Nutrition Marketing on Processed Food Packages in Canada: 2010 Food Label Information Program

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Abstract

The current study describes the frequency of use of different forms on nutrition marketing in Canada, and the nutrients and conditions that are the focus of nutrition marketing messages. Prepackaged foods with a Nutrition Facts table (N=10,487) were collected between March 2010 and April 2011 from outlets of the three largest grocery chains in Canada and one major western Canadian grocery retailer. The nutrition marketing information collected included nutrient content claims, disease risk reduction claims and front-of-pack nutrition rating systems (FOPS). We found that nutrition marketing was present on 48.1% of Canadian food packages, with nutrient content claims being the most common (45.5%), followed by FOPS on 18.9% of packages. Disease risk reduction claims were used the least frequently (1.7%). The marketing messages used most often related to total fat and trans fat (15.6% and 15.5% of nutrient content claims). Limiting total and trans fats is a current public health priority, as recommended by Health Canada and the World Health Organization. However, other nutrients that are also recommended to limit including saturated fats, sodium, and added sugars were not nearly as prominent on food labels. Thus, greater emphasis should be placed on these other nutrients of priority by the food industry. Repeated data collection in the coming years will allow us to track longitudinal changes in nutrition marketing messages over time as food marketing, public health, and consumer priorities evolve.

Keywords

Nutrition marketing; nutrition claims; Canada; food supply; food labels; public health

Introduction

Consumers are provided with nutrition information on food labels to aid them in making healthy food choices at point of purchase. In Canada, food label nutrition information comes in a variety of forms including the mandatory Nutrition Facts table (NFt), and voluntary nutrient content claims, disease risk reduction health claims, and front-of-pack nutrition rating systems (FOPS) (Government of Canada 2003; Canadian Food Inspection Agency 2012). The definitions for these forms of nutrition information are described in Table 1. The

mandatory NFt regulations were introduced in 2002 and were fully implemented by 2007 (Government of Canada 2003); the NFt presently appears on virtually all prepackaged foods in Canada. The two other forms of government regulated nutrition information, nutrient content claims and disease risk reduction claims, are used voluntarily by food manufacturers whose products meet the criteria for their use, as described in the nutrition labelling regulations (Government of Canada 2003). Like nutrient content claims and disease risk reduction claims, FOPS are also voluntary; however, unlike these claims, there are no specific regulations governing their use. For the purposes of this paper, all these latter forms of voluntary nutrition information on food labels, whether the subject of specific regulations or not, will be collectively termed “nutrition marketing,” and are of particular interest as they are used on food packages at the food manufacturer’s discretion.

Within Canada, food product labels are consumers’ primary source of food and nutrition information. A 2008 survey found that more Canadians obtain nutrition information from food labels (68%), as compared to the internet (51%), print media (46%), health professionals (40%), or government materials (22%) (Canadian Council of Food and Nutrition 2008). Furthermore, consumers’ food choices are increasingly being driven by the communicated health benefits of food, as published on food packages and labels (Strategic Counsel 2009). National monitoring data of nutrition labels in the US and European Union exist (Legault et al. 2004; Brandt et al. 2009; Brandt et al. 2010; Storcksdieck genannt Bonsmann et al. 2010) to help identify the nutrition messages conveyed to consumers. For example, data showed that total fat, calories, and sodium are the nutrients being emphasized most commonly on US labels (Brandt et al. 2010). However, similar analyses have not been done in Canada. Canadian health professionals have raised concerns that manufacturers are focusing on fat, cholesterol, and heart disease to the exclusion of other nutrients that impact chronic disease risk such as limiting sodium consumption (Strategic Counsel 2009). Despite these concerns, it is unclear which health or nutrition messages are most prominent on Canadian food labels. The purpose of this study was to describe the frequency of use of the different forms of nutrition marketing in Canada, including nutrient content claims, disease risk reduction claims, and FOPS, as well as which nutrients and health conditions and which food categories are the focus of these messages.

Materials and Methods

Food Label Information Program (F.L.I.P.)

The Food Label Information Program (FLIP) is a database of Canadian food package label information developed at the University of Toronto. The purpose of FLIP is to provide an overview of the nutrition information found on the labels of food products in the Canadian marketplace. FLIP was modelled on similar food label surveys developed in the United States (Brandt et al. 2010; Colby et al. 2010), but includes more foods and a broader range of nutrition marketing information.

Data Collection

The data acquisition occurred between March 2010 and April 2011, and was carried out in the Greater Toronto Area and Calgary, Alberta. Data were collected from outlets of the three

largest grocery chains in Canada (Mintel International 2009) and one major western Canadian grocery retailer. The former included Loblaws (Loblaws, No Frills, Great Canadian SuperStore), Metro, and Sobeys (Greater Toronto Area) and the latter Safeway (Calgary). In total, these chains represented 56% of the market share of food products sold in Canada (Mintel International 2009), which ensured most national brand products were collected, in addition to a wide range of private label brand products.

Food products were collected from 23 distinct pre-defined food categories (e.g. bakery products) described in Schedule M of the *Food and Drug Regulations (FDR)* [B.01.001] (CRC 2012). Schedule M sets out the reference amounts for 153 subcategories (e.g. “Crackers, hard bread sticks and melba toast”) which must be used as the basis for making a nutrient content claim or disease risk reduction claim. Foods in FLIP were also subcategorized based on the Schedule M subcategories. By systematically scanning the grocery store shelves we aimed to collect every food product with a NFt within each pre-defined category, including all available national and private label brands, but excluding seasonal products (e.g. egg nog) and foods from the natural health section of each store. Food products sold at multiple retailers (such as national brand products) were purchased only once. When multiple sizes of a product were available, only one size was purchased.

The food label from each product collected was removed, retained, and assigned a database ID. Trained data entry staff recorded the following details from each label into FLIP: product name, Schedule M category, Universal Product Code, company, brand, price, container size, nutrient content claims, disease risk reduction claims, FOPS, NFt information, and date and location of purchase. Price was recorded from the cash register receipt. UPC codes were entered electronically using a hand held scanner (OPN 2001, Opticon Inc., Renton, Washington).

Categorization of claims and front-of-pack information

Claims that have clearly defined wording in the Canadian regulatory environment were categorized and quantified. We included FOPS, despite the lack of regulation, because they have been defined by the Institute of Medicine (2010), as described below, and are currently prominent on Canadian foods. Nutrition and disease risk reduction claims were categorized according to the 47 Nutrient Content Claims and 5 disease risk reduction claims described in the *FDR*, including all their permitted wording variations (Government of Canada 2003). Additional wording variations detailed in the Canadian Food Inspection Agency’s Guide to Food Labelling and Advertising were also included (Canadian Food Inspection Agency 2012). The disease risk reduction claims that were captured included the following diet disease relationships: 1) sodium, potassium and hypertension; 2) calcium, vitamin D and osteoporosis; 3) saturated fat, trans fat and coronary heart disease; 4) fruits, vegetables and cancer; and 5) non-fermentable carbohydrates and dental caries. Two additional disease risk reduction claims regarding coronary heart disease risk were approved in 2010, one on plant sterols (May 2010) and the other on oats (Nov 2010) (Health Canada, 2012). Since this occurred during data collection, the true frequency of use of these two disease risk reduction claims could not be accurately captured in FLIP and are not reported here.

FOPS were identified using the definition published in the 2010 US Institute of Medicine Phase I Report on their examination of FOPS (Institute of Medicine 2010). The Report subdivided FOPS into three distinct categories, which we used to classify the FOPS in the FLIP including: 1) nutrient-specific systems, which include symbols that display the amount per serving of select nutrients and symbols based on claim criteria; 2) summary indicator systems, which include single symbols or scores that provide summary information about a product's nutrient content; and 3) food group information systems, which include symbols based on the presence of a food group or food ingredient.

Data validation

Multiple methodologies were used to ensure data accuracy of data entry and coding: 1) calorie calculations based on Atwater factors were used to identify data entry errors, and any differences between calculated and recorded calories of 20% or greater were manually checked against the product label information; and 2) NFt data were sorted for outliers for each nutrient. To aid with proper classification of nutrient content claims on food packages, data entry staff were provided with examples of the various claims both pictorially and in text. Claims identified by data entry staff were then verified by members of the research team (AS, TE, JA, and CW). FOPS were independently identified and categorized by two members of the research team (AS and TE), and disagreements over FOPS were resolved in consultation with the rest of the research team.

Data Analysis

Descriptive statistics (frequencies) were computed using SAS 9.3 (SAS Institute, Cary, NC).

Results

The FLIP database contained nutrition information for a total of 10,487 unique food products. The categories containing the largest proportion of products included Bakery Products (15.6%), Combination Dishes (10.0%), and Dairy Products and Substitutes (8.0%) (Table 2).

Overall, 48.1% (n=5,044) of food products had some form of nutritional information in addition to the NFt, with 45.5% carrying at least one Health Canada approved nutrient content claim, 1.7% carrying at least one disease risk reduction claim, and 18.9% carrying at least one FOPS.

Nutrient Content Claims

Claims about total fat, trans fat and vitamins and minerals were used most often. The percentage of products sold for each type of claim as well as the five product categories with the highest percentage of these claims are described in Table 3. Product categories containing the highest percentage of a particular claim included soups with total fat claims (53.0%), legumes with fibre claims (47.6%), potatoes, sweet potatoes, and yams with trans fat claims (46.3%), snacks with trans fat claims (44.2%), and meal replacements with vitamin and mineral claims (42.1%).

Disease Risk Reduction Claims

Claims about saturated and trans fat and coronary heart disease were the most prevalent, followed by claims about fruits and vegetables and cancer. Table 4 shows the percentage for each disease risk reduction claim as well as the top product categories carrying these claims.

FOPS Labelling

One hundred and fifty-eight unique FOPS were identified in FLIP. Of these, only two were developed by non-profit groups (the Heart and Stroke Foundation of Canada's Health Check™ and the Whole Grain Information Council's Whole Grain Stamp). The different FOPS included: 80 nutrient-specific systems (38 systems that displayed the amount per serving of select nutrients and 42 systems that used symbols based on nutrient content claim criteria); 11 summary indicator systems (7 systems with a single symbol and 4 systems with a single score related to a popular weight loss program); 47 food group information systems (12 systems based on the presence of a food group and 35 systems based on the presence of a food ingredient); and, 20 hybrid systems that combined elements from 2 or more of the preceding categories. The nutrients highlighted in nutrient specific systems varied from one system to the next and from product to product within the same system; food group information systems focused primarily on fruit and vegetables (23 of 47 systems) and whole grains (22 of 47 systems). The nutrients and food components upon which summary indicator systems were based were usually not apparent on the food label.

Overall, 18.9% of products had at least 1 FOPS, with summary indicator systems being the most prevalent (7.5%). The proportion of products with each FOPS category as well as the top categories carrying these systems symbols can be found in Table 5.

Discussion

This study presents the first known comprehensive report on the frequency of use and types of nutrition marketing found on Canadian food packages. Nutrition marketing was present on 48.1% of Canadian food packages, with government regulated nutrient content claims being the most common (45.5%). In contrast, disease risk reduction claims were used much less frequently (1.7%), despite the great attention these claims have received from the food industry (George Morris Centre 2008) and the extensive amount policy work conducted by Health Canada (Health Canada 2009; 2011). FOPS were the second most prevalent form of nutrition marketing after nutrient content claims, and were found on 18.9% of packages.

We also found that the regulated nutrition marketing messages used most often referred to total fat and trans fat (15.6% and 15.5% of nutrient content claims, respectively). The high prominence of these nutrients on packages is consistent with the directional statements in Canada's Food Guide (Health Canada 2007) and recommendations in the World Health Organization's Global Strategy (2004), which emphasize limiting total fat and trans fat in addition to saturated fat, sugar and salt. However, more recent nutrition recommendations have put less emphasis on limiting total fat and more on limiting trans and saturated fats (Beaglehole et al. 2011). While the disease risk reduction claims regarding saturated and trans fats and coronary heart disease is consistent with this recommendation, these only

appeared on 1.1% of products. Nutrient content claims about saturated fat were found less often (8.7%) than claims about total fats or trans fats. Furthermore, claims about sodium and sugar were much less prevalent (4.5% and 4.0%, respectively); claims that may be helpful to consumers, as there is strong evidence to support their link to a number of diet related chronic diseases (Aller et al. 2011; Arcand et al. 2011; Bibbins-Domingo et al. 2010; Strazzullo et al. 2009; Welsh et al. 2011) and recommendations have been made to limit their consumption (Beaglehole et al. 2011; Health Canada 2007; World Health Organization 2004). Ideally, marketing messages should focus more on nutrients such as these, deemed to be of public health significance, to ensure that nutrition marketing offers the maximum health benefit to consumers. However, claims about sodium may have been less prevalent at the time of data collection (2010/11) compared to the present time (2012), as the release of Canada's Sodium Reduction Strategy (Sodium Working Group 2010) occurred mid 2010. The recent emphasis on sodium, however, had already translated into a large increase in the percentage of Canadian consumers reporting they select foods based on the amount of salt (57% in 2001 vs. 70% in 2008) (Canadian Council of Food and Nutrition 2009). Thus, it is possible that food manufacturers may increase their use of sodium claims in future years in order to keep up with consumer demand for this information.

Similar food label monitoring databases exist in other countries (Brandt et al. 2010; Storcksdieck genannt Bonsmann et al. 2010), and several notable similarities and differences between Canada and other countries in terms of the food supply and nutrition marketing were seen. In relation to the frequency of nutrition marketing, the Canadian food supply appears to be similar to the US food supply. One US study found that 49% of products contained some form of nutrition marketing (Colby et al. 2010). Similarly, another US study found that 53.2% of all food packages displayed a nutrient content claim while only 4.8% included a health claim like a disease risk reduction claim (Brandt et al. 2010). Data from the European Union, on the other hand, revealed that only 25% and 2% of products carried a nutrition or health claim, respectively, however, this greatly varied between countries (Storcksdieck genannt Bonsmann et al. 2010). In contrast to our study, data from the US and the European Union demonstrate that only 5.7% and 1–2% of products use nutrition marketing in the form of FOPS-type logos, respectively (Storcksdieck genannt Bonsmann et al. 2010; Colby et al. 2010). The higher frequency of use of FOPS observed in our study (18.9%) may reflect the broader definition of FOPS used in this analysis. This definition included all systems and symbols that summarize key nutritional aspects and characteristics of food products consistent with the definition used by the Institute of Medicine (Institute of Medicine 2010), whereas US and European Union studies which were conducted earlier focused on logos and symbols that require qualifying products to meet a specific nutrient criteria (Storcksdieck genannt Bonsmann et al. 2010; Colby et al. 2010). Alternatively, it may reflect the higher percentage of FOPS in Canada or a trend towards the increased use of FOPS by food manufacturers and retailers in recent years. Subsequent FLIP data collections in Canada and other jurisdictions will be able to track such changes.

Maintaining a current and up-to-date FLIP provides advantages in being able to track changes in manufacturers' use of claims and changes to the food supply in response to public health campaigns and consumer demand, in order to guide policy decisions and promote consumer health. Planned data collection in 2013 will make FLIP a longitudinal

database, which will allow us to track changes in food label nutrition and marketing information over time as new public health priorities emerge and consumer interest in specific nutrients evolves.

Although this research evaluated a large number of products, some limitations need to be considered. Although we collected foods sold by the four of the five largest national chains, food collection was limited to the Greater Toronto Area and Calgary, and thus may not be completely representative of Canada. However, food products are relatively standardized across Canada and thus available to a large percentage of the overall population. The Greater Toronto Area also accounts for a large percentage (18.1%) of the entire Canadian population (City of Toronto 2012), and foods were collected at Safeway to represent a major food retailer in the western provinces. Further, we did not adjust our data for the relative market-share sales figures for each product. However, to ensure we collected most national brand products and a representation of private label brands in Canada, we collected foods from the three top selling retailers and covered the main geographic regions, with the exception of northern Canada. An additional limitation is the sometimes subjective nature of identifying FOPS. Although many products made use of systems and symbols which met the Institute of Medicine's definition of a FOPS, these systems and symbols were not always formally described as a FOPS by the system's proprietor (either on the food package or on their website) or given an identifiable system name.

We have shown that nutrient content claims are the most prevalent type of nutrition marketing in Canada, followed by FOPS, while disease risk reduction claims are relatively uncommon. Nutrition marketing messages strongly emphasize total fat and trans fat while focusing little attention on other nutrients of public health concern, including saturated fat, sodium and sugar. It may be useful to consumers for the food industry to better align nutrition marketing with public health priorities, with a greater emphasis on these other nutrients. Repeated data collection in the coming years will allow us to track longitudinal changes over time as food marketing, public health, and consumer priorities evolve.

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Table 1

Nutrition Labelling Used in the Canadian Marketplace.*

	Definition	Examples
Regulated		
Nutrition Labelling	"Refers to the standardized presentation of the nutrient content of a food." (Government of Canada 2003)	Nutrition Facts table
Nutrient content claims	"A claim that describes the amount of a nutrient in a food." (Government of Canada 2003)	"Low fat" "Trans fat free" "Reduced sodium" "Excellent source of calcium"
Disease Risk Reduction Claims	"A statement that describes the characteristics of a diet associated with the reduction of the risk of developing a diet-related disease or condition." (Government of Canada 2003)	"A healthy diet low in saturated and trans fats may reduce the risk of heart disease. (Naming the food) is free of saturated and trans fats." (Government of Canada 2003)
No specific regulations		
Front-of-pack labelling	"Systems that use nutrient criteria and symbols to indicate that a product has certain nutritional characteristics. Symbols are often placed on the principal display panel of the product, but may also be found on the side, top, or back panels or on self tags." (Institute of Medicine 2010)	Whole Grains Council's Whole Grain Stamp™ Heart and Stroke Foundation's Health Check™ logo Kraft's Sensible Solutions PC® Blue Menu™ Pepsi's Smart Spot®

* Definitions from the Government of Canada (2003) and the Institute of Medicine (2010)

Table 2

Number of products per Schedule M Food Category*.

Category	No. of Products	% of Total, N = 10,487
Bakery Products	1636	15.6
Combination Dishes	1044	10.0
Dairy Products and Substitutes	839	8.0
Fruit and Fruit Juices	800	7.6
Cereals and Other Grain Products	777	7.4
Sauces, Dips, Gravies and Condiments	691	6.6
Meat, Poultry, Their Products and Substitutes	643	6.1
Vegetables	623	5.9
Desserts	525	5.0
Fats and Oils	476	4.5
Snacks	471	4.5
Marine and Fresh Water Animals	336	3.2
Soups	334	3.2
Beverages	257	2.5
Sugars and Sweets	235	2.2
Miscellaneous	198	1.9
Legumes	189	1.8
Nuts and Seeds	109	1.0
Potatoes, Sweet Potatoes and Yams	95	0.9
Salads	60	0.6
Meal Replacements	57	0.5
Dessert Toppings and Fillings	55	0.5
Egg and Egg Substitutes	37	0.4

* As defined in Schedule M of the *Food and Drug Regulations* (CRC 2012).

Table 3

Percentage of products with nutrient content claims*.

Type of Claim	Description of Claim Variations	% of all products with claim	Top 5 product categories [†] with claims	
			Product Category	%
Total fat claims (n=1631)	Free of fat, low in fat, reduced in fat, lower in fat, (%) fat free, no added fat	15.6	Soups	53.0
			Cereals and other grain products	29.3
			Egg and Egg Substitutes	27.0
			Desserts	26.9
			Dairy Products and Substitutes	25.3
Trans fat claims (n=1622)	Free of trans fat, reduced in trans fat, lower in trans fat	15.5	Potatoes, sweet potatoes, and yams	46.3
			Snacks	44.2
			Bakery Products	36.4
			Fats and Oils	28.2
			Miscellaneous	26.3
Vitamin and Mineral claims (n=1512)	Any vitamin or mineral claim containing the following: "contains," "source of," "contains X essential nutrients," "high in," "higher in...than..."	14.4	Meal Replacements	42.1
			Fruit and Fruit Juices	34.0
			Dairy Products and Substitutes	30.0
			Cereals and Other Grain Products	27.9
			Vegetables	23.9
Fibre claims (n=1039)	Source of fibre, High source of fibre, Very high source of fibre, More fibre	9.9	Legumes	47.6
			Cereals and Other Grain Products	38.7
			Soups	18.6
			Snacks	15.9
			Bakery Products	13.4
Saturated fat claims (n=908)	Free of saturated fat, low in saturated fat, reduced in saturated fat, lower in saturated fat	8.7	Potatoes, sweet potatoes, and yams	33.7
			Fats and Oils	27.6
			Meal Replacements	24.6
			Bakery Products	18.2
			Snacks	14.7
Cholesterol claims (n=676)	Free of cholesterol, low in cholesterol, reduced in cholesterol, lower in cholesterol	6.5	Egg and Egg Substitutes	27.0
			Potatoes, sweet potatoes, and yams	25.3
			Fats and Oils	18.3
			Bakery Products	15.6
			Snacks	9.1
Sodium claims (n=474)	Free of sodium, low in sodium, reduced in sodium, lower in sodium, no added sodium, lightly salted	4.5	Soups	17.7
			Cereals and Other Grain Products	14.9

Type of Claim	Description of Claim Variations	% of all products with claim	Top 5 product categories [†] with claims	
			Product Category	%
Sugar claims (n=418)	Free of sugars, reduced in sugars, lower in sugars, no added sugars	4.0	Nuts and Seeds	11.0
			Potatoes, sweet potatoes, and yams	7.4
			Vegetables	7.1
			Fruit and Fruit Juices	27.3
			Beverages	13.6
			Sugars and Sweets	5.1
			Desserts	4.8
			Fats and Oils	4.8
Polyunsaturated fatty acid (PUFA) claims (n=346)	Source of omega-3 PUFA, Source of omega-6 PUFA	3.3	Marine and Freshwater animals	30.4
			Egg and Egg Substitutes	21.6
			Fats and Oils	19.8
			Salads	5.0
			Bakery Products	3.1
Energy and calorie claims (n=261)	Free of energy, low in energy, reduced in energy, lower in energy, source of energy, more energy, light in energy	2.5	Beverages	27.6
			Meal Replacements	19.3
			Fats and Oils	6.5
			Sugars and Sweets	6.4
			Desserts	4.0
Protein claims (n=221)	Source of protein, excellent source of protein, more protein	2.1	Egg and Egg Substitutes	13.5
			Marine and Freshwater animals	9.5
			Meat, poultry, their products and sub.	9.2
			Dairy Products and Substitutes	9.2
			Meal Replacements	7.0
Lean claims (n=86)	Lean, extra lean	0.8	Meat, poultry, their products and sub.	12.9
			Snacks	0.2
			Combination dishes	0.2

* Classified according to the 47 nutrient content claims and permitted wording variations listed in the *Food and Drug Regulations* and the Canadian Food Inspection Agency's Guide to Food Labelling and Advertising (Government of Canada 2003, Canadian Food Inspection Agency 2012).

[†] Out of 23 product categories, as defined in Schedule M of the *Food and Drug Regulations* (CRC 2012).

Table 4Percentage of products with disease risk reduction health claims ^{*}.

Disease Risk Reduction Claims[*]	% of Total Products with Claims	Top product categories[†] with claims
Saturated and Trans Fat and CHD	1.1	Cereals and Other Grain Products Bakery Products Fats and Oils
Fruits & Vegetables and Cancer	0.5	Fruit and Fruit Juices Vegetable Products
Sodium &/or Potassium and Hypertension	0.1	Cereals and Other Grain Products Fruit and Fruit Juices
Calcium &/or Vitamin D and Osteoporosis	0.1	Fruit and Fruit Juices Meal Replacements Dairy Products and Substitutes

^{*} Health Canada approved disease risk reduction claims as of 2010. A disease risk reduction claim regarding plant sterols was approved during the collection period in May 2010 and oats in November 2010; therefore its true frequency of use was not captured in FLIP and is not reported here.

[†] Out of 23 product categories, as defined in Schedule M of the *Food and Drug Regulations* (CRC 2012).

Table 5Percentage of products carrying front-of-pack nutrition rating systems (FOPS)^{*}

Type of FOPS	Category description	% of all products with FOPS	Top 5 product categories [†] with FOPS	
			Product Category	%
Nutrient-specific systems (n=511)	Systems with symbols that display the amount per serving of select nutrients or use symbols based on nutrient content claim criteria.	4.9	Meal Replacements	14.0
			Cereals and Other Grain Products	12.9
			Potatoes, Sweet Potatoes and Yams	8.4
			Nuts and Seeds	8.3
			Desserts	7.6
Summary indicator systems (n=785)	Systems with a single symbol, icon, or score that provide summary information about the nutrient content of a product.	7.5	Egg and Egg Substitutes	46.0
			Soups	18.9
			Fruit and Fruit Juices	14.0
			Bakery Products	10.3
			Combination Dishes	9.5
Food group information systems (n=369)	Systems with symbols based on the presence of a food group or food ingredient.	3.5	Cereals and Other Grain Products	12.2
			Fruits and Fruit Juices	6.4
			Vegetables	5.8
			Snacks	5.5
			Bakery Products	4.2
Hybrid (n=729)	Systems that combine features of two or more of the preceding FOPS categories.	7.0	Legumes	11.6
			Egg and Egg Substitutes	10.8
			Meat, Poultry, Their Products and Substitutes	10.7
			Marine and Fresh Water Animals	10.4
			Bakery Products	9.7

^{*} Classified according to the 3 FOPS categories described by the Institute of Medicine in the Examination of Front-of-Package Nutrition Rating Systems and Symbols: Phase I Report (Institute of Medicine, 2010).

[†] Out of 23 product categories, as defined in Schedule M of the *Food and Drug Regulations* (CRC 2012).