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Point-of-Sale Database of the second state of

Evidence from 11 cities 2023

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Contents

Executive Summary	1
Introduction	4
Point-of-sale marketing to children in stores	5
Point-of-sale marketing to children in restaurants	5
Policy context	6
Objective	6
Methods	7
Data collection	9
Analysis	10
Results	11
Stores	11
Exterior ads	14
Island displays	14
Branded beverage and ice cream fridges	14
Placement: a focus on checkout aisles	14
Differences by region	14
Restaurants	15
Exterior ads	17
Interior ads	17
Children's menus	18
Differences by region	19
Discussion	
High prevalence of marketing to children in stores and restaurants across	Canada20
Key marketing to children techniques used by stores and restaurants	21
Implications for policy	21
Conclusion	24
References	25

Acknowledgements:

This report synthesizes work funded by Heart & Stroke. Some of the data was provided by Health Canada in collaboration with Ottawa Public Health. However, the provision of this data does not imply an endorsement of the contents of the report. Sincere thanks to the data collectors whose hard work made these projects possible.

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Executive Summary

INTRODUCTION

Children in Canada are exposed to a high level of food and beverage marketing through various media. Marketing of unhealthy foods and beverages, defined as those high in salt, sugars, and saturated fats, negatively impacts children's health and nutrition. Food manufacturers, retailers and restaurants invest heavily in point-of-sale marketing. Still, we know little about the extent of point-of-sale marketing to children (M2K) in Canada. This is an important gap for three reasons. First, purchasing decisions are greatly influenced at the point-of-sale in stores and restaurants. Second, a national policy to reduce M2K is being considered, making this knowledge gap especially urgent. Third, marketing evolves in response to policies aiming to curtail it. It is important to understand the baseline of point-of-sale M2K to track how it evolves in response to federal M2K policies.

OBJECTIVE

This report synthesizes results from three recent studies that examined the prevalence of point-of-sale M2K in stores that sell foods and in restaurants (a Three-City Study from 2021, a Six-City Study from 2022, and a study conducted in Northern Canada in 2022). Combined, these studies report on data from 11 regions across eight provinces and two territories in Canada (YK, NWT, BC, AB, SK, MB, ON, QC, NS, NL).

METHODS:

The Canadian Marketing Assessment Tool in Stores and Restaurants (CMAT-S and CMAT-R) were used to audit 2,140 restaurants and 813 stores across Canada. In addition, 6,595 photos of marketing instances (e.g., exterior and interior marketing, island displays, branded fridges) were analyzed to explore child-directed marketing techniques commonly used in point-of-sale M2K. Each study used Geographic Information Systems and Statistical Analysis to explore the prevalence of M2K.

RESULTS

Despite some regional variation in specific M2K indicators, point-ofsale M2K was ubiquitous in stores and restaurants across Canada. For example, the Six-City study found that half of all exterior store ads and 41% of all exterior restaurant ads used at least one child-directed marketing technique. The vast majority were for unhealthy food product categories.

The most common child-directed marketing technique across studies was child themes/visual design, followed by branded characters.

In stores, checkout aisles are prime M2K areas as they use placement to position products within a child's reach. Among all three studies, 53% of stores had "junk food power walls" at checkout. Almost all stores (94% in the Three-City Study, 90% in the Northern Study, and 89% in the Six-City Study) had at least one unhealthy food in checkout aisles



In restaurants, children's menus contained numerous examples of marketing unhealthy foods. There were 50 times more unhealthy children's entrées than healthy ones. Over half of the children's menus included an unhealthy beverage with the purchase of a meal. One-fifth of children's menus engaged in M2K by including activities like mazes, jokes, and colouring pages, and 13% offered a free toy or giveaway with a meal purchase.

CONCLUSION

The results of these three studies fill a major gap in Canadian evidence on M2K and have important policy implications. Even before entering stores or restaurants in Canada, children are exposed to a substantial amount of advertising, which continues once they go in. Policies to support child health are needed. Regulations to encourage healthy checkout aisles, mitigate the conceivable impact of "junk food power walls," and prohibit toy giveaways with children's meals should be considered. Child themes and visual design are widespread childdirected point-of-sale marketing techniques and should be addressed when designing M2K restrictions.

Introduction

Children in Canada are exposed to a high level of unhealthy food and beverage marketing across media channels.^{1,2} Marketing unhealthy foods and beverages – those high in salt, sugar, and/or saturated fats – to children (M2K) negatively impacts children's health and nutrition.^{3–6} In Canada, existing research on M2K focuses primarily on digital and television channels or specific settings (e.g., schools).^{1,2} A major gap in research is the prevalence of point-of-sale M2K in stores that sell food and in restaurants.^{1,2} Stores like supermarkets and convenience stores are important settings for making food purchasing decisions. Up to 70% of consumer purchasing decisions are made in retail venues "at the shelf."⁷ Therefore, many industries (including food manufacturers) invest heavily in point-of-sale marketing. Promotional strategies such as exterior advertising aim to entice customers to enter the store, while placement strategies are key marketing features within stores. For example, special displays like island displays – standalone displays that are often branded and/or have vivid graphic designs – and checkout aisles are effective in-store marketing techniques.⁸ Checkout aisles are considered key M2K areas in supermarkets⁹¹⁰ since they typically present many unhealthy options within children's reach and encourage "pester power"¹⁰ – when children nag or pester their parents to make impulse purchases.

A New Zealand study found that children were heavily exposed to in-store food marketing. Using wearable cameras to capture children's everyday exposures, researchers found food marketing in supermarkets and convenience retailers was so high they deemed it "too extensive" to code.¹¹ Because of the widespread potential exposure to in-store M2K, Health Canada, the federal body committed to monitoring M2K, has identified supermarkets and convenience retailers as important settings to examine.¹²

Point-of-sale marketing to children in restaurants

Restaurants are also important settings in which food purchasing decisions are made and should be monitored. Spending in restaurants steadily increased in Canada from 2010 to 2017, accounting for about 30% of household food spending in 2017.¹³ About half (54%) of Canadians ate out at least once per week in 2016.¹⁴ The fast food restaurant industry in Canada grew an average of 2.5% between 2015 and 2020¹⁵ and experienced just over an 8% market growth in 2022.¹⁶

Children's meals served in restaurants in Canada tend to be of poor nutritional quality. The most recent Canadian study (using data from 2010) found that half of sit-down restaurant children's meals and 35% of fast food restaurant children's meals exceeded 1,200mg of sodium, the daily adequate intake for children aged 4-8 years.¹⁷ For instance, in Canada, a McDonald's Happy Meal cheeseburger currently contains 670mg of sodium,¹⁸ and a Burger King children's cheeseburger contains 732mg.¹⁹ Not surprisingly, on days they eat fast food, children consume more calories, saturated fat, sodium, sugars, and sugar-sweetened beverages, and fewer servings of fruits and vegetables than on days they do not have fast food.^{20,21}

Policy context

Legislation prohibiting M2K in Canada has been proposed but not yet adopted. The province of Quebec adopted legislation in the early 1980s to protect children from commercial advertising (including food and beverages). Still, the restrictions do not capture all forms of point-of-sale marketing. In Quebec, advertising in store windows, displays, and on labels is allowed if the advertisements meet certain conditions (e.g., they cannot directly incite a child to buy goods or services or encourage the child to urge another person to purchase goods or services).²² Of the countries that currently have legislation restricting commercial food and beverage marketing to children, most focus on broadcast media bans (e.g., television and radio) and exclude point-of-sale marketing.²³

The lack of knowledge around point-of-sale marketing of foods and beverages to children in Canada is a critical gap for three reasons. First, purchasing decisions are greatly influenced at the point-of-sale in stores and restaurants. Second, a national policy to reduce M2K is being considered, making this knowledge gap especially urgent. Third, marketing evolves in response to policies aiming to curtail it. For example, sponsorship expenditures increased considerably when tobacco product advertising was banned. The tobacco industry then invested more heavily in point-of-sale strategies when sponsorship was prohibited.^{24,25} In other words, as each form of promotion was banned, tobacco firms shifted to different marketing strategies to continue communicating brand imagery.^{24–26} Given the current policy context in Canada, it will be imperative to monitor how all M2K strategies, including point-of-sale M2K, change over time, especially if M2K restrictions are not comprehensive.

Objective

This report fills critical knowledge gaps by synthesizing three recent studies that produced Canadian evidence on the prevalence of M2K at the point-of-sale in stores that sell food and restaurants.

Methods

This report describes the results from three studies conducted in 2021 and 2022. Figure 1 shows the regions from which data were collected (11 regions across Canada: 8 provinces and 2 territories).



Figure 1. Location of data collection sites (From west to east: Whitehorse, YK; Haines Junction, YK; Carcross, YK; Vancouver, BC; Calgary, AB; Yellowknife, NWT; Saskatoon, SK; Winnipeg, MB; Kitchener, ON; Ottawa, ON; Québec City, QC; Halifax, NS; St. John's, NL)

This report presents results from 2,140 restaurants and 813 stores across Canada, including 6,595 photos.

Table 1. Key differences between studies

CHARACTERISTIC	THREE-CITY STUDY	SIX-CITY STUDY	NORTHERN STUDY
DATA COLLECTION DATES	September – October 2021	May – September 2022	August 2022
CITIES/REGIONS	Saskatoon, SK; Kitchener, ON; St. John's, NL	Cities and surrounding rural areas of: Vancouver, BC; Calgary, AB; Winnipeg, MB; Ottawa, ON; Québec City, QC; Halifax, NS	Whitehorse, YK; Haines Junction, YK; Carcross, YK; Yellowknife, NWT
SAMPLING STRATEGY	Neighbourhoods: purposeful selection to maximize diversity in geographic and socio- demographic variability across cities	School neighbourhoods: stratified random sample (stratified by urban/rural, socio-demographic characteristics, and by primary/secondary school)	Census of all stores and restaurants in the four regions
RESTAURANTS (n)	405	1,605	130
STORES (n)	175	588	50
PHOTOS (n)	1,783	4,328	484

Data collection

The Canadian Marketing Assessment Tool – Stores (CMAT-S) was used to assess food and beverage marketing in stores that sold food, while the Canadian Marketing Assessment Tool – Restaurants (CMAT-R) was used to assess food and beverage marketing in restaurants. Both tools were designed to collect data on general point-of-sale food and beverage marketing and on marketing techniques commonly used to market to children (hereafter, *child-directed*^a marketing). Minor modifications to the tools to improve data collection were made between projects (e.g., prevalence of child-appealing island displays measured as a range (Three-City Study) vs. counted (Six-City and Northern Study); collection of data on non-child-appealing island displays added for Six-City and Northern Study). The methods and results sections for this report focus on child-directed marketing techniques rather than general marketing indicators. For each study, Health Canada's Food Classification Protocol was used to define "healthy" and "unhealthy" foods and beverages.

The CMAT-S collects data on store type (supermarket, convenience store, pharmacy, dollar store, ethnic grocer, other), as well as marketing indicators such as exterior marketing, branded beverage and ice cream fridges, island displays, whether student cards were accepted, and data on checkout aisles as key child-directed⁹ placement areas (including junk food power walls^b). Additionally, the presence of "representative foods" exemplifying "healthier" and "unhealthy" selections (i.e., fruit, vegetables, water, sugary drinks, candy/gum, salty snacks) were examined in checkout aisles as a key placement area.³¹

The CMAT-R collects data on restaurant type, whether a drive-thru exists (and, if so, whether there are advertisements specific to children's activities), the presence of exterior and interior advertising, and the availability of student card/loyalty programs. The CMAT-R also collects data on restaurant amenities or promotions specific to children, such as the presence of indoor and outdoor children's play areas, the availability of children's menus (including the availability of toys/giveaways with children's meals, activities/ games on menus, nutrition information on children's menus), promotions for children's parties, children's sports team discounts, and promotions for "children eat free/for less" or "parents eat free/for less". Finally, the nutritional content of children's menus was assessed using Health Canada's Food Classification Protocol²⁷ to determine the number of "healthy" vs. "unhealthy" entrées.

- a For the purpose of this report, *child-directed* refers to "marketing techniques generally used to market to children" according to Health Canada's *Indicators of marketing techniques to be tracked across marketing media and settings*. These techniques include the presence of children or characters (branded, licenced, cartoon, celebrity) on ads, cross-promotions, games or activities, appeals to fun/cool, and child-themes or visual design.
- b Power walls are typically understood in the context of point-of-sale tobacco marketing. Tobacco power walls display hundreds of tobacco products at the checkout, and in many studies have been found to be key point-of-sale strategies that increase smoking risk among youth.^{25,39-42} Tobacco power walls work by increasing youths' perceptions about smoking norms (i.e., if there are this many kinds/brands/packs of tobacco here, then a lot of people must smoke), which increases their susceptibility to smoke in the future.⁴¹ For the purposes of this study, a "junk food power wall" refers to dozens of candy varieties, salty snacks, and sometimes caloric beverages available at check-out.

Photos were captured as part of each tool. For the CMAT-S, pictures of exterior marketing (up to 10 images per store), island displays (up to four images per store), branded beverage fridges, and branded ice cream fridges were taken. For the CMAT-R, photos of exterior and interior marketing (up to 10 images each per restaurant) were taken. Photos were *not* restricted to those typically considered child-directed marketing examples. Trained researchers assessed the photos using the CMAT Photo Coding Tool (CMAT-PCT). The CMAT-PCT was used to evaluate child-directed marketing techniques that aligned with Health Canada's *Indicators of marketing techniques to be tracked across marketing media and settings*. These techniques include the presence of children, child themes/visual design (where the ad uses themes, designs, colours, images, or other design elements that are commonly associated with children, such as fantasy, magic, adventure, and zoo animals), appeals to fun/cool, branded characters, licenced characters, other cartoon characters, celebrities/public figures, and cross-promotions.

Analysis

Data were analyzed using geographic information systems (GIS) analysis and statistical analysis. GIS analyses were used to link each store and restaurant to neighbourhood-level characteristics (e.g., neighbourhood income). Descriptive statistics (frequencies, proportions, means, standard deviations) for key marketing indicators are presented. Within each study, Chi-Square statistics were used to detect differences in dichotomous variables. One-way ANOVAs were used to evaluate differences in continuous outcomes. All statistics were computed using SPSS Statistics 28.0.0.0, and p<0.05 was considered statistically significant.

Results

Stores

Data were collected from 813 retailers (Table 2). Table 3 describes the photo analysis results from 2,971 photos of exterior advertisements, island displays, ice cream fridges, and beverage fridges.

Table 2: Marketing indicators in retail settings (n=813 retailers, 2021-2022)

INDICATOR	OVERALL	THREE-CITY STUDY	SIX-CITY STUDY	NORTHERN STUDY
TOTAL NUMBER (n)	813	175	588	50
% RETAILERS WITH EXTERIOR MARKETING	65.7	65.1	67.5	62.7
% RETAILERS WITH A BRANDED BEVERAGE FRIDGE	61.0	66.3	57.7	82.0
% RETAILERS WITH A BRANDED ICE CREAM FRIDGE	45.1	47.4	44.2	48.0
% RETAILERS WITH A JUNK FOOD POWER WALL*	52.8	54.9	50.3	74.0
% RETAILERS WITH JUNK FOOD-FREE CHECKOUT AISLES	19.2	8.6	23.9	10.0

INDICATOR	OVERALL	THREE-CITY STUDY	SIX-CITY STUDY	NORTHERN STUDY
% RETAILERS WITH A STUDENT CARD PROGRAM	2.2	Not collected	2.2	Not collected
ISLAND DISPLAYS				
MEAN NUMBER OF CHILD-DIRECTED ISLAND DISPLAYS PER STORE**	9.1	6-10 (range)	8.9	11.8
MEAN NUMBER OF NON-CHILD- DIRECTED ISLAND DISPLAYS PER STORE	6.4	Not collected	6.3	7.0

* Power wall: dozens of candy varieties, salty snacks, and sometimes caloric beverages available and displayed at checkout.

**Island displays included at least one of the following child-directed marketing techniques: presence of children, use of child language, child themes/visual design, unusual product appearance or flavour, appeals to fun/cool, characters (branded, licenced, other cartoon characters, celebrities/public figures), cross-promotions, games or activities. The Three-City Study only assessed the range of child-targeted island displays and did not assess the number of non-childdirected island displays.

Table 3: Techniques used to market to children in photo

analysis of retailer ads (n=2,971 photos, 2021-2022)

TECHNIQUE	ISLAND DISPLAYS (n=1187) n (%)	ICE CREAM FRIDGE (n=311) n (%)	BEVERAGE FRIDGE (n=426) n (%)	EXTERIOR ADS (n=1047) n (%)
PRESENCE OF	2	3	0	4
CHILDREN	(0.2)	(1.0)		(0.4)
CHILD THEMES/	465	214	136	412
VISUAL DESIGN*	(39.2)	(68.8)	(32.9)	(39.4)
APPEALS TO FUN/	58	22	1	37
COOL	(4.9)	(7.1)	(0.2)	(3.5)
BRANDED	152	65	16	90
CHARACTERS	(12.8)	(20.9)	(3.8)	(8.6)
LICENCED	25	46	2	2
CHARACTERS	(2.1)	(14.8)	(0.5)	(0.2)
OTHER CARTOON	58	16	8	85
CHARACTERS	(4.9)	(5.1)	(1.9)	(8.1)
CELEBRITIES/	8	0	1	2
PUBLIC FIGURES	(0.7)		(0.2)	(0.2)
CROSS-	52	0	2	17
PROMOTIONS	(4.4)		(0.5)	(1.6)

*For child themes/visual design, the Three-City Study and Northern Study only captured "child visual design" (e.g., bright colours and shapes) rather than also including "child themes" (e.g., magic, zoo animals), so this technique is likely underestimated in the Three-City Study and the Northern Study.

The following paragraphs comprehensively describe exterior ads, island displays, and branded beverage and ice cream fridges and discuss key placement areas in retailers and differences by region.

Exterior ads

Overall, two-thirds (66%) of retailers had at least one exterior advertisement. The most common marketing technique across all three studies was the use of child themes and visual design, with about 40% of exterior ads using these techniques. Branded characters also appeared in exterior ads (9%). The Six-City Study found that half (54%) of exterior food ads used at least one child-directed marketing technique. Of the exterior ads in the Six-City Study that contained an image of a food or non-alcoholic beverage, 68% were for chocolate/candy, salty snacks, cookies/granola bars, frozen treats like ice cream, and/or sugar-sweetened beverages and juices.

Island displays

On average, there were about 15 island displays per store across the three studies, 59% of which were child-directed. Of the island displays analyzed in the photo analysis, 40% used child themes/visual design, and 13% had branded characters. Among retailers that had island displays, 98% of retailers in the Three-City Study and 91% of retailers in the Northern study sold unhealthy foods in their island displays.

Branded beverage and ice cream fridges

Across the three studies, 61% of retailers had branded beverage fridges, and 45% had branded ice cream fridges. The two most common child-directed marketing techniques on beverage fridges were child themes/ visual design (33%) and branded characters (4%). These same marketing techniques were most commonly used on ice cream fridges but at far higher proportions: 69% displayed child themes/visual design, and 21% had branded characters. The Six-City Study found that 40% of beverage fridges and 74% of ice cream fridges used at least one child-directed marketing technique.

Placement: a focus on checkout aisles

Over half of the retailers (53%) had junk food power walls. Almost all stores (94% in the Three-City Study, 90% in the Northern Study, and 89% in the Six-City Study) had at least one unhealthy food in the checkout aisles. Only 19% had any junk-food-free checkout aisles. In all studies, candy and gum were the most common products available in checkout aisles (84% of stores across studies), followed by salty snacks (57% across studies). Fruits and vegetables were the least frequently available representative foods at the checkout. Only 2% of retailers sold vegetables, and 6% sold fruits at checkout.

Differences by region

While several significant differences in M2K indicators existed between regions in the Six-City and the Three-City studies, there were no consistent trends in terms of "more" or "less" M2K in a given city. Notably, Quebec City had the lowest proportion of child-directed island displays in the Six-City study. It was also the only city where the mean number of non-child-directed island displays per store exceeded the mean number of child-directed island displays. As seen in Table 2, the proportion of retailers with branded beverage fridges and junk-food power walls was higher in the Northern study than in the others.

Restaurants

The results presented in this section are based on data collected from 2,140 restaurants. Table 4 describes marketing features of restaurants, with examples of restaurant amenities or promotions specific to children. Fourteen percent of restaurants had student or loyalty programs. Play areas, promotions for children's parties, and promotions for "children or parents eat free/for less" were uncommon. About 7% of restaurants had a drive-thru, and 10% of drive-thrus had at least one ad for children's activities.

Table 4: Marketing indicators in restaurants (n=2,140 restaurants, 2021-2022)

Indicator	Overall n (%)	Three-City Study (n=405) n (%)	Six-City Study (n=1605) n (%)	Northern Study (n=130) n (%)
RESTAURANTS WITH	1260	241	946	73
EXTERIOR MARKETING	(58.9)	(59.5)	(59.3)	(56.2)
RESTAURANTS WITH	905	258	586	61
INTERIOR MARKETING	(42.2)	(63.7)	(37.1)	(46.9)
RESTAURANTS WITH A	156	60	84	12
DRIVE-THRU	(7.3)	(14.8)	(5.2)	(9.2)
RESTAURANTS WITH STUDENT OR LOYALTY PROGRAMS	240 (13.8)	Not collected	218 (12.9)	22 (16.9)
RESTAURANTS WITH	16	8	6	2
OUTDOOR PLAY AREA	(0.7)	(2.0)	(0.4)	(1.5)
RESTAURANTS WITH	23	10	10	3
INDOOR PLAY AREA	(1.1)	(2.5)	(0.6)	(2.3)
RESTAURANTS WITH "CHILDREN OR PARENTS EAT FREE/FOR LESS" PROMOTIONS	23 (1.1)	15 (3.7)	8 (0.5)	0

Indicator	Overall n (%)	Three-City Study (n=405) n (%)	Six-City Study (n=1605) n (%)	Northern Study (n=130) n (%)
RESTAURANTS WITH PROMOTIONS FOR CHILDREN'S PARTIES	26 (1.2)	11 (2.7)	14 (0.8)	1 (0.8)
RESTAURANTS WITH PROMOTIONS FOR CHILDREN'S SPORTS TEAMS DISCOUNTS	12 (0.6)	Ο	12 (0.7)	0
RESTAURANTS WITH A CHILDREN'S MENU	445 (20.8)	128 (31.6)	286 (18.1)	31 (23.8)
RESTAURANTS WITH A DISPLAY FOR CHILDREN'S MEAL TOY	36 (1.7)	5 (1.2)	27 (1.6)	4 (3.1)
DRIVE-THRUS WITH CHILD- DIRECTED ADS*	16 (10.3)	6 (10.0)	9 (14.3)	1 (0.8)

*E.g., featured toys with meals, children's sports teams, or camps

Table 5 describes the photo analysis results of techniques used to market to children in restaurant exterior and interior ads. The following paragraphs describe exterior and interior ads and children's menus in more detail and discuss regional differences.

Table 5: Techniques used to market to children in photo analysis of restaurant ads (n=3,624 photos, 2021 – 2022)

Techniques	Exterior ads (n=2,143) n (%)	Interior ads (n=1,481) n (%)
PRESENCE OF CHILDREN	8 (0.4)	16 (1.1)
CHILD THEMES/VISUAL DESIGN	790 (36.9)	603 (40.7)
APPEALS TO FUN/COOL	40 (1.9)	58 (3.9)
BRANDED CHARACTERS	72 (3.4)	48 (3.2)
LICENCED CHARACTERS	21 (1.0)	21 (1.4)
OTHER CARTOON CHARACTERS	55 (2.6)	56 (3.8)
CELEBRITIES/PUBLIC FIGURES	15 (0.7)	12 (0.8)
CROSS-PROMOTIONS	29 (1.4)	11 (0.7)

Exterior ads

Overall, 59% of restaurants had exterior ads. Child themes/visual design was by far the most commonly-used child-directed marketing technique (37%) followed by branded (3%) or other cartoon characters (3%). In the Six-City Study, 78% of exterior ads contained an image of a food or non-alcoholic beverage. Of these, 92% of ads featured chocolates/candies, salty snacks, cookies/granola bars, frozen treats like ice cream, sugar-sweetened beverages and juices, and/or restaurant meals. Further, 41% of exterior food ads used at least one child-directed marketing technique.

Interior ads

Less than half (42%) of restaurants had interior ads. Similar to exterior ads, child themes/visual design was frequently used (41% of ads), followed by appeals to fun/cool (4%) and other cartoon characters (4%). In the Six-City Study, 82% of interior ads contained an image of a food or non-alcoholic beverage. Of these, 84% of ads featured chocolates/candies, salty snacks, cookies/granola bars, frozen treats like ice cream, sugar-sweetened beverages and juices, and/or restaurant meals. Half (49%) of interior food ads used at least one child-directed marketing technique.

Children's menus

Table 6 describes an analysis of children's menus from the restaurants that offered them.

Table 6. Children's menu analysis (n=442 children's menus,2021-2022)

Indicator	Overall n (%)	Three-City Study n (%)	Six-City Study n (%)	Northern Study n (%)
TOTAL NUMBER OF CHILDREN'S MENUS	442 (100)	125 (100)	286 (100)	31 (100)
MENU DESIGN AND NON-FOOD FEATU	JRES			
CHILDREN'S MENUS WITH FREE TOYS/CHILD-ORIENTED GIVEAWAYS	57 (12.9)	18 (14.4)	34 (11.9)	5 (16.1)
CHILDREN'S MENUS WITH ACTIVITIES (E.G., JOKES, GAMES, MAZES)	89 (20.1)	29 (23.2)	53 (18.6)	7 (22.6)
CHILDREN'S MENUS WITH LINKS TO ONLINE GAMES/RESOURCES	15 (3.4)	6 (4.8)	8 (2.8)	1 (3.2)
CHILDREN'S MENUS WITH NUTRITION INFORMATION FOR ALL ITEMS	159 (36.0)	<mark>63</mark> (50.4)	89 (31.1)	7 (22.6)
CHILDREN'S MENU OFFERINGS				
CHILDREN'S MENUS WITH COMBO MEALS	<mark>324</mark> (73.3)	111 (88.9)	195 (68.7)	18 (58.1)
CHILDREN'S MENUS WITH FREE REFILLS ON CALORIC BEVERAGES	<mark>63</mark> (14.3)	35 (27.8)	12 (4.2)	16 (51.6)
CHILDREN'S MENUS THAT AUTOMATICALLY INCLUDE AN UNHEALTHY BEVERAGE WITH PURCHASE OF AN ENTRÉE	232 (52.5)	75 (60.3)	140 (49.1)	17 (54.8)

Indicator	Overall Mean	Three-City Study Mean	Six-City Study Mean	Northern Study Mean
MEAN NUMBER OF UNHEALTHY CHILDREN'S MENU ENTRÉES	4.5	2.1	5.44	5.35
MEAN NUMBER OF HEALTHY CHILDREN'S MENU ENTRÉES	0.09	0.1	0.10	0

About a fifth (21%) of restaurants had children's menus. In terms of menu design and non-food features, 13% offered free toys or child-oriented giveaways with the purchase of a children's meal, 20% provided activities for children to complete while waiting for their meal, 3% contained links to online games or resources, and 36% had nutrition information for all menu items.

In terms of menu offerings (i.e., items available for sale on children's menus), about three-quarters (73%) offered combo meals, 14% offered free refills on caloric beverages, and just over half (53%) automatically included an unhealthy beverage with the purchase of a child's entrée. The nutritional content of most children's menu entrées was poor. On average, children's menus featured 50 times more unhealthy than healthy entrées.

Differences by region

In the Six-City Study, there were many differences in restaurant M2K between the six regions, but regions within the other two studies were similar to one another. For example, in the Six-City Study, the prevalence of exterior restaurant marketing ranged from a low of 41.3% in Winnipeg to a high of 72.9% in Vancouver. The proportion of restaurants offering children's menus also varied significantly, from a low of 13.3% of restaurants in Vancouver to a high of 27% in Quebec City. However, like the store results, no city/region emerged as having the highest overall prevalence of marketing across all indicators.

Discussion

This report synthesized results across three recent studies that assessed the prevalence of point-of-sale food and beverage marketing in stores and restaurants in eight provinces and two territories in Canada. These results are based on data from 2,140 restaurants and 813 stores across Canada, including 6,595 photos. Three key findings emerged. First, there is high prevalence of point-of-sale M2K across Canada. Second, "child themes and visual design" was by far the most common child-directed marketing technique across all types of point-ofsale marketing. Third, results from these studies should be considered in policy development to restrict M2K in Canada.

High prevalence of marketing to children in stores and restaurants across Canada

Before children even enter stores, they are exposed to a substantial amount of advertising. Despite some regional variation in specific M2K indicators, point-of-sale M2K was ubiquitous at stores and restaurants across Canada. For example, two-thirds of stores assessed had at least one exterior ad. The largest study (the Six-City Study) found that half the exterior ads on stores and 41% of the exterior ads on restaurants used at least one child-directed marketing technique.

Unhealthy choices were frequently presented within children's reach or where impulse purchases are more likely. Across the three studies, over half the stores had junk food power walls, and 90% had at least one unhealthy food in checkout aisles, compared to just under one-fifth of retailers having a junk-food-free checkout aisle. Moreover, while 84% of stores had candy and gum available at the checkout, only 6% had fruit. Such findings support the need for changes such as the "healthy checkout policies" proposed in recent years.^{28–31}

Across all studies, child-specific amenities or restaurant promotions, such as play areas and "children eat free" promotions, were uncommon. However, restaurants frequently engaged in M2K through their children's menus. For example, one-fifth of children's menus provided activities like mazes, jokes, or colouring pages directly on the menu, and 13% offered a free toy or giveaway with the purchase of a meal. The detrimental

effects of toy premiums on children's food choices^{32–34} has led some municipalities to ban toy premiums outright.³⁵ Concerningly, children's menus had 50 times more unhealthy entrées than healthy entrées, and over half of children's menus included an unhealthy beverage with the purchase of a meal.

Overall, M2K was widespread among all regions. While there were some differences between studies and study regions regarding point-of-sale M2K prevalence, no particular region stood out as having an overall higher or lower prevalence of M2K.

Key marketing to children techniques used by stores and restaurants

From the food and restaurant photo analysis, child themes/visual design was the most frequently used childdirected marketing technique. Use of this technique in stores ranged from a low of 33% of beverage fridges to a high of 69% of ice cream fridges. In restaurants, this technique was used on 37% of exterior ads and 41% of interior ads.

The second most common child-directed marketing technique was the use of branded characters. In stores, this technique was most common on ice cream fridges (21% of ice cream fridges). In restaurants, this technique was used on 3% of exterior ads and 4% of interior ads.

Implications for policy

Very little research has examined point-of-sale M2K in stores or restaurants in Canada^{1,2} Results from this report suggest that given the high proportion of child-directed marketing in both settings, policies restricting M2K in Canada should include point-of-sale. In particular, policies should consider the following to reduce M2K in stores and restaurants:

Considering child theme/visual design in point-of-sale marketing restrictions:

Child theme/visual design was 10 times more common than the next most frequent marketing technique (branded characters) in stores and restaurants. Regulating this technique poses a challenge and an opportunity for future policy. As an explicit example of the opportunity that exists when regulating child theme/visual design, Figure 2 shows two images of Froot Loops cereal, one from Chile, where the use of characters in marketing is prohibited for products that qualify as "high in" energy, saturated fat, sugar, or sodium,⁴⁴ and the one on the right is an image of Froot Loops currently available in Canada.



Figure 2. Left image: Froot Loops package from Concepcion, Chile, in 2018 (L. Minaker). Right image: Froot Loops package taken from Walmart Canada website, 2023.

The Froot Loops example is one of product packaging (rather than point-of-sale) marketing. Still, lessons can be applied to point-of-sale marketing, particularly exterior and interior advertising and island displays. While only the image on the right contains a branded character (Toucan Sam), the image on the left still uses visual design that, through colours and images (such as cartoon grapes), is likely appealing to children.

The impact of junk food power walls:

The studies described here were the first to apply the concept of a tobacco "power wall" to food and beverage marketing. Tobacco power walls display hundreds of tobacco products at the checkout. Many studies have found this to be a key point-of-sale strategy that increases smoking risk among youth.^{25,39–42} Tobacco power walls work by increasing youths' perceptions about smoking norms (i.e., if there are this many kinds/brands/packs of tobacco here, then a lot of people must smoke), which increases their susceptibility to smoke in the future.⁴¹

Similar research has not yet been conducted to examine links between "junk food power walls" and youth consumption of unhealthy foods and beverages. Given that over half of retailers (53%) had junk food power walls, it will be essential to monitor this marketing tactic²⁹ and examine how exposure to junk food power walls is associated with youths' perceptions of social norms related to unhealthy food consumption and, ultimately, dietary patterns.

Healthy checkout aisles:

Healthy checkout aisle policies have been proposed^{30,43} and implemented in other jurisdictions.³¹ Clear and consistent healthy checkout aisle policies in supermarkets are associated with an immediate and significant reduction in purchases of sugary and salty snacks, an effect sustained over time.²⁹ Moreover, recent research suggests that healthy checkout policies may improve health equity, especially for low-income, Indigenous, and racialized people.²⁸

Restricting toy premiums with children's meals:

Giving away or charging a nominal price for toys with children's meals should be prohibited. In Quebec, McDonald's Restaurants recently reached a class action settlement over allegations that it unlawfully advertised its Happy Meals and toys to children under 13,^{36,37} but currently, there are no laws preventing the practice of restaurants giving toys away with unhealthy meals. Over a decade ago, San Francisco created an ordinance prohibiting fast food restaurants from including free toys with meals that fail to comply with nutrition standards. In response, McDonald's began charging a nominal fee (\$0.10) for a toy, which it donated to its charitable work.³⁸ Learning from this example, any effort to curb M2K should consider potential food industry responses carefully.

Conclusion

Results from these studies show that M2K was prevalent at the pointof-sale in stores and restaurants in all 11 Canadian regions investigated. These findings mirror what is observed in other settings like television, social media and websites. This policy-relevant report fills a major gap in Canadian evidence on point-of-sale M2K. It used large, geographically diverse datasets that included regions in Northern Canada and captured a broad range of M2K indicators. Future policies to restrict M2K at the point-of-sale are needed and should be comprehensive. Strategies can include measures to limit the use of marketing techniques, particularly child themes and visual design, mitigate the potential impact of "junk food power walls", support healthy checkout aisles, and prohibit toy giveaways with children's meals, among others.

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