



## chapter 6

### SOUND AND APPROPRIATE NUTRITION



#### Key Messages

- Although most mothers in Peel initiate breastfeeding, only 23% exclusively breastfeed until six months as recommended.
- Young children frequently eat fruit and vegetables, but they also frequently consume restaurant food and sweetened drinks.
- Youth frequently consume unhealthy foods and drinks. Youth are less likely to participate in family meals and eat breakfast.
- The *School Food and Beverage Policy* limits the sale of foods in schools based on their level of nutritional value.

Health at every stage of life is influenced by nutrition. When women do not receive adequate calories during pregnancy, their fetuses develop in anticipation of making do with fewer calories. If the postnatal environment is one of sufficient nutrients, the baby's prior adaptation becomes a liability which predisposes them to obesity and other diseases such as cardiovascular disease and hypertension later in life.<sup>6</sup>

This chapter will present the limited data available about what types of food children eat and some other behaviours that can impact a child's eating habits, including participation in family meals and frequency of eating breakfast. The data provided are self-reported and therefore may not accurately reflect the true nutritional habits of children and youth.

### Early Nutrition

Breast milk is an important start for healthy child nutrition. The Breastfeeding Committee for Canada, the Public Health Agency of Canada, Health Canada, Dietitians of Canada, Canadian Paediatric Society and the World Health Organization recommend exclusive breastfeeding for the first six months of life, with continued breastfeeding to age two years and beyond, with the addition of complementary foods at six months of age. Breastfeeding can be a protective factor against later obesity as it leads to improved satiation among babies and allows them to adapt more readily to new foods.<sup>58</sup> Ninety-seven per cent of Peel women reported initiating breastfeeding in 2009/2010 but only 23% continued to do so exclusively for at least six months.<sup>K</sup>

Early childhood may be a period of picky-eating habits. Thirty-seven per cent of parents reported that their senior kindergarten child's eating habits caused them stress.<sup>E</sup> Positive patterns established early will lead

to a reduced risk of obesity, while ensuring adequate calories and nutrients for normal growth and development.



#### Policy

##### Marketing Food to Children

Marketing of food and beverages to children (via television, print, internet, cellular phone, games, contests, and in-store promotions) appears to have a strong influence on nutritional knowledge, food preferences and consumption. These advertisements are plentiful and typically promote highly-processed, energy-dense, unhealthy products.<sup>59, 60</sup>

Research into the extent and nature of food promotion shows that:

- Most of the advertising that is targeted at children promotes food products.
- Advertising targeting children is dominated by five product categories – soft drinks, pre-sugared cereals, confectionary, snacks and fast-food restaurants.
- The advertised diet contrasts dramatically with the recommended diet.
- Children engage with and enjoy “unhealthy” advertising.
- Food promotion influences children's nutritional knowledge, food preferences, purchasing and purchase-related behaviour, consumption, diet, and health status.
- Children make purchasing requests for energy-dense, low-nutrient foods and beverages.
- Food promotion affects both total category sales and brand switching.<sup>60</sup>

## Food Consumption

Vegetables and fruit are nutrient-dense, provide fibre and are typically low in fat and calories. Frequency of vegetable and fruit consumption is a proxy for overall dietary intake (i.e., there is a positive association between frequency of vegetable and fruit consumption and an index of dietary quality).<sup>61</sup> Children and youth who consume fewer than five servings of vegetables and fruit per day are significantly more likely to be overweight/obese compared to those who eat vegetables and fruit more frequently.<sup>62</sup>

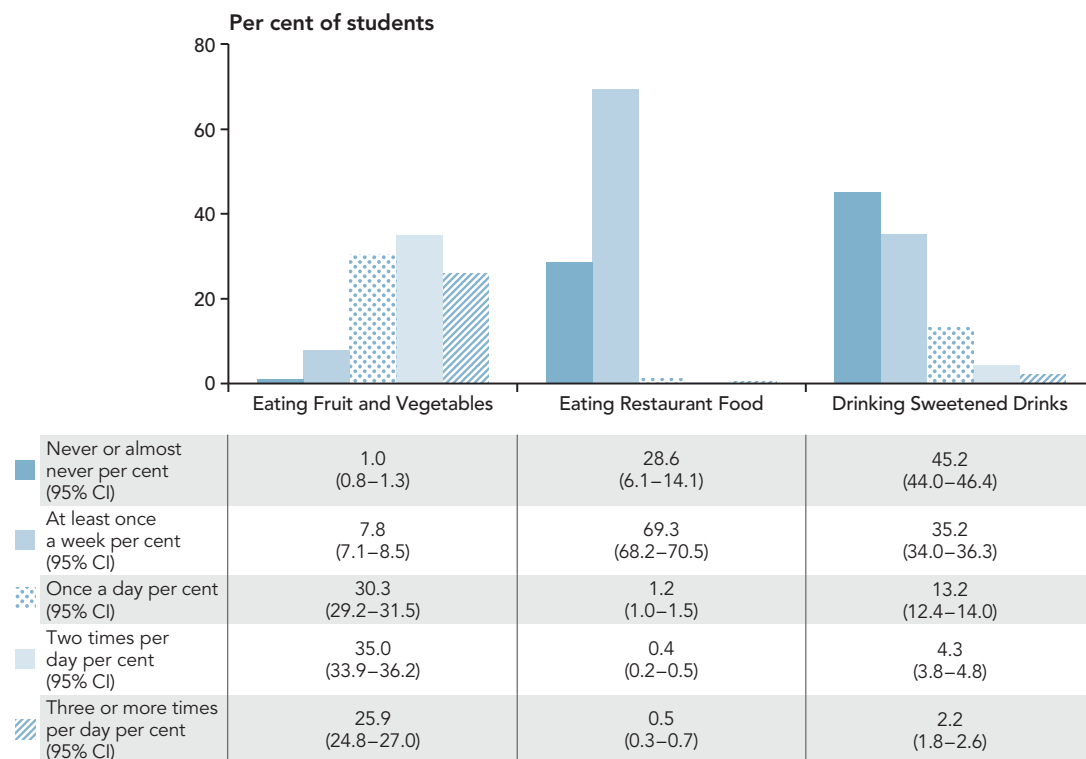
Fruit drinks and regular soft drinks are often referred to, together, as sugar-sweetened beverages. Consumption of

sugar-sweetened beverages has increased dramatically over the past few decades. They provide very little nutritional benefit and their consumption increases the risk of developing diabetes, bone fractures and dental caries.<sup>63,64</sup> Consumption of sugar-sweetened beverages also displaces consumption of other more nutritious beverages such as milk and water.<sup>63,64</sup>

*One in five senior kindergarten students in Peel consume sweetened drinks at least once per day.*

The majority of senior kindergarten (SK) students eat fruit and vegetables at least once per day or more (Figure 6.1). Mothers who are recent immigrants, have a lower

**Figure 6.1**  
Frequency of Eating Vegetables and Fruit, Restaurant Food and Drinking Sweetened Drinks, Peel, 2010



Note: 95% CI reflects the 95% confidence interval of the estimate.  
Source: Senior Kindergarten Census 2010, Region of Peel.

education level and lower income are less likely to report that their child eats fruit and vegetables at least once per day (data not shown).<sup>E</sup> One in five SK students consume sweetened drinks at least once per day (Figure 6.1).

Peel students in Grades 7 through 12 report frequent consumption of unhealthy foods such as hamburgers, hot dogs, french fries, deep-fried foods and salty snacks (e.g., potato chips, pretzels) (Figure 6.2).



## Policy

### School Food and Beverage Policy (2011)

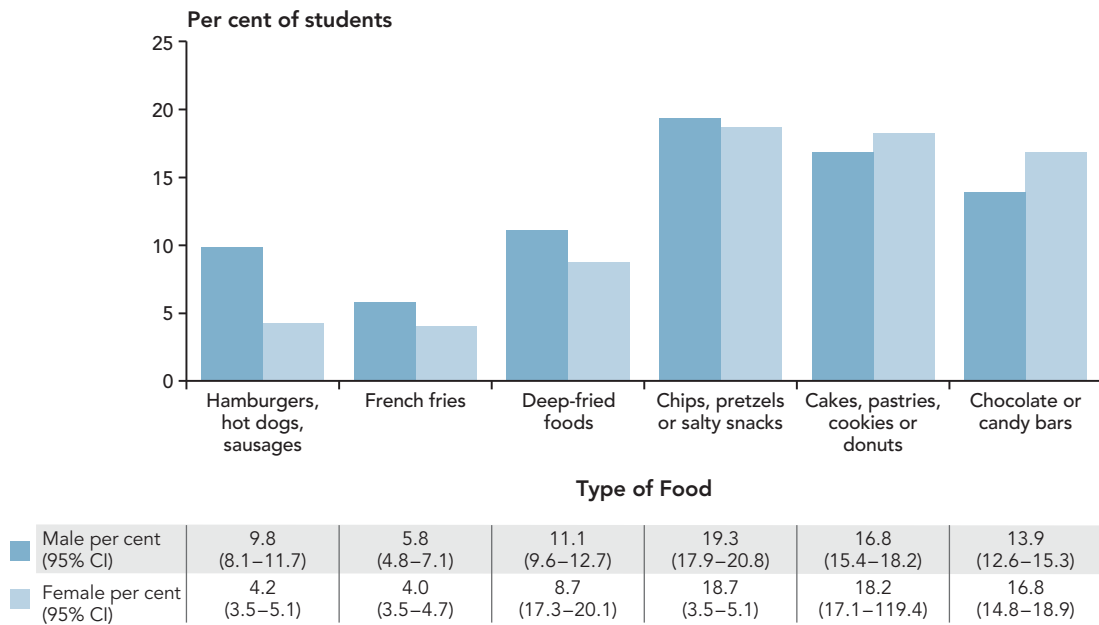
The *School Food and Beverage Policy* applies to all food and beverages offered for sale in publicly funded schools in Ontario. This policy includes a detailed set of minimum nutrition standards intended to improve the nutritional value of food and beverages sold to students. The policy applies to all food and beverages sold in all school venues (e.g., cafeterias, vending machines, tuck shops), through all programs (e.g., catered lunch programs), and at all events (e.g., bake sales, sports events). The nutrition standards categorize food and beverages, according to nutritional value as “sell most”, “sell less” and “not permitted for sale.” A minimum of 80% of items sold must be from the “sell most” category, while a maximum of 20% can be from the “sell less” category. Items such as deep-fried foods are categorized as “not permitted for sale.”

Peel Public Health provided support to school boards and schools to prepare for and implement the School Food and Beverage Policy using various strategies and working with numerous stakeholders and sectors. Strategies included information and training on the policy, skill-building for stakeholders, a social marketing campaign, youth engagement, and partnership development. Peel Public Health continues to collaborate with local school boards to provide on-going support to the schools and school community by:

- providing access to resources;
- offering consultations;
- planning and delivering training opportunities; and
- embedding the policy into the Healthy Schools Approach.



**Figure 6.2**  
**Frequency of Eating Selected Food Items One or More Times per Day by Sex, Peel, 2011**



Note: 95% CI reflects the 95% confidence interval of the estimate.  
 Source: Student Health Survey 2011, Peel Public Health.

Almost all students drink water every day (93%, not shown in Figure 6.3), while one-quarter report drinking ‘other drinks’ (such as sports drinks, fruit juice or vitamin

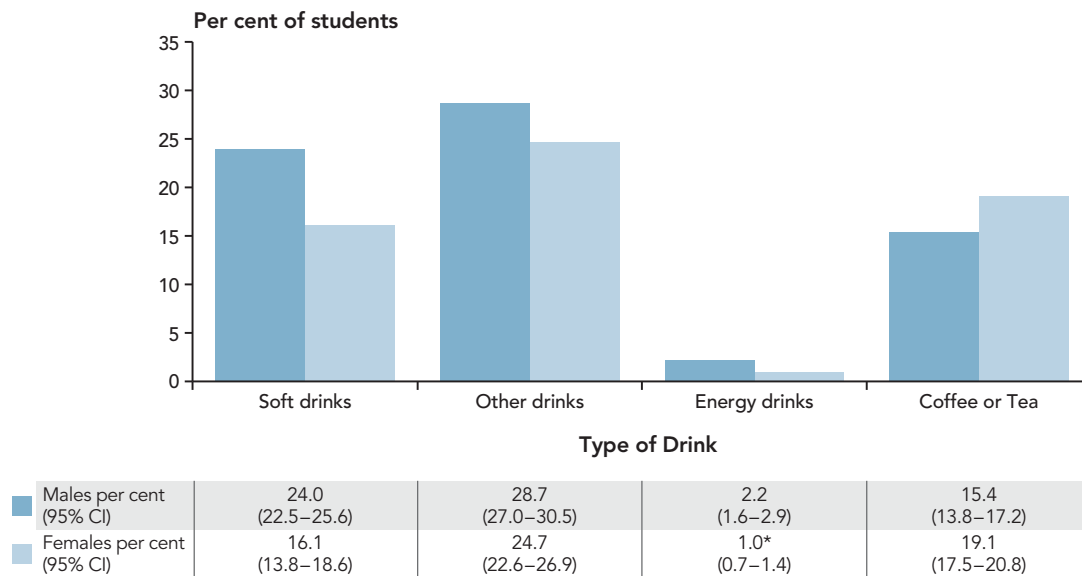
water) which may have little or no nutritional value (Figure 6.3). Male students are more likely to consume soft drinks every day compared to female students.





**Figure 6.3**

Frequency of Drinking Selected Drinks One or More Times per Day by Sex, Peel, 2011



\* Use estimate with caution.

Note: 95% CI reflects the 95% confidence interval of the estimate.

Source: Student Health Survey 2011, Peel Public Health.



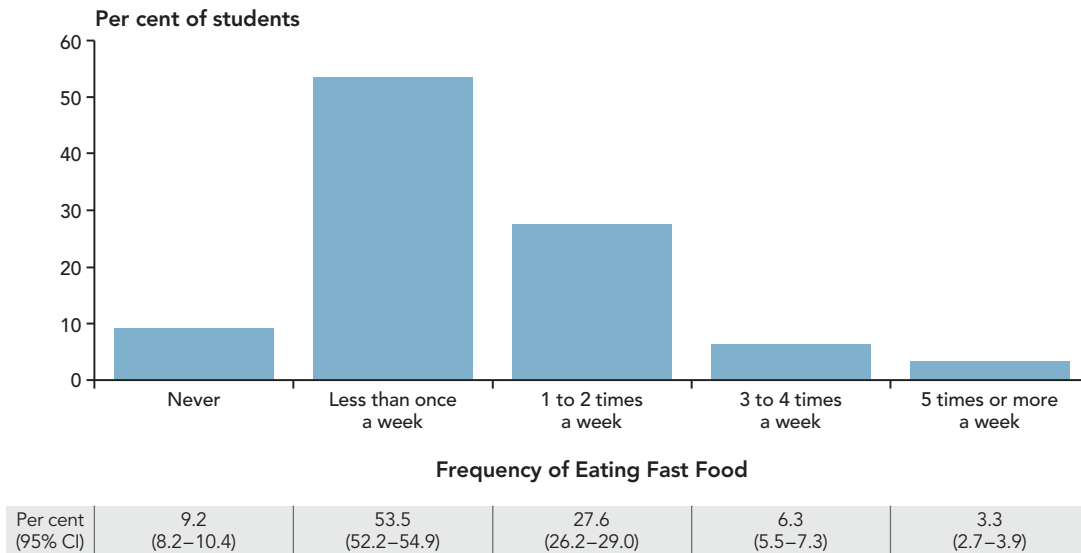
## Eating Behaviours

### Fast Food Consumption

Consumption of food and drinks outside of the home has increased over the past decade.<sup>65</sup> Eating outside of the home is associated with an increased intake of fat and lower intakes of some micronutrients (i.e., vitamin C, iron and calcium) among all age groups.<sup>65</sup>

Many students eat restaurant or fast food at least once per week. Sixty-nine per cent of senior kindergarten students eat restaurant food at least once per week (Figure 6.1). Approximately 37% of Grade 7 to 12 students report eating meals prepared/purchased at a fast food restaurant once per week or more (Figure 6.4).

**Figure 6.4**  
Frequency of Eating Fast Food,  
Peel, 2011



Note: 95% CI reflects the 95% confidence interval of the estimate.  
Source: Student Health Survey 2011, Peel Public Health.

### Family Meals

Shared family meals offer nutritional benefits to children and youth.<sup>66</sup> Children and youth who share three or more family meals per week are more likely to be within a normal weight range, eat healthier foods, and have less disordered eating behaviours compared to children and youth from families who share less than three family meals per week.<sup>66</sup>



### Did You Know

#### Family Meals and Mental Health

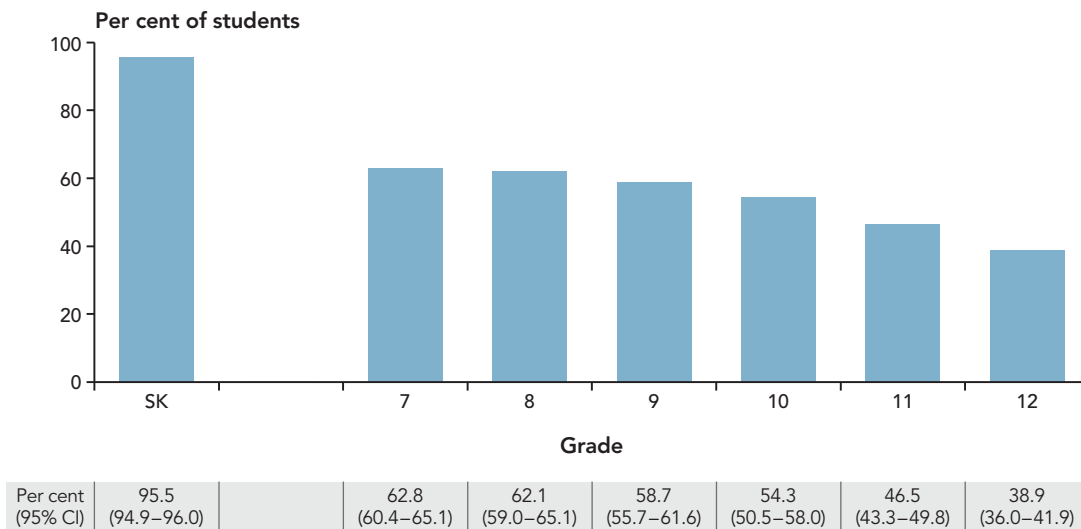
Students who ate dinner with their family more often were less likely to have emotional problems and were more likely to report emotional well-being and positive prosocial behaviours than those who had family dinners less often.<sup>41</sup>

*Less than 40% of  
Grade 12 students in Peel  
eat meals with their family daily.*

Younger students are more likely to report eating meals with their family every day (Figure 6.5).

**Figure 6.5**

Proportion of Students who ate Meals with their Family Every Day, Peel, 2010 and 2011



SK - senior kindergarten.

Note: 95% CI reflects the 95% confidence interval of the estimate.

Sources: Senior Kindergarten Census 2010, Region of Peel.

Student Health Survey 2011, Peel Public Health.



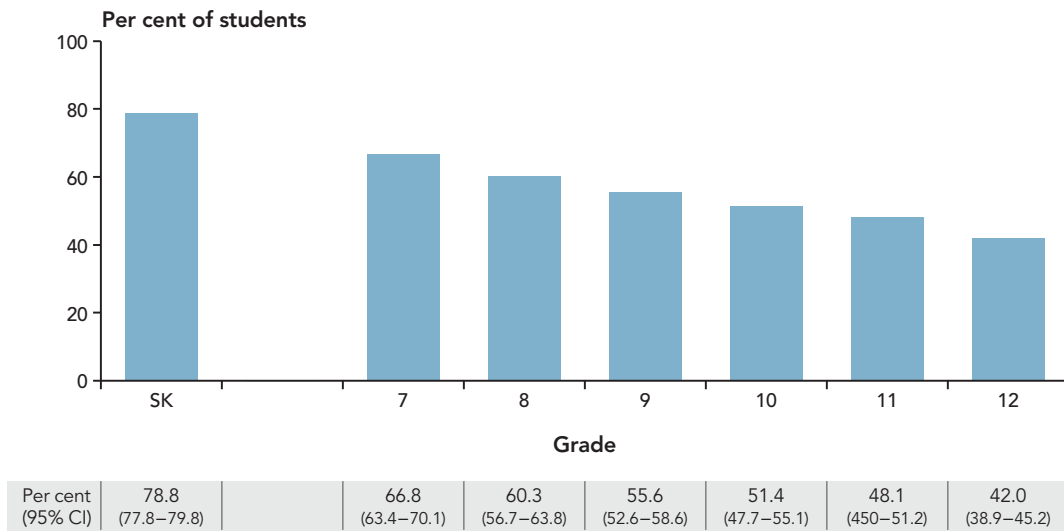
### Frequency of Eating Breakfast

Breakfast consumption is associated with overall health and well-being, and dietary adequacy in children and youth.<sup>67,68</sup> Eating breakfast is also associated with a reduced risk of becoming overweight or obese and with having a lower BMI.<sup>67-69</sup> Breakfast consumption may also improve cognitive function related to memory, test grades and school attendance.<sup>67</sup>

Students in Grades 7 through 12 are less likely to eat breakfast everyday compared to senior kindergarten students (Figure 6.6).



**Figure 6.6**  
**Proportion of Students who ate Breakfast Daily,**  
**Peel, 2010 and 2011**



SK - senior kindergarten.

Note: 95% CI reflects the 95% confidence interval of the estimate.

Sources: Senior Kindergarten Census 2010, Region of Peel.  
 Student Health Survey 2011, Peel Public Health.