



# **Toward Restricting Unhealthy Food and Beverage Marketing to Children**

Discussion paper for public consultation



Health  
Canada

Santé  
Canada

Canada

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## 1.0 PURPOSE

Many factors in our food environment influence our ability to make healthy food choices and to follow a healthy pattern of eating. Foods available at home, school, and in stores and restaurants, as well as social influences and food marketing, have a major impact on our choices and make healthy eating a challenge for many of us. (1)

Health Canada's Healthy Eating Strategy will help support Canadians to make healthier choices by improving the food environment through several linked and complementary initiatives. The strategy will: improve healthy eating information; strengthen labelling and claims; improve the nutrition quality of foods; protect vulnerable populations; and support increased access to and availability of nutritious foods.

As part of the Healthy Eating Strategy, Health Canada will restrict the marketing of unhealthy food and beverages to children. Over the past decade, there has been growing concern about the negative impact that the marketing of food and beverages has on children's nutritional health.

Health Canada is currently exploring options to fulfill its commitment. We want to hear from the public, health organizations, industry and other interested stakeholders about your experiences with food marketing to children and your ideas about how to best put in place new restrictions.

### **Objective of restricting marketing of unhealthy food and beverages to children:**

To reduce the exposure of children to unhealthy food and beverage advertising which can influence food preferences and choices, resulting in the over-consumption of unhealthy food, and leading to poor health outcomes.

For the purposes of its commitment to restrict marketing to children, Health Canada considers the terms "advertising" and "marketing" interchangeable. While "advertising" is the term set out in the *Food and Drugs Act*, "marketing" is commonly used globally when addressing this issue.

## 2.0 INTRODUCTION

Health Canada is committed to protecting the health of all Canadians. Nutrition plays a critical role in promoting health. It is important that children develop healthy eating habits early in life to support their growth and development and reduce their risk of developing chronic diseases later in life. However, many Canadians struggle to eat in a healthy way, and children are no exception. Most Canadian children eat fewer fruits and vegetables than recommended. They easily exceed recommended amounts of sodium, sugar, and calories. (2-5) Recent research has found Canadian toddlers ages one to three consume 27% of their calories from sugar. (4)

Not surprisingly, obesity rates among children and youth in Canada have nearly tripled since 1980. Today, almost one in three Canadians, 6-17 years old, is overweight or obese. (6) Overweight children are at higher risk of developing a range of health problems later in life, including type 2 diabetes, high

blood pressure and heart disease. (7) There are also emotional costs associated with excess body weight for children. Overweight and obesity can affect self-esteem, make children a target of bullying (8) and even affect how children do in school. (9)

This rise in childhood obesity is associated with changes in our eating habits. (10) Over the past half century there has been a dramatic increase in the consumption of foods high in saturated fat, sugar and sodium. Based on the latest dietary intake survey, more than 30% of the total calorie intake of Canadian children was from foods not promoted by Canada's Food Guide. (11) The current Canadian food environment has made it increasingly hard for children and adolescents to eat a healthy diet.

No single policy or program will solve the problem of childhood overweight and obesity. However, the marketing of foods and beverages has been identified as a major contributor to childhood obesity. (12,13) Most foods advertised to kids are high in salt, sugar, or fat, and low in fibre. (14,15) Evidence shows that marketing influences children's food preferences and choices and drives consumption of unhealthy food and beverages. (16,17)

Modern marketing is a rapidly-evolving science. Today's marketers leverage an intricate understanding of how the placement of products on shelves influences purchasing decisions, how the use of celebrity endorsements drives brand loyalty, and myriad other sophisticated techniques to help sell their products.

The pervasiveness of marketing to children and youth has only increased with the evolution of online technology. In the past, television was the main mechanism for marketing to children, but today it is one of many. The popularity of smart phones, tablets, and computers has made it easier for marketers to reach children through multiple channels – from online games that advertise products, to ads that appear on mobile phones. It has been estimated that in one year Canadian children view over 25 million food and beverage ads on their favourite websites – and over 90% are for unhealthy products. (18)

Marketers also target children and youth in multiple settings. In schools, branded vending machines familiarize students with new products. On the soccer field, logos on uniforms build brand loyalty. And at the grocery store, mascots and free toys call out from food packages. Children and youth are targeted through multiple channels everywhere they go and research shows that these tactics influence what they eat from an early age and lay the foundation for unhealthy eating habits.

It has become increasingly hard for parents to compete with these marketing messages or to completely control their children's exposure to marketing. Because of its pervasiveness, most parents are not even aware of the extent to which their children are exposed to these advertisements, or the impacts on them. Parents and caregivers deserve a supportive environment where children are not constantly targeted by unhealthy food marketing.

Beginning with this paper, Health Canada is consulting on the extent of restrictions necessary to support children and parents to build healthy eating habits by protecting children from powerful marketing forces.

### 3.0 BACKGROUND

#### International Context

Building on a strong body of evidence, in 2010 the member states of the World Health Organization (WHO), including Canada, released a set of recommendations calling for policies that reduce the impact of marketing to children of foods high in saturated fat, sugar, and sodium. Specifically, the WHO recommends “comprehensive” controls on marketing of unhealthy food and beverages. (10) This position is supported by the World Cancer Research Fund. (19)

Several countries have taken regulatory action to restrict marketing to children:

- The United Kingdom restricts advertising, sponsorship, and product placement in all broadcast media where more than 20% of viewers are under 16; (20)
- Mexico restricts advertising on TV at certain times, and movies where more than 35% of viewers are under 13; (20)
- Chile restricts advertising on TV, radio, internet and magazines where more than 20% of the audience is under 14; (21)
- South Korea restricts TV advertising between 5 p.m. and 7p.m., and “gratuitous gifts” on TV, internet and radio, directed at children under 18; (20)
- Sweden restricts all radio and TV advertising, before and during programming directed at children under 12; (22)
- Ireland restricts advertising, sponsorship, product placement, and teleshopping directed to children under 18, use of celebrities appealing to children under 15, and use of licensed characters appealing to children under 13, where more than 50% of the audience is children. (20)

Further, food companies in more than 50 countries have pledged to change how and what they advertise to children under 12 by implementing the International Food and Beverage Association’s Global Policy on Marketing Communications to Children. (23) Although many food companies worldwide have made these voluntary pledges, they have been ineffective in reducing exposure of children under 12 to advertising of less healthy food. (24)

#### **The current marketing environment makes it increasingly challenging for kids to eat well**

- Canadian children see over 25 million food and beverage ads a year on their favourite websites of which 90% are for products high in sugar, salt and fat. (18)
- Canadian adolescents spend more than eight hours a day in front of a screen, for example, on the internet, texting, watching television, or playing video games. (44)
- Parents report that younger children spend on average between two and three hours in front of a screen per day. (64)
- Children view an average of four to five food or beverage ads per hour on television, with the majority of advertised products (65-80%) not in line with Canadian dietary guidance. (18)

## Current Situation in Canada

Currently in Canada, there are no federally regulated restrictions on the marketing of food to children. Quebec is the only provincial government to restrict food marketing to children through its *Consumer Protection Act*. Implemented in 1980, the act bans advertising of all goods and services (including all food and beverages) targeted to children under the age of 13. A small number of studies have shown positive results in reducing children's exposure to advertisements on Quebec television. (25)

Apart from government, industry has made efforts to self-restrict their advertising to children through the voluntary *Children's Food and Beverage Advertising Initiative*. Recognizing the need to reduce childhood obesity and support children's health, this initiative has set nutrition criteria to determine which foods cannot be advertised. It has also placed restrictions on a variety of marketing techniques. (26) Despite food industry actions, children in Canada continue to be exposed to large volumes of unhealthy food advertisements. (14,27-29)

## Canadian Children's Food and Beverage Advertising Initiative

The Children's Advertising Initiative is a voluntary, industry-led initiative launched in 2007 that restricts marketing of unhealthy food and beverages to children under the age of 12. Currently, 18 food and beverage companies participate. In December 2015, strengthened nutrition criteria were implemented with a goal to reduce sodium, sugar and saturated fats in products that are advertised. Advertising restrictions apply to television, radio, print and internet advertising, EC-rated video and computer games, G-rated DVDs, and mobile media. Marketing restrictions are also applied to interactive games, licensed characters, celebrities and movie tie-ins, product placement, and advertising in schools. (26) Though industry reports show compliance with these standards, other evidence shows they have failed to reduce children's exposure to unhealthy food advertisements. (14,27-29)

## Health Canada's Role

Numerous organizations including the Heart and Stroke Foundation of Canada, the Childhood Obesity Foundation, the Canadian Cancer Society, Diabetes Canada, Dietitians of Canada, and the Quebec Coalition on Weight-Related Problems formed the Stop Marketing to Kids Coalition, calling on the Government of Canada to restrict the marketing of all food and beverages to children. (30) This call to action has been endorsed by the Canadian Pediatric Society, the Canadian Medical Association, and a number of other health related organizations and health experts. A number of Canadian academics outlined their support for a ban on marketing unhealthy food and beverages to children in 2013. (31)

Most Canadians believe there is too much food and beverage marketing that targets children (18) and many are supportive of a ban to protect children. (32)

The Government is committed to a future where better food environments enable Canadians to make healthier eating choices as part of a healthy lifestyle. Introducing new restrictions on the marketing of unhealthy food and beverages to children will support families in making better food choices. Our goal is

to create an environment supportive of healthy growth and development, where children are protected from the negative influence of advertising.

In October 2016, the Minister of Health launched a Healthy Eating Strategy to improve the food environment through various initiatives, including improving food labels, eliminating industrially produced trans fat, reducing sodium in the food supply, and revising Canada's Food Guide. Restricting marketing to children is an important component of this strategy. We need to ensure we get it right, which is why we are consulting with Canadians and stakeholders to determine what specific forms of advertising will be restricted, in the best interests of children.

## **4.0 PROPOSED APPROACH AND CONSULTATION**

The Government of Canada wants to reduce children's exposure to unhealthy food and beverage advertising. This will be accomplished through a combination of legislative and regulatory measures under the *Food and Drugs Act*. This is a complicated issue and policy questions need to be fully considered before these new measures can be developed, specifically:

- What is the right age limit for the restrictions?
- How should "unhealthy food" be defined for the purposes of the marketing restrictions?
- How can we determine if an advertisement is directed to children?
- What kinds of marketing techniques should *not* be restricted?

### **4.1 What is the right age limit for the restrictions?**

**Health Canada proposes that, for the purposes of these restrictions, children be defined as under the age of 17.**

Earlier research on the impact of food marketing focused on children under 13 and strong agreement emerged that this young age group required protection. Existing restrictions, under the Children's Advertising Initiative and Quebec's legislation, restrict marketing to young children (under 12 and under 13, respectively).

However, recent research has shown that developmental factors in adolescence leave teens especially susceptible to marketing tactics. Adolescents tend to be more impulsive, prefer immediate gratification, have strong emotional responses and are more susceptible to peer influence. (33-37) These cognitive vulnerabilities, coupled with adolescents' quest to establish an identity beyond their parents, their desire to "fit in", as well as their spending power and increased independence, make them particularly receptive to messaging and an ideal age group to target. (33,37,38)



Adolescents and teens are even more exposed to unhealthy food advertising than younger children are. Since the implementation of the Children’s Advertising Initiative in 2007, the percentage of adolescent-targeted ads has increased from 15.5% in 2006, to 30.4% in 2011. (14) Further, the proportion of adolescent-targeted ads that were for less healthy foods more than doubled over this time period. (14) This trend is consistent with international data that also shows adolescents are more heavily targeted through marketing than their younger counterparts. (39,40) The most recent publicly available figures, from the U.S., indicate that as much if not more advertising dollars were spent on 12 to 17 year olds compared to children aged two to 11 years. (41)

Unlike traditional television-based advertising, evidence shows that adolescents are not always able to identify promotions and critically assess newer marketing techniques, such as those that are embedded into media content and those promoted in subtle, less recognizable ways on the internet – for example advergames, social media, and viral marketing. (37,38,42,43) This is worrying, as adolescents spend about eight hours a day on screen-based activities, typically on mobile devices, without parental oversight. (44,45)

**Existing Canadian laws recognize that adolescents are vulnerable to external influences and need protection.**

- Unsupervised driving is illegal before the ages of 16 to 17 years.
- The age of sexual consent is 16 to 18 years.
- Voting privileges are granted at 18 years.
- Alcohol consumption is not permitted before age 18 or 19 years.
- The sale of tobacco to persons aged less than 18 or 19 is prohibited.
- Provincial and territorial legislation stipulates child protection until at least age 16.
- Youth must remain in school until age 16 to 18.

## **4.2 How should “unhealthy food” be defined for the purposes of the marketing restrictions?**

*NOTE: For more detail on the definition of “unhealthy food” in this section, please refer to Appendix A.*

To restrict the marketing of unhealthy foods to children, we must first decide what we mean by “unhealthy.” Of course, the occasional treat can be part of a healthy lifestyle, but the concern is the overall pattern of eating. Since marketing drives consumption of the foods that are marketed, Health Canada is proposing to allow marketing of only foods that contribute to a healthy pattern of eating.

To develop a model that effectively defines “unhealthy foods”, Health Canada developed a ‘made in Canada’ approach with two proposed options. Each option will allow marketing of foods that Health Canada encourages for healthy eating and child development, but will set limits on marketing of foods containing certain levels of saturated fat, sugars or sodium - nutrients of concern because they are associated with increased risk of chronic disease.



### **Foods Allowed to be Marketed**

Under the proposed approach, foods that are promoted by Canada's Food Guide as the foundation for healthy eating will be permitted to be marketed to children. These foundational foods would include vegetables, fruit, whole grains and protein-rich foods. These foods, when processed or prepared with no added sodium, sugars or fat, would be exempt from marketing restrictions. As Canada's Food Guide is currently under revision, a full list of food products that would be exempt from marketing restrictions would be refined once the revision is complete.

### **Foods Prohibited from Marketing**

The more complicated step will be identifying the threshold that will be used to determine if foods contribute to an unhealthy pattern of eating. Health Canada is proposing to make this assessment based on specific nutrients of concern. Regulations would restrict marketing of foods that contain sugars, sodium or saturated fat above these thresholds.

A large body of evidence has shown the negative health impacts of sodium, sugars and saturated fat when consumed in excess. With strong evidence for association with health risks, and given that the most frequently marketed foods are high in saturated fat, sugars or sodium, Health Canada is proposing to restrict marketing based on levels of these three nutrients.

**QUESTION 1: Based on your knowledge of nutrients, should Health Canada's marketing restrictions focus on sodium (salt), sugars, and saturated fat?**

Yes

No

Not sure

If no/not sure, please explain

Two nutrient threshold options were developed. The proposed thresholds would apply to individual foods and to meals and meal components. Marketing would be restricted for foods exceeding the threshold for any or all of the three nutrients (saturated fat, sugars or sodium). It is important to remember that Health Canada is not restricting the *sale* of these foods, just their promotion to children under 17. Consumers will still be able to buy and eat these foods, and industry would be able to advertise to those over 17.

### **Option 1: Foods with more than ~5% (approximately 5%) of the daily value (DV) of saturated fat, sugars or sodium**

This approach would:

- be consistent with federal definitions for "low in" for nutrient content claims
- be consistent with the foods most in line with Canada's Food Guide
- minimize exposure to nutrients of concern

- align with existing nutrition labelling policies for identifying “a little” of a nutrient on the Nutrient Facts table on packaged food products
- be the most restrictive option where foods commonly marketed to children are concerned

**Option 2: Foods with more than 15% of the daily value (DV) of sodium, sugars or saturated fats**

This approach would:

- be consistent with proposed thresholds for Health Canada’s Front of Package “high in” symbol for nutrients of public health concern
- align with criteria for “a lot” of a nutrient on the package’s Nutrition Facts table
- restrict foods that present greater health risks when consumed in excess
- be less restrictive than Option 1, but would still restrict many foods currently marketed to children

These charts give **examples** of foods that would typically be allowed, and foods that would be restricted from marketing to children, under Option 1 as compared to Option 2.

**Option 1  
( ~5% DV)**

Foods allowed to be advertised		Foods <b>not</b> allowed to be advertised	
<b>FOUNDATIONAL FOODS</b>	<b>OTHER FOODS</b>		
<ul style="list-style-type: none"> <li>- vegetables and fruit with no added fat, sugars or sodium</li> <li>- whole grains, like barley, popcorn, quinoa, brown rice, and oats</li> <li>- protein-rich foods, like beans, lentils, nuts, nut butters, and eggs</li> <li>- milk</li> <li>- plain yogurt</li> </ul>	<ul style="list-style-type: none"> <li>- club soda</li> <li>- pasta</li> </ul>	<ul style="list-style-type: none"> <li>- plain “animal” cookie</li> <li>- frosted wheat cereal</li> <li>- graham cracker</li> <li>- “fish” cheese-flavoured cracker</li> <li>- granola bar</li> <li>- potato chips</li> <li>- French fries</li> <li>- calorie-reduced cheese</li> </ul>	<ul style="list-style-type: none"> <li>- regular soda</li> <li>- most cookies, cakes, pies and sweets</li> <li>- pudding and ice cream</li> <li>- chocolate and candies</li> <li>- juice</li> <li>- most sugar-sweetened cereals</li> <li>- instant sugar-sweetened oatmeal</li> <li>- cheese</li> <li>- sugar-sweetened yogurt</li> <li>- frozen waffles</li> <li>- bagel</li> </ul>

**Option 2  
(15% DV)**

Foods allowed to be advertised		Foods <b>not</b> allowed to be advertised	
<b>FOUNDATIONAL FOODS</b>	<b>OTHER FOODS</b>		
<ul style="list-style-type: none"> <li>- vegetables and fruit with no added fat, sugars or sodium</li> <li>- whole grains, like barley, popcorn, quinoa, brown rice, and oats</li> <li>- protein-rich foods, like beans, lentils, nuts, nut butters, and eggs</li> <li>- milk</li> <li>- plain yogurt</li> </ul>	<ul style="list-style-type: none"> <li>- club soda</li> <li>- pasta</li> </ul>	<ul style="list-style-type: none"> <li>- plain “animal” cookie</li> <li>- frosted wheat cereal</li> <li>- graham cracker</li> <li>- “fish” cheese-flavoured cracker</li> <li>- granola bar</li> <li>- potato chips</li> <li>- French fries</li> <li>- calorie-reduced cheese</li> </ul>	<ul style="list-style-type: none"> <li>- regular soda</li> <li>- most cookies, cakes, pies and sweets</li> <li>- pudding and ice cream</li> <li>- chocolate and candies</li> <li>- juice</li> <li>- most sugar-sweetened cereals</li> <li>- instant sugar-sweetened oatmeal</li> <li>- cheese</li> <li>- sugar-sweetened yogurt</li> <li>- frozen waffles</li> <li>- bagel</li> </ul>

**QUESTION 2: In your estimation, which is more appropriate as the basis for restricting marketing to children: Option 1 (~5% DV) or Option 2 (15% DV) thresholds for sodium, sugar and saturated fats?**

Option 1  
Option 2  
Neither  
Please explain

### **Consideration for Non-sugar Sweeteners**

A common aim of marketing is to build brand awareness and brand loyalty among children. Some products, such as beverages, have strong brand identity. That means that marketing beverages containing non-sugar sweeteners may influence children's preference for other, sugar sweetened beverages in the same brand. (46) For this reason, Health Canada is proposing that marketing of foods and beverages containing non-sugar sweeteners not be permitted.

**QUESTION 3: Based on your understanding of non-sugar sweeteners (such as Aspartame and Sucralose), should Health Canada prohibit the marketing to children of all foods and beverages containing non-sugar sweeteners?**

Yes  
No  
Not Sure  
Please explain

### **4.3 How can we determine if an advertisement is directed to children?**

To adequately protect children from food and beverage marketing, Health Canada will determine what makes a setting or communication channel "child-directed". In other words, what are the characteristics of, for example, a television program or computer game, that deem it "made-for-children"? Or what characterizes a setting as one where a significant number of children are exposed?

Child-directed settings will be defined as those public facilities, events, or activities in which children are the primary audience or where significant numbers of children are likely to be exposed to marketing. Some obvious examples include schools, daycares, recreational centres, and organized children's sports. Other settings where children may be the intended audience, even though they may not be the main audience, include theme parks, community events, movie theatres, hospitals, grocery and convenience stores, and fast food establishments.

When it comes to communication channels, there are a number of ways that "child-directed" marketing can be defined. For example, with television and digital media, a common way of determining that a

program or website is intended for children is by looking at the proportion of children that make up the viewing audience. These defined “child audience thresholds” vary from one jurisdiction to another. For example, the Children’s Advertising Initiative sets child audience thresholds as high as 35%. Child audience thresholds are often ineffective in protecting children since programs such as sports coverage that appeal to children *and* adults may have *large numbers* of child viewers even though the *proportion* of child viewers is low and within the defined threshold. (47)

An alternative method of limiting children’s exposure to marketing on broadcast media is to restrict unhealthy food and beverage marketing during certain times of the day when children are most likely to be tuning in, for example on television, between 6:00 p.m. and 9:00 p.m. Defining “child-directed” for online marketing is challenging. Digital platforms popular with children, such as Google, Facebook and YouTube, are often not “directed at” or “targeted to” them. To adequately protect children online, marketing restrictions should apply to websites, platforms, and apps that appeal to mixed audiences, especially where children make up significant numbers of viewers or users.

Health Canada proposes the following definitions for “child-directed” marketing:

“Child-directed” marketing on **television** includes all unhealthy food and beverage marketing aired, on weekdays from 6:00 a.m. to 9:00 a.m. and from 3:00 p.m. to 9:00 p.m., and on weekends between 6:00 a.m. and 9:00 p.m.

“Child-directed” marketing on the **internet** includes all unhealthy food and beverage marketing on websites, platforms and apps that are popular with children, even when these digital channels are intended for adults as well.

**QUESTION 4: Would the definitions proposed adequately protect children from unhealthy food and beverage marketing?**

Yes

No

Not Sure

Please explain

#### **4.4 What kinds of marketing techniques should *not* be restricted?**

The *Food and Drugs Act* defines “advertisement” as “any representation by any means whatever for the purpose of promoting directly or indirectly the sale or disposal of any food, drug, cosmetic or device.” Given this definition, Health Canada will have the authority to restrict all marketing techniques, in all child-directed communication channels and settings. It may not be feasible or desirable, however, for Health Canada to impose broad restrictions on all forms of marketing.

A wide range of marketing strategies and techniques are used to market food and beverage products to children. Traditional food marketing techniques, such as celebrity endorsements or branding, remain prevalent. And while digital marketing has grown exponentially, it has added to, not replaced, other forms of marketing. Digital marketing is ubiquitous, highly engaging, and often hidden. Online marketing platforms collect extensive personal data to use for individually targeted “behavioural” advertising to children and to encourage them to share their marketing experiences with friends. (48) Combined, the various marketing techniques, both traditional and digital, are extremely influential to children.

Most research has looked at the impact of marketing tactics delivered through television advertising. There is ample evidence that commercial food advertising aimed at children directly influences their food preferences and purchase requests, consumption patterns, and diet-related health. (16,46,49) Further, studies have shown that exposure to unhealthy food and beverage advertisements increases food intake in children. (17) The visual and auditory signals in advertising of food high in salt, sugar and fat trigger increased consumption of these foods among children. With many newer forms of digital marketing, food cues are integrated within the media content, resulting in an even stronger effect on food intake than food cues in television advertisements. (50)

Some of the more popular marketing techniques are described below.

### **Packaging and Labelling**

A number of tactics are used on product packaging to appeal specifically to children. These include references to “fun”, unusual names or flavours, bright colours, cartoon images, along with games, contests or promotions on the back panel. Food packages that appeal to children have been shown to influence their taste preferences. (51) Package design is considered by some to be an under-estimated, yet a major factor behind successful product launches. (52)

### **Sales Promotions**

Use of toys and other items distributed in connection with the sale of a food or beverage product is an appealing marketing technique for children. These incentive items can be sold separately, redeemed through coupons, codes or proofs-of-purchase, distributed in food packages, or provided with restaurant meals. Premium offers are one of the most commonly used marketing techniques to promote unhealthy food to children. (49)

### **Sponsorship**

Sports are an important part of many families’ lives, and corporate sponsors can often help support that experience. Similarly, many school activities and supplies are sponsored by corporations. Unfortunately, less healthy foods are promoted through their association with sports and education, and studies have shown that kids are more likely to favour and consume products of companies that support their teams and schools. (53) It is challenging to balance these competing interests, and parents are an important stakeholder in this issue.

**Characters and Celebrities**

Child-directed advertisements and food packages often incorporate cartoon characters or celebrity endorsements. Companies use characters on food products to build an emotional relationship between children and products. (54) Promotional messages made by well-recognized figures have a powerful influence over children and have been shown to influence food choice. Characters are sometimes used to cross-promote a food product with a movie, game or toy, thereby enhancing the food product's appeal. (55,56) Use of promotional characters is one of the most common persuasive marketing techniques to promote food to children. (49)

**Branding**

Brand marketing connects and motivates consumers on an emotional level, affecting children's food preferences and choices. Children are particularly brand sensitive and show preferences for brands at a young age. (55) Companies can use brand marketing to promote a company or they may brand just one "healthier" food or beverage within a product line. Thus, while avoiding direct promotion of unhealthy products, they promote them by association. Brand marketing that is done online results in even greater brand awareness and intent to purchase than is achieved through traditional media. (48)



Marketing **techniques** that influence children include traditional and digital tactics.

Traditional	Digital
<ul style="list-style-type: none"> <li>• packaging and labelling</li> <li>• use of characters and celebrities (on packages, in ads, at events, etc.)</li> <li>• sponsorship (of sports teams, events, school supplies)</li> <li>• sales promotions/premiums (e.g., toy give-away; contests)</li> <li>• branding (logo, symbol, word or images associated with a food product)</li> <li>• advertisements (commercials; direct appeal)</li> <li>• product design</li> <li>• content (e.g., colours, voices, images)</li> <li>• product placement</li> </ul>	<ul style="list-style-type: none"> <li>• advertisements (e.g., banner ads; pop-up ads)</li> <li>• advergames (video game that advertises a branded product as part of the game)</li> <li>• buzz marketing (peer-to-peer)</li> <li>• word-of-mouth (“liking”, sharing, tweeting)</li> <li>• marketing “influencers” through blogging, vlogging (blogging with video), or social media</li> <li>• neuromarketing (emotional analysis through sensors)</li> <li>• behavioural advertising (informed by analytics use of shared personal data or tracking through cookies, device fingerprinting, geo-location)</li> </ul>

**QUESTION 5: Based on your experience, are there any *other* marketing techniques that influence children and should be considered as part of the marketing restrictions?**

**Yes, please specify**

**No**

The following **communication channels** are commonly used to market food and beverages to children.

- television
- radio
- print media (e.g youth magazines; comic books)
- billboards
- DVDs
- video games
- digital channels (e.g. websites; social media platforms; game platforms; apps)
- mobile devices (e.g. texting)

**QUESTION 6: Based on your experience, are there any *other* channels used for marketing to children that should be considered as part of the marketing restrictions?**

**Yes, please specify**

**No**

Health Canada will have the authority to prohibit all marketing techniques in all child-directed settings and channels. However, there may be some exceptions where marketing of unhealthy food to children should be permitted.

**QUESTION 7: Are there certain situations where some marketing techniques should be exempted from broad marketing restrictions?**

Yes

No

Not Sure

Please explain

**QUESTION 8: Do you have any other feedback?**

We appreciate your interest in our efforts to restrict the marketing of unhealthy food and beverages to children. Your input is invaluable as we work to set the parameters of the restrictions.

**Thank you for your participation!**

## Appendix A

### Proposed Nutrient Profile Model for restricting marketing to children

Nutrient profiling is “the science of classifying or ranking foods according to their nutritional composition for reasons related to preventing chronic disease and promoting health”. (57)

The policy on restricting marketing to children is targeted at protecting one of the most vulnerable populations. To that end, the overall **policy objective** of the nutrient profile model Health Canada is developing is to permit marketing of foods and beverages encouraged in Canada’s Food Guide and that minimize exposure to nutrients of concern: saturated fat, sugars and sodium.

#### Developing a Nutrient Profile Model for Canada

Many nutrient profile models exist around the world. Before embarking on the development of a new model, three nutrient profile models were considered for adaptation within the Canadian context – two developed by regional offices of the World Health Organization (WHO), specifically, the [WHO Europe Nutrient Profile Model](#) and the [Pan American Health Organization \(PAHO\) Nutrient Profile Model](#), and one developed and in use by the United Kingdom government ([UK Nutrient Profile Model / Ofcom model](#)). (58-60) As the UK model is currently under review it was not retained in the full analysis. Health Canada also considered the nutrition criteria in the [Canadian Children’s Food and Beverage Advertising Initiative \(CAI\)](#) as it is the current industry-led, voluntary framework in place in Canada. (61) The models vary in the way in which they are constructed (e.g., by product categories, nutrients considered, reference amounts, nutrient thresholds or scoring).

#### Methodology

While there is no “gold standard” nutrient profile model, the World Health Organization created guidance for member states to develop country-specific models. (62) Health Canada followed this guidance for its proposed model.

To better understand the existing nutrient profile models and to assess their potential application in supporting food and beverage marketing restrictions in Canada, steps outlined in the WHO guidance were followed. This included applying the models to a set of indicator foods (n=220) that are both commonly consumed and from categories of foods that are frequently marketed to children, in order to:

- gain a better understanding of the **level of strictness** of the model,
- assess the model’s **coherence with Canadian food-based dietary guidance and existing and proposed regulations** (e.g., nutrient content claims, front of package labelling), and
- **assess the ease of use and challenges** of applying each model in the Canadian context.

From this assessment, Health Canada is proposing a new model that:

- reflects desirable attributes of the assessed models within the Canadian context, including alignment with Canada’s dietary guidance.
- reflects the up-to-date evidence on food and health that will underpin the new Canada’s Food Guide<sup>1</sup>.
- aligns with relevant federal food regulations addressed in the *Food and Drug Regulations* relating to the nutritional quality of food sold in Canada, such as nutrient content claims, the Nutrition Facts table (NFt) and [proposed regulations on Front of Package \(FOP\) nutrition labels](#).

## **Proposed Nutrient Profile Approach**

The proposed nutrient profile is designed to permit the marketing of foods that Canada’s dietary guidance encourages for healthy eating and to support child development, while setting limits for nutrients of public health concern (saturated fat, sugars and sodium) because of their association with increased risk of chronic disease<sup>2</sup>.

### **Element 1 – Exemptions from marketing restrictions**

A key principle of the proposed nutrient profile model is consistency with Canada’s food-based dietary guidance. To that end, regulations will permit the **marketing of foods Health Canada encourages children to eat most often and that support child health**.

Health Canada’s dietary guidance is currently being revised. The draft proposed dietary guidance policy emphasizes that a variety of nutritious foods and beverages are the foundation for healthy eating and recommends the regular intake of vegetables, fruit, whole grains, and protein-rich foods, especially plant-based sources of protein. (63) **These foods, when processed or prepared with no added sodium, sugars or fat, will be exempt from marketing restrictions, provided they do not carry an FOP symbol for “high in” any of the nutrients of concern.**

The list of foods that will be exempt from marketing restrictions will be refined once dietary guidance revisions are complete.

### **Element 2 – Nutrients to Limit**

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<sup>1</sup> Canada’s Food Guide is currently under revision, and the Evidence Review for Dietary Guidance on which the new Guide will be based outlines the importance of these foods to promote health of Canadians.

<sup>2</sup> For more information on these health impacts, see the [Evidence Review for Dietary Guidance](#) and [Toward Front-of-Package Nutrition Labels for Canadians](#), two recently published Healthy Eating Strategy documents.

There is strong scientific evidence, as well as acknowledgment from health and industry stakeholders alike, that saturated fat,<sup>3</sup> sugars and sodium are nutrients of public health concern and should be limited. This evidence is laid out in the Health Canada's recent [Evidence Review for Dietary Guidance](#), as well as in the *Toward Front-of-Package Nutrition Labels for Canadians* [consultation document](#).

Health Canada's proposed dietary guidance policy acknowledges that foods that are the foundation for healthy eating can be fresh, frozen, canned or dried when processed or prepared with little or no added sodium, sugars or saturated fat, and recommends that processed or prepared foods high in these nutrients be limited. (63) These nutrients are also the focus of Health Canada's proposed FOP nutrition labels.

A focus on these nutrients is also consistent with the [WHO set of recommendations on the marketing of foods and non-alcoholic beverages to children](#) and a number of existing nutrient profile models designed to support marketing restrictions to children.

### **Non-sugar Sweeteners**

Health Canada is considering whether to include non-sugar sweeteners ([sugar substitutes](#)) in the nutrient profile model. A number of existing nutrient profile models include criteria for non-sugar sweeteners. Some do not allow non-sugar sweeteners in any products while others do not allow them in some beverage categories. While these sweeteners have been assessed for safety, evidence is limited and inconsistent regarding their role in caloric intake, body weight and cardio-metabolic risk factors, especially in children and over the long term. One rationale for including these sweeteners in the model is to ensure that they are not used to enhance brand appeal. A common aim of marketing is to build brand awareness and brand loyalty among children and there is evidence that food promotion to children influences food choices at category and brand level. (46) Some products, such as beverages, have strong brand identity and potential for cross-product effects of brand marketing. In other words, marketing of products containing non-sugar sweeteners may influence food selection for other (sugar sweetened) products in the brand.

### **Element 3 - Thresholds for Marketing Restrictions**

Health Canada has developed a model based on nutrient thresholds defined by a % of the Daily Value (DV) for saturated fat, sugars and sodium. As such, the proposed model:

- takes into account population daily intake reference values for these nutrients of concern and

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<sup>3</sup> The proposed nutrient profile approach does not include criteria for *trans* fatty acids as [proposed regulations](#) to ban the use of partially hydrogenated oils in foods sold in Canada will effectively reduce industrially produced *trans* fats in the food supply to the lowest level possible.

- uses the same approach as other Canadian food regulations and nutrition labelling policies (e.g., nutrient content claims, proposed Front of Package criteria, Nutrition Facts table) to describe the relative contribution of the nutrient in a given serving of food to the total diet, thereby supporting monitoring, enforcement and longevity of the model.

Two options are proposed:

**Option 1:** ~ 5% DV (“Low In”) – More Strict

- The levels of saturated fat, sugars and sodium in foods for which marketing to children would be permitted are equivalent to “low in” nutrient content claims defined in the *Food and Drugs Regulations*. These levels are approximately 5% of the DV for each nutrient.
- These thresholds are consistent with those of the foods most in line with Canada’s Food Guide AND that minimize exposure to nutrients of concern, thereby providing the strongest protection for children who are at a critical stage in developing their taste preferences and eating patterns.
- The 5% DV also aligns with existing nutrition labelling policies for identifying “a little” of a nutrient on the [Nutrition Facts table \(NFt\)](#) on packaged food products.

**Option 2:** 15% (“High In”) – Less Strict

- Reflects the proposed thresholds for a "high in" FOP label for packaged foods and represents 15% of the DV for sodium, sugars and saturated fat.
- Health Canada’s proposed dietary guidance recommends limited intake of processed or prepared foods and beverages high in sodium, sugars or saturated fat.
- These thresholds are consistent with Health Canada’s messaging around the use of the % DV in the NFt, which says that 15% of the DV or more is "a lot" of that nutrient.

For both options, marketing would not be permitted for foods exceeding the threshold for **any one** of the three nutrients considered (see Table 1).

	<b>Option 1</b> <b>(“Low in” nutrient content claim)</b>		<b>Option 2</b> <b>(Front of Package “high in” criteria) <sup>a</sup></b>	
<b>Nutrient</b>	<b>Foods <sup>b</sup></b> (~5% of the DV)	<b>Prepackaged meals and Combination dishes <sup>c, d</sup></b>	<b>Foods <sup>b</sup></b> (15% of the DV)	<b>Prepackaged meals and Combination dishes <sup>d</sup></b> (30% of the DV)
<b>Saturated fat (SFA)</b>	≤ 2 g SFA + <i>trans</i> fatty acid (TFA) per RA and <sup>e</sup> serving of stated size; <b>and</b> ≤ 15% energy from the sum of SFA + TFA <sup>f</sup>	≤ 2 g SFA +TFA per 100g <b>and</b> ≤ 15% energy from the sum of SFA + TFA	< 3 g per RA and per serving of stated size	< 6 g per RA and per serving of stated size
<b>Total Sugars</b>	≤ 5 g per RA and per serving of stated size <sup>g</sup>	≤ 5 g per 100g	< 15 g per RA and per serving of stated size	< 30 g per RA and per serving of stated size
<b>Sodium</b>	≤ 140 mg per RA and serving of stated size <sup>h</sup>	≤ 140 mg per 100 g	< 345 mg per RA and per serving of stated size	< 690 mg per RA and per serving of stated size

a. Option 2 reflects the proposed nutrient thresholds for “high in” Front of Package (FOP) symbols. See: <https://www.canada.ca/en/health-canada/programs/front-of-package-nutrition-labelling/consultation-document.html>

b. Reference amounts represent the amounts of food typically eaten at one sitting. Reference amounts can be found in the [Table of Reference Amounts for Food](#), incorporated by reference into the *Food and Drug Regulations*. If the reference amount is 50 g (or 50 mL for liquids) or less, the food is assessed per 50 g or 50mL (certain exceptions to this adjustment may apply, such as healthy oils with less than 30% of total fat as saturated and trans fat).

c. Inclusion of combination dishes is not in the original nutrient content claim but is proposed for inclusion in this context so that these types of foods can be assessed.

d. For meals with several discrete components (e.g., beverage, main, side, dessert) the criteria must be met by ALL components of the meal. In this case, the criteria for “foods” will apply to each component unless the component is a combination dish (e.g., lasagna) in which case it will be assessed on per 100g basis.

e. The “AND” means that the claim must be met per RA and per serving of stated size in order for a product to be marketed to children. For example, a yogurt with a 175g RA that is sold in a 100g container (stated serving size), must meet the nutrient criteria for both amounts of food.

f. The threshold for saturated fat aligns with the “low in” nutrient content claim. See: (<http://www.inspection.gc.ca/food/labelling/food-labelling-for-industry/nutrient-content/specific-claim-requirements/eng/1389907770176/1389907817577?chap=5>)

g. The threshold for sugars is based on the “low in sugars” nutrient content claim proposed in the Front of Package consultation document. See: <https://www.canada.ca/en/health-canada/programs/front-of-package-nutrition-labelling/consultation-document.html>

h. The thresholds align with “low in” nutrient content claims for sodium. See: (<http://www.inspection.gc.ca/food/labelling/food-labelling-for-industry/nutrient-content/specific-claim-requirements/eng/1389907770176/1389907817577?chap=9>)



## Summary of products for which marketing would be permitted according to Option 1 and Option 2

The two options were assessed based on the food composition database of 220 indicator foods. Table 2 presents the results according to the sub-set of food categories commonly marketed to children, including 106 of the indicator foods.

**Table 2. Number (%) of food products permitted in categories commonly marketed to children, by proposed option (preliminary analysis, n=106 indicator foods)**

Category	Total in Category (n)	“Low In” criteria (~5% DV) n (%)	“High in” criteria (15% DV) n (%)
Juice (100% pure)	4	0 (0%)	0 (0%)
Breakfast cereals (sugar added)	23	0 (0%)	5 (22%)
Sweet snacks, desserts, cookies, granola bars	25	0 (0%)	7 (28%)
Savory snacks	13	1 (8%)	6 (46%)
Confectionary	14	0 (0%)	0 (0%)
Sweetened and carbonated beverages (soda, energy drinks, juice drinks)	14	1 (7%)	1 (7%)
Meals from fast food outlets	13	0 (0%)	1 (8%)
<b>Total foods permitted n (%)</b>	<b>106</b>	<b>2 (2%)</b>	<b>20 (19%)</b>

While Option 2 restricts the marketing of many foods, a number of products in food categories commonly marketed to children would still be permitted. Please refer to the chart in the consultation document for examples of foods for which marketing to children would be allowed or would be restricted according to each option.

## REFERENCES

- (1) Health Canada. Healthy Eating Strategy. 2016; Available at: <https://www.canada.ca/en/health-canada/services/publications/food-nutrition/healthy-eating-strategy.html>.
- (2) Garriguet D. Canadians' Eating Habits. Health Reports 2007;18(2).
- (3) Garriguet D. Sodium consumption at all ages. Health Reports 2007;18(2).
- (4) Langlois K, Garriguet D. Sugar consumption among Canadians of all ages. Health Reports 2011;22(3):23-27.
- (5) Shields M. Overweight and obesity among children and youth. Health Reports 2006;17(3).
- (6) Rao DP, Kropac E, Do MT, Roberts KC, Jayaraman GC. Childhood overweight and obesity trends in Canada. Health Promotion and Chronic Disease Prevention in Canada 2016;36(9):194-198.
- (7) Reilly JJ, Kelly J. Long-term impact of overweight and obesity in childhood and adolescence on morbidity and premature mortality in adulthood: systematic review. International Journal of Obesity 2011;35(7):891-898.
- (8) Canadian Paediatric Society. Position Statement: Psychosocial aspects of child and adolescent obesity. 2012; Available at: <http://www.cps.ca/documents/position/psychosocial-child-adolescent-obesity>.
- (9) Devaux M, Sassi F, Church J, Cecchini M, Boronovi F. Exploring the Relationship Between Education and Obesity. OECD Journal: Economic Studies 2011;5(1):121-159.
- (10) World Health Organization. Set of recommendations on the marketing of foods and non-alcoholic beverages. 2010; Available at: [http://apps.who.int/iris/bitstream/10665/44416/1/9789241500210\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/44416/1/9789241500210_eng.pdf).
- (11) Health Canada. Evidence Review for Dietary Guidance: Technical Report. 2015.
- (12) World Health Organization. Consideration of the evidence on childhood obesity for the Commission on Ending Childhood Obesity. 2016.
- (13) Institute of Medicine. Food marketing to children: Threat or opportunity? . Washington, D.C.: National Academies Press; 2006.
- (14) Potvin Kent M, Martin C, Kent A. Changes in the volume, power and nutritional quality of foods marketed to children on television in Canada. Obesity 2014;22(9):2035-2060.
- (15) Potvin Kent M, Dubois L, Wanless A. A nutritional comparison of foods and beverages marketed to children in two advertising policy environments. Obesity 2012;20(9):1829-1837.

- (16) Sadeghirad B, Duhaney T, Motaghipisheh S, Campbell NCR, Johnston BC. Influence of unhealthy food and beverage marketing on children's dietary intake and preference: a systematic review and meta-analysis of randomized trials. *Obesity Reviews* 2016;17(10):945-959.
- (17) Boyland EJ, Nolan S, Kelly B, Tudur-Smith C, Jones A, Halford JCG, et al. Advertising as a cue to consume: A systematic review and meta-analysis of the effects of acute exposure to unhealthy food and nonalcoholic beverage advertising on intake in children and adults. *American Journal of Clinical Nutrition* 2016;103(2):519-533.
- (18) Heart and Stroke Foundation of Canada. The kids are not alright. How the food and beverage industry is marketing out children and youth to death. 2017; Available at: <http://www.heartandstroke.ca/-/media/pdf-files/canada/2017-heart-month/heartandstroke-reportonhealth2017.ashx?la=en&hash=1D4354193C46A235D2A657230FE2EB29DC6F34C8>.
- (19) World Cancer Research Fund International. Submission from World Cancer Research Fund International on the Interim Report of the World Health Organization's Commission on Ending Childhood Obesity. 2015; Available at: [http://www.wcrf.org/sites/default/files/Interim%20Report\\_Consultation%20response\\_WCRF\\_International\\_FINAL.pdf](http://www.wcrf.org/sites/default/files/Interim%20Report_Consultation%20response_WCRF_International_FINAL.pdf).
- (20) Hawkes C. Actions to Restrict Food Marketing to Children: International best practices and direction. 2014; Available at: [http://childhoodobesityfoundation.ca/wp-content/uploads/2015/02/WCRFI\\_Heart\\_and\\_Stroke\\_BC\\_Sep\\_30\\_2014\\_FINAL.pdf](http://childhoodobesityfoundation.ca/wp-content/uploads/2015/02/WCRFI_Heart_and_Stroke_BC_Sep_30_2014_FINAL.pdf).
- (21) World Cancer Research Fund International. NOURISHING Framework: Restrict food advertising and other forms of commercial promotion. 2017; Available at: [http://www.wcrf.org/sites/default/files/4\\_Restrict%20advertising\\_Feb%202017%20v3.pdf](http://www.wcrf.org/sites/default/files/4_Restrict%20advertising_Feb%202017%20v3.pdf).
- (22) World Health Organization. Marketing of foods high in fat, salt, and sugar to children: update 2012-2013. 2013; Available at: [http://www.euro.who.int/\\_data/assets/pdf\\_file/0019/191125/e96859.pdf](http://www.euro.who.int/_data/assets/pdf_file/0019/191125/e96859.pdf).
- (23) International Food & Beverage Alliance. Responsible Marketing & Advertising to Children. 2016; Available at: <https://ifballiance.org/our-commitments/responsible-marketing-advertising-to-children/>.
- (24) Galbraith-Emami S, Lobstein T. The impact of initiatives to limit the advertising of food and beverage products to children: A systematic review. *Obesity Reviews* 2013;14(12):960-974.
- (25) Potvin Kent M, Dubois L, Wanless A. Food marketing on children's television in two different policy environments. *International Journal of Pediatric Obesity* 2011;6(2):e433-e441.
- (26) Advertising Standards Canada. The Canadian Children's Food and Beverage Advertising Initiative: 2015 Compliance Report. 2016; Available at: <https://www.adstandards.com/en/childrensinitiative/2015ComplianceReport.pdf>.

- (27) Potvin Kent M, Dubois L, Wanless A. Self-regulation by industry of food marketing is having little impact during children's preferred television. *International Journal of Pediatric Obesity* 2011;6(5-6):401-408.
- (28) Potvin Kent M, Smith J, Pauzé E, L'Abbé M. The uniform nutrition criteria of the Canadian Children's Food and Beverage Advertising Initiative: a report on its impact on the healthfulness of food and beverage advertising during children's preferred television viewing. Unpublished 2017.
- (29) Potvin Kent M, Wanless A. The influence of the Children's Food and Beverage Advertising Initiative: change in children's exposure to food advertising on television in Canada between 2006-2009. *International Journal of Obesity* 2014;38(4):558-562.
- (30) Stop Marketing to Kids Coalition. Who we are. 2016; Available at: <http://stopmarketingtokids.ca/who-are-we/>.
- (31) Raine KD, Lobstein T, Landon J, Potvin Kent M, Pellerin S, Caulfield T, et al. Restricting marketing to children: Consensus on policy interventions to address obesity. *Journal of Public Health Policy* 2013;34(2):239-253.
- (32) Ipsos Descarie. Quebec Coalition on weight-related problems: Omnibus web survey results. 2010.
- (33) Pechman C, Levine L, Loughlin S, Leslie F. Impulsive and self-conscious: Adolescents' vulnerability to advertising and promotion. *Journal of Public Policy and Marketing* 2005;24(2):202-219.
- (34) Casey BJ, Jones RM, Hare TA. The adolescent brain. *Annals of the New York Academy of Sciences* 2008;1124:111-126.
- (35) Albert D, Chein J, Steinberg L. The teenage brain: Peer influences on adolescent decision making. *Current Directions in Psychological Science* 2013;22(2):114-120.
- (36) Harris JL, Graff SK. Protecting young people from junk food advertising: Implications of psychological research for first amendment law. *American Journal of Public Health* 2012;102(2):214-222.
- (37) Harris JL, Heard A, Schwartz MB. Older but still vulnerable: All children need protection from unhealthy food marketing. Yale Rudd Centre for Food Policy & Obesity 2014.
- (38) Harris JL, Brownell KD, Bargh JA. The food marketing defense model: Integrating psychological research to protect youth and inform public policy. *Social Issues and Policy Review* 2009;3(1):211-271.
- (39) Harris JL, LoDolce M, Dembek C, Schwartz MB. Sweet promises: Candy advertising to children and implications for industry self-regulation. *Appetite* 2015;95:585-592.
- (40) Powell LM, Harris JL, Fox T. Food marketing expenditures aimed at youth. Putting the numbers in context. *American Journal of Preventive Medicine* 2013;45(4):453-461.

- (41) Federal Trade Commission. A Review of Food Marketing to Children and Adolescents: Follow-up report. 2012; Available at: <https://www.ftc.gov/sites/default/files/documents/reports/review-food-marketing-children-and-adolescents-follow-report/121221foodmarketingreport.pdf>.
- (42) Media Smarts. Young Canadians in a Wired World. Phase III: Experts or Amateurs? Gauging Young Canadians' Digital Literacy Skills. 2014; Available at: [http://mediasmarts.ca/sites/mediasmarts/files/pdfs/publication-report/full/YCWWIII\\_Experts\\_or\\_Amateurs.pdf](http://mediasmarts.ca/sites/mediasmarts/files/pdfs/publication-report/full/YCWWIII_Experts_or_Amateurs.pdf).
- (43) Petty RD, Andrews JC. Covert marketing unmasked: A legal and regulatory guide for practices that mask marketing messages. *Journal of Public Policy and Marketing* 2008;27(1):7-18.
- (44) ParticipACTION. Are Canadian kids too tired to move? The 2016 ParticipACTION Report Card on Physical Activity for Children and Youth. 2016; Available at: [www.participACTION.com/reportcard](http://www.participACTION.com/reportcard).
- (45) Media Smarts. Young Canadians in a Wired World. Phase III: Life Online. 2014; Available at: [http://mediasmarts.ca/sites/mediasmarts/files/pdfs/publication-report/full/YCWWIII\\_Life\\_Online\\_FullReport\\_2.pdf](http://mediasmarts.ca/sites/mediasmarts/files/pdfs/publication-report/full/YCWWIII_Life_Online_FullReport_2.pdf).
- (46) Cairns G, Angus K, Hastings G, Caraher M. Systematic review of the evidence on the nature, extent and effects of food marketing to children. A retrospective summary. *Appetite* 2013;62:209-215.
- (47) Harris JL, Sarda V, Schwartz MB, Brownell KD. Redefining « Child-Directed Advertising » to reduce unhealthy television food advertising. *American Journal of Preventive Medicine* 2013;44(4):358-364.
- (48) World Health Organization. Tackling food marketing to children in a digital world: trans-disciplinary perspectives. 2016.
- (49) Jenkin G, Madhvani N, Signal L, Bowers S. A systematic review of persuasive marketing techniques to promote food to children on television. *Obesity Reviews* 2014;15(4):281-293.
- (50) Folkvord F., Anschutz D.J., Boyland E., Kelly B., Buijzen M. Food advertising and eating behavior in children. *Current Opinion in Behavioral Sciences* 2016 June 01, 2016;9:26-31.
- (51) Elliott CD, Carruthers Den Hoed R, Conlon MJ. Food branding and young children's taste preferences: A reassessment. *Canadian Journal of Public Health* 2013;104(5):e364-368.
- (52) The Nielsen Company. Nielsen Breakthrough Innovation Report: European Edition. December 2016.
- (53) Kelly B, Baur LA, Bauman AE, King L, Chapman K, Smith BJ. "Food company sponsors are kind, generous and cool": (mis)conceptions of junior sports players. *The International Journal of Behavioural Nutrition and Physical Activity* 2011;8(95):1-7.
- (54) Kraak V. I., Story M. Influence of food companies' brand mascots and entertainment companies' cartoon media characters on children's diet and health: A systematic review and research needs. *Obesity Reviews* 2015;16(2):107-126.

- (55) Robert Wood Johnson Foundation. Recommendations for responsible food marketing to children. 2015; Available at: [http://healthyeatingresearch.org/wp-content/uploads/2015/01/HER\\_Food-Marketing-Recomm\\_1-2015.pdf](http://healthyeatingresearch.org/wp-content/uploads/2015/01/HER_Food-Marketing-Recomm_1-2015.pdf).
- (56) Robert Wood Johnson Foundation. The use of brand mascots and media characters: Opportunities for responsible food marketing to children. 2016; Available at: [http://healthyeatingresearch.org/wp-content/uploads/2016/03/her\\_mascot\\_3-22\\_FINAL-1.pdf](http://healthyeatingresearch.org/wp-content/uploads/2016/03/her_mascot_3-22_FINAL-1.pdf).
- (57) World Health Organization. A framework for implementing the set of recommendations on the marketing of foods and non-alcoholic beverages to children. 2012.
- (58) Pan American Health Organization. Pan American Health Organization Nutrient Profile Model. 2017; Available at: <http://iris.paho.org/xmlui/handle/123456789/18621>.
- (59) Department of Health. Nutrient Profiling Technical Guidance. 2011; Available at: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/216094/dh\\_123492.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216094/dh_123492.pdf).
- (60) World Health Organization. WHO Regional Office for Europe nutrient profile model (2015). 2015; Available at: <http://www.euro.who.int/en/health-topics/disease-prevention/nutrition/publications/2015/who-regional-office-for-europe-nutrient-profile-model-2015>.
- (61) Advertising Standards Canada. Canadian Children's Food and Beverage Advertising Initiative: Uniform Nutrition Criteria White Paper. 2014; Available at: <http://adstandards.com/en/ChildrensInitiative/CAIUniformNutritionCriteriaWhitePaper.pdf>.
- (62) World Health Organization. Guiding principles and framework manual for the development or adaptations of nutrient profile models. In press.
- (63) Health Canada. Dietary guidance policy elements for second online Canada's Food Guide consultation. unpublished.
- (64) Public Health Ontario. Parental Support for Child Health. 2015; Available at: <http://www.publichealthontario.ca/en/BrowseByTopic/HealthPromotion/Pages/Parental-Support-for-Child-Health.aspx>.