



# TECHNICAL REPORT – WAVE 1 (2016)

FEBRUARY 2019



**UNIVERSITY OF WATERLOO**  
FACULTY OF APPLIED HEALTH SCIENCES  
School of Public Health and Health Systems



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## CONTACT

DAVID HAMMOND PHD  
ASSOCIATE PROFESSOR  
SCHOOL OF PUBLIC HEALTH & HEALTH SYSTEMS  
UNIVERSITY OF WATERLOO  
WATERLOO, ON CANADA  
N2L 3G1  
[DHAMMOND@UWATERLOO.CA](mailto:DHAMMOND@UWATERLOO.CA)  
[WWW.DAVIDHAMMOND.CA](http://WWW.DAVIDHAMMOND.CA)



**UNIVERSITY OF WATERLOO**  
FACULTY OF APPLIED HEALTH SCIENCES  
School of Public Health and Health Systems

## RESEARCH TEAM

### PRINCIPAL INVESTIGATOR

David Hammond, PhD, School of Public Health and Health Systems, University of Waterloo

### CO-INVESTIGATORS

Joel Dubin, PhD, Department of Statistics & Actuarial Science, School of Public Health and Health Systems, University of Waterloo

Guy Faulkner, PhD, School of Kinesiology, University of British Columbia

Erin Hobin, PhD, Public Health Ontario

Sara Kirk, PhD, School of Health & Human Performance, Dalhousie University

Sharon Kirkpatrick, PhD, RD, School of Public Health and Health Systems, University of Waterloo

Leia Minaker, PhD, School of Planning, University of Waterloo

Zachary Patterson, PhD, Department of Geography, Planning and Environment, Concordia University

Marie-Claude Paquette, DtP, PhD, Institut National de Santé Publique du Québec, Department of Nutrition, University of Montreal

Kim Raine, PhD, RD, FCAHS, School of Public Health, University of Alberta

Lana Vanderlee, PhD, Department of Nutritional Sciences, University of Toronto

Michael Widener, PhD, Department of Geography and Planning, University of Toronto – St. George

### PROJECT MANAGERS

Jessica Reid, MSc, Propel Centre for Population Health Impact, University of Waterloo

Christine White, MSc, School of Public Health and Health Systems, University of Waterloo

### SURVEY PROGRAMMING AND ADMINISTRATIVE SUPPORT

Afraaz Jadavji, BSc Candidate, School of Public Health and Health Systems, University of Waterloo

Meghan O'Neill, BSc, School of Public Health and Health Systems, University of Waterloo

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# INTRODUCTION

The primary objective of the current study is to examine eating patterns and trends among youth and young adults in Canada. This technical report describes the methods for a national cohort survey conducted with 3,000 participants aged 16-30 in October-December 2016. The survey will be repeated annually to monitor trends in dietary patterns over time.

## STUDY PROTOCOL

### OVERVIEW

Data were collected via two self-completed web-based surveys between October 18, 2016 and December 15, 2016. Participants completed a 'main survey' on dietary patterns, and two Automated Self-Administered 24-hour (ASA24) dietary assessments.

### SAMPLE AND RECRUITMENT

#### Sample Eligibility

Respondents were recruited from five Canadian cities: Vancouver (BC), Edmonton (AB), Toronto (ON), Montreal (QC), and Halifax (NS). Individuals were eligible to participate if they resided in one of the five cities, were 16-30 years old at the time of recruitment, had access to the internet, as well as a laptop, desktop computer or tablet, and had not previously enrolled in the study panel. Eligibility was established through a brief screener at the time of recruitment (see **Appendix A**).

#### Recruitment and Consent

Participants were recruited using in-person intercept recruitment from selected sites in each city, using a stratified sample of sites. For each city, a sampling frame of shopping centres and public areas was constructed, stratified by city region/neighbourhood and type of site (mall, transit hub, park, or other shopping district). Each city was stratified into 3-5 regions based on neighbourhood boundaries. Vancouver, Edmonton and Toronto were each stratified into 5 regions; Montreal was stratified into 4 regions; and Halifax was stratified into 3 regions. In each region, two sites were selected within each of the four site type strata where feasible; however, some sites were replaced with alternative locations during the recruitment process if the pre-selected location proved to have little pedestrian traffic or if safety concerns arose. See **Appendix B** for maps displaying the region boundaries within each city.

At each site, potential respondents were selected by trained University of Waterloo research assistants using systematic sampling and a standard intercept technique whereby every person who passed a designated landmark was approached (when a research assistant was available) and invited to participate. Individuals were selected from groups by first inviting the closest person, and subsequently inviting the next person to the left. All

individuals were approached unless they were clearly under 16 or over 30 years of age, or the research assistant knew they had already been recruited. Recruitment was conducted on all days of the week, simultaneously in the five cities, to avoid any time-related effects. Specifically, recruitment was conducted on weekdays between 10:00am-2:00pm, and 2:30pm-6:30pm, and on weekends between 9:00am-1:00pm and 1:30pm-5:30pm. Recruitment was conducted in English in all cities, as well as French in Montreal.

A short introductory script was used to introduce the survey, invite individuals to participate, and ensure that they met eligibility criteria. Individuals were invited to enroll in a participant panel for an online study on food choices run by the University of Waterloo, and were informed that the study would involve completing two online surveys on their own time: one the next day (~1 hour), and one in a week (~30 minutes). Respondents were informed they would receive \$2 for enrolling in the study, and would be sent a \$20 Interac e-transfer after completing both surveys. Eligibility was assessed through a brief screener (see **Appendix A**), with responses recorded on an iPad using SurveyGizmo software. Eligible respondents were asked to provide their email address.

Research assistants tracked the number of individuals who refused to enroll in the study panel, or did not acknowledge the invitation using a paper tally system. Individuals who were interested in participating but did not meet eligibility criteria were recorded through the screener on the iPad.

Recruited respondents were sent an email invitation with a personalized link to the survey using SurveyGizmo software. Participants were sent the initial survey invitation the day following recruitment, as well as a maximum of four email reminders (sent 2, 4, 7, and 10 days after the initial invitation).

Upon clicking the link in the invitation, respondents were directed to the main survey, and were reminded that they should access the survey from a laptop, desktop computer or tablet. Respondents were discouraged from attempting to complete the survey via a smartphone, but were not restricted from doing so. Respondents were asked to reconfirm where they were recruited for the study (one of the five study cities [eligible], or “none of the above/not personally recruited” [ineligible]), and their age. Respondents reconfirmed as eligible (recruited in a study city, and age 16-30) were provided with information about the study and asked to give consent for participation.

As shown in **Appendix C**, 80% of those approached refused or did not acknowledge the invitation to enroll in the study. Overall, 6,720 respondents were recruited and sent invitations to the main survey.

### **Response Rates: Main Survey**

In total, 6,720 eligible respondents enrolled in the study panel and were sent an email invitation to the main survey. Of these, 3,234 accessed the survey link for a cooperation rate of 48.1%.<sup>1</sup>

The remaining 3,486 respondents (51.9%) may not have started the main survey for a number of possible reasons, including disinterest, or failure to receive the email due to a spam filter or incorrect email address. For

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<sup>1</sup> American Association for Public Opinion Research (AAPOR). Cooperation Rate #2. Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys. Revised 2016. Available online: [http://www.aapor.org/AAPOR\\_Main/media/publications/Standard-Definitions20169theditionfinal.pdf](http://www.aapor.org/AAPOR_Main/media/publications/Standard-Definitions20169theditionfinal.pdf)

example, SurveyGizmo identified that 313 respondents (9% of those who did not start the survey) did not receive the invitation email because it was “bounced” by the email server.

**Table 1** shows outcomes for respondents sent the email invitation, in terms of completion of the main survey. Among the 3,234 respondents who accessed the main survey link, 86.4% completed the survey; 13.6% partially completed the survey.

**Table 1: Main Survey Completion Outcomes**

	<b>%</b>	<b>n</b>
Completed	41.6%	2,795
Partially completed	6.5%	439
Not started (participant did not access link)	51.9%	3,486
<b>Total</b>		<b>6,720</b>

Participants were discouraged from attempting to complete the main survey via a smartphone, but were not restricted from doing so. SurveyGizmo data estimates that 583 individuals completed the survey using a mobile browser (n=490 in the analytic sample). See page 8 for further discussion about smartphone use.

Respondents were excluded from the analytic sample if they terminated the survey prior to the 7-day food source frequency questions (n=191).

## **DATA INTEGRITY CHECK**

As a data integrity check, respondents were asked midway through the main survey to select the current month from a list. The month selected by the respondent was compared to the month when the survey was submitted. Respondents with month discrepancies were excluded from the analytic sample, unless the selected month was within a few days of the date the survey was submitted (e.g., selected November but submitted on October 30<sup>th</sup> or 31<sup>st</sup>), or the selected month was the month preceding the submitted date (e.g., selected October but submitted in November) as the respondent may have paused the survey for a few weeks and then returned to submit it. Overall, 41 respondents were excluded from the analytic sample due to discrepancies with the month selected. Two additional respondents were excluded from the analytic sample due to other data quality concerns (i.e., unusual/suspicious responses for several questions).

The final analytic sample included 3,000 respondents.

## **LANGUAGE**

Respondents in Montreal were asked whether they would prefer to receive communication about the study in French or English; survey invitation emails were sent in their preferred language. Nearly three-quarters (72%; n=406) of respondents in Montreal indicated they would prefer French communication during recruitment. Email invitations were sent in English or French according to the language preference expressed.

After clicking the survey link in the email, all participants were, by default, shown the survey in English, but they could click a button at the top of the screen to change the language to French. Overall, 6.1% of participants

completed the survey in French (n=183), including a few participants (n=5) from Halifax, Edmonton and Vancouver. Less than half (42%) of the respondents in Montreal who initially indicated they would prefer to receive French communication actually changed the survey language to French.

## **PARTICIPANT COMPENSATION**

Monetary incentives have been shown to increase response rates and to decrease response bias among subgroups commonly under-represented in surveys, including disadvantaged subgroups. All study panel members were given \$2.00 at the time of face-to-face recruitment. Upon completion of both surveys, respondents were offered a \$20 Interac e-transfer, or alternatively, a \$20 e-giftcard to either Amazon.ca, Chapters/Indigo, Cineplex, or Starbucks.

## **ETHICS CLEARANCE**

The study was reviewed by and received ethics clearance through a University of Waterloo Research Ethics Committee (ORE# 21631).

## **STUDY CONTENT**

Participants were asked to complete two online surveys: a main survey on dietary patterns, and two Automated Self-Administered 24-hour (ASA24) dietary assessments.

### **MAIN SURVEY**

Participants were sent a link to the main survey the day after they were recruited. Participants were also sent a maximum of four email reminders (sent 2, 4, 7, and 10 days after the initial invitation).

The main survey included questions about dietary behaviours, including food shopping patterns, eating outside of the home, meal planning and preparation, weight loss and diet monitoring behaviours, and food security. The survey also included measures of nutrition knowledge, perceived health, perceived diet quality, perceived availability of healthy food, perceived availability and use of nutrition information in restaurants, and attitudes and knowledge related to food preparation skills, as well as exposure to or participation in specific interventions or policies (e.g., school nutrition programs, use of nutrition facts tables). Socio-demographic variables (e.g., age, weight, education) and other health behaviours were also assessed, including sleep patterns, physical activity, smoking and alcohol use.



## **ASA24 DIETARY RECALL**

At the end of the main survey, participants were redirected to a US National Institutes of Health website to complete a 24-hour dietary recall. The dietary recall data were collected and analyzed using the Automated Self-Administered 24-hour Recall (ASA24®) system, version ASA24-Canada-2016, developed by the National Cancer Institute<sup>2</sup>. The intake frame was from midnight to midnight. Respondents could complete reporting in multiple sessions, but were to finish within 24 hours. Modules for 'location', 'ate with' and 'supplements' were turned on in the ASA24 system.

Participants were sent a link to a second ASA24 dietary recall 4 to 10 days later. The sample was divided evenly across the seven day period, and invitations were sent according to this assignment. A randomized number sequence of 4-10 was generated from [www.random.org](http://www.random.org) (7, 9, 10, 8, 4, 6, 5), and then assigned repeatedly as a block down the list of eligible respondents (with list sorted by the date/time the first ASA24 dietary recall was submitted). Participants were also sent a maximum of four email reminders to complete the second ASA24 dietary recall (sent 2, 4, 7, and 10 days after the initial invitation).

## **FOLLOW-UP SURVEY**

After the second ASA24 dietary recall was submitted, participants were asked to confirm whether they would like to receive their \$20 remuneration as an Interac e-transfer; if they had concerns about receiving an e-transfer, they were given the alternative to receive an e-giftcard to either Amazon.ca, Chapters/Indigo, Cineplex, or Starbucks. The participants were asked for back-up contact information that could be used to re-contact participants for the next survey wave, and a few questions to determine whether they would be eligible and interested in being contacted about a related study about food and travel patterns.

## **QUESTIONNAIRE DEVELOPMENT**

The majority of questionnaire items were drawn or adapted from national surveys or selected based on previous research. Cognitive interviewing was also conducted with 50 young adults in small groups to evaluate and improve several new items including the food source and beverage frequency measures. The questionnaire was translated to French by Communications Parisella, etc. Inc (Montreal, QC).

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<sup>2</sup> National Cancer Institute. Automated Self-Administered 24-Hour (ASA24®) Dietary Assessment Tool. Available at: <https://epi.grants.cancer.gov/asa24/>

## SAMPLE INFORMATION

### PARTICIPATION

As noted above, the final main survey sample included 3,000 respondents. **Table 2** shows the proportion of respondents from each of the five cities.

**Table 2: Proportion of Respondents by City**

City	Unweighted % (n)	Weighted % (n)
Edmonton	17.2% (516)	16.5% (494)
Halifax	19.4% (582)	17.4% (523)
Montreal	18.7% (562)	19.9% (596)
Toronto	25.5% (765)	24.6% (739)
Vancouver	19.2% (575)	21.6% (648)
<b>Total (n)</b>	3,000	3,000

### SAMPLE CHARACTERISTICS

The demographic characteristics of the sample are shown in **Table 3**. An analysis was conducted to compare the Canada Food Study (CFS) study sample with national estimates for the comparable age groups from the 2014 Canadian Community Health Survey (CCHS)<sup>3</sup> and the 2013 Canadian Tobacco, Alcohol, and Drugs Survey (CTADS)<sup>4</sup>. Details of the analysis are provided in **Appendix D**. Briefly, the CFS study sample was more highly educated (more than high school, CFS=91% vs. CCHS=70%), and more likely to be currently be a student (CFS=52% vs. CCHS=29%). CFS and CCHS respondents reported very similar levels of overweight and obesity (CFS=32% vs. CCHS=36%) and perceived weight status (CFS=26% “overweight” vs. CCHS=26%), but lower levels of food security (CFS=65% vs. CCHS=73%). The prevalence of other risk behaviours was similar, but slightly higher among CFS respondents, including for current smoking (CFS=17% vs. CCHS=15%) and ever use of cannabis (CFS=55%, CCHS=48%). As noted below, the age and sex distribution for the CFS sample is weighted according to national distributions.

### SURVEY WEIGHTS

Post-stratification sample weights were constructed based on 2016 population estimates from Statistics Canada’s postcensal CANSIM tables.<sup>5</sup> For each age by sex group, weights were calculated as the population proportion divided by the sample proportion ensuring the weighted sample aligns with known population proportions. Weights were applied to the full dataset of 3,000 participants.

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<sup>3</sup> Statistics Canada. Canadian Community Health Survey – Annual Component: Detailed Information for 2014. Available at: <http://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&id=164081>

<sup>4</sup> Health Canada. Canadian Tobacco Alcohol and Drugs (CTADS): 2013 Summary. Available at: <https://www.canada.ca/en/health-canada/services/canadian-tobacco-alcohol-drugs-survey/2013-summary.html>

<sup>5</sup> Statistics Canada. Table 051-0001 - Estimates of population, by age group and sex for July 1, Canada, provinces and territories, annual (persons unless otherwise noted), 2016. CANSIM (database). Accessed April 27, 2017. Available at: <http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=0510001&p2=17>

**Table 3. Sample Demographics** n=3000

Characteristic	Unweighted % (n)	Weighted % (n)
<b>Survey Mode</b>		
Smartphone	15.3% (460)	14.4% (432)
Other Device	84.7% (2540)	85.6% (2568)
<b>Sex</b>		
Male	39.5% (1184)	50.9% (1527)
Female	60.5% (1816)	49.1% (1473)
<b>Gender</b>		
Man	39.2% (1177)	50.5% (1516)
Woman	59.4% (1782)	48.1% (1444)
Trans male / trans man	0.2% (7)	0.1% (3)
Trans female / trans woman	0.2% (5)	0.2% (7)
Gender queer / gender non-confirming	0.6% (18)	0.6% (17)
Different identity	0.1% (2)	0.1% (2)
Not stated	0.3% (9)	0.4% (11)
<b>Age (mean; SD)</b>	21.7 years (SD=3.8)	23.3 years (SD=4.2)
<b>Age Group</b>		
16 to 18	24.4% (731)	17.1% (514)
19 to 21	29.2% (876)	19.8% (594)
22 to 25	27.4% (821)	28.1% (843)
26 to 30	19.1% (572)	34.9% (1048)
<b>Race/Ethnicity (6 categories)</b>		
White only	44.5% (1335)	45.3% (1360)
Chinese only	8.1% (244)	7.9% (237)
South Asian only	6.4% (191)	6.6% (198)
Black only	5.5% (166)	5.3% (160)
Aboriginal inclusive	4.0% (120)	3.8% (113)
Mixed/other/not stated/missing	31.5% (944)	31.0% (931)
<b>Race/Ethnicity*</b>		
White	52.1% (1563)	52.1% (1563)
Chinese	10.4% (313)	9.8% (293)
South Asian	7.3% (218)	7.4% (222)
Black	7.7% (231)	7.3% (218)
Filipino	4.0% (120)	3.6% (109)
Latin American	4.0% (120)	4.4% (131)
Southeast Asian	2.6% (77)	2.3% (70)
Arab	4.3% (130)	4.2% (126)
West Asian	1.1% (34)	1.1% (32)
Japanese	0.8% (24)	0.7% (22)
Korean	1.2% (37)	1.4% (43)
Other	7.6% (229)	7.7% (231)
Don't Know	0.4% (11)	0.4% (12)
Refused	0.8% (25)	0.9% (26)
<i>*Respondents could select multiple responses (percent≠100).</i>		
<b>Aboriginal Person</b>		
Yes	4.0% (120)	3.8% (113)
No	86.6% (2598)	86.6% (2598)
Not stated/missing	9.3% (282)	9.6% (289)
<b>Born in Canada</b>		
Yes	61.4% (1843)	59.1% (1774)
No	30.6% (918)	32.8% (984)
Not stated/missing	8.0% (239)	8.15% (242)
<b>Student Status</b>		
No	29.6% (887)	40.1% (1204)
Yes, full-time	63.7% (1912)	52.8% (1583)
Yes, part-time	6.5% (194)	6.9% (208)
Not stated	0.3% (7)	0.1% (4)

<b>Current Education (enrolled)</b>		
High school	17.8% (374)	18.1% (323)
CEGEP	7.1% (150)	5.8% (103)
College or trade school	18.0% (379)	19.4% (347)
University	56.8% (1197)	56.5% (1012)
Not stated	0.2% (6)	0.3% (5)
<b>Educational Attainment</b>		
High school or less	18.7% (562)	17.3% (518)
CEGEP/trade school/college (partial or complete)	22.6% (677)	22.1% (664)
University (partial or complete)	56.4% (1692)	57.7% (1730)
Not stated/missing	2.3% (69)	2.9% (88)
<b>Children (incl. step-children or adopted)</b>		
Yes	3.0% (91)	4.7% (140)
No	96.9% (2906)	95.2% (2857)
Don't Know	0.1% (3)	0.1% (3)
<b>Children in Household (incl. step-children or adopted)</b>		
Yes	79.1% (72)	81.0% (114)
No	15.4% (14)	14.6% (20)
Not Stated	5.5% (5)	4.4% (6)
<b>Father's educational attainment</b>		
Attended high school (or less)	10.6% (316)	11.1% (334)
Graduated high school	13.8% (414)	13.9% (417)
Attended college	5.7% (171)	5.8% (173)
Graduated college	15.4% (461)	15.4% (462)
Attended university	3.9% (118)	3.9% (118)
Graduated university	37.0% (1111)	36.2% (1087)
Not stated / missing	13.6% (409)	13.7% (408)
<b>Mother's educational attainment</b>		
Attended high school (or less)	10.4% (314)	10.4% (312)
Graduated high school	15.5% (464)	16.1% (482)
Attended college	6.9% (208)	7.5% (224)
Graduated college	17.1% (512)	17.0% (511)
Attended university	4.6% (138)	4.3% (128)
Graduated university	34.9% (1048)	34.1% (1023)
Not stated / missing	10.5% (316)	10.7% (320)
<b>BMI category</b>		
Underweight	6.9% (206)	5.8% (174)
Healthy weight	50.8% (1524)	50.8% (1523)
Overweight	15.7% (471)	17.3% (520)
Obese	7.8% (235)	8.0% (240)
Not stated	18.8% (564)	18.1% (544)
<b>Literacy</b>		
High likelihood of limited literacy	13.1% (394)	13.1% (394)
Possibility of limited literacy	19.7% (591)	18.3% (549)
Adequate literacy	59.7% (1792)	60.9% (1826)
Missing	7.4% (223)	7.7% (231)

## USE OF SMARTPHONES TO COMPLETE THE SURVEY

Completion of the survey on a smartphone may have implications for how respondents interact with the survey due to the device screen size. Sample characteristics by survey mode are shown in **Table 4**.

**Table 4: Sample Demographics by Survey Mode (weighted)**

Characteristic	Total Sample (n=3000) % (n)	Smartphone (n=432) % (n)	Other device (n=2568) % (n)
<b>Sex</b>			
Male	50.9% (1527)	48.2% (208)	51.4% (1319)
Female	49.1% (1473)	51.8% (224)	48.6% (1249)
<b>Age Group</b>			
16 to 18	17.1% (514)	25.5% (110)	15.7% (404)
19 to 21	19.8% (594)	20.3% (88)	19.7% (506)
22 to 25	28.1% (843)	24.3% (105)	28.7% (738)
26 to 30	34.9% (1048)	29.9% (129)	35.8% (919)
<b>Race/Ethnicity</b>			
White only	45.3% (1360)	37.5% (162)	46.7% (1198)
Chinese only	7.9% (237)	5.7% (25)	8.3% (212)
South Asian only	6.6% (198)	6.4% (28)	6.6% (170)
Black only	5.3% (160)	7.9% (34)	4.9% (126)
Aboriginal inclusive	3.8% (113)	3.7% (16)	3.8% (97)
Mixed/other/not stated/missing	31.0% (931)	38.8% (168)	29.7% (764)
<b>BMI category</b>			
Underweight	5.8% (174)	6.5% (28)	5.7% (146)
Healthy weight	50.8% (1523)	44.1% (191)	51.9% (1332)
Overweight	17.3% (520)	14.7% (63)	17.8% (456)
Obese	8.0% (240)	7.8% (34)	8.0% (207)
Not stated	18.1% (544)	27.0% (117)	16.6% (427)

## ASA24 DIETARY RECALL SAMPLE

Respondents were affected by technical difficulties with the ASA24-Canada-2016 system. Some respondents were unable to start their dietary recalls due to an issue with the redirect from the main survey to the ASA24 system. Other respondents were able to start recalls, but experienced substantial lags in response time from the system. Both issues resulted in respondents quitting or otherwise being unable to continue with the recalls.

ASA24 recalls were excluded from the dataset for any of the following three reasons: (1) if the respondent had only 'incomplete' record(s); (2) if the respondent had multiple 'complete' records per recall (as it was not possible to determine which record was 'correct'); and, (3) if the respondent had extremely low energy intake values ( $\leq 500$  kcal) and indicated that their food consumption was "usual" or either "much more than usual", or had extremely high energy intake values ( $\geq 5000$  kcal) and indicated that their food consumption was "usual" or "much less than usual". Respondents who did not start the ASA24 recall (by choice or because of technical difficulties) are also missing ASA24 recall data.

Among the 3,000 respondents in the analytic sample from the main survey, 2,073 respondents (69.1%) successfully completed their first dietary recall (i.e., immediately after the main survey). A total of 1,972 respondents (65.7%) successfully completed their second dietary recall (i.e., approximately 4 to 10 days later). Overall, 1,702 respondents (56.7%) successfully completed both dietary recalls (371 respondents successfully completed only the first dietary recall; 270 respondents successfully completed only the second dietary recall).

## APPENDIX A: RECRUITMENT SCRIPT

English Script	French Script (Offered in Montreal Only)
Research Assistant ID: _____	Research Assistant ID: _____
City: <ol style="list-style-type: none"> <li>1. Edmonton</li> <li>2. Halifax</li> <li>3. Montreal</li> <li>4. Toronto</li> <li>5. Vancouver</li> </ol>	City: <ol style="list-style-type: none"> <li>1. Edmonton</li> <li>2. Halifax</li> <li>3. Montreal</li> <li>4. Toronto</li> <li>5. Vancouver</li> </ol>
Type of Site: <ol style="list-style-type: none"> <li>1. Mall</li> <li>2. Park</li> <li>3. Transit Hub</li> <li>4. Other</li> </ol>	Type of Site: <ol style="list-style-type: none"> <li>1. Mall</li> <li>2. Park</li> <li>3. Transit Hub</li> <li>4. Other</li> </ol>
<p>Are you interested in a short survey for \$2?</p> <p>I'm from the University of Waterloo. We are doing online surveys on food choices.</p> <p>I will give you \$2 right now to add your name to our email list. We'll email you with a link to two online surveys to do on your own time – one today, and one in about a week. After you complete the two surveys you will receive an <i>Interac</i>® e-transfer for \$20.</p> <p>It will take 2 minutes now, about 1 hour to complete the first survey, and 30 minutes to complete the second survey.</p> <p>Are you interested?</p> <p><i>[If Yes → Great, thanks. I have a few quick questions for you.]</i></p> <p><i>[If No → Okay – have a nice day.]</i></p>	<p>Êtes-vous intéressé à un court sondage pour 2 \$?</p> <p>Je suis de l'Université de Waterloo. Nous faisons des enquêtes en ligne sur les choix alimentaires. Si vous nous autorisez à inscrire votre nom sur notre liste d'envoi, nous vous donnerons 2 \$ sur-le-champ. Nous vous enverrons des courriels contenant les liens permettant d'accéder à deux enquêtes auxquelles vous devez répondre dans vos temps libres. Le premier vous parviendra aujourd'hui, et le second, dans une semaine. Une fois que vous aurez répondu aux deux enquêtes, vous recevrez un virement Interac de 20 \$.</p> <p>Deux minutes seront requises maintenant, environ une heure sera nécessaire pour répondre à la première enquête, puis vous devrez consacrer 30 minutes à la deuxième enquête.</p> <p>Cette proposition vous intéresse-t-elle?</p> <p><i>[Si oui → Formidable, merci. J'ai quelques courtes questions à vous poser.]</i></p> <p><i>[Si non → D'accord, passez une belle journée.]</i></p>
<p><i>[Vancouver]:</i> Do you live in Vancouver, Burnaby, Richmond, North or West Vancouver?</p> <p><i>[Edmonton]:</i> Do you live within in the City of Edmonton?</p> <p><i>[Toronto]:</i> Do you live within in the City of Toronto?</p> <p><i>[Halifax]:</i> Do you live within Halifax or Dartmouth?</p> <p><i>[Montreal]:</i> Do you live on the island of Montreal?</p> <p><i>[If no → Sorry, you are not eligible to participate, but thank you for your time.]</i></p>	<p><i>[Montreal]:</i> Vivez-vous sur l'île de Montréal?</p> <p><i>[Si non → Je regrette que vous n'y soyez pas admissible, mais je vous remercie du temps que vous m'avez accordé]</i></p>

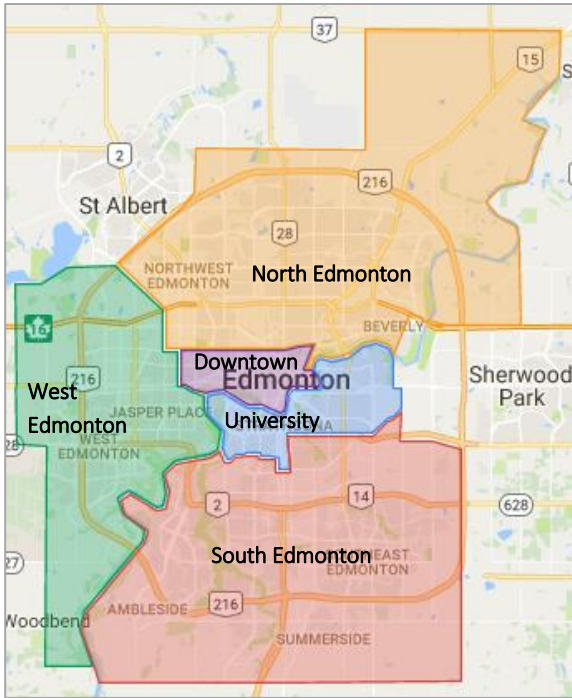
<p>Can you please tell me your age?</p> <p>_____</p> <p><i>[If under 16 or over 30 → Sorry, you are not eligible to participate, but thank you for your time.]</i></p> <p><i>[If Refuse → Sorry, you must provide your age in order to join our survey panel. Thank you for your time.]</i></p>	<p>Pouvez-vous m'indiquer votre âge?</p> <p>_____</p> <p><i>[Si la personne est âgée de moins de 16 ans ou de plus de 30 ans → Je regrette que vous n'y soyez pas admissible, mais je vous remercie du temps que vous m'avez accordé.]</i></p> <p><i>[Si la personne refuse → Je regrette, je dois connaître votre âge pour que vous puissiez faire partie du groupe qui participera à l'enquête. Merci de votre temps.]</i></p>
<p>Do you have access to the internet to complete this survey?</p> <ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol> <p><i>[If No → Sorry, you are not eligible to participate, but thank you for your time]</i></p>	<p>Vous devez accéder à Internet pour répondre à cette enquête, est-ce le cas?</p> <ol style="list-style-type: none"> <li>1. Oui</li> <li>2. Non</li> </ol> <p><i>[Si non → Je regrette que vous n'y soyez pas admissible, mais je vous remercie du temps que vous m'avez accordé.]</i></p>
<p>You cannot use a smartphone to complete the survey. Do you have access to a laptop, desktop computer, or tablet?</p> <ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol> <p><i>[If No → Sorry, you are not eligible to participate, but thank you for your time]</i></p>	<p>Il n'est pas possible d'utiliser un téléphone intelligent pour répondre à l'enquête. Avez-vous accès à un portable, à un ordinateur de bureau ou à une tablette?</p> <ol style="list-style-type: none"> <li>1. Oui</li> <li>2. Non</li> </ol> <p><i>[Si non → Je regrette que vous n'y soyez pas admissible, mais je vous remercie du temps que vous m'avez accordé.]</i></p>
<p>Have you already signed up for the study?</p> <ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol> <p><i>[If Yes → Sorry, you can only sign up once.]</i></p>	<p>Avez-vous déjà procédé à votre inscription à l'étude?</p> <ol style="list-style-type: none"> <li>1. Oui</li> <li>2. Non</li> </ol> <p><i>[Si oui → Je regrette, vous ne pouvez vous y inscrire qu'une fois.]</i></p>
<p>Select gender: <i>[Do not ask participant]</i></p> <ol style="list-style-type: none"> <li>1. Male</li> <li>2. Female</li> </ol>	<p><i>[Ne pas poser la question.]</i></p> <ol style="list-style-type: none"> <li>1. Homme</li> <li>2. Femme</li> </ol>
<p>Great. The link for the online survey includes all of the study details, but I want to assure you that the survey is not-for-profit research and completely confidential: we will never share your information with any companies or marketing firms.</p>	<p>Formidable. Le lien qui permet de participer à l'enquête en ligne donne aussi accès à toutes les précisions au sujet de l'étude. Mais je dois vous assurer que l'enquête est destinée à une recherche sans but lucratif totalement confidentielle: jamais nous ne communiquerons vos renseignements personnels à une entreprise ou à un cabinet de marketing quelconque.</p>
<p>What email address should we send the survey links to? We won't send you any junk mail or share your information in any way: we will only send you links to do the surveys.</p> <p><i>[Enter email address]</i></p> <p><i>[If Refuse → Sorry, you must provide your email address in order to join our survey panel. Thank you for your time]</i></p>	<p>À quelle adresse électronique devons-nous envoyer les liens vers l'enquête? Nous ne vous enverrons aucun pourriel, et vos renseignements personnels resteront confidentiels : nous ne vous enverrons que les liens pour participer aux enquêtes.</p> <p><i>[Enter email address]</i></p>

	<i>[Si la personne refuse → Je regrette, je dois connaître votre adresse électronique pour que vous puissiez faire partie du groupe qui participera à l'enquête. Merci de votre temps.]</i>
Thanks. Please be sure to enter this same email address when you complete the surveys! Once you've finished the surveys we'll email you the \$20 as an <i>Interac</i> ® e-transfer within 4 business days.	Merci. Souvenez-vous de taper cette même adresse électronique au moment de répondre à l'enquête! Une fois que vous aurez répondu aux enquêtes, nous vous enverrons un virement <i>Interac</i> de 20 \$ au cours des 4 jours ouvrables suivants.
<i>[Montreal ONLY]</i>  Would you prefer to hear from us in French or English?  1. French 2. English	<i>[Montreal ONLY]</i>  Préférez-vous que nous communiquions avec vous en français ou en anglais?  1. Français 2. Anglais
Here is your \$2 for signing up to our list. <i>[give participant \$2, along with paper flyer]</i>  Could you please initial here to indicate you've received the \$2? <i>[Use remuneration form]</i>  Thanks. You should receive an email with your survey link within 24 hours.  Do you have any questions? Thanks for your help!	Voici la somme de 2 \$ en échange de votre inscription sur notre liste. <i>[give participant \$2, along with paper flyer]</i>  Pourriez-vous inscrire vos initiales ici pour montrer que vous avez reçu les 2 \$. <i>[Use remuneration form]</i>  Merci. Vous devriez recevoir un courriel avec votre lien vers le sondage au cours des 24 prochaines heures. Avez-vous des questions?  Nous vous remercions de votre aide!
<i>[Do not read to participant]</i> Do you have any concerns about the participant or are there any changes that need to be made to the data entered?  1. Yes -> Please specify: _____ 2. No	<i>[Do not read to participant]</i> Do you have any concerns about the participant or are there any changes that need to be made to the data entered?  1. Yes -> Please specify: _____ 2. No
Have a nice day.	Passez une belle journée!

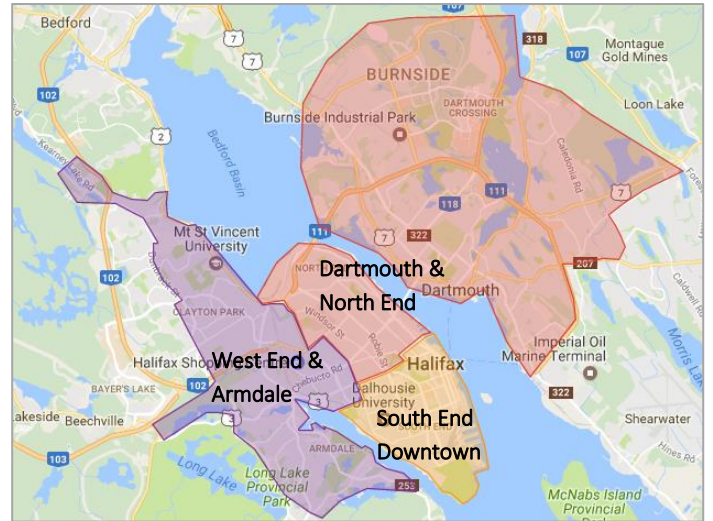


# APPENDIX B: RECRUITMENT REGIONS

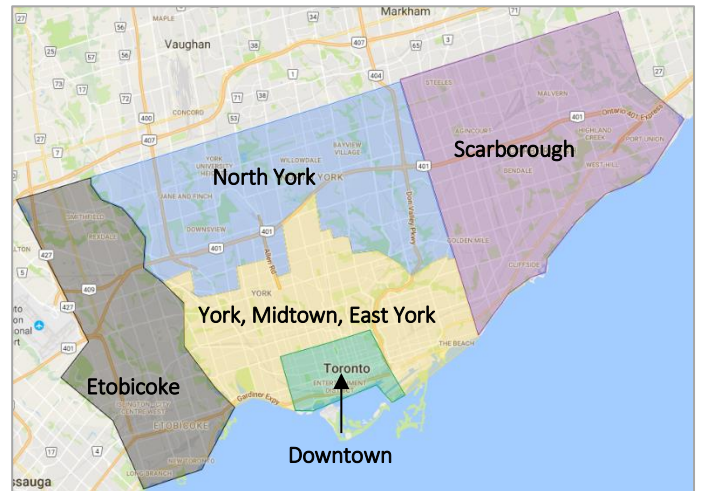
## Edmonton



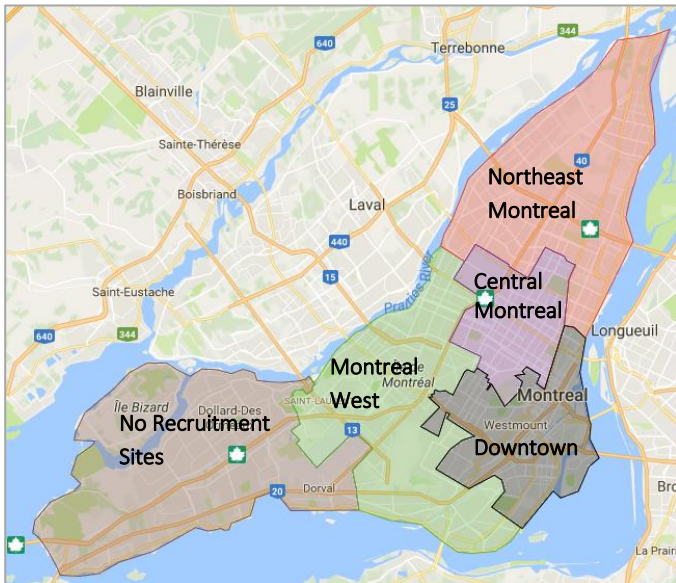
## Halifax



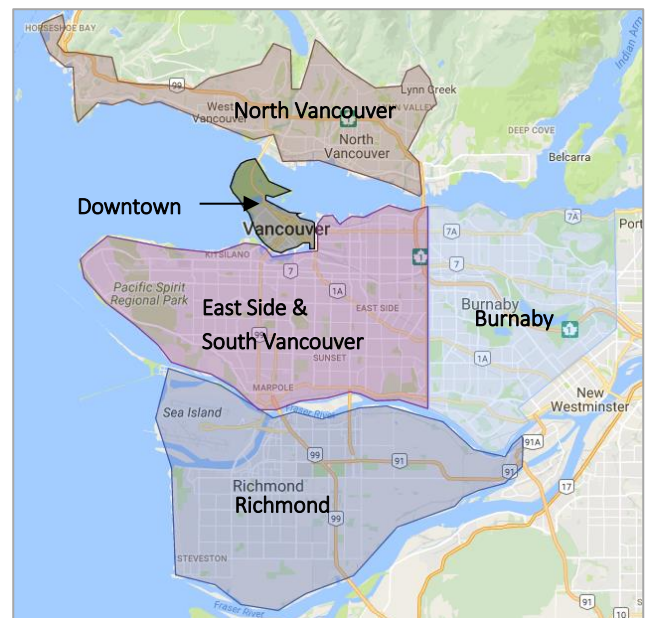
## Toronto



## Montreal



## Vancouver



## APPENDIX C: RECRUITMENT OUTCOMES

### Recruitment Outcomes for Approached Persons

	<b>% of total</b>	<b>n</b>
Refusals (unknown eligibility)	80.3%	39,422
Recruited – Invite sent (eligible; full email address provided)	13.7%	6,720
Ineligible or excluded (no valid email; concern re: language, age, mental health, etc.)	5.8%	2,833
Incomplete eligibility information (due to refusal, improperly recorded ineligible response, or RA error)	0.2%	90
<b>Total</b>		<b>49,065</b>

## APPENDIX D: SAMPLE COMPARISON

The study sample was compared with national estimates from the 2014 Canadian Community Health Survey (CCHS)<sup>6</sup>, and the 2013 Canadian Tobacco, Alcohol, and Drugs Survey (CTADS)<sup>7</sup>.

Measure	Canada Food Study (CFS) Findings	National Estimates
<b>Highest level of education</b>	<p>2016 CFS, 20-29 year olds Education Level (S1A_educ_level_DV)</p> <p>High school or less: 8.8% CEGEP/Trade/college/university (partial or complete): 91.2%</p>	<p>2014 CCHS, 20-29 year olds Highest level of education – respondent 4 levels (EDUDR04)</p> <p>Sec. School or less: 30.2% Post-Sec Ed (partial or complete): 69.8%</p>
<b>Current student</b>	<p>2016 CFS, 20-29 year olds Are you currently a student? (S1A_student)</p> <p>Yes: 52.2% No: 47.8%</p>	<p>2014 CCHS, 20-29 year olds Are you currently attending a school, college or university? (SDC_8)</p> <p>Yes: 29.0% No: 71.0%</p>
<b>BMI Category</b>	<p>2016 CFS, 18-29 year olds BMI Class (S1A_BMI_class_DV)</p> <p>Underweight: 6.6% Normal weight: 61.8% Overweight: 21.8% Obese: 9.7%</p> <p><u>Percent with Missing:</u> Underweight: 5.5% Normal weight: 51.3% Overweight: 18.1% Obese: 8.1% Missing: 17.0%</p>	<p>2014 CCHS, 18-29 year olds BMI Class (HWTGISW)</p> <p>Underweight: 4.9% Normal weight: 59.5% Overweight: 22.8% Obese: 12.8%</p> <p><u>Percent with Not Stated:</u> Underweight: 4.6% Normal weight: 55.8% Overweight: 21.4% Obese: 12.0% Not stated: 6.2%</p>
<b>Perceived weight status</b>	<p>2016 CFS, 18-29 year olds Do you consider yourself... (S1A_wt_perceive)</p> <p>Overweight: 25.6% Underweight: 9.7% Just about right: 64.7 %</p>	<p>2014 CCHS, 18-29 year olds Do you consider yourself... (HWT_4)</p> <p>Overweight: 26.2% Underweight: 6.9% Just about right: 66.9%</p>

<sup>6</sup> Statistics Canada. Canadian Community Health Survey – Annual Component: Detailed Information for 2014. Available at: <http://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&id=164081>

<sup>7</sup> Health Canada. Canadian Tobacco Alcohol and Drugs (CTADS): 2013 Summary. Available at: <https://www.canada.ca/en/health-canada/services/canadian-tobacco-alcohol-drugs-survey/2013-summary.html>

Measure	Canada Food Study (CFS) Findings	National Estimates
<b>Household food security status</b>	<p><i>CFS 2016, 18-29 year olds</i> <i>Household Status (S1A_secure_hhldstatus_DV)</i></p> <p>Food Secure: 69.9% Moderately Food Insecure: 20.5% Severely Food Insecure: 9.6%</p> <p><u>Percent with Missing:</u> Food Secure: 64.7% Moderately Food Insecure: 19.0% Severely Food Insecure: 8.9% Missing: 7.4%</p>	<p><i>2014 CCHS, 18-29 year olds</i> <i>Household Food Security Status (FSCDHFS2)</i></p> <p>Food Secure: 91.4% Moderately Food Insecure: 5.8% Severely Food Insecure: 2.8%</p> <p><u>Percent with NA/Not Stated:</u> Food Secure: 73.0% Moderately Food Insecure: 4.6% Severely Food Insecure: 2.3% NA: 17.8% Not Stated: 2.3%</p> <p><i>*Not applicable includes those not asked the Food Security Module (optional module only asked in PEI, NS, NB, QC, ON, SK, AB, NWT, NU)</i></p> <p><i>*Not stated includes respondents for whom a person most knowledgeable about the household could not be identified.</i></p>
<b>Smoking Status</b>	<p><i>2016 CFS, 16-30 year olds</i> <i>Smoking Status (S1A_smk_status_DV)</i></p> <p>Current smokers (last 30 days, &gt;=100 cigs): 17.0% Former smokers (not last 30 days, &gt;=100 cigs): 8.6% Experimental (last 30 days, &lt;100 cig): 4.6% Never smoked (includes past experimental): 69.8%</p>	<p><i>2013 CTADS, 16-30 year olds</i> <i>Smoking Status Type 2 – Detailed, 30 days definition (DVSS2)</i></p> <p>Current smokers (last 30 days, &gt;=100 cigs): 14.6% Former smokers (not last 30 days, &gt;=100 cigs): 5.8% Experimental (last 30 days, &lt;100 cigs): 1.7% Never smoked (incl. past experimental): 77.9%</p>
<b>Cannabis Use</b>	<p><i>2016 CFS, 16-30 year olds</i> <i>In the last 12 months, how often did you use marijuana or cannabis (a joint, pot, weed, hash)? (S1A_mj_use)</i></p> <p>Never used: 44.8% Former user (not in past 12 months): 18.1% Current user (used in past 12 months): 37.1%</p>	<p><i>2013 CTADS, 16-30 year olds</i> <i>Cannabis use status – 3 categories (CANPAT)</i></p> <p>Never used: 52.4% Former user (not in past 12 months): 24.7% Current user (used in past 12 months): 22.9%</p>