parents" to raise healthy children,⁴⁹ and the National Restaurant Association has expressed "the restaurant industry's commitment to offer healthful options for children."⁵⁰ However, previous research shows that fast food remains among the top-two food categories marketed most often to children and teens,^{51,52} and exposure to this marketing contributes most often to excess calorie consumption and poor diet quality for young people.⁵³⁻⁵⁵ The findings in this report serve to evaluate fast food restaurants' true commitment to improving the unhealthy food and marketing environment that surrounds today's children and teens.