



## Short Communication

# Soft drinks and premiums with children's meals marketed on the websites of the top restaurant chains worldwide

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### Abstract

**Objective:** To assess the frequency with which soft drinks and premiums are available with children's meals marketed on the top restaurant chains' websites worldwide.

**Design:** Cross-sectional structured observational assessment of secondary information about top international restaurant chain children's meals.

**Setting:** Websites of top restaurant chains for 193 countries and five regions of the United Nations.

**Participants:** Top restaurant chains (including McDonald's, Subway, Burger King and KFC) across 193 countries. Children's meal images and descriptions were reviewed to determine if the meal was marketed with a soft drink as a beverage option and whether the meal offered a premium.

**Results:** Children's meals were marketed online on restaurant websites by at least one of the four chains in a total of seventy eight of the 193 countries (40.4%). Overall, 56.3% of countries with any online children's meal marketing by the four chains included at least one chain that marketed soft drinks and 92.3% marketed premiums with the meal.

**Conclusions:** Every region in the world includes marketing of children's meals on the websites of the top restaurant chains. The high prevalence of premiums marketed online with children's meals is of concern. Similarly, with over 50% of countries with online children's meal marketing having at least one chain that offers soft drinks as part of the meals, additional regulation and education may be warranted.

**Keywords**  
Children's meals  
Restaurant meals  
Marketing to children

Worldwide, the proportion of children and adolescents (ages 5 to 19 years) who had a weight higher than appropriate for their age increased from 1% in 1975 to 18% in 2016<sup>(1)</sup>. The consumption of energy-dense and high-fat foods, such as those marketed by fast food restaurant chains, is among the contributors to overweight status, nutrition-related health issues in childhood and likelihood of chronic illness<sup>(2)</sup>. With the growth of fast-food restaurants worldwide, the marketing and nutritional quality of children's meals is of interest.

Restaurant children's meals typically include an entree, side and beverage and are usually packaged in a child-friendly box or bag. Research on children's meals offered at the top US restaurant chains indicates that only 3% of children's meals meet expert nutrition standards for

healthier meals<sup>(3)</sup>. Research in many countries, such as Australia<sup>(4)</sup>, Germany<sup>(5)</sup>, Guatemala<sup>(6)</sup>, Japan<sup>(7)</sup> and Saudi Arabia<sup>(8)</sup>, suggests that restaurant children's meals around the world are generally of poor nutritional quality.

Although there are several aspects of children's meals that may be improved, two aspects that have important nutrition implications and that are currently prioritised by child health advocates are the inclusion of sugary beverages and the inclusion of a premium with a meal. Sugar-sweetened beverages contribute to excess calories<sup>(9)</sup>, and soft drinks in particular contribute to long-term health problems<sup>(10)</sup>. Premiums, such as small toys, entice children to request associated foods, and young children's knowledge of toy premiums is associated with fast food consumption<sup>(11)</sup>. Children are particularly susceptible to

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marketing because of their limited ability to discern commercial from noncommercial content or ability to attribute persuasive intent to advertising<sup>(12)</sup>.

While not active marketing to children, such as through video games or advertisements, the depiction of children's meals on company websites may be considered a form of marketing because of the slogans, characters and other visual elements that promote the products along with the menu. Although children's meal marketing has been studied extensively in the USA, the extent to which restaurants in countries around the world market children's meals with soft drinks and/or with premiums has not yet been systematically researched. This study assessed the frequency with which soft drinks and premiums are included with children's meals marketed online on the top restaurant chains worldwide.

## Methods

This study was a cross-sectional observational assessment of children's meals marketed on the websites of the top five restaurant chains worldwide (by number of locations)<sup>(13)</sup>. Four of the top five chains (Subway, McDonald's, KFC and Burger King) were included in the assessment; Starbucks, the third largest restaurant chain, does not offer children's meals.

### Data collection

In the fall of 2018, a research team member visited the global corporate websites of each of the restaurant chains to identify the countries in which the chain was physically located. Subway was in the most countries (174), followed by McDonald's (158), KFC (108) and Burger King (84). The researcher then conducted a Google web search of each restaurant chain name and each country where they were located, to find chain websites. For example, we would use the search terms 'McDonald's' and 'Argentina'. The top search results were clicked through until the official restaurant chain website for that country was found. If, after checking two pages of search results, no official restaurant website for a particular country was found, then the country-specific restaurant was excluded from the study. If a webpage was in a language different from English, the researcher could usually click the Google pop-up inviting translation of the page, and an English version was provided. Once at the restaurant website, we looked for children's meals by reviewing the site menus and tabs. Typically, a children's meal, sometimes referred to as a 'Happy Meal' or 'Kids', was a separate page linked directly from the website or part of the food 'Menu'.

If the website included a children's menu section online or in an attached document or on a children's meal webpage, then the chain in that country was coded as marketing a children's meal online. Each children's meal

description and images were reviewed to determine if the meal was served with a soft drink as a beverage option and whether the meal offered a premium. Soft drinks included sugary (containing added sugars) carbonated beverages, usually pictured in a branded cup or listed in the description of what could be included as part of the children's meal. If the only beverage that came with a child's meal was depicted without a description, and it was unclear what was in the beverage container, we coded the meal as not containing/marketing soft drinks. Although juices and other beverages may be sugary, due to the variation in ingredients of such beverages across countries, it is not possible to assess whether they would be considered sugary based on observation of the image or menu listing only, so they were not included. Premiums such as toys, codes for online game play, books and similar incentives for children were coded as present if they were pictured along with the children's meal.

### Data analysis

Data were entered in a Google spreadsheet, and the seventy-eight countries with children's meals were ultimately separated out for analyses and the total number of countries established as 193, per the United Nations list of member countries<sup>(14)</sup>, to ensure a common total number across chains and globally. The data were grouped by UN region (Africa, Americas, Asia, Europe and Oceania), in order to organise the countries into meaningful categories for display. The regional groupings made sense because restaurant companies typically are structured at the regional level and national policies are often influenced by other countries within the same region. The proportion of the countries with children's meals that contained (1) a soft drink or (2) a premium, for each chain and overall, was calculated. The proportions by region were then calculated to create a summary table.

## Results

Children's meals were marketed on at least one of the four chains' websites for a total of seventy-eight of 193 countries worldwide (40.4%). The region with the most countries with at least one of the chains marketing children's meals on their websites was Europe (33 countries/76.7% of countries in that region), followed by Asia (18/38.3%), the Americas (17/48.6%), Africa (7/13.0%) and Oceania (3/21.4%). McDonald's marketed children's meals on their website in the highest number of countries (73/37.8% of all 193 countries), followed by Burger King (28/14.5%), KFC (20/10.4%) and Subway (16/8.3%) (Table 1).

Overall, 56.4% of countries with any children's meal marketing on the four chains' websites included at least one chain that marketed soft drinks and 92.3% marketed

**Table 1** Online children's meal marketing and inclusion of soft drinks and premiums with meals at top restaurant chains by region

Region	McDonald's	Subway	Burger king	KFC	Total
<b>Africa (n 54; 28.0 % of all countries)</b>					
% of Countries where they market children's meals on a restaurant website	13	1.9	0	0	13.0
% with soft drinks	71.4	0	–	–	
% with premium	100	0	–	–	
<b>Americas (n 35; 18.1 %)</b>					
% of Countries where they market children's meals on a restaurant website	45.7	5.7	25.7	8.6	48.6
% with soft drinks	12.5	0	44.4	33.3	
% with premium	100	50	77.8	33.3	
<b>Asia (n 47; 24.4 %)</b>					
% of Countries where they market children's meals on a restaurant website	36.2	2.1	6.4	6.4	38.3
% with soft drinks	52.9	0	33.3	100	
% with premium	82.4	100	33.3	66.7	
<b>Europe (n 43; 22.2 %)</b>					
% of Countries where they market children's meals on a restaurant website	69.8	23.3	27.9	27.9	76.7
% with soft drinks	63.3	0	50	50	
% with premium	96.7	50	50	75	
<b>Oceania (n 14; 7.3 %)</b>					
% of Countries where they market children's meals on a restaurant website	21.4	14.3	21.4	14.3	21.4
% with soft drinks	0	0	0	0	
% with premium	66.7	0	33.3	0	
<b>Total (n 193)</b>					
% of Countries where they market children's meals on a restaurant website	37.8	8.3	14.5	10.4	40.4
% with soft drinks	48	0	39.3	50	56.4
% with premium	93.2	43.8	53.6	60	92.3

premiums with a meal. KFC offered soft drinks as an option with children's meals in 50 % of countries where they market children's meals on their websites, followed by McDonald's (48 %) and Burger King (39.3 %). Subway did not include soft drinks as an option with the children's meal in any of the sixteen countries where it markets children's meals on its websites. Other beverage items that were included with children's meals were juice, chocolate milk, plain milk and water. McDonald's was more likely to include premiums with children's meals (93.2 % of countries), compared to KFC (60 %), Burger King (53.6 %) and Subway (43.8 %). McDonald's was the only chain to offer non-toy/non-game premiums, in the form of digital books, in Bulgaria, Greece and Latvia.

## Discussion

This study suggests that marketing of children's meals on the websites of the world's top restaurant chains is somewhat prevalent, with children's meals marketed on restaurant websites in about four of ten countries worldwide. McDonald's marketed children's meals on their websites in the most countries.

About 56 % of countries where we found children's meals on websites had at least one chain that offered soft drinks with children's meals marketed on the website. The US-based Center for Science in the Public Interest recommends removing soft drinks from children's menus altogether<sup>(15)</sup>. With online menus and ordering popular in many countries, the items marketed on websites are likely to influence purchasing, either through the website

or if consulted prior to visiting the physical restaurant. According to Center for Science in the Public Interest's recent report, *Soda Still on the Menu*, the four restaurants analysed in this study have removed sugary beverages from their children's menus in the USA. Research conducted across countries and companies suggests that companies can and do vary the nutritional quality of their children's menu items from country to country<sup>(16)</sup>. Restaurant chains play an important role in their marketing around the world, including online. Even if they offer soft drinks in the physical restaurant and in the online menu, they do not need to picture them next to the children's meals online, where children will see and may be influenced by the image.

Over 90 % of the countries had at least one chain that markets premiums with children's meals on the website, suggesting that premiums are an important component of restaurants' website marketing to children. The US-based Health Eating Research group recommends that premiums only be marketed with children's meals that meet nutritional standards<sup>(17)</sup>. The US-based National Policy Analysis Network recommends that local governments set nutrition standards for meals that include children's toy giveaways using local ordinances<sup>(18)</sup>. A study on the effect of a toy ordinance passed in 2010 in Santa Clara County, California, USA, suggests that the requirement allowing toys and other incentives only with meals that met nutrition standards contributed to improved side and beverage offerings and promotion and distribution of children's meals<sup>(19)</sup>. Alternatively, research from Ontario, Canada, suggests that offering toys with 'healthier' meals may contribute to children choosing those meals over less



healthy meals<sup>(20)</sup>. A study from Thailand suggests that restaurant chains market premiums and characters online. In a study that included ten restaurant chain Facebook pages, 6.7% of posts offered some kind of competition, prize or giveaway and 4% featured a branded character<sup>(21)</sup>. With restaurant website children's meals premiums prevalent, child health professionals and officials may advocate for national-level or chain-specific policies that stipulate that only restaurant chains with healthier meal options offer premiums may encourage healthier choices and contribute better child nutrition. Those working with families to provide nutrition education and counseling also may recommend that parents look for and discuss with their children healthier options when consulting children's meal and menu items on restaurant websites.

In this study, soft drinks and premiums marketed on restaurant websites varied across regions. Though information on online food marketing worldwide is limited, previous research suggests that general marketing activity and impact are growing faster in low- and middle-income countries<sup>(22)</sup>. Research also suggests that stringent national market regulation is associated with slower increases in food consumption and BMI<sup>(23)</sup>. As such, national policies to restrict and regulate food marketing to children are of interest. In 2010, the WHO published a Set of Recommendations on the Marketing of Foods and Non-Alcoholic Beverages to Children<sup>(24)</sup>. A 2015 report discussed transnational and industry efforts to limit food marketing and referenced one study on national-level efforts to limit food marketing to children<sup>(25)</sup>. The 2009 study of fifty-nine countries where food marketing policies had been developed and some information was available found that four of the seventeen countries with restrictions on food marketing to children were low- or middle-income countries<sup>(26)</sup>. Recent research from one of the countries, Brazil, suggests that a more comprehensive approach, such as their 2016 law to address labelling, marketing and school food, contributes to lower purchasing of high-sugar beverages<sup>(27)</sup>. Though not included in the 2009 study, Mexico recently implemented policies regulating the school environment and adopting on-package marketing, but public health officials are still calling for restrictions on marketing of unhealthy products to children and adolescents<sup>(28)</sup>.

In 2018, the WHO Regional Office for Europe released a report on progress in implementing the 2010 recommendations, stating that just over 50% of countries had implemented a policy framework on food marketing to children. The report authors state that the focus of most national frameworks and policies was advertising; marketing in digital and other formats, such as online for restaurant children's meals, was rarely included<sup>(29)</sup>.

This study had several limitations. First, the assessment was limited to restaurant website marketing, and so may

not be an accurate reflection of the availability of children's meals offered across the countries. Second, the meals marketed on restaurant websites may have varied from what was offered physically in the restaurants. Third, the study only assessed one form of marketing online (company websites) and only one form of marketing overall (online). Fourth, the study may have underestimated the amount of sugary beverages marketed on restaurant websites because no juice drinks, regardless of sugar or juice content, were included. Fifth, the study is just one snapshot in time and does not describe changes over time or even the current status at the time of publication. Sixth, the study did not assess the purchase or consumption of children's meals within each country. Future research might survey organisations or restaurant chains to find out more about the availability and contents of children's meals in countries worldwide.

Every region in the world includes marketing of children's meals on the websites of the top restaurant chains. Though only four in ten countries include marketing of children's meals on restaurant websites, the high prevalence of premiums marketed with children's meals is of concern. Similarly, with over 50% of countries with restaurant website children's meal marketing having at least one chain that markets soft drinks as part of the meals, additional government and restaurant industry regulation of online marketing on company websites may be warranted.

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