

ENHANCED EPIDEMIOLOGICAL SUMMARY

Healthy Eating Behaviours Among 1-17 Year Olds using the Canadian Health Survey of Children and Youth

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Highlights

- This report provides an overview of eating behaviours and weight-focused thoughts and behaviours among children and youth ages 1-17 years in Ontario as measured by the 2019 Canadian Health Survey of Children and Youth (CHSCY).
- In Ontario, 76.8% of children and youth ate breakfast daily in the past week. Breakfast consumption was closely related to age, with daily breakfast consumption dropping to 52.9% among youth (defined as 12-17 years olds throughout this report). Among children and youth attending school, only 61.9% ate breakfast daily on all school days in the past week.
- Three quarters of children and youth (75.9%) ate dinner with their family at a table on five or more nights in the past week. The prevalence decreased with age, with only 65.7% of youth reporting eating dinner with their family five or more nights in the past week. Most (76.1%) children, youth and their family members were not allowed to use electronic devices while eating dinner together.
- One in three (33.6%) Ontario children and youth ate food from a restaurant (fast-food or sit-down) two or more times in the past week, and the prevalence increased with age.
- Almost half (47.9%) of Ontario children and youth consumed 7 or more sugary beverages in the past week. Sugary beverage consumption was higher in youth compared to younger age groups; however, even in the youngest age group, 38.5% of children 3-4 years old reported consuming 7 or more sugary drinks in the past week. Energy drink consumption was low among Ontario youth, with only 4.7% reporting any consumption in the past week. Males were more likely to report sugary beverage and energy drink consumption than females.
- Weight focused thoughts and behaviours were prevalent among Ontario youth; almost half (47.5%) reported being preoccupied with a desire to be thinner in the past year and 42.6% reported changing their eating habits to manage their weight within the past year. Approximately 4% of youth reported vomiting to lose weight in the past year. While more prevalent among females, over 1 in 3 males reported a preoccupation with a desire to be thinner (36.1%) and changing eating habits to lose weight (35.9%).
- Healthy eating behaviours differed significantly across sociodemographic characteristics, including child race and ethnic origin, Indigenous identity, immigration status, living arrangement, household income and educational attainment.

Introduction

This report is one in a series of summaries on child health indicators derived from the 2019 Canadian Health Survey of Children and Youth (CHSCY). The purpose of this series is to provide clearly defined categories for socio-demographic variable use in analyses of CHSCY data to ensure consistent language and interpretation of results among public health units (PHUs). Basic estimates are provided by several levels of geography for PHUs with limited epidemiological support to access estimates for their region. For more information about the series please see the series Technical Report.¹

This report provides an overview of food and eating behaviours among children and youth ages 1-17 years in Ontario as measured by the 2019 CHSCY. The following indicators are described: the prevalence of children and youth that (1) ate breakfast, (2) ate dinner with family at the table, (3) were not allowed (nor were their family members) to use electronic devices while eating dinner, (4) ate food from a restaurant, and (5) drank various sugary beverages. Weight focused thoughts and behaviours are also presented, including the prevalence of youth (12 to 17 years old) experiencing a preoccupation with a desire to be thinner, changed their eating habits to manage their weight, and vomited to lose weight. All indicators are reported and stratified by socio-demographic characteristics. Prevalence estimates are also presented by PHU, geographic region, and Statistics Canada Peer Group. For further information about the CHSCY data and population characteristics, please see the CHSCY Technical Report.¹

Eating and food behaviours play an important role in the health of children and youth and their growth and development. The physiological need for nutrients is increased during early childhood and adolescence, and diets that are high in nutritional quality are especially important among children and youth as they grow and learn.^{2,3} Further, establishing healthy eating behaviours in the early years is important as these behaviours are often carried into adulthood.^{3,4}

Canada's Food Guide (CFG) provides dietary guidance for the types of foods that Canadians (aged two years and older) should consume every day to maintain a healthy diet, along with additional recommendations for healthful eating practices.³ Recommendations include information about "where, when, why, and how you should eat." A large focus of CFG is on mealtime, including recommendations promoting healthy eating environments: eat meals with others, take time to eat (i.e., limit distractions including television and electronic devices), and cook more often. For children and adolescents, eating meals together as a family is associated with higher diet quality and family functioning,⁵ and for adolescents, a reduction in risk behaviours (e.g., alcohol use) and improved outcomes (e.g., well-being).⁶ Eating meals while distracted (e.g., watching television, using electronic devices) is associated with poorer diets among children and youth.⁷ Cooking at home is recommended, since eating food from restaurants is associated with increased caloric intake and poorer diet quality.^{8,9} This is of particular importance for youth, who tend to consume more fast food compared to other age groups.¹⁰ CFG also recommends water as the drink of choice as an alternative to sugary beverages or other calorically dense beverages; sugary drinks and sugar-sweetened beverages (SSB) can negatively impact children's health, including increasing their risk of type 2 diabetes, hypertension, and dental caries.^{11,12}

Another important dimension to healthy eating among youth relates to body image and disordered eating behaviours. Body dissatisfaction and weight preoccupation are risk factors for disordered eating, eating disorders, and other health compromising behaviours.¹³ For example, adolescents might choose to skip meals or diet for weight loss, both of which are associated with poorer diet quality.¹⁴ Further, poor body image and disordered eating behaviours are of increasing public health concern post-pandemic. During the COVID-19 pandemic, isolation and feelings of loneliness, increased time spent on social media, extended time with family, and decreased access to care and services at schools, all may have contributed to an increased risk of developing eating disorders and related symptomatology.^{15,16}

Rates of emergency department visits and hospital admissions for eating disorders among children and adolescents increased significantly during the COVID-19 pandemic.^{15,16}

It is important to establish healthy food and eating behaviours in childhood and adolescence to ensure healthy eating practices for proper growth and development and prevention of chronic diseases later in life. There is limited provincially representative data on healthy eating and food behaviours for children and youth. Understanding and surveilling these data, especially by socio-demographic and geographic factors, will support the development and implementation of relevant public health interventions with considerations for disproportionately affected Ontarians. Within that, it is critical to bear in mind the complexity of the determinants of healthy eating behaviours,¹⁷ as well as their inequitable distribution. Given the timing of these collected data, this report can provide baseline descriptions of healthy eating and food behaviour indicators after the release and dissemination of the new CFG, prior to the COVID-19 pandemic.

Race-based and Indigenous Identity Data

The CHSCY utilizes the following socio-demographic terms to describe its variables: “Population Group”, “Visible Minority”, and “Aboriginal Identity”. To stay current with health equity language preferred by impacted communities and to reduce unintentional harms when discussing and utilizing findings of the CHSCY, we have replaced the CHSCY terminology with the following terms in this report, where possible: “race and ethnic origin”, “racialized groups”, and “Indigenous.”

‘Race’ is a social construct without a biological basis and created to categorize people into different groups based on visual traits in ways that create and maintain power differentials within society.¹⁸ ‘Ethnic origin’ refers to communities’ learned or adopted characteristics such as language, practices, and beliefs.^{19,20} Note that the categorization of people as Indigenous, Black, and other racial categories has been historically and currently used to mark certain groups for exclusion, discrimination, and oppression. Racism, racial categorization, and racial discrimination; therefore, continue to shape the lives and opportunities of those who are categorized as “racialized people.”²⁰ For more information on socio-demographic terminology, please refer to the Technical Notes and Technical Report.

Race-based and Indigenous identity data are vital for the identification and monitoring of health inequities that stem from racism, bias, and discrimination²¹ and to inform the design of programs and services to promote the health and well-being of racialized populations and Indigenous peoples. Public Health Ontario (PHO) includes data and analyses on Indigenous peoples to advance understanding and support action to enhance Indigenous people’s health.

PHO recognizes the importance of Indigenous data sovereignty and the First Nations principles of Ownership, Control, Access and Possession (OCAP) and Métis Principles of Ownership, Control, Access and Stewardship (OCAS). We continue to strive to build processes and relationships to respectfully and meaningfully analyze and report on Indigenous data.

Results

Breakfast eating

OVERALL ESTIMATES

- Approximately 3 in 4 children and youth (76.8% [95% CI 76.1-77.5%]) consumed breakfast daily in the past week.
- Among children and youth that attend school, 61.9% (95% CI 60.9-62.9%) consumed breakfast every school day in the past week.

Figure 1: Breakfast eating among children and youth between 1 to 17 years in the past week; Ontario, 2019

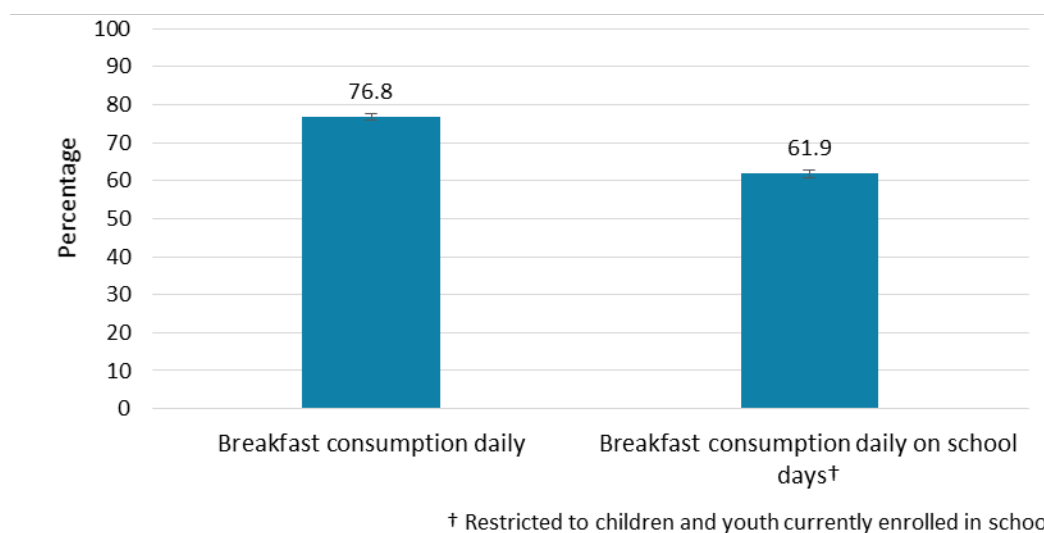


Table 1: Breakfast eating among children and youth; Ontario, 2019

Indicator	Weighted percentage % (95% CI)
Breakfast consumption, past week (1-17 year olds)	
0-6 days	23.2 (22.5-23.9)
7 days	76.8 (76.1-77.5)
Breakfast consumption on school days, past week (3-17 year olds)*	
0-4 days	38.1 (37.1-39.1)
5 days	61.9 (60.9-62.9)

*Restricted to children and youth currently enrolled in school, where >99% were 4-17 years old.

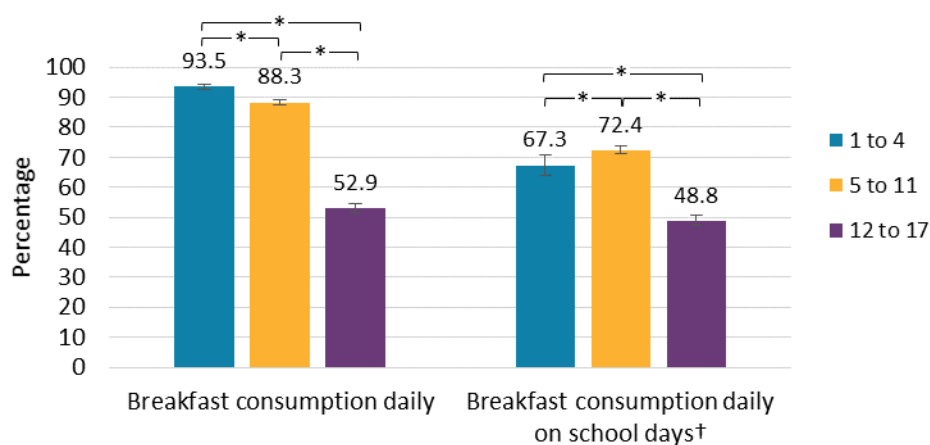
ESTIMATES BY CHILD SOCIODEMOGRAPHIC CHARACTERISTICS

- As children got older, the prevalence of consuming breakfast daily in the past week and daily on school days in the past week declined (Figure 2 and Table 2). The drop in prevalence by age group Healthy Eating Behaviours among 1-17 year olds using CHSCY

was substantial, with 93.5% (95% CI 92.7-94.4%) of 1 to 4 year olds consuming breakfast daily in the past week compared to 52.9% (95% CI 51.4-54.5%) of 12 to 17 year olds.

- Compared to females, males had a higher prevalence of daily breakfast consumption in the past week and daily on school days in the past week (Figure 3 and Table 2), although values were within 4 percentage points for both indicators.
- Compared to children and youth identifying as Indigenous, those identifying as non-Indigenous had a higher prevalence of having consumed breakfast daily in the past week and daily on school days in the past week (Table 2).
- While there was an overall difference in daily breakfast consumption in the past week by race and ethnic origin (by Rao-Scott Chi-Square), there were no significant differences between specific groups (by adjusted Tukey-Kramer; Table 2). For school days only, almost 70 per cent (68.6% [95% CI 64.5-72.7%]) of children and youth identifying as East Asian consumed breakfast daily on school days in the past week, which was significantly higher than those identifying as white/non-racialized (60.5% [95% CI 59.3-61.7%]).
- Daily breakfast consumption was higher among non-immigrant (77.5% [95% CI 76.7-78.2%]) compared to immigrant (71.2% [95% CI 68.3-74.1%]) children and youth. There was no difference in daily breakfast consumption on school days across child/youth immigrant status (Table 2).

Figure 2: Breakfast eating among children and youth between 1 to 17 years in the past week by age group; Ontario, 2019



* p<0.05 by adjusted Tukey-Kramer

† Restricted to children and youth currently enrolled in school, where >99% were 4-17 years old

Figure 3: Breakfast eating among children and youth between 1 to 17 years in the past week by sex at birth; Ontario, 2019

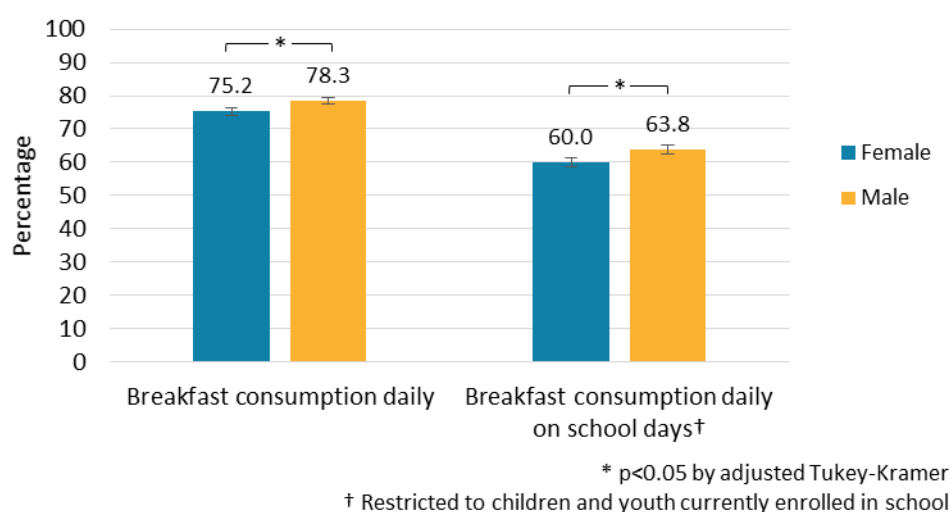


Table 2: Child and youth breakfast consumption, by child sociodemographic characteristics; Ontario, 2019

Child socio-demographic	Breakfast consumption daily in past week % (95% CI)	Breakfast consumption daily on school days in past week % (95% CI)
Age Group*†		
1-4 years	93.5 (92.7-94.4) ^a	67.3 (63.9-70.6) ^a
5-11 years	88.3 (87.4-89.2) ^b	72.4 (71.2-73.7) ^b
12-17 years	52.9 (51.4-54.5) ^c	48.8 (47.1-50.5) ^c
Sex at birth*†		
Female	75.2 (74.2-76.3) ^a	60.0 (58.5-61.4) ^a
Male	78.3 (77.4-79.3) ^b	63.8 (62.5-65.2) ^b
Indigenous identity*†		
No	77.0 (76.3-77.7) ^a	62.3 (61.3-63.3) ^a
Yes	69.5 (65.3-73.7) ^b	52.0 (46.9-57.1) ^b
Race and Ethnic Origin*†		
White/Not racialized	77.2 (76.3-78.0)	60.5 (59.3-61.7) ^a
South Asian	77.5 (75.1-79.8)	65.6 (62.5-68.7) ^{ab}

Child socio-demographic	Breakfast consumption daily in past week	Breakfast consumption daily on school days in past week
	% (95% CI)	% (95% CI)
Black	74.1 (70.7-77.4)	63.1 (58.8-67.4) ^{ab}
East Asian	79.8 (76.6-83.0)	68.6 (64.5-72.7) ^b
Southeast Asian/Filipino	72.6 (68.3-77.0)	61.4 (56.1-66.6) ^{ab}
West Asian/Arab	73.9 (69.2-78.6)	61.5 (55.6-67.4) ^{ab}
Latin American	80.0 (71.9-88.1)	74.6 (65.7-83.5) ^{ab}
Other/Multiple	80.6 (76.3-84.8)	64.6 (58.5-70.8) ^{ab}
Child/Youth status*		
Non-immigrant	77.5 (76.7-78.2) ^a	62.0 (61.0-63.1)
Immigrant	71.2 (68.3-74.1) ^b	60.6 (57.3-63.9)
Non-permanent resident	80.8 (69.6-92.0) ^{ab}	68.5 (54.2-82.7)

Note: Indigenous identity, race and ethnic origin, and child/youth immigration status are ordered based on weight in the sample (i.e., percent of total Ontario sample), from largest to smallest.

* Indicates significant difference between groups for breakfast consumption daily in past week (Rao-Scott Chi-Square Test $p < 0.05$)

† Indicates significant difference between groups for breakfast consumption daily on school days in past week (Rao-Scott Chi-Square Test $p < 0.05$)

Estimates with no shared superscript lowercase letters are significantly different (within each indicator and socio-demographic; Tukey-Kramer adjusted $p < 0.05$)

ESTIMATES BY HOUSEHOLD SOCIODEMOGRAPHIC CHARACTERISTICS

- Daily breakfast consumption increased with higher household income, as reflected in all three income variables (Table 3). For both income categories and quintiles, the difference in prevalence between the lowest and highest income groups was about 6%. There were no significant differences in daily breakfast consumption on school days by any household income variable (Table 3).
- Daily breakfast consumption on all days and school days were higher among children/youth living with two parents/guardians compared to those living with a lone-parent/guardian or in other living situations (Figure 5 and Table 3).
- Daily breakfast consumption on all days and school days increased with higher household educational attainment (Table 3).

Figure 4: Breakfast eating among children and youth between 1 to 17 years in the past week by household income quintile; Ontario, 2019

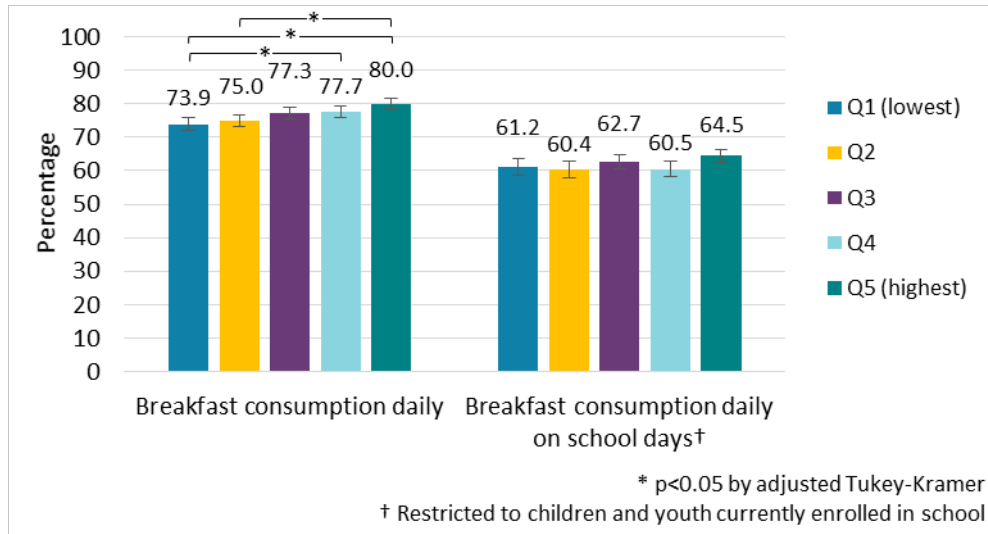


Figure 5: Breakfast eating among children and youth between 1 to 17 years in the past week by child living arrangement; Ontario, 2019

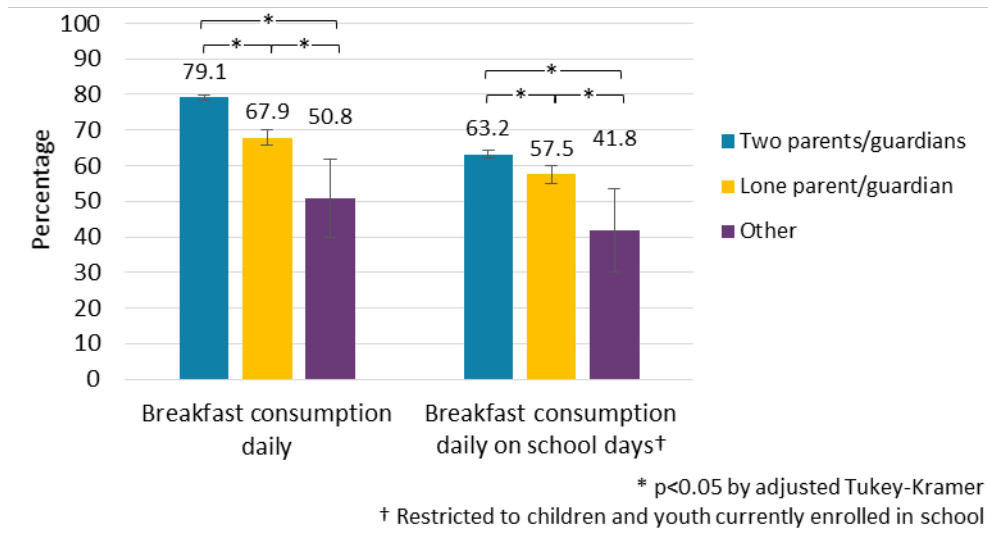


Table 3: Child and youth breakfast consumption, by household sociodemographic characteristics; Ontario, 2019

Household socio-demographic	Breakfast consumption daily in past week % (95% CI)	Breakfast consumption daily on school days in past week % (95% CI)
Household Income Categories*		
up to 24,999	73.6 (70.7-76.5) ^{ab}	61.4 (57.6-65.2)
\$25,000 to 49,999	73.7 (71.6-75.8) ^a	61.6 (58.9-64.3)
\$50,000 to 74,999	75.8 (73.7-77.8) ^{abc}	59.6 (56.8-62.5)
\$75,000 to 99,999	76.4 (74.4-78.3) ^{abc}	62.2 (59.6-64.8)
\$100,000 to 149,999	78.0 (76.4-79.6) ^{bc}	61.0 (58.8-63.2)
\$150,000 to 199,999	79.9 (78.0-81.9) ^c	63.2 (60.4-65.9)
\$200,000 and higher	79.6 (77.6-81.5) ^c	65.1 (62.6-67.6)
Household Income Quintiles*		
Q1 (lowest)	73.9 (71.9-75.8) ^a	61.2 (58.7-63.8)
Q2	75.0 (73.3-76.7) ^{ab}	60.4 (58.1-62.8)
Q3	77.3 (75.7-78.9) ^{abc}	62.7 (60.5-64.9)
Q4	77.7 (76.0-79.3) ^{bc}	60.5 (58.1-62.9)
Q5 (highest)	80.0 (78.5-81.6) ^c	64.5 (62.5-66.5)
Household Low Income Cut-Off (LICO)*		
Below LICO	73.9 (72.2-75.7) ^a	62.5 (60.2-64.8)
Above LICO	77.6 (76.9-78.4) ^b	61.8 (60.7-62.9)
Child living arrangement**†		
Two parents/guardians	79.1 (78.3-79.9) ^a	63.2 (62.0-64.3) ^a
Lone parent/guardian	67.9 (65.9-70.0) ^b	57.5 (55.1-59.9) ^b
Other (incl. no parents/guardians in household)	50.8 (39.9-61.6) ^c	41.8 (30.2-53.5) ^c
Highest household educational attainment**†		
High-school or less	70.9 (68.8-73.1) ^a	57.0 (54.1-60.0) ^a
College/vocational/ university certificate or diploma	74.7 (73.4-76.0) ^b	60.3 (58.7-61.9) ^a
Bachelor's degree or more	80.4 (79.4-81.4) ^c	64.7 (63.3-66.1) ^b

* Indicates significant difference between groups for breakfast consumption daily in past week (Rao-Scott Chi-Square Test p<0.05)

† Indicates significant difference between groups for breakfast consumption daily on school days in past week (Rao-Scott Chi-Square Test p<0.05)

Estimates with no shared superscript lowercase letters are significantly different (within each indicator and socio-demographic; Tukey-Kramer adjusted p<0.05)

ESTIMATES FOR SUB-ONTARIO GEOGRAPHIES

Public Health Unit

- The prevalence of having consumed breakfast all 7 days in the past week varied across PHUs (Table 4), ranging from 66.6% (95% CI 56.0-77.2%; Timiskaming) to 79.6% (95% CI 77.0-82.2%; Halton). Most estimates were not significantly different from the Ontario average (76.8% [95% CI 76.1-77.5%]; Table 1), with the exception of Chatham-Kent with a prevalence of 72.1% (95% CI 68.5-75.7%).
- The prevalence of having consumed breakfast all 5 past school days were similar in most PHUs compared to the Ontario average (61.9% [95% CI 60.9-62.9%]; Table 1), ranging from 53.7% (95% CI 48.5-58.9%; Oxford Elgin St. Thomas) to 66.1% (95% CI 59.1-73.1%; Middlesex-London). Most estimates were not significantly different from the Ontario average, with the exception of Toronto, which had a comparatively higher prevalence (65.8% [95% CI 63.8-67.9%]); and Kingston, Frontenac and Lennox and Addington (54.5% [95% CI 49.0-59.9%]) and Oxford Elgin St. Thomas, which both had comparatively lower prevalence.

Table 4: Child and youth breakfast consumption, by Public Health Unit; Ontario, 2019

Public health unit	Breakfast consumption daily in past week % (95% CI)	Breakfast consumption daily on school days in past week % (95% CI)
Brant County Health Unit	75.7 (70.7-80.7)	61.0 (53.9-68.1)
Chatham-Kent Health Unit	72.1 (68.5-75.7) [↓]	58.0 (52.6-63.3)
City of Hamilton Health Unit	76.6 (71.1-82.0)	64.4 (57.1-71.7)
City of Ottawa Health Unit	79.4 (76.7-82.2)	59.7 (55.6-63.9)
City of Toronto Health Unit	78.3 (76.9-79.8)	65.8 (63.8-67.9) [↑]
Durham Regional Health Unit	72.6 (68.9-76.4)	60.5 (55.6-65.5)
Grey Bruce Health Unit	76.3 (71.7-80.9)	58.0 (51.8-64.2)
Haldimand-Norfolk Health Unit	76.0 (70.2-81.8)	54.3 (46.4-62.1)
Haliburton, Kawartha, Pine Ridge District Health Unit	76.1 (72.4-79.7)	59.1 (54.1-64.1)
Halton Regional Health Unit	79.6 (77.0-82.2)	60.9 (57.1-64.7)
Hastings and Prince Edward Counties Health Unit	77.8 (73.6-82.0)	64.8 (59.4-70.3)
Huron Perth Health Unit	79.5 (75.1-83.9)	64.5 (58.1-71.0)
Kingston, Frontenac and Lennox and Addington Health Unit	76.2 (72.3-80.2)	54.5 (49.0-59.9) [↓]
Lambton Health Unit	72.4 (68.0-76.9)	60.7 (54.2-67.2)
Leeds, Grenville and Lanark District Health Unit	76.0 (71.6-80.4)	55.1 (48.9-61.3)

Public health unit	Breakfast consumption daily in past week	Breakfast consumption daily on school days in past week
	% (95% CI)	% (95% CI)
Middlesex-London Health Unit	77.0 (71.9-82.0)	66.1 (59.1-73.1)
Niagara Regional Area Health Unit	79.0 (74.6-83.3)	61.0 (54.8-67.2)
North Bay Parry Sound District Health Unit	74.9 (68.8-80.9)	58.5 (50.2-66.9)
Northwestern Health Unit	73.2 (69.3-77.1)	59.2 (53.9-64.5)
Oxford Elgin St. Thomas Health Unit	72.4 (68.3-76.6)	53.7 (48.5-58.9) [↓]
Peel Regional Health Unit	76.2 (74.2-78.3)	64.8 (62.1-67.5)
Peterborough County—City Health Unit	78.3 (73.3-83.4)	56.3 (48.9-63.7)
Porcupine Health Unit	75.0 (69.1-80.9)	60.9 (53.5-68.3)
Renfrew County and District Health Unit	76.8 (70.8-82.9)	54.4 (45.2-63.6)
Simcoe Muskoka District Health Unit	76.1 (73.4-78.7)	57.0 (53.0-60.9)
Sudbury and District Health Unit	73.4 (68.0-78.8)	57.4 (50.6-64.1)
The District of Algoma Health Unit	76.6 (71.6-81.6)	59.5 (52.0-66.9)
The Eastern Ontario Health Unit	78.5 (73.9-83.1)	57.2 (50.1-64.2)
Thunder Bay District Health Unit	72.0 (66.9-77.1)	56.3 (49.4-63.2)
Timiskaming Health Unit	66.6 (56.0-77.2)	59.1 (44.7-73.4)
Waterloo Health Unit	78.4 (75.4-81.5)	61.6 (56.4-66.8)
Wellington-Dufferin-Guelph Health Unit	79.5 (76.7-82.4)	61.5 (57.4-65.6)
Windsor-Essex County Health Unit	73.4 (69.9-76.9)	58.8 (54.0-63.6)
York Regional Health Unit	75.9 (72.4-79.3)	63.6 (59.2-68.1)

[↑] Indicates significantly higher than the Ontario average, based on non-overlapping 95% confidence intervals

[↓] Indicates significantly lower than the Ontario average, based on non-overlapping 95% confidence intervals

Region

- Prevalence of having consumed breakfast all 7 days in the past week varied across regions, although only significantly different in one region compared to Ontario (Table 5). Children and youth in the North West were slightly but significantly less likely to consume breakfast all 7 days compared to all of Ontario (72.4% [95% CI 68.7-76.0%] vs. 76.8% [95% CI 76.1-77.5%], respectively).
- Prevalence of having consumed breakfast all 5 past school days varied across regions, but was only significantly different in one region compared to Ontario. Toronto had a significantly higher prevalence compared to the provincial average (65.8% [95% CI 63.8-67.9%] vs. 61.9% [95% CI 60.9-62.9%], respectively).

Table 5: Child and youth breakfast consumption, by Region; Ontario, 2019

Region	Breakfast consumption daily in past week % (95% CI)	Breakfast consumption daily on school days in past week % (95% CI)
North West	72.4 (68.7-76.0) [↓]	57.2 (52.2-62.2)
North East	74.1 (71.4-76.8)	58.7 (54.9-62.4)
South West	75.0 (73.0-76.9)	60.8 (58.1-63.4)
Central West	78.3 (76.8-79.9)	61.5 (59.3-63.8)
Toronto	78.3 (76.9-79.8)	65.8 (63.8-67.9) [↑]
Central East	75.5 (74.1-76.9)	62.3 (60.5-64.2)
East	78.4 (76.7-80.2)	58.7 (56.1-61.3)

[↑] Indicates significantly higher than the Ontario average, based on non-overlapping 95% confidence intervals

[↓] Indicates significantly lower than the Ontario average, based on non-overlapping 95% confidence intervals

Peer Group

- Prevalence of having consumed breakfast all 7 days in the past week varied across peer groups, however none were significantly different from the Ontario average (Table 6).
- Compared to the Ontario average (61.9% [95% CI 60.9-62.9%]; Table 1), peer group G&H had a significantly higher prevalence of breakfast consumption on all 5 past school days (65.0% [95% CI 63.4-66.6%]; Table 6). Peer group D had a significantly lower prevalence (57.7% [95% CI 55.8-59.6%]).

Table 6: Child and youth breakfast consumption, by Peer Group; Ontario, 2019

Peer Group	Breakfast consumption daily in past week % (95% CI)	Breakfast consumption daily on school days in past week % (95% CI)
B (mainly urban centers)	77.0 (75.6-78.4)	61.5 (59.5-63.4)
C (sparsely populated urban-rural mix)	76.0 (74.7-77.4)	59.1 (57.2-61.0)
D (mainly rural regions)	76.5 (75.1-77.8)	57.7 (55.8-59.6) [↓]
G&H (largest metro centres)	77.1 (75.9-78.3)	65.0 (63.4-66.6) [↑]

[↑] Indicates significantly higher than the Ontario average, based on non-overlapping 95% confidence intervals

[↓] Indicates significantly lower than the Ontario average, based on non-overlapping 95% confidence intervals

Dinner eating with family

OVERALL ESTIMATES

- Approximately 3 in 4 children and youth (75.9%; 95% CI 75.2-76.7%) ate dinner with their family at a table most nights (5-7 nights) in the past week.
- Similarly, nearly 3 in 4 families of children and youth (76.1%; 95% CI 75.3-76.8%) did not allow electronic devices to be used by any family member during dinner.

Figure 6: Dinner eating with family among children and youth between 1 to 17 years; Ontario, 2019

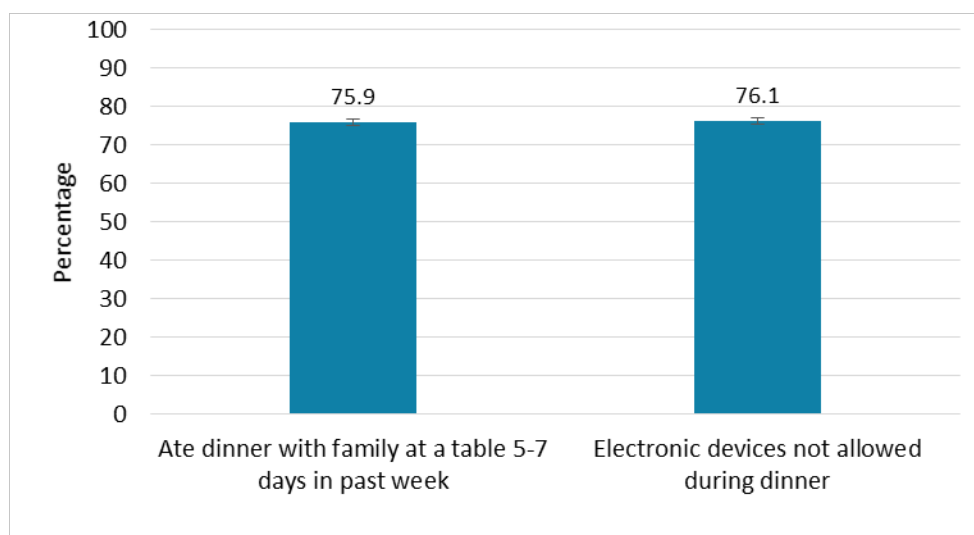


Table 7: Dinner eating with family among children and youth; Ontario, 2019

Indicator	Weighted percentage % (95% CI)
Eating dinner with family at a table, past week (1-17 year olds)	
0-4 days	24.1 (23.3-24.8)
5-7 days	75.9 (75.2-76.7)
Electronic devices allowed during dinner (1-17 year olds)	
Yes	19.9 (19.1-20.6)
No	76.1 (75.3-76.8)
Family does not eat dinner together	4.1 (3.7-4.4)

ESTIMATES BY CHILD SOCIODEMOGRAPHIC CHARACTERISTICS

- As children get older, fewer consume dinner most nights at a table with their families (Figure 7 and Table 8). Prevalence of consuming dinner with family at a table 5-7 days in the past week decreased approximately 20% between 1-4 year olds (83.6% [95% CI 82.3-84.8%]) and 12-17 year olds (65.7% [95% CI 64.2-67.2%]). There was a non-linear trend by age group for prevalence of electronic devices not being allowed during dinner; the highest prevalence was among 5-11 year olds (81.1% [95% CI 80.0-82.3%]).
- There was no difference by sex at birth in prevalence of eating dinner at a table with the family 5-7 days in the past week or prevalence of family members not being allowed to use electronic devices during dinner (Figure 8 and Table 8).
- Children and youth identifying as non-Indigenous had a significantly higher prevalence of having eaten dinner with their family at a table 5-7 days in the past week (76.1% [95% CI 75.4-76.9%]), compared to those identifying as Indigenous (69.1% [95% CI 65.0-73.3%]). There was no difference in prevalence of family members not being allowed to use electronic devices during dinner by Indigenous identity (Table 8).
- When considering the race and ethnic group, children and youth identifying as East Asian had the highest prevalence of having reported eating dinner with their family at a table 5-7 days in the past week (87.3% [95% CI 84.7-89.8%]) and children and youth identifying as Black had the lowest prevalence (63.4% [95% CI 59.7-67.2%]). Children and youth identifying as Latin American (82.6% [95% CI 76.2-89.0%]) or white/non-racialized (81.5% [95% CI 80.7-82.4%]) and had the highest prevalence of family members not being allowed to use electronic devices during dinner, while those identifying as Southeast Asian/Filipino had the lowest prevalence (61.9% [95% CI 57.3-66.6%]) (Table 8).
- There was no difference by child immigration status in prevalence of eating dinner with the family at a table 5-7 days in the past week. Children and youth identifying as non-immigrants had a higher prevalence of family members not being allowed to use electronic devices during dinner (77.1% [95% CI 76.3-77.9%]) compared to those identifying as immigrants (67.1% [95% CI 64.1-70.1%]) (Table 8).

Figure 7: Dinner eating with family among children and youth between 1 to 17 years by age group; Ontario, 2019

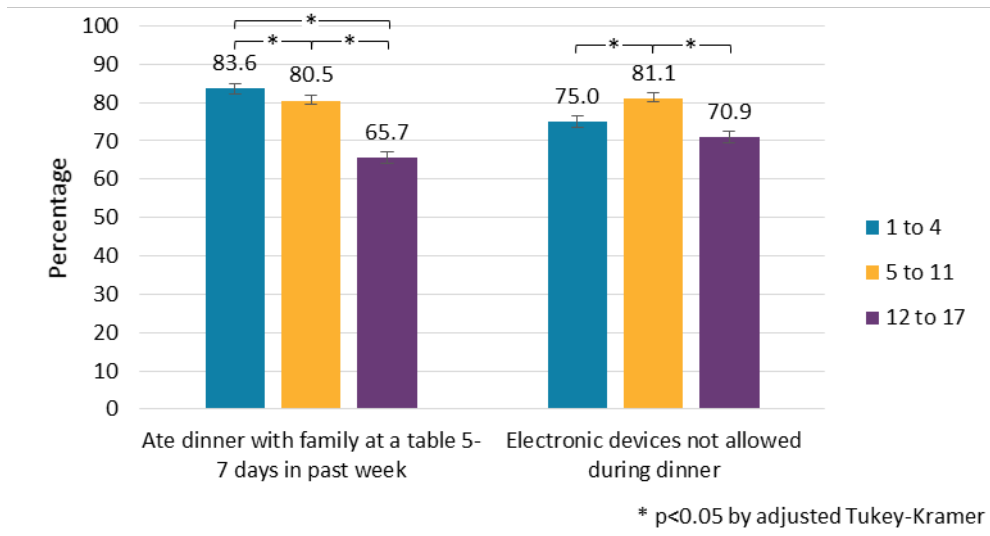


Figure 8: Dinner eating with family among children and youth between 1 to 17 years by sex at birth; Ontario, 2019

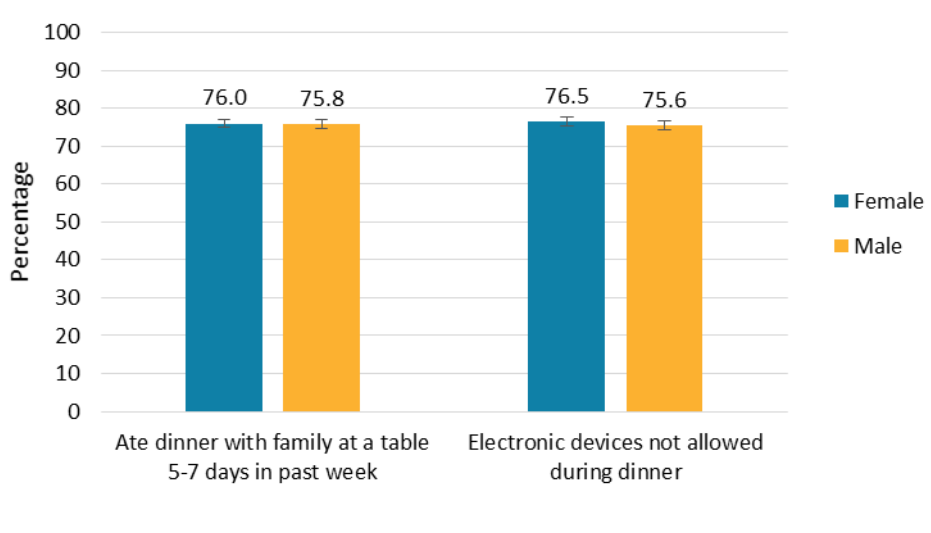


Table 8: Dinner eating with family among children and youth, by child sociodemographic characteristics; Ontario, 2019

Child socio-demographic	Ate dinner with family at a table 5-7 days in past week % (95% CI)	Electronic devices are not allowed during dinner % (95% CI)
Age Group**†		
1-4 years	83.6 (82.3-84.8) ^a	75.0 (73.6-76.5) ^a
5-11 years	80.5 (79.5-81.6) ^b	81.1 (80.0-82.3) ^b
12-17 years	65.7 (64.2-67.2) ^c	70.9 (69.4-72.4) ^a
Sex at birth†		
Female	76.0 (75.0-77.1)	76.5 (75.4-77.6)
Male	75.8 (74.7-76.9)	75.6 (74.5-76.7)
Indigenous identity*		
No	76.1 (75.4-76.9) ^a	76.1 (75.3-76.9)
Yes	69.1 (65.0-73.3) ^b	75.5 (71.5-79.5)
Race and Ethnic Origin**†		
White/Not racialized	76.1 (75.2-77.0) ^{ab}	81.5 (80.7-82.4) ^a
South Asian	78.8 (76.5-81.2) ^a	63.1 (60.4-65.7) ^b
Black	63.4 (59.7-67.2) ^c	68.9 (65.5-72.3) ^{cd}
East Asian	87.3 (84.7-89.8) ^d	71.0 (67.5-74.4) ^{bcd}
Southeast Asian/Filipino	70.6 (66.4-74.8) ^{bce}	61.9 (57.3-66.6) ^{bc}
West Asian/Arab	75.7 (71.0-80.4) ^{ab}	69.2 (63.9-74.4) ^{bcd}
Latin American	79.5 (72.2-86.9) ^{ade}	82.6 (76.2-89.0) ^{ad}
Other/Multiple	76.7 (72.2-81.2) ^a	69.5 (64.5-74.5) ^{bcd}
Child/Youth status†		
Non-immigrant	76.0 (75.2-76.8)	77.1 (76.3-77.9) ^a
Immigrant	75.4 (72.7-78.1)	67.1 (64.1-70.1) ^b
Non-permanent resident	86.5 (77.7-95.3)	73.6 (60.0-87.3) ^{ab}

Note: Indigenous identity, race and ethnic origin, and child/youth immigration status are ordered based on weight in the sample (i.e., percent of total Ontario sample), from largest to smallest.

* Indicates significant difference between groups for ate dinner with family at a table 5-7 days in past week (Rao-Scott Chi-Square Test $p < 0.05$)

† Indicates significant difference between groups for electronic devices not allowed during dinner (Rao-Scott Chi-Square Test $p < 0.05$)

Estimates with no shared superscript lowercase letters are significantly different (within each indicator and socio-demographic; Tukey-Kramer adjusted $p < 0.05$)

ESTIMATES BY HOUSEHOLD SOCIODEMOGRAPHIC CHARACTERISTICS

- While there were some significant differences across household income variables in the prevalence of children and youth eating dinner with their family at a table 5-7 days in the past week, there was not a strong linear relationship. In contrast, as reflected in all three income variables, increasing household income was related to increasing prevalence of family members not being allowed to use electronic devices during dinner (Figure 9 and Table 9).
- Children and youth living with two parents/guardians had a higher prevalence of having eaten dinner with their family at a table 5-7 nights in the past week, compared to those living with one parent/guardian or in another living arrangement (Figure 10 and Table 9). Similarly, compared to children and youth living with a lone parent/guardian, those living with 2 parents/guardians had a higher prevalence of electronic devices not being allowed at the dinner table.
- Highest household educational attainment was not associated with the prevalence of having eaten dinner with family at the table 5-7 nights in the past week (Table 9). Higher household educational attainment was associated with a higher prevalence of a child/youth having device use not allowed for the family members at the dinner table (Table 9).

Figure 9: Dinner eating with family among children and youth between 1 to 17 years by household income quintile; Ontario, 2019

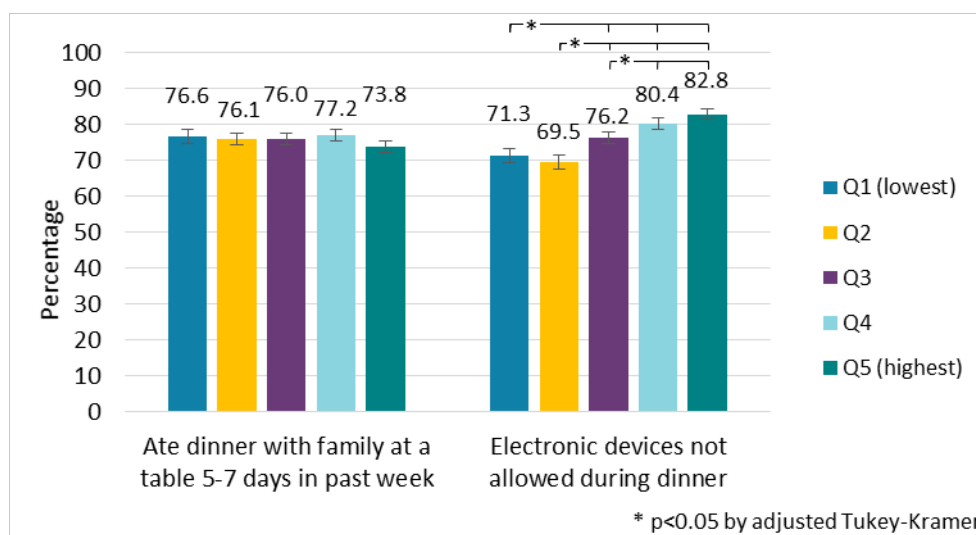


Figure 10: Dinner eating with family among children and youth between 1 to 17 years by child living arrangement; Ontario, 2019

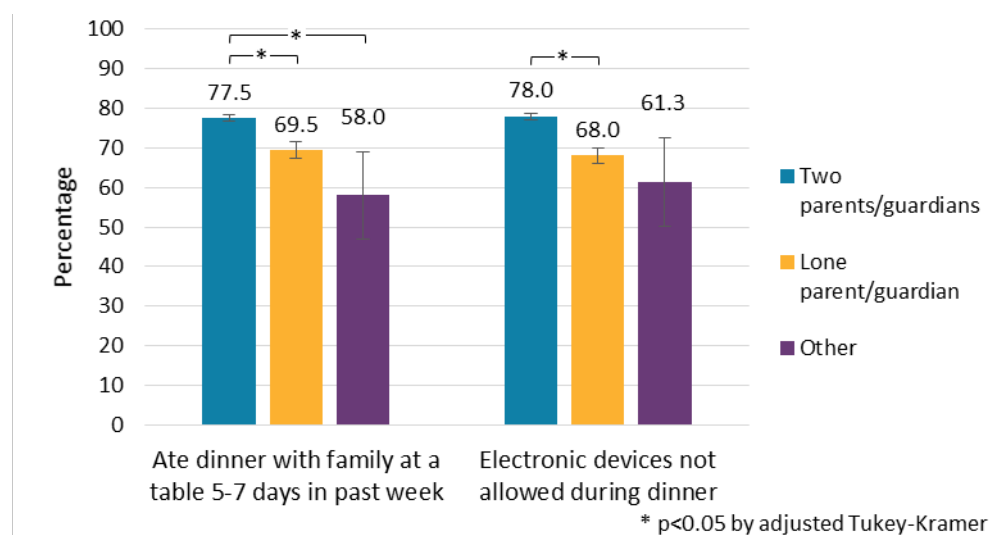


Table 9: Dinner eating with family among children and youth, by household sociodemographic characteristics; Ontario, 2019

Household socio-demographic	Ate dinner with family at a table 5-7 days in past week % (95% CI)	Electronic devices are not allowed during dinner % (95% CI)
Household Income Categories*†		
<\$24,999	75.4 (72.7-78.2) ^{ab}	70.2 (67.2-73.3) ^a
\$25,000 to 49,999	77.0 (75.0-79.0) ^a	70.3 (68.1-72.6) ^a
\$50,000 to 74,999	76.2 (74.2-78.1) ^{ab}	70.3 (68.1-72.5) ^a
\$75,000 to 99,999	76.2 (74.2-78.1) ^{ab}	75.6 (73.6-77.6) ^b
\$100,000 to 149,999	77.5 (76.0-79.0) ^a	80.0 (78.5-81.6) ^c
\$150,000 to 199,999	75.5 (73.4-77.7) ^{ab}	81.0 (79.1-83.0) ^{bc}
\$200,000 and higher	72.0 (69.7-74.3) ^b	82.8 (80.9-84.8) ^c
Household Income Quintiles[†]		
Q1 (lowest)	76.6 (74.7-78.5)	71.3 (69.2-73.3) ^a
Q2	76.1 (74.5-77.7)	69.5 (67.6-71.3) ^a
Q3	76.0 (74.3-77.6)	76.2 (74.6-77.8) ^b
Q4	77.2 (75.6-78.8)	80.4 (78.8-82.0) ^c
Q5 (highest)	73.8 (72.1-75.5)	82.8 (81.3-84.2) ^c
Household Low Income Cut-Off (LICO)*†		

Household socio-demographic	Ate dinner with family at a table 5-7 days in past week	Electronic devices are not allowed during dinner
	% (95% CI)	% (95% CI)
Below LICO	77.6 (76.0-79.3) ^a	70.3 (68.4-72.2) ^a
Above LICO	75.4 (74.6-76.3) ^b	77.7 (76.9-78.5) ^b
Child living arrangement**†		
Two parents/guardians	77.5 (76.7-78.3) ^a	78.0 (77.2-78.8) ^a
Lone parent/guardian	69.5 (67.5-71.5) ^b	68.0 (66.0-70.1) ^b
Other (incl. no parents/guardians in household)	58.0 (47.0-69.0) ^b	61.3 (50.1-72.5) ^{ab}
Highest household educational attainment[†]		
High-school or less	75.4 (73.3-77.5)	71.4 (69.1-73.8) ^a
College/vocational/ university certificate or diploma	75.3 (74.1-76.6)	76.8 (75.6-78.0) ^b
Bachelor's degree or more	76.8 (75.7-77.8)	77.2 (76.1-78.3) ^b

* Indicates significant difference between groups for breakfast consumption daily in past week (Rao-Scott Chi-Square Test p<0.05)

† Indicates significant difference between groups for breakfast consumption daily on school days in past week (Rao-Scott Chi-Square Test p<0.05)

Estimates with no shared superscript lowercase letters are significantly different (within each indicator and socio-demographic; Tukey-Kramer adjusted p<0.05)

ESTIMATES FOR SUB-ONTARIO GEOGRAPHIES

Public Health Unit

- There was variation across PHUs in the prevalence of having eaten dinner at the table with family 5-7 nights in the past week (Table 10); ranging from 63.5% (95% CI 52.1-75.0%; Timiskaming) to 81.0% (95% CI 75.8-86.2%; Haldimand-Norfolk). Most estimates were not significantly different from the provincial average of 75.9% (95% CI 75.2-76.7%; Table 7), with the exception of Timiskaming.
- There was variation across PHUs in the prevalence of family members not being allowed to use devices during dinner (Table 10); ranging from 67.3% (95% CI 65.0-69.7%; Peel) to 86.9% (95% CI 82.3-91.5%; Haldimand-Norfolk). Several PHU estimates were significantly different from the provincial average of 76.1% (95% CI 75.3-76.8%; Table 7).

Table 10: Dinner eating with family among children and youth, by Public Health Unit; Ontario, 2019

Public health unit	Ate dinner with family at a table 5-7 days in past week	Electronic devices are not allowed during dinner
	% (95% CI)	% (95% CI)
Brant County Health Unit	71.2 (65.3-77.1)	80.8 (75.5-86.2)
Chatham-Kent Health Unit	76.5 (72.6-80.4)	83.6 (80.0-87.2) [↑]
City of Hamilton Health Unit	72.4 (66.6-78.2)	75.1 (69.0-81.1)
City of Ottawa Health Unit	77.6 (74.4-80.7)	77.5 (74.3-80.7)
City of Toronto Health Unit	75.1 (73.4-76.7)	71.6 (69.9-73.2) [↓]
Durham Regional Health Unit	71.1 (66.8-75.5)	76.9 (72.8-80.9)
Grey Bruce Health Unit	80.0 (75.4-84.6)	83.3 (78.8-87.7) [↑]
Haldimand-Norfolk Health Unit	81.0 (75.8-86.2)	86.9 (82.3-91.5) [↑]
Haliburton, Kawartha, Pine Ridge District Health Unit	72.9 (68.8-77.0)	84.3 (80.7-87.8) [↑]
Halton Regional Health Unit	77.6 (74.9-80.4)	77.8 (75.1-80.6)
Hastings and Prince Edward Counties Health Unit	73.9 (69.0-78.8)	84.6 (80.8-88.4) [↑]
Huron Perth Health Unit	78.1 (73.1-83.0)	85.9 (81.5-90.3) [↑]
Kingston, Frontenac and Lennox and Addington Health Unit	75.2 (71.2-79.3)	78.9 (74.6-83.1)
Lambton Health Unit	76.0 (70.8-81.3)	83.1 (78.5-87.8) [↑]
Leeds, Grenville and Lanark District Health Unit	72.2 (67.0-77.3)	81.8 (77.3-86.4) [↑]
Middlesex-London Health Unit	77.2 (71.8-82.6)	80.2 (75.1-85.2)
Niagara Regional Area Health Unit	79.3 (74.6-83.9)	79.8 (75.1-84.5)
North Bay Parry Sound District Health Unit	76.0 (69.5-82.5)	81.0 (75.2-86.8)
Northwestern Health Unit	75.6 (71.4-79.8)	78.8 (74.7-82.8)
Oxford Elgin St. Thomas Health Unit	76.8 (72.6-81.0)	81.0 (77.5-84.6) [↑]
Peel Regional Health Unit	75.1 (72.9-77.2)	67.3 (65.0-69.7) [↓]
Peterborough County—City Health Unit	76.4 (70.9-81.9)	81.8 (76.8-86.9)
Porcupine Health Unit	78.6 (73.4-83.9)	81.0 (76.0-85.9)
Renfrew County and District Health Unit	78.1 (71.5-84.8)	83.9 (78.0-89.8) [↑]
Simcoe Muskoka District Health Unit	75.5 (72.8-78.3)	84.2 (81.7-86.7) [↑]
Sudbury and District Health Unit	74.7 (68.8-80.6)	78.1 (72.4-83.7)
The District of Algoma Health Unit	74.4 (68.4-80.4)	80.6 (75.2-86.0)

Public health unit	Ate dinner with family at a table 5-7 days in past week	Electronic devices are not allowed during dinner
	% (95% CI)	% (95% CI)
The Eastern Ontario Health Unit	79.6 (74.5-84.7)	82.1 (77.2-86.9) [↑]
Thunder Bay District Health Unit	76.4 (71.5-81.3)	75.9 (70.8-81.0)
Timiskaming Health Unit	63.5 (52.1-75.0) [↓]	82.5 (73.7-91.3)
Waterloo Health Unit	76.4 (72.4-80.3)	75.8 (71.5-80.1)
Wellington-Dufferin-Guelph Health Unit	78.4 (75.3-81.6)	81.6 (78.5-84.6) [↑]
Windsor-Essex County Health Unit	79.0 (75.5-82.5)	81.3 (78.0-84.7) [↑]
York Regional Health Unit	77.4 (74.1-80.8)	71.1 (67.5-74.8) [↓]

[↑] Indicates significantly higher than the Ontario average, based on non-overlapping 95% confidence intervals

[↓] Indicates significantly lower than the Ontario average, based on non-overlapping 95% confidence intervals

Region

- Prevalence of eating dinner at the table with family 5-7 nights in the past week varied slightly by region (Table 11), but no region had a significantly different prevalence than the provincial average.
- There was more variation across regions in the prevalence of family members not being allowed to use devices during dinner (Table 11); ranging from 71.6% (95% CI 69.9-73.2%; Toronto) to 81.8% (95% CI 79.9-83.7%; South West). Several regions had a prevalence that was significantly different than the provincial average of 76.1% (95% CI 75.3-76.8%; Table 7).

Table 11: Dinner eating with family among children and youth, by Region; Ontario, 2019

Region	Ate dinner with family at a table 5-7 days in past week	Electronic devices are not allowed during dinner
	% (95% CI)	% (95% CI)
North West	76.1 (72.6-79.7)	76.8 (73.0-80.6)
North East	74.8 (71.7-77.8)	79.9 (77.1-82.8) [↑]
South West	77.8 (75.8-79.8)	81.8 (79.9-83.7) [↑]
Central West	76.5 (74.7-78.2)	78.1 (76.2-79.9)
Toronto	75.1 (73.4-76.7)	71.6 (69.9-73.2) [↓]
Central East	75.1 (73.6-76.5)	73.2 (71.7-74.7) [↓]
East	76.8 (74.8-78.8)	79.5 (77.5-81.5) [↑]

[↑] Indicates significantly higher than the Ontario average, based on non-overlapping 95% confidence intervals

[↓] Indicates significantly lower than the Ontario average, based on non-overlapping 95% confidence intervals

Peer Group

- Prevalence of eating dinner at the table with family 5-7 nights in the past week were similar across peer groups (Table 12).
- There was variation across peer groups in the prevalence of family members not being allowed to use devices during dinner (Table 12); ranging from 70.2% (95% CI 68.9-71.5%; peer group G&H) to 83.2% (95% CI 81.9-84.5%; peer group D). Both peer groups C and D had a higher prevalence of family members not being allowed to use devices during dinner than the provincial average of 76.1% (95% CI 75.3-76.8; Table 7), while peer group G&H had a prevalence lower than the provincial average.

Table 12: Dinner eating with family among children and youth, by Peer Group; Ontario, 2019

Peer Group	Ate dinner with family at a table 5-7 days in past week % (95% CI)	Electronic devices are not allowed during dinner % (95% CI)
B (mainly urban centers)	75.8 (74.3-77.3)	77.6 (76.0-79.1)
C (sparsely populated urban-rural mix)	76.0 (74.5-77.5)	80.9 (79.5-82.3) [↑]
D (mainly rural regions)	77.0 (75.5-78.4)	83.2 (81.9-84.5) [↑]
G&H (largest metro centres)	75.6 (74.4-76.9)	70.2 (68.9-71.5) [↓]

[↑] Indicates significantly higher than the Ontario average, based on non-overlapping 95% confidence intervals

[↓] Indicates significantly lower than the Ontario average, based on non-overlapping 95% confidence intervals

Eating from fast-food or sit-down restaurants

OVERALL ESTIMATES

- Approximately 1 in 3 children and youth (33.6%; 95% CI 32.8-34.4%) ate food from a fast-food or sit-down restaurant 2 or more times in the past week.

Figure 11: Ate from a restaurant 2 or more times in the past week among children and youth between 1 to 17 years; Ontario, 2019

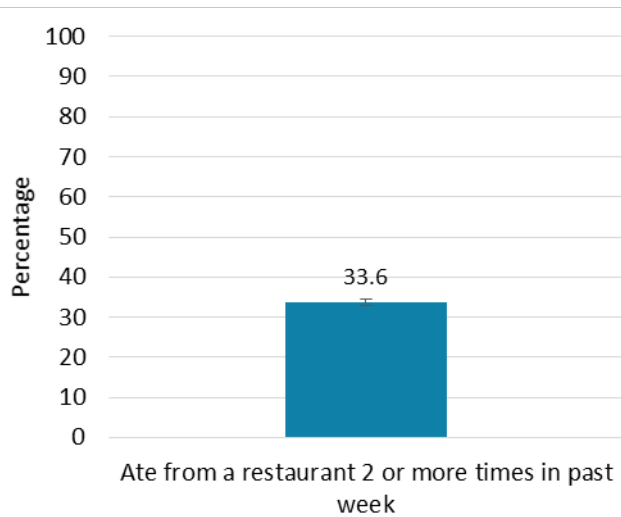


Table 13: Ate from a restaurant 2 or more times in the past week among children and youth; Ontario, 2019

Indicator	Weighted percentage % (95% CI)
Eating from a fast-food or sit-down restaurant, past week (1-17 year olds)	
0-1 time	66.4 (65.6-67.2)
2 or more times	33.6 (32.8-34.4)

ESTIMATES BY CHILD SOCIODEMOGRAPHIC CHARACTERISTICS

- The prevalence of having eaten food from a fast-food or sit-down restaurant 2 or more times in the past week increased with increasing age (Figure 12 and Table 14), almost doubling from 23.2% (95% CI 21.8-24.7%) among 1-4 year olds to 42.4% (95% CI 40.8-43.9%) among 12-17 year olds.
- There was no difference by sex at birth in the prevalence of having eaten food from a restaurant 2 or more times in the past week (Figure 13 and Table 14).
- There was no difference by Indigenous identity in the prevalence of having eaten food from a restaurant 2 or more times in the past week (Table 14).
- There was variation across race and ethnic origin groups in the prevalence of having eaten food from a restaurant 2 or more times in the past week (Table 14). Children and youth identifying as Southeast Asian/Filipino had the highest prevalence of having eaten food from a restaurant 2 or more times in the past week (44.7% [95% CI 40.1-49.3%]), and those identifying as Latin American had the lowest (27.7% [95% CI 19.9-35.5%]).
- There was no difference in the prevalence of having eaten food from a restaurant 2 or more times in the past week by child immigration status (Table 14).

Figure 12: Ate from a restaurant 2 or more times in the past week among children and youth between 1 to 17 years by age group; Ontario, 2019

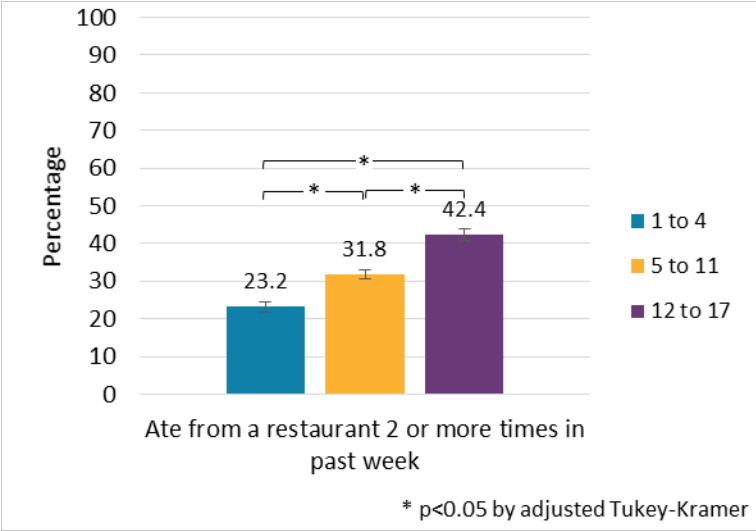


Figure 13: Ate from a restaurant 2 or more times in the past week among children and youth between 1 to 17 years by sex at birth; Ontario, 2019

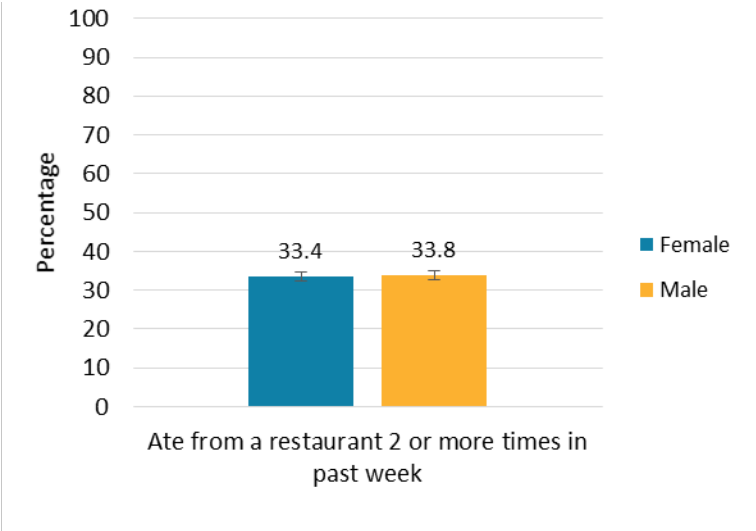


Table 14: Ate from a restaurant 2 or more times in the past week among children and youth, by child sociodemographic characteristics; Ontario, 2019

Child socio-demographic	Ate from a restaurant 2 or more times in past week % (95% CI)
Age Group*	
1-4 years	23.2 (21.8-24.7) ^a
5-11 years	31.8 (30.4-33.1) ^b
12-17 years	42.4 (40.8-43.9) ^c
Sex at birth	
Female	33.4 (32.2-34.6)
Male	33.8 (32.6-34.9)
Indigenous identity	
No	33.6 (32.8-34.5)
Yes	33.0 (28.8-37.2)
Race and Ethnic Origin*	
White/Not racialized	31.8 (30.8-32.8) ^a
South Asian	33.4 (30.7-36.1) ^{ab}
Black	36.9 (33.4-40.3) ^{ac}
East Asian	39.6 (35.8-43.3) ^{bcd}
Southeast Asian/Filipino	44.7 (40.1-49.3) ^c
West Asian/Arab	32.0 (27.0-36.9) ^{ad}
Latin American	27.7 (19.9-35.5) ^{ad}
Other/Multiple	41.6 (36.1-47.2) ^{bcd}
Child/Youth status	
Non-immigrant	33.4 (32.6-34.3)
Immigrant	35.6 (32.6-38.7)
Non-permanent resident	C 25.6 (13.2-38.0)

Note: Indigenous identity, race and ethnic origin, and child/youth immigration status are ordered based on weight in the sample (i.e., percent of total Ontario sample), from largest to smallest.

Tests for difference:

* Indicates significant difference between groups (Rao-Scott Chi-Square Test $p < 0.05$)

Estimates with no shared superscript lowercase letters are significantly different (within each indicator and socio-demographic; Tukey-Kramer adjusted $p < 0.05$)

Flags for data quality:

Capital C before estimate: Data quality indicator— marginal ($0.15 < CV \leq 0.25$), interpret with caution due to high sampling variability

ESTIMATES BY HOUSEHOLD SOCIODEMOGRAPHIC CHARACTERISTICS

- There was variation across household income categories and quintiles in the prevalence of children and youth having eaten food from a restaurant 2 or more times in the past week, with a skewed U-shaped relationship (Figure 14). The lowest prevalence was seen in the middle-income groups (e.g., income Q3; 30.9% [95% CI 29.2-32.7%]), and highest prevalence in the higher income groups (e.g., income Q5; 36.9% [95% CI 35.1-38.7%]). There was no difference by LICO threshold (Table 15).
- Children and youth living with two parents/guardians had a lower prevalence of having eaten food from a restaurant 2 or more times in the past week (33.0% [95% CI 32.0-33.9%]), compared to those living with a lone parent/guardian (36.0% [95% CI 33.9-38.1%]) (Figure 15 and Table 15).
- There was no difference in prevalence of having eaten food from a restaurant 2 or more times in the past week by highest household educational attainment (Table 15).

Figure 14: Ate from a restaurant 2 or more times in the past week among children and youth between 1 to 17 years by household income quintile; Ontario, 2019

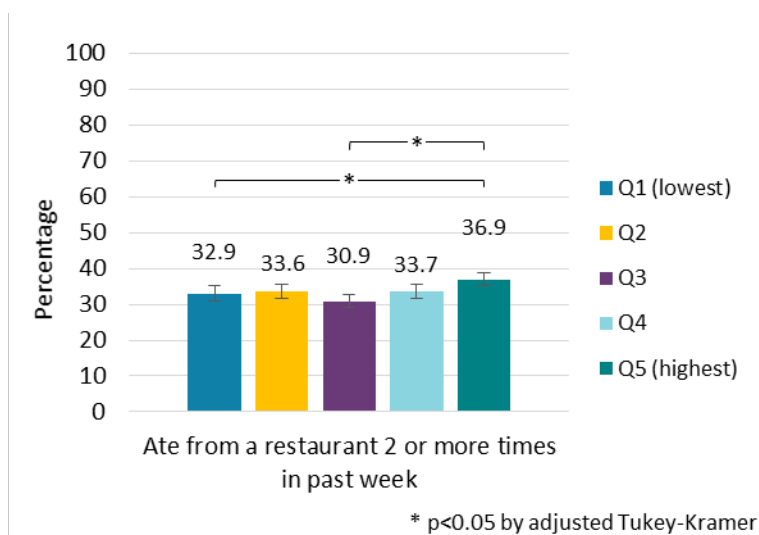


Figure 15: Ate from a restaurant 2 or more times in the past week among children and youth between 1 to 17 years by child living arrangement; Ontario, 2019

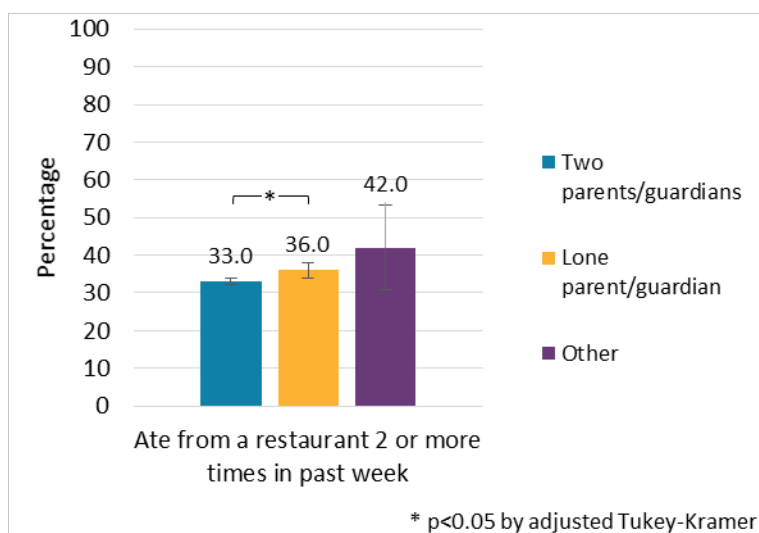


Table 15: Ate from a restaurant 2 or more times in the past week among children and youth, by household sociodemographic characteristics; Ontario, 2019

Household socio-demographic	Ate from a restaurant 2 or more times in past week % (95% CI)
Household Income Categories*	
<\$24,999	33.5 (30.5-36.5) ^{abc}
\$25,000 to 49,999	32.7 (30.5-34.8) ^{ab}
\$50,000 to 74,999	33.8 (31.4-36.1) ^{abc}
\$75,000 to 99,999	30.4 (28.3-32.4) ^a
\$100,000 to 149,999	32.7 (30.8-34.5) ^{ab}
\$150,000 to 199,999	35.5 (33.2-37.8) ^{bc}
\$200,000 and higher	38.1 (35.8-40.4) ^c
Household Income Quintiles*	
Q1 (lowest)	32.9 (30.7-35.0) ^a
Q2	33.6 (31.7-35.5) ^{ab}
Q3	30.9 (29.2-32.7) ^a
Q4	33.7 (31.8-35.6) ^{ab}
Q5 (highest)	36.9 (35.1-38.7) ^b
Household Low Income Cut-Off (LICO)	
Below LICO	32.6 (30.7-34.5)

Household socio-demographic	Ate from a restaurant 2 or more times in past week % (95% CI)
Above LICO	33.9 (32.9-34.8)
Child living arrangement*	
Two parents/guardians	33.0 (32.0-33.9) ^a
Lone parent/guardian	36.0 (33.9-38.1) ^b
Other (incl. no parents/guardians in household)	42.0 (30.8-53.2) ^{ab}
Highest household educational attainment	
High-school or less	33.8 (31.4-36.2)
College/vocational/ university certificate or diploma	33.3 (31.9-34.6)
Bachelor's degree or more	33.5 (32.3-34.8)

* Indicates significant difference between groups (Rao-Scott Chi-Square Test $p < 0.05$)

Estimates with no shared superscript lowercase letters are significantly different (within each indicator and socio-demographic; Tukey-Kramer adjusted $p < 0.05$)

ESTIMATES FOR SUB-ONTARIO GEOGRAPHIES

Public Health Unit

- There was variation across PHUs in the prevalence of children and youth having eaten food from a restaurant 2 or more times in the past week (Table 16), ranging from 21.1% (95% CI 15.7-26.6%; Sudbury and District) to 39.6% (95% CI 35.0-44.2%; Durham). Several PHUs had a significantly different prevalence compared to the provincial prevalence of 33.6% (95% CI 32.8-34.4%; Table 13).

Table 16: Ate from a restaurant 2 or more times in the past week among children and youth, by Public Health Unit; Ontario, 2019

Public health unit	Ate from a restaurant 2 or more times in past week % (95% CI)
Brant County Health Unit	30.5 (24.7-36.4)
Chatham-Kent Health Unit	34.5 (30.0-38.9)
City of Hamilton Health Unit	36.9 (30.7-43.0)
City of Ottawa Health Unit	28.5 (25.0-32.0) [↓]
City of Toronto Health Unit	36.0 (34.3-37.8)
Durham Regional Health Unit	39.6 (35.0-44.2) [↑]
Grey Bruce Health Unit	24.4 (19.5-29.4) [↓]
Haldimand-Norfolk Health Unit	28.1 (22.0-34.2)

Public health unit	Ate from a restaurant 2 or more times in past week % (95% CI)
Haliburton, Kawartha, Pine Ridge District Health Unit	35.5 (30.9-40.0)
Halton Regional Health Unit	37.2 (33.9-40.4)
Hastings and Prince Edward Counties Health Unit	26.6 (21.9-31.3) [↓]
Huron Perth Health Unit	23.3 (18.2-28.5) [↓]
Kingston, Frontenac and Lennox and Addington Health Unit	27.6 (23.3-31.8) [↓]
Lambton Health Unit	28.3 (22.7-34.0)
Leeds, Grenville and Lanark District Health Unit	33.9 (28.5-39.3)
Middlesex-London Health Unit	28.5 (22.8-34.1)
Niagara Regional Area Health Unit	27.1 (22.1-32.2) [↓]
North Bay Parry Sound District Health Unit	24.2 (18.0-30.3) [↓]
Northwestern Health Unit	24.4 (20.5-28.4) [↓]
Oxford Elgin St. Thomas Health Unit	30.2 (26.0-34.3)
Peel Regional Health Unit	36.9 (34.6-39.2) [↑]
Peterborough County—City Health Unit	31.1 (25.4-36.9)
Porcupine Health Unit	23.1 (17.3-28.8) [↓]
Renfrew County and District Health Unit	23.0 (16.2-29.7) [↓]
Simcoe Muskoka District Health Unit	37.3 (34.0-40.7)
Sudbury and District Health Unit	21.1 (15.7-26.6) [↓]
The District of Algoma Health Unit	24.6 (18.7-30.5) [↓]
The Eastern Ontario Health Unit	26.0 (20.7-31.3) [↓]
Thunder Bay District Health Unit	23.8 (18.7-28.9) [↓]
Timiskaming Health Unit	C 33.3 (22.2-44.4)
Waterloo Health Unit	28.3 (24.0-32.6) [↓]
Wellington-Dufferin-Guelph Health Unit	34.5 (30.8-38.3)
Windsor-Essex County Health Unit	36.2 (31.9-40.4)
York Regional Health Unit	39.5 (35.6-43.5) [↑]

Capital C before estimate: Data quality indicator— marginal ($0.15 < CV \leq 0.25$), interpret with caution due to high sampling variability

[↑] Indicates significantly higher than the Ontario average, based on non-overlapping 95% confidence intervals

[↓] Indicates significantly lower than the Ontario average, based on non-overlapping 95% confidence intervals

Region

- There was variation across regions in the prevalence of children and youth having eaten food from a restaurant 2 or more times in the past week (Table 17). Generally, prevalence was lower in

northern regions and higher in central regions (including Toronto) in comparison to the provincial average of 33.6% (95% CI 32.8-34.4; Table 13).

Table 17: Ate from a restaurant 2 or more times in the past week among children and youth, by Region; Ontario, 2019

Region	Ate from a restaurant 2 or more times in past week % (95% CI)
North West	24.0 (20.3-27.7) [↓]
North East	23.6 (20.6-26.6) [↓]
South West	30.2 (28.0-32.3) [↓]
Central West	32.7 (30.7-34.7)
Toronto	36.0 (34.3-37.8)
Central East	37.9 (36.3-39.6) [↑]
East	28.1 (25.9-30.3) [↓]

[↓] Indicates significantly lower than the Ontario average, based on non-overlapping 95% confidence intervals

Peer Group

- There was variation across peer groups in the prevalence of having eaten food from a restaurant 2 or more times in the past week (Table 18). Compared to the provincial average of 33.6% (95% CI 32.8-34.4%; Table 13), prevalence was lower in peer group C (27.5% [95% CI 25.9-29.1%]) and higher in peer group G&H (37.1% [95% CI 35.7-38.5%]).

Table 18: Ate from a restaurant 2 or more times in the past week among children and youth, by Peer Group; Ontario, 2019

Peer Group	Ate from a restaurant 2 or more times in past week % (95% CI)
B (mainly urban centers)	33.3 (31.6-35.0)
C (sparsely populated urban-rural mix)	27.5 (25.9-29.1) [↓]
D (mainly rural regions)	31.7 (30.1-33.2)
G&H (largest metro centres)	37.1 (35.7-38.5) [↑]

[↑] Indicates significantly higher than the Ontario average, based on non-overlapping 95% confidence intervals

[↓] Indicates significantly lower than the Ontario average, based on non-overlapping 95% confidence intervals

Beverage consumption

Sugary drinks include 100% fruit juice; fruit flavoured drinks; regular soft drinks; sports drinks; energy drinks (12 to 17 year olds only); chocolate milk or hot chocolate; milkshakes or ice cream sodas; and

sweetened coffee/tea/iced coffee/iced tea (12 to 17 year olds only). Sugar-sweetened beverages (SSB) contain all of the above except 100% fruit juice, where by definition there is no sugar added.

OVERALL ESTIMATES

- Approximately 1 in 2 children and youth (47.9% [95% CI 47.0-48.9%]) consumed a sugary drink 7 or more times in the past week. Sugary drinks include 100% fruit juice.
- Over 1 in 4 children and youth (28.3% [95% CI 27.4-29.2%]) consumed a SSB 7 or more times in the past week.
- Around 5% of youth consumed an energy drink at least 1 time in the past week (4.7% [95% CI 4.0-5.4%]).

Figure 16: Past week beverage consumption among 3 to 17 year olds (12 to 17 year olds only for energy drinks); Ontario, 2019

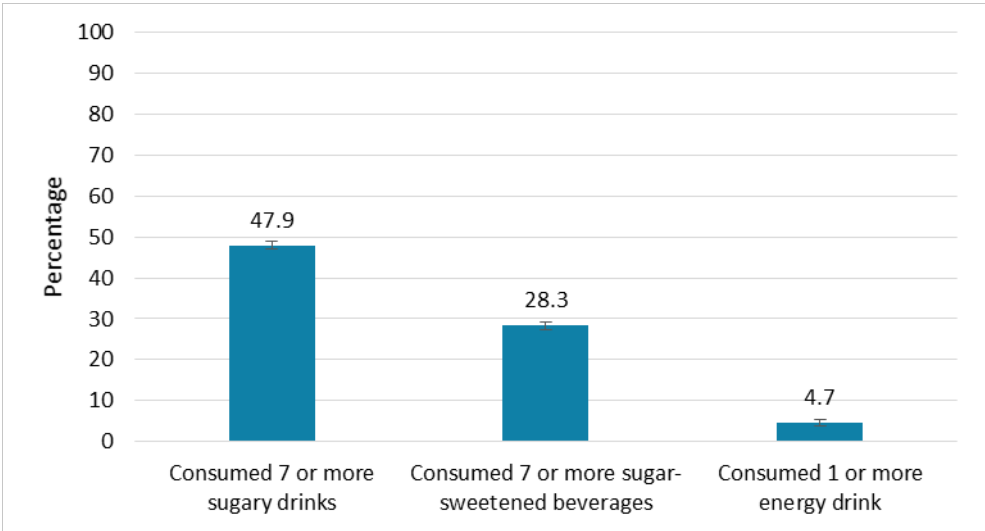


Table 19: Beverage consumption among children and youth; Ontario, 2019

Indicator	Weighted percentage % (95% CI)
Consumption of sugary drinks (including 100% fruit juice), past week (3-17 year olds)	
0-6 times	52.1 (51.1-53.0)
7 or more times	47.9 (47.0-48.9)
Consumption of sugar-sweetened beverages, past week (3-17 year olds)	
0-6 times	71.7 (70.8-72.6)
7 or more times	28.3 (27.4-29.2)
Consumption of energy drinks, past week (12-17 year olds)	

Indicator	Weighted percentage % (95% CI)
0 times	95.3 (94.6-96.0)
1 or more times	4.7 (4.0-5.4)

ESTIMATES BY CHILD SOCIODEMOGRAPHIC CHARACTERISTICS

- The prevalence of consuming sugary drinks (or SSBs) 7 or more times in the past week increased with age (Figure 17 and Table 20).
- Compared to females, males had a higher prevalence of consuming sugary drinks (or SSBs) 7 or more times in the past week, and consuming an energy drink 1 or more times in the past week (Figure 18 and Table 20).
- Children and youth identifying as Indigenous had a higher prevalence of consuming sugary drinks (or SSBs) 7 or more times in the past week, and consuming an energy drink 1 or more times in the past week, compared to those identifying as non-Indigenous (Table 20). Interpret energy drink result with caution due to high variability of the estimate (i.e., lower data quality).
- Children and youth identifying as East Asian had the lowest prevalence of consuming sugary drinks (or SSBs) 7 or more times in the past week, whereas children and youth identifying as West Asian/Arab or Black had the highest prevalence (Table 20).
- Children and youth identifying as non-immigrants had a lower prevalence of consuming sugary drinks (or SSBs) 7 or more times in the past week, compared to those identifying as immigrants (Table 20).

Figure 17: Past week beverage consumption among 3 to 17 year olds (12 to 17 year olds only for energy drinks) by age group; Ontario, 2019

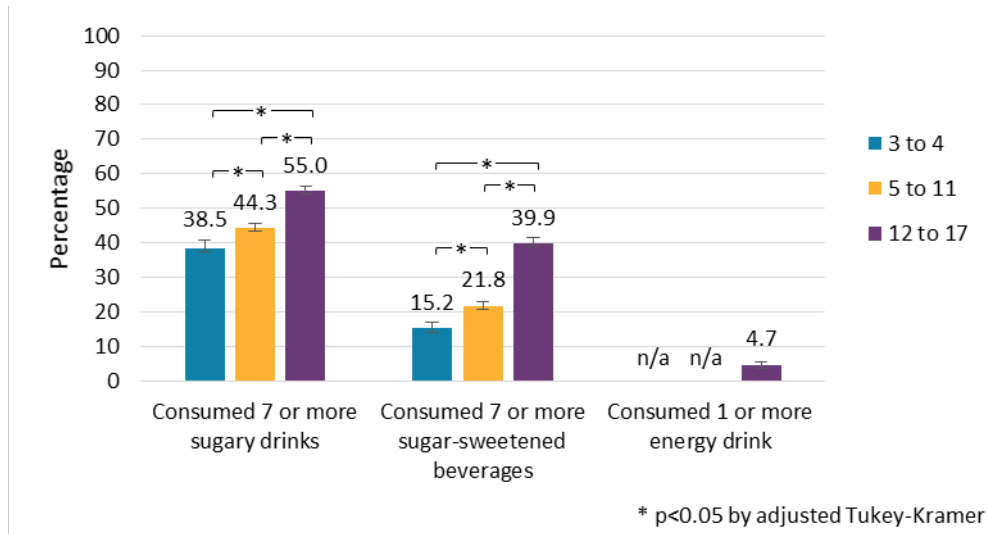


Figure 18: Past week beverage consumption among 3 to 17 year olds (12 to 17 year olds only for energy drinks) by sex at birth; Ontario, 2019

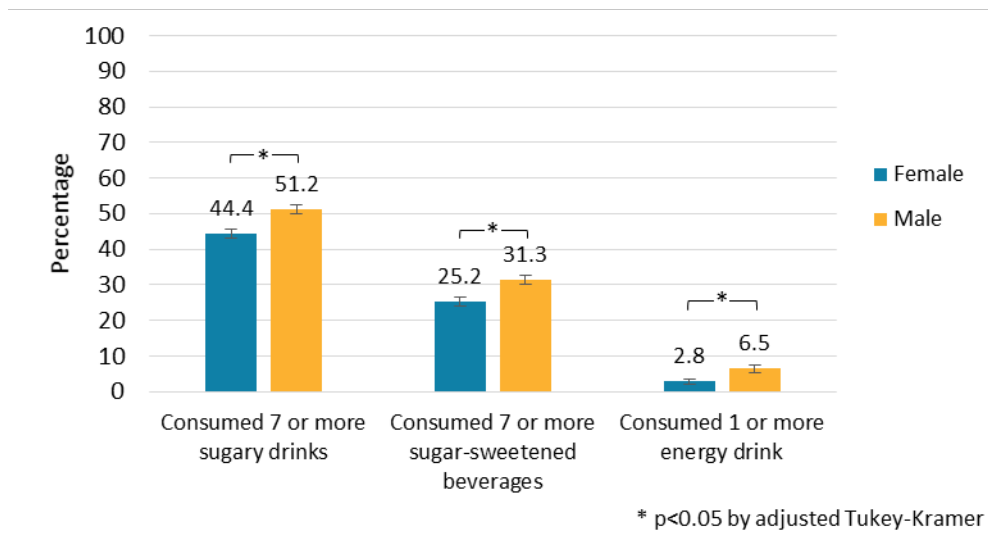


Table 20: Beverage consumption among children and youth, by child sociodemographic characteristics; Ontario, 2019

Child socio-demographic	Consumed 7 or more sugary drinks in past week % (95% CI)	Consumed 7 or more sugar-sweetened beverages in past week % (95% CI)	Consumed 1 or more energy drink in past week (12-17 year olds only) % (95% CI)
Age Group*†			
3-4 years	38.5 (36.1-40.8) ^a	15.2 (13.5-17.0) ^a	n/a
5-11 years	44.3 (42.9-45.7) ^b	21.8 (20.6-23.0) ^b	n/a
12-17 years	55.0 (53.5-56.6) ^c	39.9 (38.3-41.4) ^c	4.7 (4.0-5.4)
Sex at birth*†‡			
Female	44.4 (43.1-45.8) ^a	25.2 (24.0-26.4) ^a	2.8 (2.1-3.5) ^a
Male	51.2 (49.9-52.5) ^b	31.3 (30.0-32.6) ^b	6.5 (5.4-7.6) ^b
Indigenous identity*†‡			
No	47.5 (46.6-48.5) ^a	28.0 (27.1-28.9) ^a	4.6 (3.9-5.3) ^a
Yes	59.8 (55.0-64.5) ^b	38.2 (33.5-43.0) ^b	C 8.6 (4.4-12.8) ^b
Race and Ethnic Origin*†‡			
White/Not racialized	47.0 (45.9-48.2) ^a	26.3 (25.3-27.3) ^a	5.3 (4.5-6.2)
South Asian	50.3 (47.1-53.4) ^{ad}	34.6 (31.6-37.5) ^{bce}	NR
Black	60.7 (56.7-64.6) ^b	38.7 (34.7-42.8) ^{ce}	NR
East Asian	29.6 (26.0-33.2) ^c	16.2 (13.3-19.1) ^d	NR
Southeast Asian/Filipino	44.9 (39.9-49.9) ^a	26.8 (22.4-31.2) ^{ab}	NR
West Asian/Arab	59.5 (54.0-65.0) ^d	39.5 (34.1-45.0) ^e	NR
Latin American	50.7 (40.7-60.7) ^{ad}	35.0 (25.6-44.3) ^{abce}	NR
Other/Multiple	46.3 (40.4-52.1) ^a	25.4 (20.1-30.6) ^{ab}	NR
Child/Youth status*†			
Non-immigrant	47.4 (46.4-48.4) ^a	27.3 (26.4-28.2) ^a	5.0 (4.3-5.7)
Immigrant	52.1 (49.0-55.3) ^b	36.4 (33.4-39.3) ^b	C 3.4 (1.8-5.0)
Non-permanent resident	57.7 (43.7-71.7) ^{ab}	C 24.5 (13.5-35.6) ^{ab}	NR

Note: Indigenous identity, race and ethnic origin, and child/youth immigration status are ordered based on weight in the sample (i.e., percent of total Ontario sample), from largest to smallest.

Tests for difference:

* Indicates significant difference between groups for sugary beverage consumption (Rao-Scott Chi-Square Test p<0.05)

† Indicates significant difference between groups for SSB consumption (Rao-Scott Chi-Square Test p<0.05)

‡ Indicates significant difference between groups for energy drink consumption (Rao-Scott Chi-Square Test p<0.05)

Estimates with no shared superscript lowercase letters are significantly different (within each indicator and socio-demographic; Tukey-Kramer adjusted $p < 0.05$)

Flags for data quality:

Capital C before estimate: Data quality indicator— marginal ($0.15 < CV \leq 0.25$), interpret with caution due to high sampling variability

Capital D before estimate: Data quality indicator: marginal ($0.25 < CV \leq 0.35$), interpret with caution due to high sampling variability

NR: not reportable due to an insufficient number of observations or unacceptable quality ($CV > 0.35$)

ESTIMATES BY HOUSEHOLD SOCIODEMOGRAPHIC CHARACTERISTICS

- The prevalence of children and youth consuming sugary drinks (or SSBs) 7 or more times in the past week decreased with increasing household income (Figure 19 and Table 21).
- Children and youth living with two parents/guardians had a lower prevalence of consuming sugary drinks (or SSBs) 7 or more times in the past week, compared to those living with a lone parent/guardian (Figure 20 and Table 21).
- The prevalence of children and youth consuming sugary drinks (or SSBs) 7 or more times in the past week decreased with increasing household educational attainment (Table 21).

Figure 19: Past week beverage consumption among 3 to 17 year olds (12 to 17 year olds only for energy drinks) by household income quintile; Ontario, 2019

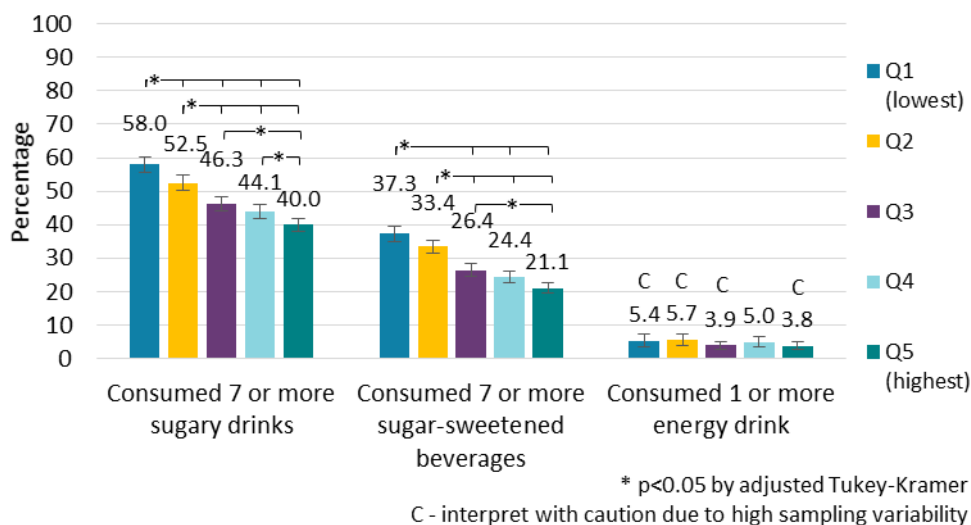


Figure 20: Past week beverage consumption among 3 to 17 year olds (12 to 17 year olds only for energy drinks) by child living arrangement; Ontario, 2019

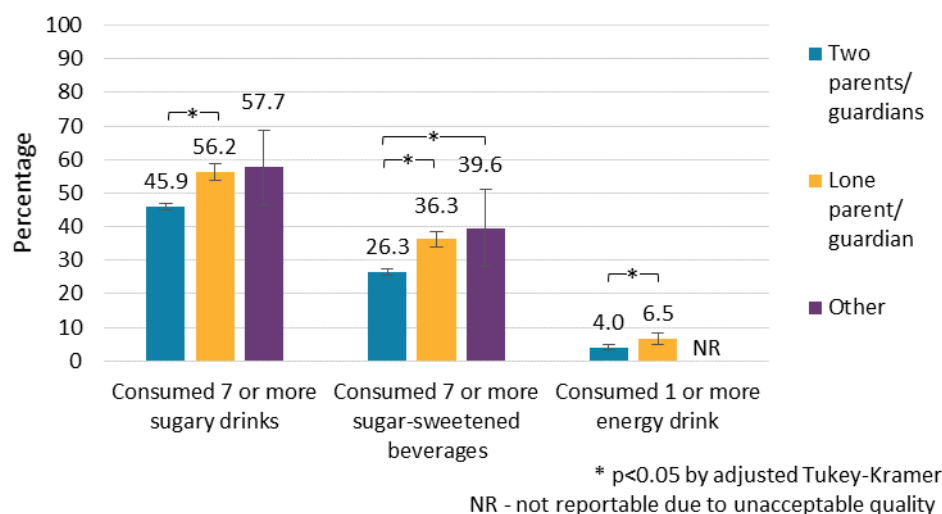


Table 21: Beverage consumption among children and youth, by household sociodemographic characteristics; Ontario, 2019

Household socio-demographic	Consumed 7 or more sugary drinks in past week % (95% CI)	Consumed 7 or more sugar-sweetened beverages in past week % (95% CI)	Consumed 1 or more energy drink in past week (12-17 year olds only) % (95% CI)
Household Income Categories*†			
<\$24,999	59.3 (55.8-62.7) ^a	39.0 (35.6-42.5) ^a	C 5.9 (3.1-8.6)
\$25,000 to 49,999	56.2 (53.8-58.6) ^b	35.8 (33.5-38.1) ^{ab}	C 4.4 (2.7-6.1)
\$50,000 to 74,999	51.4 (48.7-54.0) ^{bc}	32.5 (30.0-34.9) ^{bc}	C 6.6 (4.3-8.9)
\$75,000 to 99,999	46.3 (43.7-49.0) ^{cd}	27.1 (24.8-29.3) ^{de}	C 4.1 (2.7-5.4)
\$100,000 to 149,999	45.8 (43.7-47.9) ^{de}	25.1 (23.3-26.9) ^{ef}	4.3 (3.1-5.6)
\$150,000 to 199,999	40.3 (37.8-42.8) ^f	21.0 (18.9-23.1) ^f	C 5.2 (3.3-7.1)
\$200,000 and higher	39.6 (37.1-42.1) ^g	21.5 (19.2-23.8) ^f	C 3.3 (1.9-4.6)
Household Income Quintiles*†			
Q1 (lowest)	58.0 (55.7-60.3) ^a	37.3 (35.1-39.6) ^a	C 5.4 (3.5-7.3)
Q2	52.5 (50.3-54.7) ^b	33.4 (31.3-35.4) ^a	C 5.7 (4.0-7.4)
Q3	46.3 (44.1-48.5) ^c	26.4 (24.5-28.3) ^b	C 3.9 (2.7-5.0)
Q4	44.1 (42.0-46.2) ^c	24.4 (22.6-26.2) ^{bc}	5.0 (3.5-6.4)
Q5 (highest)	40.0 (38.1-41.8) ^d	21.1 (19.4-22.7) ^c	C 3.8 (2.7-5.0)

Household socio-demographic	Consumed 7 or more sugary drinks in past week % (95% CI)	Consumed 7 or more sugar-sweetened beverages in past week % (95% CI)	Consumed 1 or more energy drink in past week (12-17 year olds only) % (95% CI)
Household Low Income Cut-Off (LICO) **			
Below LICO	56.9 (54.9-59.0) ^a	37.1 (35.0-39.1) ^a	C 5.5 (3.7-7.2)
Above LICO	45.3 (44.3-46.4) ^b	25.8 (24.8-26.7) ^b	4.5 (3.8-5.2)
Child living arrangement**††			
Two parents/guardians	45.9 (44.8-46.9) ^a	26.3 (25.3-27.2) ^a	4.0 (3.3-4.7) ^a
Lone parent/guardian	56.2 (53.9-58.6) ^b	36.3 (34.0-38.5) ^b	6.5 (4.7-8.3) ^b
Other (incl. no parents/guardians in household)	57.7 (46.5-68.8) ^{ab}	39.6 (28.2-50.9) ^b	NR
Highest household educational attainment**††			
High-school or less	59.4 (56.7-62.1) ^a	40.2 (37.6-42.8) ^a	C 6.7 (4.6-8.9) ^a
College/vocational/ university certificate or diploma	52.1 (50.5-53.7) ^b	32.1 (30.6-33.5) ^b	6.0 (4.8-7.2) ^a
Bachelor's degree or more	41.4 (40.1-42.8) ^c	22.0 (20.8-23.1) ^c	3.1 (2.3-3.9) ^b

Tests for difference:

* Indicates significant difference between groups for sugary beverage consumption (Rao-Scott Chi-Square Test p<0.05)

† Indicates significant difference between groups for SSB consumption (Rao-Scott Chi-Square Test p<0.05)

‡ Indicates significant difference between groups for energy drink consumption (Rao-Scott Chi-Square Test p<0.05)

Estimates with no shared superscript lowercase letters are significantly different (within each indicator and socio-demographic; Tukey-Kramer adjusted p<0.05)

Flags for data quality:

Capital C before estimate: Data quality indicator— marginal (0.15 < CV ≤ 0.25), interpret with caution due to high sampling variability

NR: not reportable due to an insufficient number of observations or unacceptable quality (CV > 0.35)

ESTIMATES FOR SUB-ONTARIO GEOGRAPHIES

Public Health Unit

- There was variation across PHUs in the prevalence of consuming 7 or more sugary drinks in the past week (Table 22), ranging from 38.3% (95% CI 34.5-42.2%; Ottawa) to 58.1% (95% CI 45.0-71.2%; Timiskaming). Several PHUs had a significantly different prevalence from the provincial average of 47.9% (95% CI 47.0-48.9%; Table 19).
- There was variation across PHUs in the prevalence of consuming 7 or more SSBs in the past week (Table 22), ranging from 20.0% (95% CI 16.7-23.3%; Ottawa) to 35.9% (95% CI 31.0-40.8%;

Northwestern). Several PHUs had a significantly different prevalence compared to the provincial average of 28.3% (95% CI 27.4-29.2%).

- PHU-level estimates for energy drink consumption were generally unstable due to the low prevalence and smaller sample (youth 12 to 17 year olds only). Of the PHUs that did have reportable estimates, none were significantly different from the provincial prevalence of 4.7% (95% CI 4.0-5.4%) of youth consuming 1 or more energy drink in the past week.

Table 22: Beverage consumption among children and youth, by Public Health Unit; Ontario, 2019

Public health unit	Consumed 7 or more sugary drinks in past week % (95% CI)	Consumed 7 or more sugar-sweetened beverages in past week % (95% CI)	Consumed 1 or more energy drink in past week (12-17 year olds only) % (95% CI)
Brant County Health Unit	54.7 (48.2-61.2)	33.1 (27.2-38.9)	NR
Chatham-Kent Health Unit	56.1 (51.1-61.1) [↑]	34.9 (30.1-39.7) [↑]	NR
City of Hamilton Health Unit	54.2 (47.3-61.1)	34.8 (28.1-41.5)	NR
City of Ottawa Health Unit	38.3 (34.5-42.2) [↓]	20.0 (16.7-23.3) [↓]	D 3.8 (1.3-6.4)
City of Toronto Health Unit	45.2 (43.2-47.3)	28.2 (26.3-30.0)	C 3.8 (2.3-5.4)
Durham Regional Health Unit	52.7 (47.6-57.9)	30.5 (25.9-35.1)	D 6.8 (2.6-11.1)
Grey Bruce Health Unit	50.7 (44.3-57.1)	30.1 (24.7-35.5)	NR
Haldimand-Norfolk Health Unit	58.0 (50.7-65.4) [↑]	31.6 (24.8-38.5)	NR
Haliburton, Kawartha, Pine Ridge District Health Unit	51.8 (46.7-56.9)	29.8 (25.5-34.1)	NR
Halton Regional Health Unit	44.3 (40.7-47.9)	23.9 (20.8-26.9) [↓]	NR
Hastings and Prince Edward Counties Health Unit	56.8 (51.1-62.6) [↑]	34.1 (28.8-39.4)	NR
Huron Perth Health Unit	51.0 (44.0-57.9)	29.7 (23.3-36.0)	NR
Kingston, Frontenac and Lennox and Addington Health Unit	45.8 (40.3-51.3)	26.6 (21.8-31.4)	D 6.3 (2.2-10.3)
Lambton Health Unit	53.9 (47.1-60.7)	27.6 (21.7-33.5)	NR
Leeds, Grenville and Lanark District Health Unit	50.8 (44.6-57.1)	29.0 (23.3-34.6)	NR
Middlesex-London Health Unit	47.4 (40.8-54.0)	24.0 (18.1-29.9)	NR
Niagara Regional Area Health Unit	54.5 (48.3-60.7)	31.9 (26.2-37.5)	NR
North Bay Parry Sound District Health Unit	48.1 (40.2-56.1)	28.1 (21.0-35.3)	NR

Public health unit	Consumed 7 or more sugary drinks in past week % (95% CI)	Consumed 7 or more sugar-sweetened beverages in past week % (95% CI)	Consumed 1 or more energy drink in past week (12-17 year olds only) % (95% CI)
Northwestern Health Unit	57.6 (52.4-62.8) [↑]	35.9 (31.0-40.8) [↑]	D 9.2 (3.8-14.6)
Oxford Elgin St. Thomas Health Unit	55.7 (50.6-60.8) [↑]	32.5 (28.0-37.1)	NR
Peel Regional Health Unit	50.2 (47.5-52.8)	33.8 (31.2-36.3) [↑]	C 3.5 (2.0-5.0)
Peterborough County—City Health Unit	49.9 (42.8-57.0)	27.8 (21.3-34.2)	NR
Porcupine Health Unit	50.8 (43.1-58.5)	27.8 (21.2-34.3)	NR
Renfrew County and District Health Unit	51.9 (43.4-60.5)	33.2 (24.8-41.6)	NR
Simcoe Muskoka District Health Unit	50.4 (46.8-54.1)	29.3 (26.2-32.4)	C 7.0 (4.4-9.6)
Sudbury and District Health Unit	57.0 (50.2-63.9) [↑]	29.3 (22.7-35.9)	NR
The District of Algoma Health Unit	54.7 (47.5-61.8)	34.5 (27.7-41.2)	NR
The Eastern Ontario Health Unit	56.0 (49.2-62.8) [↑]	26.0 (20.2-31.9)	NR
Thunder Bay District Health Unit	51.7 (45.2-58.2)	33.1 (27.1-39.2)	NR
Timiskaming Health Unit	58.1 (45.0-71.2)	C 34.1 (21.3-47.0)	NR
Waterloo Health Unit	45.2 (40.0-50.3)	26.4 (22.0-30.9)	D 5.3 (1.8-8.8)
Wellington-Dufferin-Guelph Health Unit	46.6 (42.5-50.7)	26.4 (22.8-30.0)	D 5.7 (2.6-8.7)
Windsor-Essex County Health Unit	53.1 (48.5-57.7)	32.8 (28.6-37.0)	D 4.5 (1.8-7.2)
York Regional Health Unit	39.1 (34.9-43.2) [↓]	21.5 (18.0-25.0) [↓]	NR

[↑] Indicates significantly higher than the Ontario average, based on non-overlapping 95% confidence intervals

[↓] Indicates significantly lower than the Ontario average, based on non-overlapping 95% confidence intervals

Capital C before estimate: Data quality indicator— marginal (0.15 < CV ≤ 0.25), interpret with caution due to high sampling variability

Capital D before estimate: Data quality indicator— marginal (0.25 < CV ≤ 0.35), interpret with caution due to high sampling variability

NR: not reportable due to an insufficient number of observations or unacceptable quality (CV > 0.35)

Region

- There was some variation across regions in the prevalence of consuming 7 or more sugary drinks in the past week (Table 23). The prevalence in the North East (53.7% [95% CI 50.1-57.4%]) and South West (51.6% [95% CI 49.0-54.2%]) were higher than the provincial average (47.9% [95% CI 47.0-48.9%]; Table 19).
- Relatedly, there was also variation across regions in the prevalence of consuming 7 or more SSB in the past week (Table 23). Compared to the provincial prevalence of 28.3% (95% CI 27.4-29.2%;

Table 19), the East had a lower prevalence (24.0% [95% CI 21.8-26.2%]) and the North West had a higher prevalence (34.0% [95% CI 29.5-38.5%]).

- Regional estimates for energy drink consumption were generally unstable due to the low prevalence and smaller sample (youth 12 to 17 year olds only). None were significantly different from the provincial prevalence of 4.7% (95% CI 4.0-5.4%; Table 19) of youth consuming 1 or more energy drink in the past week.

Table 23: Beverage consumption among children and youth, by Region; Ontario, 2019

Region	Consumed 7 or more sugary drinks in past week % (95% CI)	Consumed 7 or more sugar-sweetened beverages in past week % (95% CI)	Consumed 1 or more energy drink in past week (12-17 year olds only) % (95% CI)
North West	53.5 (48.8-58.3)	34.0 (29.5-38.5) [↑]	D 6.1 (2.9-9.3)
North East	53.7 (50.1-57.4) [↑]	30.1 (26.7-33.5)	D 5.3 (2.6-8.0)
South West	51.6 (49.0-54.2) [↑]	29.4 (27.2-31.7)	C 5.4 (3.7-7.2)
Central West	49.2 (47.0-51.4)	28.8 (26.7-30.9)	C 5.3 (3.6-6.9)
Toronto	45.2 (43.2-47.3)	28.2 (26.3-30.0)	C 3.8 (2.3-5.4)
Central East	47.6 (45.7-49.5)	28.9 (27.3-30.6)	4.5 (3.4-5.6)
East	44.5 (42.0-47.0)	24.0 (21.8-26.2) [↓]	C 4.6 (2.9-6.3)

[↑] Indicates significantly higher than the Ontario average, based on non-overlapping 95% confidence intervals

[↓] Indicates significantly lower than the Ontario average, based on non-overlapping 95% confidence intervals

Capital C before estimate: Data quality indicator— marginal (0.15 < CV ≤ 0.25), interpret with caution due to high sampling variability

Capital D before estimate: Data quality indicator— marginal (0.25 < CV ≤ 0.35), interpret with caution due to high sampling variability

Peer Group

- There was variation across peer groups in the prevalence of consuming 7 or more sugary drinks in the past week (Table 24). Compared to the Ontario prevalence of 47.9% (95% CI 47.0-48.9%; Table 19), both peer groups C (53.4% [95% CI 51.5-55.3%]) and D (51.3% [95% CI 49.4-53.1%]) had a higher prevalence, while peer group G&H (45.3% [95% CI 43.7-46.9%]) had a lower prevalence.
- While there was some variation by peer group in the prevalence of (1) consuming 7 or more SSBs in the past week, and (2) consuming 1 or more energy drink in the past week, no peer group prevalence differed significantly from provincial averages.

Table 24: Beverage consumption among children and youth, by Peer Group; Ontario, 2019

Peer Group	Consumed 7 or more sugary drinks in past week % (95% CI)	Consumed 7 or more sugar-sweetened beverages in past week % (95% CI)	Consumed 1 or more energy drink in past week (12-17 year olds only) % (95% CI)
B (mainly urban centers)	46.9 (45.0-48.8)	26.7 (24.9-28.5)	5.2 (3.8-6.6)
C (sparsely populated urban-rural mix)	53.4 (51.5-55.3) [↑]	30.4 (28.7-32.1)	5.1 (3.8-6.3)
D (mainly rural regions)	51.3 (49.4-53.1) [↑]	29.8 (28.2-31.5)	6.4 (5.1-7.8)
G&H (largest metro centres)	45.3 (43.7-46.9) [↓]	28.3 (26.9-29.8)	3.5 (2.5-4.6)

[↑] Indicates significantly higher than the Ontario average, based on non-overlapping 95% confidence intervals

[↓] Indicates significantly lower than the Ontario average, based on non-overlapping 95% confidence intervals

Weight-focused thoughts and behaviours

OVERALL ESTIMATES

- Almost half of youth (47.5% [95% CI 46.0-49.0%]) were preoccupied with a desire to be thinner in the past year.
- Over 1 in 3 youth (42.6% [95% CI 41.1-44.1%]) had changed their eating habits to manage their weight in the past year.
- In the past year, 4.1% (95% CI 3.5-4.7%) of youth reported vomiting to lose weight.

Figure 21: Weight-focused thoughts and behaviours among youth 12 to 17 years in the past 12 months; Ontario, 2019

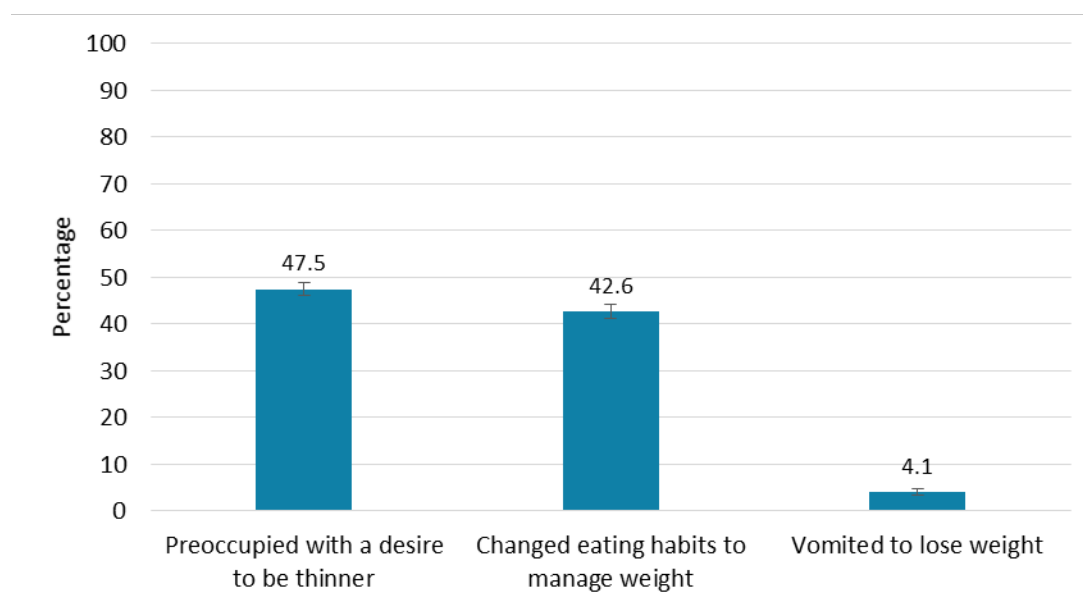


Table 25: Weight-focused thoughts and among youth 12-17 years old; Ontario, 2019

Indicator	Weighted percentage % (95% CI)
Preoccupied with a desire to be thinner, past 12 months	
Never	52.5 (51.0-54.0)
Any affirmative*	47.5 (46.0-49.0)
Changed eating habits to manage weight, past 12 months	
Never	57.4 (55.9-58.9)
Any affirmative*	42.6 (41.1-44.1)
Vomited to lose weight, past 12 months	
Never	95.9 (95.3-96.5)
Any affirmative*	4.1 (3.5-4.7)

*Includes "A few times," "Monthly," "Weekly," and "Daily." See technical notes for more information.

ESTIMATES BY CHILD SOCIODEMOGRAPHIC CHARACTERISTICS

- Compared to males, female youth had a higher prevalence of reporting that, within the past 12 months, they had been preoccupied with a desire to be thinner, changed their eating habits to manage weight, and vomited to lose weight (Figure 22 and Table 26).
- There was no difference by Indigenous identity in the prevalence of youth reporting having been preoccupied with a desire to be thinner, having changed their eating habits to manage weight, or having vomited to lose weight in the past 12 months (Table 26).
- With one exception, there were no differences across race and ethnic origin groups in the prevalence of youth reporting having been preoccupied with a desire to be thinner, having changed their eating habits to manage weight, or having vomited to lose weight in the past 12 months (Table 26). The exception was that youth identifying as Southeast Asian/Filipino had a higher prevalence of having changed eating habits to manage weight (56.4% [95% CI 48.3-64.5%]) compared to those identifying as white/non-racialized (40.4% [95% CI 38.5-42.3%]). Interpret results for vomiting to lose weight with caution due to high variability in the estimates (i.e., lower data quality).
- While there was an overall difference across immigration status in the prevalence of youth reporting having been preoccupied with a desire to be thinner in the past 12 months (by Rao-Scott Chi-Square), there were no significant differences between specific groups (by adjusted Tukey-Kramer; Table 26). Youth identifying as non-immigrants had a lower prevalence of reporting having changed their eating habits to manage weight (41.2% [95% CI 39.5-42.8%]) compared to those identifying as immigrants (50.6% [95% CI 46.3-54.9%]). There was no difference by immigration status in the prevalence of youth reporting vomiting to lose weight in the past 12 months (Table 26). Estimates and comparisons for youth identifying as non-permanent residents should be interpreted with caution due to high variability in the estimates (i.e., lower data quality).

Figure 22: Weight-focused thoughts and behaviours among youth 12 to 17 years in the past 12 months by sex at birth; Ontario, 2019

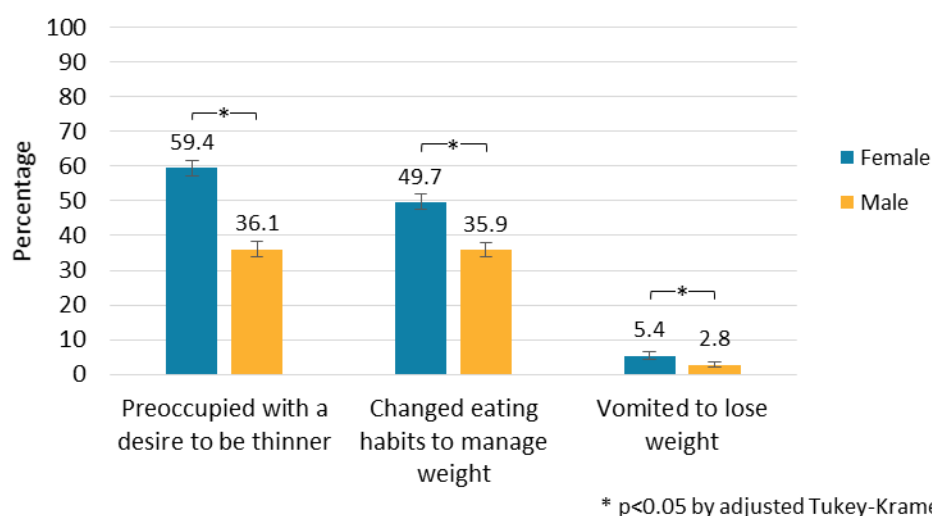


Table 26: Weight-focused thoughts and behaviours among youth 12-17 years old, by child sociodemographic characteristics; Ontario, 2019

Child socio-demographic	Preoccupied with the desire to be thinner in past year % (95% CI)	Changed eating habits to manage weight in past year % (95% CI)	Vomited to lose weight in past year % (95% CI)
Sex at birth**†			
Female	59.4 (57.3-61.6) ^a	49.7 (47.4-52.0) ^a	5.4 (4.4-6.4) ^a
Male	36.1 (34.0-38.2) ^b	35.9 (33.8-37.9) ^b	2.8 (2.0-3.5) ^b
Indigenous identity			
No	47.6 (46.0-49.1)	42.7 (41.2-44.3)	4.0 (3.4-4.6)
Yes	45.4 (37.9-52.9)	38.3 (31.4-45.3)	D 6.2 (2.4-10.0)
Race and Ethnic Origin[†]			
White/Not racialized	46.9 (45.0-48.8)	40.4 (38.5-42.3) ^a	4.1 (3.3-4.8)
South Asian	49.6 (44.5-54.6)	48.3 (43.2-53.5) ^{ab}	D 3.6 (1.8-5.4)
Black	43.0 (35.8-50.2)	40.7 (33.8-47.7) ^{ab}	NR
East Asian	52.4 (46.2-58.6)	42.7 (36.5-48.8) ^{ab}	D 4.0 (1.6-6.5)
Southeast Asian/Filipino	54.2 (45.8-62.7)	56.4 (48.3-64.5) ^b	NR
West Asian/Arab	47.0 (37.7-56.4)	51.6 (42.3-60.8) ^{ab}	NR
Latin American	57.4 (43.1-71.7)	C 48.7 (33.7-63.8) ^{ab}	NR
Other/Multiple	40.6 (30.8-50.5)	43.7 (33.5-53.9) ^{ab}	NR

Child socio-demographic	Preoccupied with the desire to be thinner in past year % (95% CI)	Changed eating habits to manage weight in past year % (95% CI)	Vomited to lose weight in past year % (95% CI)
Child/Youth status*†			
Non-immigrant	46.7 (45.1-48.4)	41.2 (39.5-42.8) ^a	4.1 (3.4-4.7)
Immigrant	51.5 (47.3-55.8)	50.6 (46.3-54.9) ^b	C 4.3 (2.6-5.9)
Non-permanent resident	C 64.6 (41.2-88.0)	D 46.7 (21.7-71.8) ^{ab}	NR

Note: Indigenous identity, race and ethnic origin, and child/youth immigration status are ordered based on weight in the sample (i.e., percent of total Ontario sample), from largest to smallest.

Tests for difference:

* Indicates significant difference between groups for preoccupation with desire to be thinner (Rao-Scott Chi-Square Test $p < 0.05$)

† Indicates significant difference between groups for changed eating habits to manage weight (Rao-Scott Chi-Square Test $p < 0.05$)

‡ Indicates significant difference between groups for vomited to lose weight (Rao-Scott Chi-Square Test $p < 0.05$)

Estimates with no shared superscript lowercase letters are significantly different (within each indicator and socio-demographic; Tukey-Kramer adjusted $p < 0.05$)

Flags for data quality:

Capital C before estimate: Data quality indicator— marginal ($0.15 < CV \leq 0.25$), interpret with caution due to high sampling variability

Capital D before estimate: Data quality indicator: marginal ($0.25 < CV \leq 0.35$), interpret with caution due to high sampling variability

NR: not reportable due to an insufficient number of observations or unacceptable quality ($CV > 0.35$)

ESTIMATES BY HOUSEHOLD SOCIODEMOGRAPHIC CHARACTERISTICS

- Prevalence of weight-focused thoughts and behaviours were not different across household income levels (Figure 23 and Table 27).
- Youth living with two parents/guardians had a lower prevalence of reporting a preoccupation with a desire to be thinner and vomiting to lose weight, compared to youth living with a lone parent/guardian (Figure 23 and Table 27).
- Youth living in households with a highest level of education of Bachelor’s degree or more had a lower prevalence of reporting vomiting to lose weight, compared to those living in households with a highest level of college/vocational/university certificate or diploma (Table 27).

Figure 23: Weight-focused thoughts and behaviours among youth 12 to 17 years in the past 12 months by household income quintile; Ontario, 2019

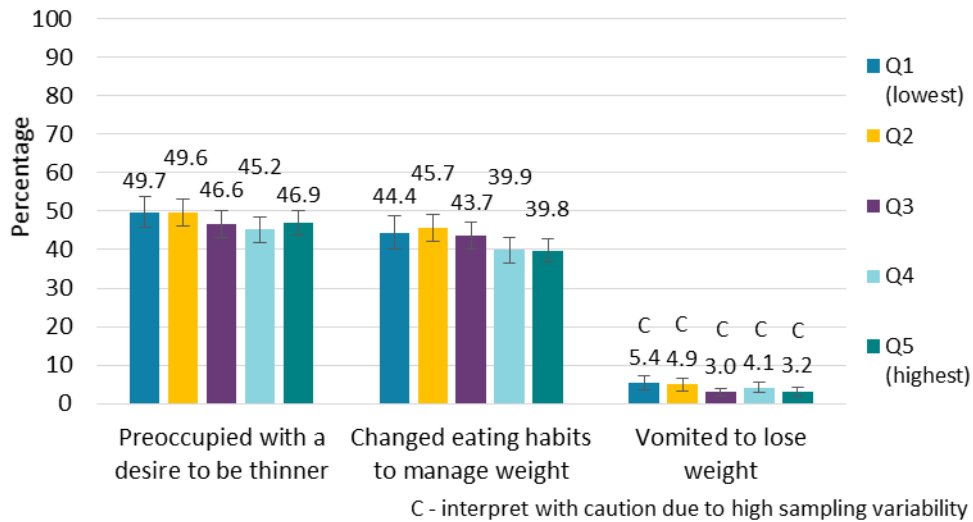


Figure 24: Weight-focused thoughts and behaviours among youth 12 to 17 years in the past 12 months by child living arrangement; Ontario, 2019

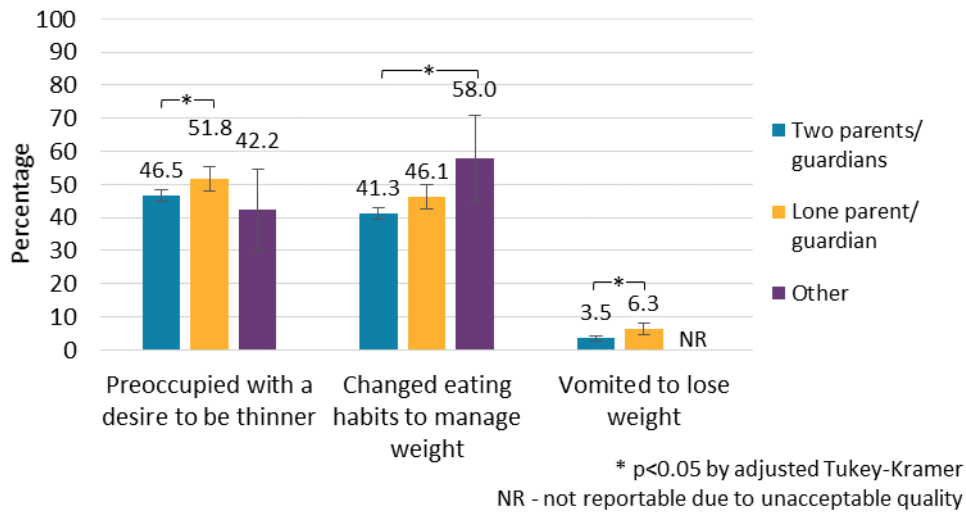


Table 27: Weight-focused thoughts and behaviours among youth 12-17 years old, by household sociodemographic characteristics; Ontario, 2019

Household socio-demographic	Preoccupied with the desire to be thinner in past year % (95% CI)	Changed eating habits to manage weight in past year % (95% CI)	Vomited to lose weight in past year % (95% CI)
Household Income Categories[†]			
<\$24,999	50.7 (44.9-56.6)	46.7 (40.5-52.9)	D 4.5 (2.1-6.9)
\$25,000 to 49,999	49.4 (45.2-53.7)	43.6 (39.4-47.7)	C 5.7 (3.7-7.6)
\$50,000 to 74,999	49.3 (45.1-53.5)	45.9 (41.7-50.1)	C 5.0 (3.1-7.0)
\$75,000 to 99,999	48.3 (44.0-52.6)	46.2 (42.0-50.4)	C 3.0 (1.8-4.3)
\$100,000 to 149,999	43.8 (40.5-47.1)	39.6 (36.2-42.9)	C 3.4 (2.3-4.6)
\$150,000 to 199,999	45.6 (41.4-49.8)	38.9 (34.9-43.0)	C 3.6 (2.0-5.3)
\$200,000 and higher	48.4 (44.3-52.4)	40.2 (36.3-44.1)	C 3.6 (2.0-5.1)
Household Income Quintiles			
Q1 (lowest)	49.7 (45.7-53.8)	44.4 (40.1-48.6)	C 5.4 (3.6-7.3)
Q2	49.6 (46.1-53.1)	45.7 (42.2-49.3)	C 4.9 (3.4-6.5)
Q3	46.6 (43.1-50.0)	43.7 (40.2-47.3)	C 3.0 (1.9-4.0)
Q4	45.2 (41.8-48.6)	39.9 (36.5-43.2)	C 4.1 (2.8-5.4)
Q5 (highest)	46.9 (43.7-50.1)	39.8 (36.8-42.8)	C 3.2 (2.1-4.4)
Household Low Income Cut-Off (LICO)			
Below LICO	47.9 (44.2-51.5)	44.5 (40.8-48.2)	C 4.4 (2.9-5.9)
Above LICO	47.4 (45.7-49.1)	42.1 (40.4-43.8)	4.0 (3.3-4.6)
Child living arrangement^{**††}			
Two parents/guardians	46.5 (44.8-48.3) ^a	41.3 (39.6-43.1) ^a	3.5 (2.8-4.1) ^a
Lone parent/guardian	51.8 (48.1-55.5) ^b	46.1 (42.4-49.8) ^{ab}	6.3 (4.7-8.0) ^b
Other (incl. no parents/guardians in household)	42.2 (30.0-54.5) ^{ab}	58.0 (45.1-71.0) ^b	NR
Highest household educational attainment[‡]			
High-school or less	49.1 (45.0-53.2)	41.5 (37.4-45.6)	C 4.5 (2.8-6.2) ^{ab}
College/vocational/ university certificate or diploma	47.2 (44.6-49.9)	42.2 (39.7-44.8)	5.2 (4.0-6.3) ^a
Bachelor's degree or more	47.3 (45.1-49.5)	42.6 (40.4-44.8)	3.2 (2.4-4.0) ^b

Tests for difference:

* Indicates significant difference between groups for preoccupation with desire to be thinner (Rao-Scott Chi-Square Test $p < 0.05$)

† Indicates significant difference between groups for changed eating habits to manage weight (Rao-Scott Chi-Square Test $p < 0.05$)

‡ Indicates significant difference between groups for vomited to lose weight (Rao-Scott Chi-Square Test $p < 0.05$)

Estimates with no shared superscript lowercase letters are significantly different (within each indicator and socio-demographic; Tukey-Kramer adjusted $p < 0.05$)

Flags for data quality:

Capital C before estimate: Data quality indicator— marginal ($0.15 < CV \leq 0.25$), interpret with caution due to high sampling variability

NR: not reportable due to an insufficient number of observations or unacceptable quality ($CV > 0.35$)

ESTIMATES FOR SUB-ONTARIO GEOGRAPHIES**Public Health Unit**

- There was variation across PHUs in the prevalence of youth reporting a preoccupation to be thinner in the past year (Table 28), ranging from 34.9% (95% CI 23.9-45.9%; interpret with caution due to high sampling variability; Haldimand-Norfolk) to 60.6% (95% CI 46.4-74.8%; Renfrew County and District). Only Haldimand-Norfolk had a prevalence different, lower, from the Ontario prevalence of 47.5% (95% CI 46.0-49.0%; Table 25).
- There was variation across PHUs in the prevalence of youth reporting having changed their eating habits to manage weight in the past year (Table 28), ranging from 24.7% (95% CI 15.7-33.6%; interpret with caution due to high sampling variability; Grey Bruce) to 53.1% (95% CI 38.2-67.9%; Renfrew County and District). Only two PHUs had a prevalence different from the provincial average of 42.6% (95% CI 41.1-44.1; Table 25); Brant County (28.7% [95% CI 18.4-38.9%]) and Grey Bruce, however both PHU estimates have caution flags due to high sampling variability.
- PHU-level estimates of youth reporting vomiting to lose weight in the past year were generally unstable due to the low prevalence and smaller sample (youth 12 to 17 year olds only). Of the PHUs that did have reportable estimates, none were significantly different from the provincial prevalence of 4.1% (95% CI 3.5-4.7%; Table 25).

Table 28: Weight-focused thoughts and behaviours among youth 12-17 years old, by Public Health Unit; Ontario, 2019

Public health unit	Preoccupied with the desire to be thinner in past year % (95% CI)	Changed eating habits to manage weight in past year % (95% CI)	Vomited to lose weight in past year % (95% CI)
Brant County Health Unit	46.9 (36.0-57.9)	C 28.7 (18.4-38.9) [‡]	NR
Chatham-Kent Health Unit	54.6 (46.1-63.2)	41.8 (33.2-50.4)	NR
City of Hamilton Health Unit	50.4 (39.2-61.6)	44.9 (33.1-56.8)	NR
City of Ottawa Health Unit	48.7 (42.2-55.1)	41.9 (35.6-48.3)	NR
City of Toronto Health Unit	46.5 (42.5-50.5)	44.8 (41.0-48.6)	C 4.8 (3.1-6.5)

Public health unit	Preoccupied with the desire to be thinner in past year % (95% CI)	Changed eating habits to manage weight in past year % (95% CI)	Vomited to lose weight in past year % (95% CI)
Durham Regional Health Unit	49.1 (41.2-57.0)	40.1 (32.2-48.0)	NR
Grey Bruce Health Unit	36.7 (26.5-46.8)	C 24.7 (15.7-33.6) [↓]	NR
Haldimand-Norfolk Health Unit	C 34.9 (23.9-45.9) [↓]	C 31.1 (20.2-42.0)	NR
Haliburton, Kawartha, Pine Ridge District Health Unit	50.2 (42.3-58.1)	41.1 (33.4-48.8)	NR
Halton Regional Health Unit	50.3 (44.9-55.7)	44.0 (38.7-49.3)	D 5.3 (2.5-8.1)
Hastings and Prince Edward Counties Health Unit	53.2 (43.6-62.7)	39.8 (30.2-49.4)	NR
Huron Perth Health Unit	42.9 (33.1-52.6)	C 32.2 (22.3-42.2)	NR
Kingston, Frontenac and Lennox and Addington Health Unit	47.3 (39.2-55.5)	42.6 (34.4-50.8)	NR
Lambton Health Unit	46.4 (35.3-57.6)	38.7 (27.8-49.7)	NR
Leeds, Grenville and Lanark District Health Unit	52.3 (42.7-61.9)	40.1 (30.8-49.4)	NR
Middlesex-London Health Unit	46.6 (36.1-57.0)	40.8 (30.5-51.1)	NR
Niagara Regional Area Health Unit	46.9 (37.2-56.5)	42.6 (32.7-52.4)	NR
North Bay Parry Sound District Health Unit	49.0 (35.9-62.1)	45.8 (33.1-58.5)	NR
Northwestern Health Unit	49.0 (40.3-57.8)	46.5 (37.1-55.9)	NR
Oxford Elgin St. Thomas Health Unit	48.7 (40.5-56.9)	38.4 (30.0-46.8)	NR
Peel Regional Health Unit	47.7 (43.6-51.7)	46.8 (42.7-51.0)	C 3.0 (1.8-4.3)
Peterborough County—City Health Unit	40.9 (30.3-51.5)	C 36.0 (25.4-46.6)	NR
Porcupine Health Unit	50.0 (37.6-62.4)	C 34.8 (23.0-46.6)	NR
Renfrew County and District Health Unit	60.6 (46.4-74.8)	53.1 (38.2-67.9)	NR
Simcoe Muskoka District Health Unit	50.0 (44.1-55.9)	44.3 (38.5-50.1)	D 4.7 (2.1-7.4)
Sudbury and District Health Unit	49.9 (38.0-61.8)	46.4 (34.7-58.1)	NR
The District of Algoma Health Unit	45.8 (34.7-57.0)	38.6 (27.4-49.9)	NR
The Eastern Ontario Health Unit	45.8 (35.1-56.5)	42.6 (31.2-54.0)	NR
Thunder Bay District Health Unit	48.5 (38.8-58.1)	46.7 (36.9-56.5)	NR

Public health unit	Preoccupied with the desire to be thinner in past year % (95% CI)	Changed eating habits to manage weight in past year % (95% CI)	Vomited to lose weight in past year % (95% CI)
Timiskaming Health Unit	C 44.3 (24.6-64.0)	D 38.2 (17.4-59.0)	NR
Waterloo Health Unit	45.6 (37.9-53.2)	41.5 (33.7-49.3)	D 6.1 (2.4-9.8)
Wellington-Dufferin-Guelph Health Unit	42.3 (35.9-48.8)	36.1 (29.7-42.4)	NR
Windsor-Essex County Health Unit	46.1 (39.2-52.9)	38.5 (31.6-45.4)	D 4.0 (1.5-6.5)
York Regional Health Unit	46.8 (40.4-53.1)	44.1 (37.8-50.3)	NR

↑ Indicates significantly higher than the Ontario average, based on non-overlapping 95% confidence intervals

↓ Indicates significantly lower than the Ontario average, based on non-overlapping 95% confidence intervals

Capital C before estimate: Data quality indicator— marginal ($0.15 < CV \leq 0.25$), interpret with caution due to high sampling variability

Capital D before estimate: Data quality indicator— marginal ($0.25 < CV \leq 0.35$), interpret with caution due to high sampling variability

NR: not reportable due to an insufficient number of observations or unacceptable quality ($CV > 0.35$)

Region

- While there was some variation in the prevalence of weight-focused thoughts and behaviours across regions (Table 29), no estimates were significantly different than provincial averages (Table 25).

Table 29: Weight-focused thoughts and behaviours among youth 12-17 years old, by Region; Ontario, 2019

Region	Preoccupied with the desire to be thinner in past year % (95% CI)	Changed eating habits to manage weight in past year % (95% CI)	Vomited to lose weight in past year % (95% CI)
North West	48.6 (41.5-55.8)	46.7 (39.2-54.1)	D 5.3 (2.0-8.5)
North East	48.6 (42.5-54.7)	42.5 (36.5-48.4)	D 3.5 (1.4-5.6)
South West	46.0 (42.1-50.0)	37.6 (33.5-41.6)	C 3.6 (2.3-4.9)
Central West	47.2 (43.8-50.6)	41.3 (37.9-44.8)	C 4.9 (3.4-6.5)
Toronto	46.5 (42.5-50.5)	44.8 (41.0-48.6)	C 4.8 (3.1-6.5)
Central East	47.8 (45.1-50.6)	44.1 (41.4-46.9)	3.4 (2.4-4.3)
East	49.5 (45.4-53.6)	42.3 (38.2-46.4)	C 3.9 (2.1-5.6)

Capital C before estimate: Data quality indicator— marginal ($0.15 < CV \leq 0.25$), interpret with caution due to high sampling variability

Capital D before estimate: Data quality indicator— marginal ($0.25 < CV \leq 0.35$), interpret with caution due to high sampling variability

Peer Group

- While there was some variation in the prevalence of weight-focused thoughts and behaviours across peer groups (Table 30), no estimates were significantly different than provincial averages (Table 25).

Table 30: Weight-focused thoughts and behaviours among youth 12-17 years old, by Peer Group; Ontario, 2019

Peer Group	Preoccupied with the desire to be thinner in past year % (95% CI)	Changed eating habits to manage weight in past year % (95% CI)	Vomited to lose weight in past year % (95% CI)
B (mainly urban centers)	48.3 (45.4-51.3)	41.8 (38.8-44.8)	4.2 (3.0-5.4)
C (sparsely populated urban-rural mix)	48.0 (45.0-51.0)	41.0 (38.0-44.0)	C 3.9 (2.7-5.1)
D (mainly rural regions)	46.7 (43.7-49.6)	38.9 (36.0-41.8)	4.7 (3.3-6.0)
G&H (largest metro centres)	46.9 (44.2-49.6)	45.2 (42.6-47.9)	3.8 (2.8-4.8)

Capital C before estimate: Data quality indicator— marginal ($0.15 < CV \leq 0.25$), interpret with caution due to high sampling variability

Discussion

CHSCY is a valuable survey that helps fill a gap in measurement of child and youth healthy eating data at the population level in Ontario. This gap has been especially large for children under the age of 12, who have not routinely been included in other population-representative health surveys that can provide provincial and sub-provincial estimates, such as the Canadian Community Health Survey (CCHS) and the Ontario Student Drug Use and Health Survey (OSDUHS). Note that as of 2023, the CCHS only covers the population 18 years of age and over, in order to reduce overlap with CHSCY. While there are other informative school-based surveys (e.g., COMPASS, Health Behaviour in School-Aged Children Survey) that collect data on youth and adolescents at various intervals, they are not able to produce population-representative estimates at sub-provincial levels.

Health inequities among Ontario children and youth are evident in the healthy eating indicators presented in this report. Healthy eating behaviours differed by several equity-related child/youth and household sociodemographic characteristics; including household income, household educational attainment, number of parents in the household, child Indigenous identity, and child race and ethnic origin group. For example, children and youth were less likely to report daily breakfast consumption if they lived in households with lower incomes or educational attainment, or with a lone-parent/guardian. As another example, children and youth were more likely to report daily sugary beverage consumption if they identified as Indigenous, West Asian/Arab or Black, lived in households with lower income or educational attainment, or if they lived with a lone parent/guardian. While causal pathways are complex, the inequities quantified and presented in this report are broadly consistent with evidence around child health as it relates to socioeconomic status or race and ethnic origin.²²⁻²⁴ Despite indicators in this report being individually-measured behaviours, personal food choices are made within a wide range of contextual factors, including the interpersonal, the physical environment, the economic environment, and the social environment.¹⁷ It is important to acknowledge that historical and ongoing systemic racism and colonialism are key drivers of health inequities among racialized and Indigenous children and their families. Policies that help reduce inequities in Ontario and programs designed to support equity-denied populations are a necessary response.

Breakfast eating among children and youth is associated with a host of positive health measures including higher diet quality, cognitive performance, academic achievement, quality of life, well-being, and fewer metabolic risk factors.²⁵⁻²⁷ While causality between breakfast consumption and these positive health measures is debated, review-level evidence supports breakfast skipping (or conversely, breakfast consumption) as a valid marker of metabolic disease risk.²⁵ In 2019, 76.8% of Ontario children and youth ate breakfast daily in the past week. Consistent with previous research,²⁵ daily breakfast consumption declined with age, with only 52.9% of youth (12-17 years) reporting daily consumption. Children and youth living in households with fewer resources (e.g., income, education) or a lone-parent/guardian were less likely to consume breakfast daily. Breakfast eating has not been included on OSDUHS since the 2019 cycle, and is not included on the 2023 cycle of the CHSCY.

For children and youth, eating meals as a family is associated with higher diet quality, higher family functioning measures, positive psychosocial outcomes, and reduced high-risk and disordered eating behaviours.^{5,6,28} In 2019, 75.9% of Ontario children and youth ate dinner with their families at a table at least 5 nights in the past week. Eating dinner with family decreased with age, with only 65.7% of youth reporting eating dinner with family 5-7 nights in the past week. There was no difference across household income categories or education attainment. However, children and youth in two-parent/guardian households were more likely than those living in lone-parent/guardian or other living arrangements to have eaten dinner with family 5-7 nights in the past week. There are no other population-surveys measuring eating meals as a family among Ontario children and youth. This question is asked on the 2023 cycle of the CHSCY.

Among children and youth, distracted eating (i.e., eating while watching screens) has been associated with increased caloric intake, a higher consumption of SSBs and higher-fat and sugary foods, and less frequent consumption of fruits and vegetables.^{7,29} One way to reduce distracted eating is to restrict device use during mealtime. In 2019, 76.1% of Ontario children and youth were not allowed (nor were any family members allowed) to use electronic devices during dinner. There were no linear trends by child/youth age, nor differences by sex at birth. Children and youth living in households with less resources (e.g., income, education) and a lone parent/guardian were more likely to have devices allowed during mealtime. While rules against electronic device use during dinner should generally be considered a positive healthy eating measure, the relationship between rules and actual device use during dinner as well as device use during other meals and snacks in this sample is not known. There are currently no comparable questions on OSDUHS, and there is no similar question appearing on the 2023 cycle of CHSCY.

Eating food from restaurants is associated with increased caloric intake and poorer diet quality among children and youth.^{8,9} In 2019, one third (33.6%) of Ontario children and youth consumed food from a fast-food or sit-down restaurant two or more times in the past week. In agreement with previous population-survey data in Canada on fast-food consumption,¹⁰ youth had a higher prevalence of consuming restaurant foods than younger age groups. Among the healthy eating indicators measured in CHSCY, eating from a restaurant two or more times in the past week was not highly associated with socioeconomic status; although there was a U-shaped relationship found with household income, consistent with previous findings.²⁴ There were some differences across race and ethnic origin groups, but only minor variations in prevalence across household income and education. There is no comparable question on OSDUHS, however, a similar question is included on the 2023 cycle of CHSCY.

There is consistent evidence of the negative impacts that SSBs have on children's health, including greater risk of metabolic dysfunction (i.e., insulin resistance, hypertension) and dental caries.^{12,30} Particularly among children and adolescents, SSBs are the main contributor to excess sugar in diets.³¹ In 2019, approximately half (47.9%) of Ontario children and youth (3-17 years of age) were consuming at least one sugary drink (includes 100% fruit juice) per day and more than 1 in 4 (28.3%) were consuming at least one SSB (excludes 100% fruit juice) per day, on average, in the past week. There was an overall low prevalence (4.7%) of energy drink consumption (1 or more times in the last week) among youth, although higher in males than females. Consistent with international evidence,^{31,32} frequency of both sugary and SSB consumption increased with increasing age and was higher in males than females. Children and youth living in higher income households, those living with two parents/guardians, and those living in households with higher educational attainment consumed fewer sugary or SSBs than their counterparts, consistent with evidence associating lower socioeconomic status to higher sugary beverage consumption.³² There are comparable questions on beverage consumption on OSDUHS, and similar questions are asked in the 2023 CHSCY.

Dissatisfaction with one's body image is a significant risk factor for disordered eating behaviours, eating disorders, symptoms of mental health, and health compromising behaviours among youth.^{13,14,33} In 2019, approximately half of Ontario youth (47.5%) reported a preoccupation with a desire to be thinner, while more than one third (42.6%) reported changing their eating habits in an attempt to manage their weight in the past year. One in 20 reported vomiting to lose weight in the past year. While a higher proportion of females compared to males reported a preoccupation with a desire to be thinner (59.4%), changing their eating habits to manage weight (49.7%), and vomiting to lose weight in the last year (5.4%), these issues do impact a concerning proportion of male youth (36.1%, 35.9%, and 2.8%, respectively). Weight-focused thoughts and behaviours did not differ across household income levels, consistent with previous evidence.³⁴ However, fewer youth living with two parents/guardians reported a preoccupation with a desire to be thinner and vomiting to lose weight than those living in a lone parent/guardian household. Similar to data from the 2019 OSDUHS, there was no significant regional

variation in weight-focused thoughts and behaviours.³⁵ Questions on weight-focused thoughts and behaviours remain the same for the 2023 CHSCY, so ongoing surveillance on these indicators is possible.

Limitations

Several limitations should be considered when interpreting and using this report. Retrospective self- or person most knowledgeable (PMK)-reported data collection in CHSCY may be subject to recall errors and biases. The cross-sectional design of the 2019 CHSCY and the bivariate analyses prevent any assumptions of causality for the significant relationships presented. Certain estimates of healthy eating behaviours across sociodemographic indicators or at sub-Ontario geographies have been suppressed or flagged due to data quality issues, highlighting the challenge of producing high quality estimates even when relying on the best data sources currently available for Ontario. Estimates could not be reported among transgendered and gender-diverse youths due to the very low number of youths reporting a non-cisgender identity. In addition, while data from the 2019 CHSCY is the most current available, it is several years old as of the time of publication of this report, and more importantly, the survey was conducted prior to the COVID-19 pandemic. It is likely that many behaviours measured have been impacted by the pandemic, such as worsening of body image and related eating behaviours.^{15,16} Some of these behaviours will be measured in the 2023 CHSCY and therefore comparisons will be possible. The importance of certain measures in CHSCY may be unclear, for instance, the measure of rules around device use at dinner (the relationship between rules and actual device use is not captured). Further, the specificity of certain measures based on question phrasing may have created challenges in both the response and interpretation; specifically, the question on eating dinner together at the table with family may be difficult to interpret as it has two components: eating dinner at a table and eating dinner with family. Finally, the 2019 CHSCY measures a limited number of indicators related to healthy eating and therefore does not capture the overall health of children and youth's diet or eating behaviours.

Conclusion

The data presented in this report provide an overview of healthy eating and food behaviours by child and household sociodemographic characteristics and at various geographies. Comprehensive interpretations will require more detailed analyses and, where appropriate, collaboration with relevant communities and partners. CHSCY is an important survey for understanding relationships between healthy eating and food behaviours, socio-demographics, geography, and other child/youth behaviours and outcomes. Comparisons of equivalent indicators can be conducted with subsequent cycles of CHSCY (for those indicators that will continue) to provide valuable information about any relative changes to behaviours.

Technical notes

Data Source

This report examined the Ontario portion of the 2019 Canadian Health Survey on Children and Youth (CHSCY). This survey used the Canadian Child Tax Benefit (CCB) as the sampling frame to select children and youth between the ages of 1 to 17 years old as of January 31, 2019.

- Children living in private dwellings across 10 provinces and 3 territories were eligible.
- Children living on First Nation reserves or other Indigenous settlements were excluded from the survey. Further, children living in foster care and children and youth who were institutionalized were excluded.

Indicators

PMK report for children ages 1-11 years, and youth ages 12-17 years self-report.

HEALTHY EATING INDICATORS

Breakfast eating

- **Breakfast consumption, past week**
 - FDB_005: Eat breakfast - num of days - 7 d
 - *Question Text:* In the past 7 days, that is from last [day of interview] to yesterday, how many days did [this child/you] eat breakfast?
 - *Universe:* PMK of selected child aged 1 to 11 and youth aged 12 to 17
 - *Answer Categories:* 0, 1, 2, 3, 4, 5, 6, 7, Not Stated
 - Created dichotomous variable (excluding Not Stated):
 - 0-6 days
 - 7 days
- **Breakfast consumption on school days, past week**
 - FDB_010: Eat breakfast on school days - num of days - 7 d
 - *Question Text:* How many of those days were school days?
 - *Universe:* PMK of selected child aged 1 to 11 who answered SCH_005 = (1, NS) and youth aged 12 to 17 who answered SCH_005 = (1, NS)
 - *Answer Categories:* 0, 1, 2, 3, 4, 5, Valid Skip, Not Stated
 - Created dichotomous variable (excluding Valid Skip and Not Stated):
 - 0-4 days
 - 5 days

Dinner eating with family

- **Eating dinner with family at a table, past week**
 - FDB_015: Eat meal with family at table - num of days - 7 d
 - *Question Text:* In the past 7 days, how many days did [he/you] eat the evening meal with [his/your] family sitting at the dinner table together?
 - *Universe:* PMK of selected child aged 1 to 11 and youth aged 12 to 17
 - *Answer Categories:* 0, 1, 2, 3, 4, 5, 6, 7, Not Stated
 - Created dichotomous variable (excluding Not Stated):
 - 0-4 days
 - 5-7 days
- **Electronic devices allowed during dinner**
 - FDB_020: Electronics devices allowed while eating the evening meal together
 - *Question Text:* [Is this child/Are you] or other family members allowed to use electronic devices while eating the evening meal together?
 - *Universe:* PMK of selected child aged 1 to 11 and youth aged 12 to 17
 - *Answer Categories:* Yes, No, Family does not eat the evening meal together, Not Stated
 - Created 3-level variable (excluding Not Stated):
 - Yes
 - No
 - Family does not eat dinner together

Eating food from fast-food or sit-down restaurants

- **Eating at a fast-food or sit-down restaurant, past week**
 - FDB_025: Eat from a restaurant - num of times - 7 d
 - *Question Text:* During the past 7 days, how many times did [this child/you] eat food from 'fast food' or sit-down restaurants?
 - *Universe:* PMK of selected child aged 1 to 11 and youth aged 12 to 17
 - *Answer categories:* Number of times, Not stated
 - Created dichotomous variable (excluding Not Stated):
 - 0-1 times
 - 2 or more times

Beverage consumption

- **Consumption of sugary drinks (including 100% fruit juice), past week**
 - A series of questions (FDB_030A to FDB_030J) to capture beverage consumption of children and youth. For this indicator, sugary drinks include 100% fruit juice; fruit flavoured drinks; regular soft drinks; sports drinks; energy drinks (12 to 17 year olds only); chocolate milk or hot

chocolate; milkshakes or ice cream sodas; sweetened coffee/tea/ice coffee/ice tea (12 to 17 year olds only). This indicator was derived using the following variables in CHSCY:

- FDB_030A: Drink - 100% pure fruit juice - num of times -7 d
- FDB_030B: Drink - fruit flavoured drinks - num of times -7 d
- FDB_030D: Drink - regular soft drinks - num of times - 7 d
- FDB_030E: Drink - sports drinks - num of times - 7 d
- FDB_030F: Drink - energy drinks - num of times - 7 d
- FDB_030G: Drink - chocolate milk or hot chocolate - num of times -7 d
- FDB_030I: Drink - milkshakes or ice cream sodas - num of times -7 d
- FDB_030J: Drink - sweetened coffee/tea/iced coffee/iced tea - num of times - 7 d
- *Question Text:* For each drink type, the respondent (PMK/youth) was asked “During the past 7 days, how many times did [this child/you] drink the following beverages?” followed by the specific beverage, for example, “100% pure fruit juice”.
- *Universe:* PMK of selected child aged 3 to 11 and youth aged 12 to 17
 - For energy drinks (FDB_030F) and sweetened coffee/tea/iced coffee/iced tea (FDB_030J), the universe was further restricted to youth aged 12 to 17.
- *Answer Categories:* For each drink type, the respondent (PMK/youth) was able to answer: Number of times, Valid Skip, Not stated
- Created a dichotomous variable: 0-6 times; 7 or more times
 - For each child/youth, their response (i.e., number of times a drink was consumed in the past week) to each included question was summed for a total number of sugary drinks in the past week. This total number was used to dichotomize into 0-6 times and 7 or more times.
 - Children/youth were excluded if they had a response of “Not stated” for any of the included drinks, or if they had “Valid Skip” for all included drinks as was the case for 1 and 2 year olds who were outside the question universe.
- **Consumption of sugar-sweetened beverages, past week**
 - A series of questions (FDB_030A to FDB_030J) to capture beverage consumption of children and youth. For this indicator, sugar-sweetened beverages include fruit flavoured drinks; regular soft drinks; sports drinks; energy drinks (12 to 17 year olds only); chocolate milk or hot chocolate; milkshakes or ice cream sodas; sweetened coffee/tea/ice coffee/ice tea (12 to 17 year olds only). This indicator was derived using the following variables in CHSCY:
 - FDB_030B: Drink - fruit flavoured drinks - num of times -7 d
 - FDB_030D: Drink - regular soft drinks - num of times - 7 d
 - FDB_030E: Drink - sports drinks - num of times - 7 d
 - FDB_030F: Drink - energy drinks - num of times - 7 d
 - FDB_030G: Drink - chocolate milk or hot chocolate - num of times -7 d
 - FDB_030I: Drink - milkshakes or ice cream sodas - num of times -7 d
 - FDB_030J: Drink - sweetened coffee/tea/iced coffee/iced tea - num of times - 7 d

- *Question Text:* For each drink type, the respondent (PMK/youth) was asked “During the past 7 days, how many times did [this child/you] drink the following beverages?” followed by the specific beverage, for example, “fruit flavoured drinks”.
- *Universe:* PMK of selected child aged 3 to 11 and youth aged 12 to 17
 - For energy drinks (FDB_030F) and sweetened coffee/tea/iced coffee/iced tea (FDB_030J), the universe was further restricted to youth aged 12 to 17.
- *Answer Categories:* For each drink type, the respondent (PMK/youth) was able to answer: Number of times, Valid Skip, Not stated
- Created a dichotomous variable: 0-6 times; 7 or more times
 - For each child/youth, their response (i.e., number of times a drink was consumed in the past week) to each included question was summed for a total number of sugary drinks in the past week. This total number was used to dichotomize into 0-6 times and 7 or more times.
 - Children/youth were excluded if they had a response of “Not stated” for any of the included drinks, or if they had “Valid Skip” for all included drinks as was the case for 1 and 2 year olds who were outside the question universe.
- **Consumption of energy drinks, past week**
 - FDB_030F: Drink - energy drinks - num of times - 7 d
 - *Question Text:* During the past 7 days, how many times did you drink the following beverages? – Energy drinks
 - *Universe:* Youth aged 12 to 17
 - *Answer categories:* Number of times, Valid skip, Not stated
 - Created dichotomous variable (excluding Valid skip and Not stated):
 - 0 times
 - 1 or more times

Weight-focused thoughts and behaviours

- **Preoccupied with a desire to be thinner, past 12 months**
 - EAB_005A: Preoccupied with a desire to be thinner - frequency - 12 mo
 - *Question Text:* In the past 12 months, how often have you done the following things? - Been preoccupied with a desire to be thinner
 - *Universe:* Youth aged 12 to 17
 - *Answer categories:* Never, A few times, Monthly, Weekly, Daily, Valid skip, Not stated
 - Created dichotomous variable (excluding Valid skip and Not stated):
 - Never
 - Any affirmative [i.e., A few times, Monthly, Weekly, Daily]
- **Changed eating habits to manage weight, past 12 months**
 - EAB_005C: Changed eating habits to manage weight - frequency - 12 mo

- *Question Text:* In the past 12 months, how often have you done the following things? - Changed your eating habits in order to manage your weight
- *Universe:* Youth aged 12 to 17
- *Answer categories:* Never, A few times, Monthly, Weekly, Daily, Valid skip, Not stated
- Created dichotomous variable (excluding Valid skip and Not stated):
 - Never
 - Any affirmative [i.e., A few times, Monthly, Weekly, Daily]
- **Vomited to lose weight, past 12 months**
 - EAB_005B: Vomited to lose weight - frequency - 12 mo
 - *Question Text:* In the past 12 months, how often have you done the following things? - Vomited to lose weight
 - *Universe:* Youth aged 12 to 17
 - *Answer categories:* Never, A few times, Monthly, Weekly, Daily, Valid skip, Not stated
 - Created dichotomous variable (excluding Valid skip and Not stated):
 - Never
 - Any affirmative [i.e., A few times, Monthly, Weekly, Daily]

SOCIO-DEMOGRAPHIC VARIABLES

The socio-demographic variables used in this analysis include age, sex at birth, race and ethnic origin (including Indigenous identity), child immigration status, household income, child living arrangement, and highest educational attainment of the person most knowledgeable (PMK) of the child and their spouse (referred to as highest household educational attainment). For more information on these socio-demographic variables and how they were coded please see the Technical Report.

- Age was categorized as 3-4, 5-11, and 12-17 years
- Sex at birth was categorized as male or female
- Indigenous identity (First Nations, Inuit, or Métis) was defined as ‘Yes’ or ‘No’
- Race and ethnic origin groups were categorized as South Asian, Black, East Asian, Southeast Asian/Filipino, West Asian/Arab, White/Non-racialized, Latin American, and other (or multiple). Because Indigenous identity is included in these analyses as a separate variable, we excluded respondents who answered ‘yes’ to Indigenous identity (who are otherwise automatically included in the White/Non-racialized category, as per Statistics Canada methods).
- Immigration status (child) was categorized as non-immigrant, immigrant, and non-permanent resident
- Household income was categorized 3 ways:
 - Into 7 levels (<\$24,999, \$25,000-\$49,999, \$50,000-\$74,999, \$75,000-\$99,999, \$100,000-\$149,999, \$150,000-\$199,999, and \$200,000+)
 - By quintile (income divided into five equal groups, each group is known as a quintile. Quintile one (Q1) represents the lowest 20% of the data distribution and quintile five (Q5) is the highest 20%)

- By Low Income Cut-Off (LICO) threshold, resulting in a dichotomous variable describing low or high income. It was calculated using Canadian 2019 before-tax income adjusted for community and household size.
- Child living arrangement was categorized as two parents/guardians, lone parent/guardian, or other (incl. no parents/guardians in household)
- Highest educational attainment of the PMK or PMK spouse was categorized into three groups (high-school or less, college/vocational/university certificate or diploma, and university or more)

GEOGRAPHIC VARIABLES

Estimates of each healthy eating indicator are provided at three sub-provincial geographies.

1. Public Health Unit
2. Major geographic region
 - **North West** – Northwestern Health Unit, Thunder Bay District Health Unit
 - **North East** – Porcupine Health Unit, Timiskaming Health Unit, Public Health Sudbury & Districts, Algoma Public Health, North Bay and Parry Sound District Health Unit
 - **South West** – Windsor-Essex County Health Unit, Chatham-Kent Public Health, Southwestern Public Health, Lambton Public Health, Middlesex-London Health Unit, Huron Perth Public Health, Grey Bruce Health Unit
 - **Central West** – Wellington-Dufferin-Guelph Public Health, Halton Region Public Health, City of Hamilton Public Health Services, Niagara Region Public Health, Region of Waterloo Public Health and Emergency Services, Haldimand-Norfolk Health Units, Brant County Health Unit
 - **Toronto** Public Health
 - **Central East** – Peel Public Health, York Region Public Health, Durham Region Health Department, Haliburton, Kawartha, Pine Ridge District Health Unit, Peterborough Public Health, Simcoe Muskoka District Health Unit
 - **East** – Renfrew County and District Health Unit, Hastings Prince Edward Public Health, Kingston, Frontenac and Lennox & Addington Public Health, Leeds, Grenville & Lanark District Health Unit, Ottawa Public Health, Eastern Ontario Health Unit
3. Statistics Canada Peer Groups³⁶
 - **Peer Group B** – Mainly urban centres with moderate population density
 - Durham Region Health Department, Halton Region Public Health, City of Hamilton Public Health Services, Middlesex-London Health Unit, Ottawa Public Health, Region of Waterloo Public Health and Emergency Services, Windsor-Essex County Health Unit
 - **Peer Group C** – Sparsely populated urban-rural mix
 - Algoma Public Health, Brant County Health Unit, Chatham-Kent Public Health, Eastern Ontario Health Unit, Haliburton, Kawartha, Pine Ridge District Health Unit, Hastings Prince Edward Public Health, Kingston, Frontenac and Lennox & Addington Public Health, Lambton Public Health, Niagara Region Public Health, North Bay Parry Sound District Health Unit, Porcupine Health Unit, Peterborough Public Health, Public Health Sudbury & Districts, Thunder Bay District Health Unit, Timiskaming Health Unit
 - **Peer Group D** – Mainly rural

- Grey Bruce Health Unit, Haldimand-Norfolk Health Unit, Huron Perth Public Health, Leeds, Grenville & Lanark District Health Unit, Northwestern Health Unit, Renfrew County and District Health Unit, Simcoe Muskoka District Health Unit, Southwestern Public Health, Wellington-Dufferin-Guelph Public Health
- **Peer Group G & H** – Largest population centres with high population density
- City of Toronto, Peel Public Health, York Region Public Health

Data Analysis

SAS 8.2 Enterprise Guide was used to conduct all statistical analysis. PROC SURVEYFREQ commands were used to obtain prevalence estimates, 95% CIs, and CVs.

- Statistics Canada approved guidelines were used to report outcomes. Estimates based on fewer than 10 observations with the characteristic of interest or fewer than 20 observations in the domain were suppressed. Estimates with enough observations were then assessed for quality based on coefficient of variation (CV). Estimates with CVs less than 0.15 were reported without warnings. Estimates with CVs between 0.15 and 0.35 were reported with warnings to interpret with caution. Estimates with CVs over 0.35 were suppressed due to extreme sampling variability resulting in unacceptable data quality.
- To test for prevalence differences across sociodemographic variables, Rao-Scott Chi-Square were performed with differences considered significant at $p < 0.05$. When there was a significant difference detected by Rao-Scott Chi-Square, a post-hoc test was performed to test for differences between specific groups. For this, a PROC SURVEYLOGISTIC was performed with an adjusted Tukey-Kramer test, and differences between groups considered significant at $p < 0.05$.
- To test for prevalence differences between Ontario and sub-Ontario geographies, 95% CIs were compared. Where a sub-Ontario (e.g., PHU level) estimates had non-overlapping confidence intervals compared to the Ontario estimate, it was considered significantly different.
- All PROC SURVEY commands used with bootstrap replications ($n=1,000$) and survey weights provided by Statistics Canada.

References

1. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Examining the health and well-being of Ontario children 1-17 years using the Canadian Health Survey on Children and Youth: technical report. Toronto, ON: King's Printer for Ontario; 2023 Available from: https://www.publichealthontario.ca/-/media/Documents/H/2023/health-well-being-ontario-children-1-17-chscy.pdf?rev=5ab4999d166f4e28ab79c7cb56b07788&sc_lang=en.
2. Das JK, Salam RA, Thornburg KL, Prentice AM, Campisi S, Lassi ZS, et al. Nutrition in adolescents: physiology, metabolism, and nutritional needs. *Ann N Y Acad Sci*. 2017;1393(1):21-33. Available from: <https://doi.org/10.1111/nyas.13330>
3. Health Canada. Canada's food guide [Internet]. Ottawa, ON: Government of Canada; 2019 [cited 2024 Jun 6]. Available at: <https://food-guide.canada.ca/en/>
4. Dubois L, Bédard B, Goulet D, Prud'homme D, Tremblay RE, Boivin M. Eating behaviors, dietary patterns and weight status in emerging adulthood and longitudinal associations with eating behaviors in early childhood. *Int J Behav Nutr Phys Act*. 2022;19(1):139. Available from: <https://doi.org/10.1186/s12966-022-01376-z>
5. Robson SM, McCullough MB, Rex S, Munafò MR, Taylor G. Family meal frequency, diet, and family functioning: A systematic review with meta-analyses. *J Nutr Educ Behav*. 2020;52(5):553-64. Available from: <https://doi.org/10.1016/j.jneb.2019.12.012>
6. Goldfarb SS, Tarver WL, Locher JL, Preskitt J, Sen B. A systematic review of the association between family meals and adolescent risk outcomes. *J Adolesc*. 2015;44:134-49. Available from: <https://doi.org/10.1016/j.adolescence.2015.07.008>
7. Avery A, Anderson C, McCullough F. Associations between children's diet quality and watching television during meal or snack consumption: a systematic review. *Matern Child Nutr*. 2017;13(4):e12428. Available from: <https://doi.org/10.1111/mcn.12428>
8. Goffe L, Rushton S, White M, Adamson A, Adams J. Relationship between mean daily energy intake and frequency of consumption of out-of-home meals in the UK National Diet and Nutrition Survey. *Int J Behav Nutr Phys Act*. 2017;14(1):131. Available from: <https://doi.org/10.1186/s12966-017-0589-5>
9. Tugault-Lafleur CN, Black JL, Barr SI. Lunch-time food source is associated with school hour and school day diet quality among Canadian children. *J Hum Nutr Diet*. 2018;31(1):96-107. Available from: <https://doi.org/10.1111/jhn.12500>
10. Black JL, Billette J. Fast food intake in Canada: differences among Canadians with diverse demographic, socio-economic and lifestyle characteristics. *Can J Public Health*. 2015;106:e52-e58. Available from: <https://doi.org/10.17269/cjph.106.4658>
11. Farhangi MA, Nikniaz L, Khodarahmi M. Sugar-sweetened beverages increases the risk of hypertension among children and adolescence: a systematic review and dose–response meta-analysis. *J Transl Med*. 2020;18:1-18. Available from: <https://doi.org/10.1186/s12967-020-02511-9>
12. Keller A, Bucher Della Torre S. Sugar-sweetened beverages and obesity among children and adolescents: a review of systematic literature reviews. *Child Obes*. 2015;11(4):338-46. Available from: <https://doi.org/10.1089/chi.2014.0117>
13. Smolak L, Levine MP. Body image, disordered eating, and eating disorders: connections and disconnects. In: Smolak L, Levine MP, editors. *Wiley handbook of eating disorders*. Hoboken, NJ: John Wiley & Sons, Ltd.; 2015. p.1-10. Available from: <https://doi.org/10.1002/9781118574089.ch1>

14. Rodrigues PRM, Luiz RR, Monteiro LS, Ferreira MG, Gonçalves-Silva RMV, Pereira RA. Adolescents' unhealthy eating habits are associated with meal skipping. *Nutrition*. 2017;42:114-20.e1. Available from: <https://doi.org/10.1016/j.nut.2017.03.011>
15. Toulany A, Kurdyak P, Guttman A, Stukel TA, Fu L, Strauss R, et al. Acute care visits for eating disorders among children and adolescents after the onset of the COVID-19 pandemic. *J Adolesc Health*. 2022;70(1):42-7. Available from: <https://doi.org/10.1016/j.jadohealth.2021.09.025>
16. Toulany A, Saunders NR, Kurdyak P, Strauss R, Fu L, Joh-Carnella N, et al. Acute presentations of eating disorders among adolescents and adults before and during the COVID-19 pandemic in Ontario, Canada. *CMAJ*. 2023;195(38):E1291-E1299. Available from: <https://doi.org/10.1503/cmaj.221318>
17. Raine KD. Determinants of healthy eating in Canada: an overview and synthesis. *Can J Public Health*. 2005;96(Suppl 3):S8-S15. Available from: <https://doi.org/10.1007/BF03405195>
18. Anti-Racism Directorate. Data standards for the identification and monitoring of systemic racism [Internet]. Toronto, ON: King's Printer for Ontario; 2024 [cited 2024 Mar 19]. Available from: <https://www.ontario.ca/document/data-standards-identification-and-monitoring-systemic-racism>
19. Iwamoto DK, Liu WM. The impact of racial identity, ethnic identity, Asian values, and race-related stress on Asian Americans and Asian international college students' psychological well-being. *J Couns Psychol*. 2010;57(1):79-91. Available from: <https://doi.org/10.1037/a0017393>
20. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Collecting information on ethnic origin, race, income, household size, and language data: a resource for data collectors [Internet]. Toronto, ON: Queen's Printer for Ontario; 2021 [cited 2024 Jun 6]. Available from: <http://www.publichealthontario.ca/-/media/documents/ncov/he/2021/03/aag-race-ethnicity-income-language-data-collection.pdf?la=en>
21. Canadian Institute for Health Information (CIHI). Guidance on the use of standards for racebased and Indigenous identity data collection and health reporting in Canada [Internet]. Ottawa, ON: CIHI; 2022 [cited 2024 Jun 6]. Available from: <https://www.cihi.ca/sites/default/files/document/guidance-and-standards-for-race-based-and-indigenous-identity-data-en.pdf>
22. Pearce A, Dundas R, Whitehead M, Taylor-Robinson D. Pathways to inequalities in child health. *Arch Dis Child*. 2019;104(10):998-1003. Available from: <https://doi.org/10.1136/archdischild-2018-314808>
23. Russo RG, Northridge ME, Wu B, Yi SS. Characterizing sugar-sweetened beverage consumption for US children and adolescents by race/ethnicity. *J Racial Ethn Health Disparities*. 2020;7:1100-16. Available from: <https://doi.org/10.1007/s40615-020-00733-7>
24. Patte KA, Duncan MJ, Amores A, Belita E, Kocsis R, Riazi NA, et al. Inequities in dietary intake and eating behaviours among adolescents in Canada. *Can J Public Health*. 2024;115(3):507-20. Available from: <https://doi.org/10.17269/s41997-024-00854-0>

25. Monzani A, Ricotti R, Caputo M, Solito A, Archero F, Bellone S, et al. A systematic review of the association of skipping breakfast with weight and cardiometabolic risk factors in children and adolescents. What should we better investigate in the future? *Nutrients*. 2019;11(2):387. Available from: <https://doi.org/10.3390/nu11020387>
26. Ricotti R, Caputo M, Monzani A, Pigni S, Antoniotti V, Bellone S, et al. Breakfast skipping, weight, cardiometabolic risk, and nutrition quality in children and adolescents: A systematic review of randomized controlled and intervention longitudinal trials. *Nutrients*. 2021;13(10):3331. Available from: <https://doi.org/10.3390/nu13103331>
27. Lundqvist M, Vogel NE, Levin L. Effects of eating breakfast on children and adolescents: A systematic review of potentially relevant outcomes in economic evaluations. *Food Nutr Res*. 2019;63. Available from: <https://doi.org/10.29219/fnr.v63.1618>
28. Neumark-Sztainer D, Eisenberg ME, Fulkerson JA, Story M, Larson NI. Family meals and disordered eating in adolescents: longitudinal findings from project EAT. *Arch Pediatr Adolesc Med*. 2008;162(1):17-22. Available from: <https://doi.org/10.1001/archpediatrics.2007.9>
29. La Marra M, Caviglia G, Perrella R. Using smartphones when eating increases caloric intake in young people: an overview of the literature. *Front Psychol*. 2020;11:587886. Available from: <https://doi.org/10.3389/fpsyg.2020.587886>
30. Bleich SN, Vercammen KA. The negative impact of sugar-sweetened beverages on children's health: an update of the literature. *BMC Obes*. 2018;5:6. Available from: <https://doi.org/10.1186/s40608-017-0178-9>
31. Ooi JY, Wolfenden L, Sutherland R, Nathan N, Oldmeadow C, McLaughlin M, et al. A systematic review of the recent consumption levels of sugar-sweetened beverages in children and adolescents from the World Health Organization regions with high dietary-related burden of disease. *Asia Pac J Public Health*. 2022;34(1):11-24. Available from: <https://doi.org/10.1177/10105395211014642>
32. Schneider S, Schilling L, Osenbrügge N. Determinants of soft drink consumption among children and adolescents in developed countries—a systematic review. *Cent Eur J Public Health*. 2021;29(4):290-300. Available from: <https://doi.org/10.21101/cejph.a6755>
33. Shagar PS, Harris N, Boddy J, Donovan CL. The relationship between body image concerns and weight-related behaviours of adolescents and emerging adults: a systematic review. *Behav Change*. 2017;34(4):208-252. Available from: <https://doi.org/10.1017/bec.2018.3>
34. Wang Z, Byrne NM, Kenardy JA, Hills AP. Influences of ethnicity and socioeconomic status on the body dissatisfaction and eating behaviour of Australian children and adolescents. *Eat Behav*. 2005;6(1):23-33. Available from: <https://doi.org/10.1016/j.eatbeh.2004.05.001>
35. Boak A, Elton-Marshall T, Mann RE, Henderson JL, Hamilton HA. The mental health and well-being of Ontario students, 1991–2019: detailed findings from the Ontario student drug use and health survey (OSDUHS). Toronto, ON: Centre for Addiction and Mental Health 2020. Available from: <https://www.camh.ca/-/media/files/pdf--osduhs/osduhs-mh-report2019-pdf.pdf>
36. Statistics Canada. Health Region peer groups – working paper [archived]. Ottawa, ON: Government of Canada; 2018 [cited Mar 19, 2024]. Available from: <https://www150.statcan.gc.ca/n1/pub/82-622-x/82-622-x2018001-eng.htm>

Authors

Sarah Orr, PhD
Applied Public Health Science Specialist - Healthy Eating and Food Environments
Health Promotion, Chronic Disease, and Injury Prevention
Public Health Ontario

Rachel Laxer, PhD
Applied Public Health Science Specialist - School Health
Health Promotion, Chronic Disease, and Injury Prevention
Public Health Ontario

Contributors

Ashini Weerasinghe, MPH
Epidemiologist
Health Promotion, Chronic Disease and Injury Prevention
Public Health Ontario

Acknowledgements

This report was reviewed by and/or developed in consultation with:

Laura Abbasi, RD
Public Health Dietitian
HKPR District Health Unit

Claire Bilik, RD
Registered Dietitian
Middlesex-London Health Unit

Becky Blair, RD
Public Health Nutritionist
Simcoe Muskoka District Health Unit

Kirstin Boehme
Epidemiologist
Region of Peel – Public Health

Megan Brunner
Epidemiologist
Halton Region Public Health

Carrie Cartmill
Epidemiologist
Halton Region Public Health

Gabriella Christopher
Epidemiologist
Region of Peel – Public Health

Marcia Dawes, RD
Public Health Nutritionist,
Region of Peel – Public Health

Amy MacDonald, RD
Public Health Dietitian,
Huron Perth Public Health

Rachel Morgan, RD
Public Health Nutritionist
York Region

Karen Patte
Associate Professor
Brock University

Sielen Raoufi, RD
Nutrition Promotion Consultant
Toronto Public Health

Taheera Walji
Senior Program Specialist - Health Equity
Public Health Ontario

Emily Wright Advisor
Indigenous Strategy & Engagement
Public Health Ontario

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