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Final Report
SURVEY OF CANADIAN'S KNOWLEDGE AND BEHAVIOURS
RELATED TO FOOD SAFETY

Prepared for
Health Canada
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May 9, 2018

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SURVEY OF CANADIAN'S KNOWLEDGE AND BEHAVIOURS RELATED TO FOOD SAFETY

Final Report

Prepared for: Health Canada

Supplier Name: The Strategic Counsel

May 2018

This public opinion research report presents the results of an online and telephone survey conducted by The Strategic Counsel on behalf of Health Canada. The research study was conducted with 2,814 Canadians between December 2017 and January 2018.

Cette publication est aussi disponible en français sous le titre: ENQUÊTE SUR LES CONNAISSANCES ET LES COMPORTEMENTS DES CANADIENS EN MATIÈRE DE SALUBRITÉ ALIMENTAIRE.

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I. Executive Summary



Executive Summary

This report details the findings, key insights and conclusions from a survey of Canadians which was undertaken on behalf of Health Canada during the period from December, 2017 to January, 2018 with the aim of assessing public awareness, attitudes, knowledge and behaviours related to food safety and food-borne illnesses, commonly known as food poisoning. The results from this research are tracked against those from a previous, benchmark survey on this topic which was undertaken in 2010. However, some modifications to the methodology mean that not all data is directly comparable across the two waves of surveys. Readers should take note of these changes, which are detailed in the Methodology section of this report, as they are relevant in some cases to interpreting apparent shifts or trends in public attitudes and opinions between 2010 and 2018. Going forward, the current survey findings represent the 'new' benchmarks with respect to consumer attitudes and behaviours on food safety.

A. Context

According to the Government of Canada's own statistics a total of 4 million (or 1 in 8) Canadians are affected by a domestically acquired food-borne illness every year, resulting in approximately 11,500 hospitalizations and some 240 deaths. Scientists have identified hundreds of different food-borne illnesses, some of which are quite rare while others are much more common. Among the most common pathogens are norovirus, salmonella and listeria which, combined, account for an estimated 1.2 million episodes of domestically acquired food-borne illnesses and just over 2,000 hospitalizations annually.¹

Food-borne illnesses can be serious and even fatal in some cases although most individuals will experience only short-lived symptoms and recover fully. Nevertheless, some people are more vulnerable both in terms of their likelihood of contracting food poisoning and of becoming seriously ill, including infants and young children, pregnant women, senior citizens and people with weakened or compromised immune systems such as those with chronic diseases or conditions (i.e., cancer, liver disease and AIDs) and those undergoing certain medical treatments such as chemotherapy. In some instances, food-borne illness can result in long-term health issues including kidney damage, arthritis or heart problems. But, the good news is that it can often be prevented by taking a number of simple steps when preparing and handling food, by washing hands and cleaning kitchen surfaces, separating raw foods from cooked foods to avoid cross-contamination, cooking foods according to instructions and proper internal cooking temperatures, and chilling foods or leftovers within two hours.

Educating the public about food safety is essential to reducing cases and outbreaks of food-borne illnesses that continue to occur throughout the population, and is of particular importance for those at greater risk of contracting food poisoning. Indeed, the majority of food poisoning cases are preventable with proper and consistent safe food handling practices and avoidance of certain high risk foods. Raising public awareness about the extent to which one's own behaviours are a contributing factor to food-borne illness can go a long way towards reducing outbreaks, specifically education around both the risks and some very basic prevention strategies.

In 2009, Health Canada launched a multi-year social marketing strategy (The Safe Food Handling Marketing Campaign) to increase awareness and knowledge of the health risks associated with unsafe food handling practices and food poisoning for the above-noted vulnerable populations, emphasising their at-risk status (i.e. why they are at higher risk and what this means for them). Over the intervening years, Health Canada's Marketing Division has undertaken additional outreach activities, including:

¹ Government of Canada, [Yearly food-borne illness estimates for Canada](#)



- Print and web-based content for various audiences;
- Targeted outreach activities to health professionals and other intermediaries;
- National multi-media advertising campaigns;
- Promotion of food safety messages through partners;
- Public relations activities; and
- Baseline public opinion research (2010).

The Survey of Canadians' Knowledge and Behaviour Related to Food Safety (2010) referred to above was originally undertaken to identify the extent to which 'at-risk' Canadians are aware of food safety practices. That survey aimed to address issues regarding the lack of clarity surrounding individuals' abilities to self-identify as being at greater risk due to age, medical conditions, or other factors. It also focused on pinpointing knowledge gaps related to proper food handling and storage practices among 'at-risk' populations and determine how these groups wanted to receive information on proper food handling and storage practices.

Health Canada recognizes that being effective in changing food safety behaviours requires continuous interventions which must be reinforced on a regular basis. As such, the 2017-18 public opinion research was designed to inform the existing campaign, helping to ensure approaches, messages and tactics reflect the current knowledge, behaviour and opinion landscape of targeted populations. The 2018 survey builds off the previous research with the key objectives being to:

- Assess public awareness and knowledge on food safety;
- Measure individuals' ability to self-identify their risk status for food-borne illness;
- Evaluate consumers' knowledge of food safety practices and understand where there are gaps;
- Examine food safety behaviours of the general public and "at-risk" individuals;
- Identify how and where the general public and "at-risk" individuals would like to receive information on the topic, including which sources they trust the most; and
- Assess the awareness of specific food-borne illnesses and specific foods to avoid.

B. Key Findings

As a backdrop to the key results found in the 2018 survey, it is important to underscore that Canadians continue to express reasonably high levels of confidence in Canada's food safety system. Overall, most feel that they have sufficient information to be able to protect themselves from food-borne illnesses and food poisoning, although those with compromised immune systems and pregnant women are somewhat less likely to hold this view.

1. Awareness and Knowledge of Food Safety and Food-borne Illness

Awareness of food safety-related issues is fairly high across the board. In particular, campaigns stressing the importance of handwashing have clearly broken through with over nine-in-ten Canadians saying they have heard something about this issue or practice. At the same time, awareness of safe food handling appears to have fallen off in the 8-year period between the benchmark and this current survey. Although a majority say they have heard at least something about this issue (almost two-thirds), this represents a drop from almost three-quarters who said the same in 2010.



Awareness of listeria has also plummeted, from over half when the survey was undertaken in 2010, just two years following a very serious outbreak, to just over one-third currently. This result is not surprising as we would expect awareness of specific food-borne pathogens to fluctuate year-over-year depending on the severity of outbreaks and extent of national or regional media attention on this issue. Further to this point, the 2008 listeriosis outbreak was widespread with 57 confirmed cases, resulting in 22 deaths. Subsequent outbreaks have occurred, but they have been more limited. For example, in early 2016, the Public Health Agency of Canada reported 14 cases of listeria, in 5 provinces, resulting in all cases being hospitalized. While 3 people died, it was not determined if listeria contributed to the cause of these deaths.²

While the vast majority of Canadians understand that cases of food poisoning can range from mild to severe and, in some instances, can result in hospitalization, there is a small contingent (about one-in-ten) within three of the four 'at risk' groups (excluding seniors) who tend to downplay the potential issues and complications that can arise. This suggests a continued need for communications on the true impacts of food poisoning to pregnant women, parents of young children and immunocompromised individuals.

Knowledge of the sources and causes of food poisoning is also reasonably good as the majority of respondents recognize that most cases of food poisoning occur as a result of unsafe food handling or cooking practices in the kitchen. At the same time, results suggest that Canadians could benefit from messaging that reinforces vigilance about food safety practices in the home, as Canadians are much more inclined to think that the vast majority of food poisoning cases are contracted in restaurants or from take-out foods rather than from unsafe practices in their own home (by a ratio of about 3:1).

Although Canadians' are generally knowledgeable of the issues related to food-borne illnesses, there continue to be some significant gaps. In particular, Canadians continue to be uncertain about whether the look, taste or smell of a food is any indication that it could cause a food-borne illness – about half say this is true, a marker which has not moved significantly since 2010, however this belief has decreased among seniors. In addition, interpretation of best before dates which appear on food packages is a cause for confusion with Canadians expressing mixed views on whether the data suggests when a food becomes unsafe or when it simply loses its freshness. In particular, seniors are more likely (88%) to view foods as safe to consume past the best before date. A modest level of confusion is also apparent when it comes to Canadians' understanding of the appropriate temperature at which refrigerators should be set. While two-in-five accurately suggest a temperature setting between 2 and 4 degrees Celsius, a significant proportion (about one-quarter) simply don't know. Seniors in particular, have a gap in knowledge regarding safe temperatures.

2. Food Safety Behaviours

As in 2010, most Canadians conduct themselves in a safe manner when it comes to food handling and food preparation. However, there are some exceptions.

On the positive side, handwashing before preparing food or after handling raw meat, fish or frozen breaded chicken products is fairly routine. Most also wash fresh fruits and vegetables, closely follow cooking instructions, clean the surfaces on which they prepare foods, and refrigerate leftover food within two hours of cooking.

Findings are more mixed in other areas however. For example, many people do not make a regular practice of washing reusable grocery bags, using a food thermometer to determine if the recommended temperature has been reached. And small, but still concerning, numbers of Canadians continue to defrost meat or poultry at room temperature rather than in the fridge. In fact, this practice has increased among pregnant women (21% to 39%) and

² <https://www.canada.ca/en/public-health/services/public-health-notices/2016/public-health-notice-update-outbreak-listeria-infections-linked-packaged-salad-products-produced-dole-processing-facility-springfield-ohio.html>.



parents of young children (27% to 39%) over the past 8 years, and is thus now particularly high among these high risk groups.

Other practices such as putting meat, poultry and fresh produce in the same shopping bag, keeping leftovers after they've been reheated, and eating eggs with runny yolks are also common among a minority of Canadians. And, as with defrosting meat at room temperature instead of the fridge, some of these practices are in fact more common among the 'at risk' groups – just under half of pregnant women admitted to eating eggs with runny yolks and one-third in this group also keep remaining leftover food after it has been reheated once. While most Canadians do put meat, poultry and seafood on the bottom shelf of their fridge or in a special drawer, for a large number of people (40%), this is not a regular practice.

There are also misperceptions relating to frozen, breaded chicken products among slightly more than one-third of Canadians, who are of the view that these are pre-cooked products that require re-heating only. The perceptions among the target groups are particularly concerning on this subject, especially for seniors where just under half (46%) consider that these products are pre-cooked. Significant proportions of parents with young children (41%) and those with compromised immune systems (40%) also hold this view.

In line with the 2010 results, many in the higher risk groups do not view themselves as being at greater risk for complications from food poisoning. Although the plurality (just under half) of parents with children 5 years of age or younger consider their young child to be at greater risk, a majority say they are unsure (20%) or believe they are not (32%). Relatively few (fewer than one-in-five and in some cases one-in-ten) of those with compromised immune systems, pregnant women and seniors definitively feel they are at greater risk. The majority are uncertain or say they are at not greater risk.

3. Communications

There is a clear demand for more, and more detailed, information on safe food handling and particularly among at-risk groups (31-33%) as compared to the general public (18%). Many Canadians support developing and distributing detailed articles and brochures, although perceptions of the effectiveness of the latter as a vehicle for providing information on safe food handling has declined since 2010.

As expected, the media landscape has dramatically shifted since 2010 with a significant increase in the numbers of Canadians who now access information pertaining to food safety on the Internet. A significant proportion of seniors (42%) still cite newspapers as a preferred medium, although this has decreased from 2010 (64%). While reliance on traditional media has declined it remains a highly relevant vehicle for getting information out to the public during an outbreak of a food-borne illness.

The power and reach of social media has also grown significantly between 2010 and 2018, although as with other media, usage varies markedly across various sub-groups. At the same time, it is notable that almost two-thirds of seniors (62%) who were surveyed online as one of the 'at risk' groups indicated they have a Facebook account, while almost one-quarter (23%) were also on YouTube. This may be an instance where the use of an online panel to reach this particular segment of the population skews the results on questions related to social media usage in an upward direction. One might expect that all panellists, regardless of age, would exhibit a greater propensity for a range of online activities.



4. High Risk Groups

As was the case in 2010, significant percentages of those who self-identified as being in one of the defined high risk groups (i.e., people with compromised immune systems, pregnant women, and seniors) did not necessarily consider themselves to be at substantially greater risk of food poisoning relative to the average person. At the same time, in contrast to the other 'at risk' target groups, the majority of parents (68%) felt their child (5 years of age or younger) was at greater risk for complications from food poisoning.

Among those who do consider themselves, or their young child, to be at greater risk from food poisoning, a majority in each of the target groups say they are taking precautions to protect themselves (or their child). When probed on the types of precautions they take to protect themselves from food poisoning, results illustrate that there are a wide variety of actions taken, including cleaning food preparation surfaces, washing fruits and vegetables, using different cutting boards to avoid cross-contamination, defrosting meat and poultry in the refrigerator and avoiding certain higher risk food. These results were largely consistent across the 'at risk' groups.

C. Conclusions and Recommendations

There is a clear demand for more, and more detailed, information on safe food handling, particularly among the at-risk groups (34-37%) as compared to the general public (28%), based on the proportion of respondents who are less inclined to agree with the statement *I feel I have enough information about food safety and how to protect myself and my family from food-borne illness and/or food poisoning*. Beyond consumers' own self-evaluation, it is apparent from their responses to questions probing the frequency of safe food handling, preparation and storage practices that there is also a need to reinforce or remind the public of some of the less well-known or understood ways to minimize exposure to food-borne illnesses.

The results of this survey also suggest an '*out of sight ... out-of-mind*' tendency among the public with regards to safe food handling in general, food-borne illness and listeria in particular. In the absence of sustained messaging related to food safety, it is likely that consumer vigilance may lapse, especially with respect to specific food safety practices that have not yet become normalized or habitualized. Given that messaging around handwashing appears to have been broadly internalized, upcoming educational campaigns could focus more directly on four specific areas:

- Broadening consumers' understanding and awareness of the types of foods that tend to be more commonly associated with food-borne illnesses such as listeria or salmonella, including canned and raw seafood, deli meats, raw eggs, unpasteurized cheeses, sprouts, unpasteurized juices, some root vegetables and fruits such as melons, and uncooked flour. Without undermining the public's confidence in agriculture or the agri-food industry or in Canada's food safety system, which is reasonably good, the focus of educational and awareness-raising activities should underscore the significant role that consumers have to engage in more self-protective behaviours;
- Related to the above point, it is important to remind Canadians of continued vigilance in terms of consumer hygiene in the home, with respect to food handling, preparation and storage. In particular, a heavier emphasis needs to be placed on driving wider behaviour change in the following areas:
 - Washing reusable bags;
 - Using food thermometers to check that foods have reached the recommended temperature;
 - Rinsing poultry before cooking;
 - Proper storage, defrosting and reheating of foods, including meat, poultry and seafood/leftovers; and



- Risks associated with eating eggs with runny yolks;
- Developing highly targeted communications to the 'at risk' groups to further sensitize them to food safety issues. Seniors and women who are pregnant or likely to be so within the next year should be prioritized given that a majority in each case do not consider themselves to be at any greater risk from food poisoning. At the same time, continued outreach should target parents of young children and those with compromised immune systems to ensure ongoing safe food handling practices. Notably, for those with compromised immune systems, the issue is not so much one of awareness of their 'at risk' status (although there are additional opportunities to increase basic awareness and understanding), but more the fact that just over one-third (35%) are not taking precautions beyond what anyone else might do to protect themselves from food poisoning; and
- Raising awareness of appropriate cooking techniques specifically related to frozen breaded chicken products, across the board – among the general public and 'at risk' groups. While most consumers recognize that these products need to be fully cooked there is a sizeable proportion of the population, ranging from one-third (the general public) to close to one-half (seniors) who consider these products to be pre-cooked and only requiring reheating. Messaging to reinforce that these products should be treated in the same way as raw poultry should be reinforced, including emphasis on following the directions on the package.

As expected, the media landscape has dramatically shifted since 2010 with a significant increase in the numbers of Canadians who now access information pertaining to food safety on the Internet. A significant proportion of seniors (42%) still cite newspapers as a preferred medium, although this has decreased from 2010 (64%). While reliance on traditional media has declined it remains a highly relevant vehicle for getting information out to the public during an outbreak of a food-borne illness. Notably, few among the general public cite product labels or packaging among their main sources of information on food safety, although reliance is significantly higher among each of the four 'at risk' groups. This suggests there may be opportunities to work with industry partners to develop key food safety-related messages that could appear on the label or packaging, resulting in higher visibility and impact as they reach consumers at the time of purchase and/or use of the product.

Many Canadians support developing and distributing detailed articles and brochures, although perceptions of the effectiveness of the latter as a vehicle for providing information on safe food handling has declined since 2010.

The power and reach of social media has also grown significantly between 2010 and 2018, although as with other media, usage varies markedly across various sub-groups. At the same time, it is notable that almost two-thirds of seniors (62%) who were surveyed online as one of the 'at risk' groups indicated they have a Facebook account, while almost one-quarter (23%) are also on YouTube. This may be an instance where the use of an online panel to reach this particular segment of the population skews the results on a question related to social media usage in an upward direction. One might expect that all panellists, regardless of age, would exhibit a greater propensity for a range of online activities.



MORE INFORMATION

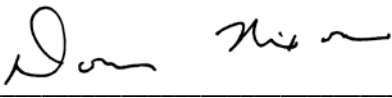
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I hereby certify as Senior Officer of *The Strategic Counsel* that the deliverables fully comply with the Government of Canada political neutrality requirements outlined in the *Communications Policy* of the Government of Canada and Procedures for Planning and Contracting Public Opinion Research. Specifically, the deliverables do not include information on electoral voting intentions, political party preferences, standings with the electorate or ratings of the performance of a political party or its leaders.

Signed:



Donna Nixon, Partner



II. Introduction



Introduction

A. Background

In its role to ensure the safety of all foods produced and/or distributed within the Canadian food system, Health Canada has launched a social marketing strategy to help increase awareness and knowledge of the health risks associated with unsafe food handling practices and food poisoning within Canada. A specific focus has been on targeting vulnerable populations who are at a greater risk for food-borne illnesses. Educating these groups, and the broader population, on the health risks associated with unsafe food handling processes as well as food poisoning is a key component of Health Canada's ongoing efforts to change food safety behaviours.

This public opinion research (POR) study was undertaken to inform Health Canada's multi-year Safe Food Handling campaign by providing further information to ensure the messaging and tactics reflect an understanding of the current knowledge and behaviours of the targeted audiences.

B. Research Objectives

The research program was designed to track data from 2010 and explore new issues and areas of interest related to food safety, as follows:

- Assess the level of awareness and knowledge concerning food safety;
- Measure individuals' awareness of their status as "at-risk" for complications from food-borne illness;
- Assess knowledge of methods one can employ to improve food safety;
- Examine current food safety behaviours of the general public and "at-risk" individuals;
- Determine where and how various audiences would like to receive their food safety information, and which information sources they trust most; and
- Measure awareness of specific foods they should avoid and specific food-borne illnesses.

C. Target Audiences

The key target audiences for this research included the general population and four "at risk" defined by Health Canada which were also the focus of the 2010 research program:

- Older adults, aged 60 and older;
- Pregnant women and those who expect to become pregnant within the next year;
- Parents of children aged 5 and younger;
- Those with a compromised immune system, such as diabetes, cancer or heart disease; and
- The general public, aged 18 years and older.



D. Methodology

In 2010 this survey was undertaken by telephone among 1,536 Canadians. Four ‘at risk’ target groups and a general public comparison group were included in the survey. In 2018 a decision was taken to update both the survey instrument and reconsider the methodology. A mixed-mode approach was employed, utilizing both online (to target the ‘at risk’ groups) and telephone (for the general population) methodologies. A more detailed explanation of the rationale for this change in the methodology is provided below. In total, 2,814 Canadians completed interviews either by telephone (n=1,201) or online (n=1,613). Appendix A contains the Call Dispositions and details on the response rate for the telephone survey.

All fieldwork was undertaken between December 14, 2017 and January 18, 2018.

1. Rationale for the Multi-Modal Approach

For each research study undertaken by the Government of Canada a rationale for the choice of methodology is discussed and a decision taken based on a range of factors. In many, but not all, cases, the decision is often predicated on cost which typically favours online over telephone surveys. In addition, over time, access to the Internet has become much less of a barrier meaning that many online panels are generally representative of the Canadian population both attitudinally and demographically. Ten years ago, or more, the argument for telephone surveys was primarily based on the fact that a small, but still significant, proportion of the Canadian population did not have access to the Internet while landlines were quite ubiquitous in Canadian households. Those seeking to obtain statistically reliable survey results often favoured telephone surveys which relied on random digit dialling (RDD).

Since that time, as response rates to telephone surveys have declined, an increasing number of households are switching from landline to cell phone only, and access to the Internet has become quite pervasive, ‘best value’ for the Government of Canada, depending on the nature of the research, can often now be obtained by conducting surveys using one of the many professionally managed online panels. These panels allow researchers access to hundreds of thousands of Canadians from various backgrounds and demographic strata, in all parts of the country.

However, migrating surveys from one methodology to another – in this case from telephone to online – should be done carefully and in a stepwise process. For this study, it made sense to conduct the surveys of the four ‘at risk’ groups online given the ability to cost-effectively profile and target each group by sorting on the basis of panel profile characteristics (i.e., compromised immune system, senior, parent of young child, etc.). At the same time, it is important to be able to assess to what extent, if any, a change in the methodology has had an impact on the results. For example, if the data for 2018 showed a 10-point increase or decrease in levels of confidence in Canada’s food safety system, does this reflect a change in public opinion, a change in the methodology or some combination of both? There is a body of research that suggests that surveys administered by ‘live’ interviewers tend to yield findings that are more ‘socially desirable’ (i.e., the respondent is more inclined to answer a question in a politically correct or socially desirable manner). This effect is lessened, or absent, in online surveys, although the topic and nature of the survey have an impact on the extent to which social desirability is ‘in play.’ In the case of this survey in which questions about food safety behaviours are being asked, we fully expect that some degree of social desirability will have been and continue to be evident in the telephone survey results while this may be less of an issue online. For this reason, a general population survey was undertaken both by telephone and online. This allows for a comparison of the results and further analysis of the effects of and considerations which should be taken into account when shifting the entire study from telephone to online in future waves. This methodological analysis is contained under separate cover.



2. Sample Design

Two methodologies were employed as follows:

- A telephone survey of the general public, aged 18 years and older (n=1,201). A weighting scheme was applied to the final sample to ensure the data was reflective of the Canadian population by age and gender. The results of this survey have an associated margin of error of +/- 2.83%, 95 times out of 100; and
- An online survey of n=1,038 respondents from each of the following groups:
 - Seniors, aged 60+ (n=406);
 - Parents of children aged 5 years and younger (n=302);
 - Pregnant women or those who anticipate they will become pregnant within the next year (n=301); and
 - Those with compromised immune systems (n=300).

In addition, a general public dataset (n=1613) was created from the online surveys representing a combination of sample for the general public and the 'at risk' groups in proportion to their prevalence within the population. Note that the data from the surveys of the general population which were completed online are not reported on here, but are being analysed as part of the assessment of any differences resulting from the transition from telephone to online.

3. Questionnaire Design and Pretesting

The questionnaire was designed in close consultation with Health Canada. The starting point was the 2010 survey. However, the final 2018 survey has been modified and added to fairly extensively (see Appendix B) to reflect current and emerging issues and the environment related to food safety. Tracking data for 2010 is shown where it exists. In some cases, question wording was slightly modified. In those instances where the changes were not deemed to be significant, tracking data from the 2010 benchmark is shown. By contrast, if the edits were felt to fundamentally change the nature of the question and how it might be interpreted, we have not included previous data. A number of new questions, unique to the 2018 survey, are also reported on.

The survey was intended to be 20 minutes in length, although fielding of the telephone survey averaged 26 minutes per interview. Online, the average length of the interview was 15 minutes – another argument for full migration of the survey from telephone to online.

As per Government of Canada standards for public opinion research, pre-testing was undertaken prior to launching the survey. This did not result in any additional changes to either the telephone or online versions of the survey.

4. Fieldwork

The telephone survey was conducted between December 14, 2017 and January 18, 2018. In parallel, the online survey ran from January 3 to 10, 2018.



E. Note to the Reader

The results for each question are shown in a consistent fashion throughout the report with a focus first on the findings for the general population. Using the example below to illustrate the reporting format, the first two columns usually show the results from the benchmark survey in 2010 followed by the current results for the general population. In both cases, these results are from surveys of the general public, aged 18+ that were undertaken by telephone and are directly comparable across the two waves.

Results for the four ‘at risk’ target groups are shown in the subsequent columns:

IMMUNO – Those who have self-identified as having a compromised immune system

PREGNANT – Those who have self-identified as being pregnant or who have indicated that they expect to become pregnant within the next year

PARENTS – Parents who have indicated that they have children aged 5 years or younger

SENIORS – Those who have reported that they are aged 60+

For each of the above groups two sets of results are shown – the 2010 benchmark, which was undertaken by telephone, and the 2018 survey findings which were undertaken online. As mentioned above, we do find there are a number of notable differences between the 2010 and 2018 results for all of the ‘at risk’ groups. Results for 2018 are, in many cases, slightly less positive and/or show a wider gap in people’s awareness and understanding of food safety issues or their risk of complications from food poisoning than was apparent in 2010. It is our view that the current results should be considered as a ‘reset’ or establishment of a new benchmark which should be tracked going forward.

CONFIDENCE IN FOOD SAFETY SYSTEM

How confident would you say you are right now in Canada’s food safety system?

	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
n=	304	1201	323	300	300	301	305	302	304	406
	%	%	%	%	%	%	%	%	%	%
TOTAL CONFIDENT ...5/6/7	67	66	70	54	74	61	70	63	59	60
Completely confident.../7	14	17	13	6	8	7	12	9	13	7
.../5/6	50	49	57	47	66	54	58	53	46	53
.../4	30	26	18	37	21	31	20	29	29	35
.../2/3	5	6	11	8	5	7	8	8	11	4
Not at all confident.../1	1	2	<1	2	-	1	1	1	1	1
TOTAL NOT CONFIDENT .../1/2/3	6	8	11	10	5	8	10	9	12	5



III. General Perceptions



General Perceptions

A. Confidence in the Food Safety System

Respondents were asked to rate their confidence in Canada’s food safety system. Results in 2018 continue to show that Canadians’ confidence in the food safety system is quite high, with two-in-three (66% vs. 67% in 2010) expressing confidence in Canada’s food safety system, and only eight per cent expressing little to no confidence (vs. 6% in 2010).

Notwithstanding the stability in overall confidence among the general Canadian population, it is lower in 2018 among each of the various target groups included in the survey and down significantly for three of them over 2010 (i.e., immune compromised Canadians, pregnant women and parents).

CONFIDENCE IN FOOD SAFETY SYSTEM

How confident would you say you are right now in Canada’s food safety system?

	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
n=	304	1201	323	300	300	301	305	302	304	406
	%	%	%	%	%	%	%	%	%	%
TOTAL CONFIDENT ...5/6/7	67	66	70	54	74	61	70	63	59	60
Completely confident.../7	14	17	13	6	8	7	12	9	13	7
.../5/6	50	49	57	47	66	54	58	53	46	53
.../4	30	26	18	37	21	31	20	29	29	35
.../2/3	5	6	11	8	5	7	8	8	11	4
Not at all confident.../1	1	2	<1	2	-	1	1	1	1	1
TOTAL NOT CONFIDENT .../1/2/3	6	8	11	10	5	8	10	9	12	5



B. Most Important Food Safety Concerns

In an open-ended question, meaning respondents were not prompted with specific answer categories, respondents were asked to identify their main food safety concerns in their home. Three main issues dominate responses to this question in 2018: food cleanliness/safety (57%), the quality and freshness of food (27%) and the extent to which food contains/does not contain unsafe elements (22%).

Among the target audiences the same concerns are evident but it is clear they are much more pronounced relative to the general Canadian population. Among pregnant women and parents, the issue of food containing or not containing unsafe elements is cited as being important to a greater degree than it is among the other two 'at risk' or vulnerable groups.

MOST IMPORTANT FOOD SAFETY CONCERNS - ALL MENTIONS

When you think of food safety concerns in your home, what are your top 3 concerns? [Open-end]

	GEN POP	IMMUNO	PREGNANT	PARENTS	SENIORS
n=	1201	300	301	302	406
	%	%	%	%	%
NET - FOOD CLEANLINESS/SAFETY	57	78	77	79	83
Expired food	14	20	17	19	29
Food not handled, stored or refrigerated properly	9	12	9	9	13
Bacteria/Viruses (e.g. Listeria, E.coli, salmonella)	9	32	30	35	31
Cleanliness	8	16	7	13	17
Food contamination	8	15	16	15	16
Proper cooking and cooling instructions	4	7	6	7	7
(HPP) High Pressure Processing	3	-	-	-	-
Proper food inspection	2	3	2	3	4
Hygiene/Hand washing/Clean utensils, cutting board/Wipe countertop	2	4	6	4	7
Safe/Not get sick	1	5	8	7	4
Illness/Health reasons (i.e. gout, diabetes)	1	1	5	2	0
Refrigeration/Power outage	1	1	1	1	5
Water/Clean water	1	2	2	2	1
Food poisoning	1	3	2	3	3
Recalls	1	1	3	2	1
Cross contamination	1	6	6	7	4
Mold	0	2	3	3	1
Washing fruits and vegetables	1	1	1	1	2
NET - QUALITY/FRESHNESS OF FOOD	27	42	38	38	41
Origin/Where the food is grown/Where its produced	9	9	7	8	13
Freshness/Fresh/Fresh food	7	24	11	14	21
Healthy/Healthy food/Healthy to eat	4	3	5	5	3
Quality/Good product	3	8	5	6	8
Nutrition/Nutritional value	2	3	5	4	3
Fat/Fat content	2	4	4	4	2
Balanced diet/Calorie count	2	1	2	1	0
Organic/Natural	2	3	6	5	1
Colour/Look/Appearance/Odour/Smell	0	1	1	0	1



NET - UNSAFE QUALITIES OF FOOD	22	31	46	39	32
Pesticides/Insecticides	6	12	23	20	13
Correct labeling /Information	6	4	4	3	3
Sugar/Sugar content	3	5	3	5	4
Genetically modified foods	3	5	12	8	7
Additives/Preservatives	3	5	10	8	5
Packaging/In plastic/Containers	3	5	1	4	5
Salt/Salt content	1	2	3	2	1
Hormones	1	2	4	3	3
NET - OTHER	15	29	30	26	26
Meat/Seafood (general)	3	6	5	4	5
Cost/Price/Affordability	3	2	3	3	2
Storage/Preservation	2	5	4	5	8
Vegetables/Fruits/Produce	1	4	3	2	4
Chicken/Poultry/Eggs	1	2	1	0	2
Humane treatment of animals	1	-	1	1	<1
Allergies	1	2	3	4	1
Familiarity of store/Where I buy it	1	-	-	-	<1
Irradiation	<1	-	-	-	-
Dairy	<1	2	1	2	1
Taste	<1	2	1		1
Other	5	11	12	10	6
None	<1	2	3	5	4
DK/NR/Not Stated	15	4	4	4	1

C. Confidence in Amount of Information about Food Safety

Findings from the current survey continue to indicate that Canadians feel they have sufficient information about food safety and how to protect themselves and their family from food-borne illnesses and food poisoning. Although down from 2010, a strong majority of respondents (72% vs. 76% in 2010) agree that they have the necessary information in this regard. Conversely, only 10% disagree that this is the case (vs. 13% in 2010).

Results are fairly consistent across the target groups with a slightly higher percentage of seniors agreeing that they have enough information. Notably, and in line with the trend in overall confidence in the food safety system, agreement on this measure is down across all of the target groups in 2018 versus 2010.



HAVE SUFFICIENT INFORMATION ABOUT FOOD SAFETY

I feel I have enough information about food safety and how to protect myself and my family from food-borne illness and/or food poisoning.

	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
	n=		n=		n=		n=		n=	
	304	1201	323	300	300	301	305	302	304	406
	%	%	%	%	%	%	%	%	%	%
TOTAL AGREE...5/6/7	76	72	74	63	84	63	71	66	74	68
.../6/7	53	53	54	34	59	33	52	34	48	40
.../5	24	19	20	28	25	31	19	32	26	28
.../4	11	18	10	19	7	17	16	21	14	18
.../3	7	5	10	12	6	14	8	8	8	7
.../1/2	6	5	7	6	3	6	5	6	3	6
TOTAL DISAGREE...1/2/3	13	10	17	18	9	20	13	14	12	14



IV. Awareness and Knowledge



Awareness and Knowledge

A. Awareness of Food-Related Subjects

Awareness of an issue or concern is the first step to understanding and to shifting consumer behaviours towards more positive habits regarding food safety which should then ultimately result in a broader public health benefits for the overall population. Toward that end, respondents were asked to what extent they have heard about a series of food-related issues.

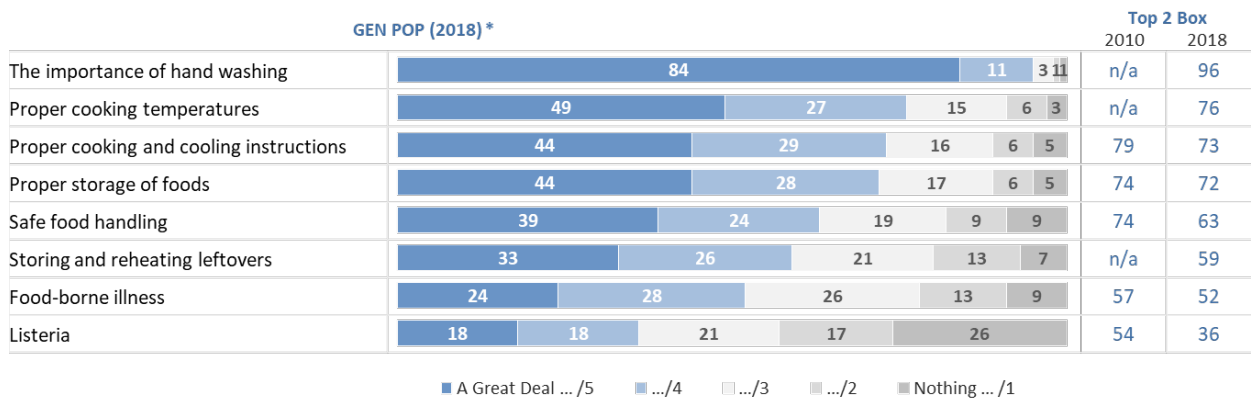
Messaging around the importance of handwashing has clearly broken through as virtually all Canadians (96%) say that they have heard quite a bit about this issue (4 or 5 on a 5-point scale). Awareness is high across all four sub-groups (around 9 in 10 in each case).

A large proportion of consumers have also heard something about proper cooking temperatures (76%), cooking and cooling instructions (73%) and storage of foods (72%).

Awareness levels drop to below two-thirds around issues such as safe food handling (63%, down 9 points from 2010) and storing and reheating leftovers (59%). And, while just over half (52%) of consumers have said they are generally aware of food-borne illness, those specifically having heard quite a bit about listeria has dropped off by 18 points, from 54% in 2010 to 36% in 2018. This decline is perhaps not surprising given that the worst outbreak of listeria in Canada was in 2008, with illnesses reported in seven provinces ultimately claiming 22 lives, and was probably still quite top-of-mind for respondents to the survey in 2010. While there have been outbreaks since that time, they have not been as widespread or as severe in terms of impact.

AWARENESS OF FOOD-RELATED SUBJECTS

How much have you heard about the following food-related subjects?



* Proportions have been re-percentage to exclude Don't Know responses



Awareness varies to some extent across the four sub-groups, relative to the general population:

- Those who are currently pregnant or expecting to become pregnant exhibit slightly lower levels of awareness of a larger number of food-related subjects, including proper cooking temperatures (69% vs. 76%), cooking and cooling instructions (65% vs. 73%), storage of foods (63% vs. 72%), storing and reheating of leftovers (50% vs 59%) and general food-borne illnesses (46% vs. 52%).
- Among those with compromised immune systems, awareness of proper cooking temperatures (69%), cooking and cooling instructions (65%) and storage of foods (65%) is somewhat lower.
- Parents of young children also claim slightly lower levels of awareness of proper cooking and cooling instructions (67%) and storage of foods (63%).
- Across all food related subjects, seniors have the highest level of awareness compared to all other high risk groups.

AWARENESS OF FOOD RELATED-SUBJECTS

How much have you heard about the following food-related subjects?

	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
<i>Top 2 box (5 - A great deal, 4)</i>										
	n= 304	1201	323	300	300	301	305	302	304	406
	%	%	%	%	%	%	%	%	%	%
The importance of hand washing	n/a	96	n/a	91	n/a	88	n/a	89	n/a	96
Proper cooking temperatures	n/a	76	n/a	69	n/a	69	n/a	74	n/a	77
Proper cooking and cooling instructions	79	73	76	65	79	65	74	67	75	70
Proper storage of foods	74	72	76	65	72	63	70	63	75	76
Safe food handling	74	63	72	70	78	67	71	69	74	74
Storing and reheating leftovers	n/a	59	n/a	53	n/a	50	n/a	54	n/a	60
Food-borne illness	57	52	67	50	60	46	52	48	60	52
Listeria	54	36	70	38	62	33	59	41	59	38

B. General Perceptions of Food Poisoning

New to the 2018 survey, respondents were asked about their experience with and understanding of the underlying causes of food poisoning and their perceptions of the severity of food poisoning.

Fewer than one-in-five (16%) of the general public have experienced an illness over the past year that they thought was related to something they had eaten. The proportion of self-reported food poisoning is higher among those who are expecting or anticipating becoming pregnant (29%) and is slightly above that for the general population among parents of younger children (23%) and those with compromised immune systems (22%). Proportions of food poisoning, according to these survey results, are much lower among seniors (9%) and this may be linked to the fact that they tend to be somewhat more vigilant, compared to the other 'at risk' groups and the general population when it comes to their awareness of safe food handling (see the previous chart).



INCIDENCE OF ILLNESS FROM FOOD

In the past year, have you experienced illness that you thought was due to the food you ate, that is food poisoning?

	GEN POP	IMMUNO	PREGNANT	PARENTS	SENIORS
	2018	2018	2018	2018	2018
n=	1201	300	301	302	406
	%	%	%	%	%
Yes	16	22	29	23	9
No	84	78	71	77	91

The vast majority of consumers (97%) recognize that food poisoning can be severe. Almost unanimously (99%) this was the view of seniors. By contrast, one-in-ten of those in the other ‘at risk’ groups were inclined to view food poisoning as a less severe condition that generally resolves itself. While this number is relatively low, it suggests that there may need to be continued communications and reinforcement of the risks and impacts associated with food poisoning among these groups.

UNDERSTANDING OF FOOD POISONING

Which of the following comes closest to describing your understanding of food poisoning?

	GEN POP	IMMUNO	PREGNANT	PARENTS	SENIORS
	2018	2018	2018	2018	2018
n=	1201	300	301	302	406
	%	%	%	%	%
Food poisoning is a mild condition that resolves itself without medical treatment	3	10	13	11	1
Food poisoning can be mild or severe, and can sometimes send people to the hospital	97	90	87	89	99

In line with studies showing that the public is about twice as likely to get food poisoning from food prepared at restaurants versus food prepared at home³, most Canadians also believe that the majority of cases are contracted in restaurants, cafeterias and take-out venues (52%). Fewer cite international travel (29%) or the home (18%) as places where most food poisoning cases are contracted.

The results are roughly similar across the four ‘at risk’ groups.

PERCEPTION OF WHERE FOOD POISONING IS MOST CONTRACTED

To the best of your knowledge, where are most food poisoning cases contracted? Are they mostly contracted...

	GEN POP	IMMUNO	PREGNANT	PARENTS	SENIORS
	2018	2018	2018	2018	2018
n=	1201	300	301	302	406
	%	%	%	%	%
In restaurants, take-out, or cafeterias	52	54	56	55	57
International travel	29	19	19	12	22
At your home	18	24	20	28	20
At friends/relatives	1	3	5	4	1

³ A Review of Food-borne Illness in America from 2002-2011, Center for Science in the Public Interest, April 1, 2014.



While just under three-quarters (71%) of Canadians believe that most cases of food poisoning are a result of unsafe food handling or cooking practices in the kitchen (a view more widely held by parents of young children and pregnant women (82% for both groups)), just over one-quarter (29%) of the population is more likely to point to contamination at source (i.e., during cultivation, harvesting or processing) as the culprit.

WHAT CAUSES MOST CASES OF FOOD POISONING

And, to the best of your knowledge, what are most cases of food poisoning a result of? Are they mostly a result of...

	GEN POP	IMMUNO	PREGNANT	PARENTS	SENIORS
	2018	2018	2018	2018	2018
n=	1201	300	301	302	406
	%	%	%	%	%
Unsafe food handling or cooking practices in the kitchen	71	77	82	82	73
Things that occur before food reaches the kitchen (such as contamination in culture/harvesting/ processing)	29	23	18	18	27

C. Knowledge of Issues Related to Food-Borne Illnesses

To further gauge awareness and understanding of food-related issues, respondents were asked a short series of true/false questions. For the most part, Canadians respond correctly and the results are very much in line with those in 2010. For example, many (89%) believe that certain groups of people are at greater risk of developing complications from food-borne illness. Similar numbers (84%) also indicated that most food-borne illnesses can be prevented by cooking food thoroughly. Far fewer are convinced that freezing food kills bacteria that can cause food-borne illness (20%) or that there is very little consumers can do to prevent food-borne illness (12%).

By contrast, there was greater uncertainty about whether it could be determined by look, smell or taste if a food might cause an illness (52% claimed this to be true). Responses from the 'at risk' groups suggest they are somewhat more skeptical, but nevertheless significant proportions in each of the four groups still claim this to be true, despite the fact that food that looks and smells fresh may in fact contain harmful bacteria not visible to the consumer. Indeed, foods that are contaminated with pathogenic microorganisms usually do not look, taste or smell bad. These results suggest that a substantial proportion of Canadians are confusing food-spoilage bacteria with those that cause food-borne illnesses.

KNOWLEDGE OF ISSUES RELATED TO FOOD-BORNE ILLNESSES

Please indicate whether or not you believe each of the following to be mostly true or mostly false.

% True	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
n=	304	1201	323	300	300	301	305	302	304	406
	%	%	%	%	%	%	%	%	%	%
Certain groups of people are at a greater risk of developing complications from food-borne illness	84	89	90	87	88	85	86	84	84	85
Most food-borne illnesses can be prevented by cooking food thoroughly	82	84	87	79	89	83	85	86	88	76
You can tell if a food may cause food-borne illness by its look, smell or taste	49	52	39	39	42	42	43	38	46	32
Freezing food kills the bacteria that can cause food-borne illness	22	20	23	21	16	26	17	22	24	17
There is very little consumers can do to prevent food-borne illness	15	12	13	17	6	19	12	13	16	15



D. Groups at Greater Risk

As noted above, close to nine-in-ten (89%) Canadians believe that certain groups are at greater risk of developing complications as a result of a bout of food poisoning. The groups that were identified most commonly included:

- The elderly population – 71% identified this group – an increase from 61% in 2010.
- Young children – 61%, representing a slight increase from 56% who identified this group in 2010.
- People with pre-existing health conditions – 41%, unchanged from 2010 (43%).

Notably, just 4% identified pregnant women as being at greater risk.

Scanning the response to this question across the four ‘at risk’ groups shows that each is more aware of their own risk status. For example:

- 83% of parents of young children, identified children under 6 years of age as one of the groups most at risk;
- 81% of seniors identified the elderly;
- 42% of those with compromised immune systems identified this specific group as being more at risk; 54% mentioned people with pre-existing health conditions; and
- 32% of those who are pregnant or anticipating becoming pregnant, and 19% of parents cited pregnant women as being at higher risk of complications from a food-borne illness.

It is among seniors where we see the biggest shifts since 2010 with respect to their identifying elderly people as more at risk (81%, up from 50%).

GROUPS AT GREATER RISK*

*Which groups of people do you think would be at greater risk of developing complications from food-borne illness?
[Open-end]*

	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
n=	246	1056	287	260	260	256	254	254	248	345
	%	%	%	%	%	%	%	%	%	%
Elderly	61	71	62	77	69	75	69	81	50	81
NET - YOUNG CHILDREN	56	61	58	74	79	77	69	83	40	71
Children under six years of age	56	57	58	28	79	29	69	27	40	32
Children/Young children (all others)	-	4	-	52	-	55	-	64	-	43
NET - HEALTH CONDITION	n/a	47	n/a	77	n/a	63	n/a	69	n/a	74
People with pre-existing health issues	43	41	66	54	60	34	49	33	48	50
People with compromised immune system	7	7	9	42	2	38	4	46	6	39
NET - LOW INCOME	7	5	7	7	4	5	4	3	6	8
Low income people/Poor people	7	4	7	5	4	3	4	3	6	6
The homeless/Street people	-	1	-	1	-	2	-	<1	-	4
Pregnant women	4	4	4	8	25	32	9	19	2	5
Uneducated people/Uninformed/Misinformed people/Anybody who lacks knowledge	3	4	3	5	1	4	4	2	4	7
NET - OTHER	n/a	6	n/a	13	n/a	14	n/a	9	n/a	19
People from specific ethnic background/newcomers	3	2	2	3	1	3	1	2	4	4
Any group/Everybody/Everyone	-	2	-	3	-	<1	-	<1	-	3
People with poor hygiene/who dont wash their hands	-	1	-	-	-	-	-	-	-	-
Other	1	2	2	8	1	12	2	7	2	13
None/Not Stated	-	-	-	5	-	4	-	2	-	3
DK/NR	4	4	1	-	2	-	2	-	2	-

*Asked of those who said that certain groups are at a greater risk of developing complications from food-borne illness.



E. Perceived Risks Associated with Various Foods

As in the 2010 survey, respondents were presented with a number of food items and asked to indicate to what extent they believed that these foods carried an increased risk of being contaminated by bacteria, viruses or parasites linked to food-borne illnesses. Several new items were added to this list and, in line with the findings from 2010, there is a high degree of variability in responses depending on the food examined.

The chart below shows the percentage of respondents who associate a higher degree of risk (5, 6, 7) on a 7-point scale) with each of these types of foods. The results underscore that raw poultry (89%) and raw ground beef (84%) are viewed as carrying a higher risk for a food-borne illness, in addition to raw seafood (75%). There is slightly less risk associated with deli meats (61%), and this has dropped off considerably since 2010 (72%), as well as with raw eggs (57%), unpasteurized cheeses (54%) and frozen breaded chicken products (53%, up significantly from 39% in 2010). The associated risk drops off for a range of food products including sprouts (41%), unpasteurized juices (38%), pre-washed vegetables (37%), soft pasteurized cheeses (33%), pasteurized milk (29%), hard cheeses (25%, up from 16% in 2010), melons (25%) and uncooked flour (25%).

PERCEPTIONS REGARDING RISK OF FOOD-BORNE ILLNESS ASSOCIATED WITH VARIOUS FOODS

To what extent do you think each of the following foods carries an increased risk of being contaminated by bacteria, viruses or parasites linked to food-borne illness?

Top 3 Box Summary (5,6,7)	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
n=	304	1201	323	300	300	301	305	302	304	406
	%	%	%	%	%	%	%	%	%	%
Raw poultry	n/a	89	n/a	91	n/a	88	n/a	88	n/a	94
Raw ground beef	n/a	84	n/a	88	n/a	82	n/a	84	n/a	92
Raw seafood such as sushi, raw oysters, or smoked seafood	70	75	75	81	76	80	75	77	65	83
Deli meats (e.g., cold cuts, hot dogs)	72	61	70	62	81	62	72	57	70	60
Raw eggs	n/a	57	n/a	65	n/a	73	n/a	65	n/a	61
Unpasteurized cheeses	n/a	54	n/a	54	n/a	60	n/a	58	n/a	57
Frozen breaded chicken products (e.g., chicken nuggets, strips, burgers)	39	53	41	52	36	46	42	44	43	50
Sprouts (for example: alfalfa, bean, clover, radish)	n/a	41	n/a	48	n/a	49	n/a	46	n/a	50
Unpasteurized juices (e.g., freshly squeezed juices, cider from local farm)	47	38	49	46	52	50	46	44	47	49
Pre-washed, ready to eat vegetables such as lettuce, carrots	n/a	37	n/a	46	n/a	45	n/a	44	n/a	45
Soft pasteurized cheeses (e.g., camembert, brie)	47	33	44	35	64	50	55	39	39	34
Pasteurized milk	22	29	14	25	16	31	21	22	20	19
Hard cheeses (for example: cheddar, swiss)	16	25	14	19	13	21	19	20	18	16
Melons	n/a	25	n/a	27	n/a	26	n/a	24	n/a	29
Uncooked flour	n/a	25	n/a	30	n/a	29	n/a	28	n/a	28

Across the four sub-groups:

- Findings for those with compromised immune systems do not vary greatly from those of the general population, but we note an increase in perceived risk associated with frozen breaded chicken products since 2010 (41% to 52%) and pasteurized milk (14% to 25%).
- Pregnant women are more likely to associate greater risk with raw eggs (73%), unpasteurized juices (50%) and soft, pasteurized cheeses (50%). The degree to which they associate risk with deli meats has dropped off since 2010 (from 81% to 62%), while their concerns about the risk associated with frozen breaded chicken products has increased (from 36% to 46%) as have concerns about pasteurized milk (16% to 31%) and hard cheeses (13% to 21%).
- Among parents with young children, there has been a dip since 2010 in the proportion who associate a relatively high degree of risk with deli meats (from 72% to 57%) and similarly with soft pasteurized cheeses (55% to 39%).



- For seniors, the perceived risk associated with raw seafood has increased (65% in 2010 to 83%), while slightly fewer in this group are now inclined to associate any real degree of risk with deli meats (70% to 60%).

F. Perceptions of Best-Before and Expiry Dates

There has been a significant shift in how consumers interpret the ‘best-before’ date on packaging. In 2010 views were more split on whether foods that have gone past the ‘best-before’ date are still safe to consume (54%) or should be thrown out (46%). In 2018, over three-quarters (77%) now hold the view that best-before dates indicate when a product is freshest, but foods kept past this date are still safe to consumer for a while. Conversely, just under one-quarter (23%) now say these foods should be tossed out.

Notably, a larger share of seniors (88%) are of the view that foods can be retained for some time after the best-before date has passed.

PERCEPTIONS OF "BEST-BEFORE" DATES ON FOOD

Most foods carry a 'best-before' date. Which of the following statements comes closest to your understanding of best-before dates?

	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010 n=304 %	2018 n=1201 %	2010 n=323 %	2018 n=300 %	2010 n=300 %	2018 n=301 %	2010 n=305 %	2018 n=302 %	2010 n=304 %	2018 n=406 %
Best-before dates indicate when a product is freshest and foods kept past this date are still safe to consume for a while	54	77	62	77	43	69	42	76	62	88
Food that is not consumed before the best-before date is unsafe and should be thrown out	46	23	38	23	57	31	58	24	38	12

There is less consensus among consumers regarding interpretation of expiry dates on food packages, although the balance (54%) are of the view that foods kept past the expiry date are still safe to consume, representing a slight shift in understanding since 2010 (47%). In the previous survey, the majority (53%) were inclined to interpret the expiry date more strictly as an indication of when foods become unsafe and should be thrown out, compared to 46% who hold this view in 2018.

In keeping with how they view best-before dates, two-thirds (67%) of seniors believe that foods are still safe to consume past their expiry date and just over half (54%) of those with compromised immune systems hold the same point of view. By contrast, the balance of those who are pregnant or anticipate being pregnant (52%) and parents of children 5 and under (54%) feel that foods that have gone beyond the expiry date are unsafe and should be thrown out.



UNDERSTANDING OF EXPIRY DATES

Many foods carry an 'expiry' date. Which of the following statements comes closest to your understanding of expiry dates?

	GEN POP	IMMUNO	PREGNANT	PARENTS	SENIORS
	2018	2018	2018	2018	2018
n=	1201	300	301	302	406
	%	%	%	%	%
Food that is not consumed before the expiry date is unsafe and should be thrown out	53	46	52	54	33
Expiry dates indicate when a product is freshest and foods kept past this date are still safe to consume for a while	47	54	48	46	67

G. Refrigerator Temperatures

A slim majority (53%) of consumers say that the temperature of refrigerators should be kept somewhere between 0 and 4 degrees Celsius (41% say between 2 and 4 degrees Celsius). Another 15 percent indicate that between 4 and 8 degrees Celsius is an acceptable temperature, 7 percent say it should be kept below 0 degrees and one-quarter (25%) don't know.

Across the 'at risk' groups, parents exhibit higher levels of knowledge with fully 60% indicating the appropriate temperature is between 0 and 4 degrees Celsius. By contrast, almost half of seniors either don't know (28%) or believe that a setting above 4 degrees Celsius (21%) is acceptable.

These results suggest there is an opportunity to increase Canadians knowledge levels about proper refrigeration temperature for food products.

KNOWLEDGE OF MINIMUM INTERNAL TEMPERATURE IN FRIDGE

To the best of your knowledge, what temperature should refrigerators be kept at?

	GEN POP	IMMUNO	PREGNANT	PARENTS	SENIORS
	2018	2018	2018	2018	2018
n=	1201	300	301	302	406
	%	%	%	%	%
ABOVE 4°C	15	16	13	16	21
Between +6°C and +8°C	2	2	3	2	2
Between +4°C and +6°C	13	13	11	14	18
BETWEEN 0°C and 4°C	53	47	52	60	43
Between +2°C and +4°C	41	36	37	47	34
Between 0°C and +2°C	12	12	15	13	9
UNDER 0°C	7	13	15	10	9
Between -2°C and -1°C	5	8	10	6	5
Lower than -2°C	2	5	5	5	3
I don't really have a good idea as to what the temperature should be kept at	25	24	20	14	28



V. Food Safety Behaviours



Food Safety Behaviours

Respondents were asked an extensive series of questions to determine the frequency with which they engage in safe food handling practices. Overall, the results suggest that Canadians are generally conducting themselves appropriately when it comes to handling and preparing foods. As shown in the chart below, the most common practices include handwashing before preparing food or after handling raw meat or fish, cleaning food preparation surfaces and following cooking instructions. In addition, very few consumers refreeze foods which have already been completely thawed.

At the same time, there is some room for further education and improvement in a number of areas. There are still significant proportions continuing to engage in unsafe food handling, preparation and storage activities. Relatively few (about one-in-five) are regularly washing reusable grocery bags which means the other 80 percent are not. Many (almost two-thirds of consumers – although this represents a drop from three-quarters in 2010) rinse poultry before cooking it which can increase the risk of food poisoning as splashing water from washing chicken under a tap spreads bacteria onto hands, work surfaces, clothing and cooking equipment. While, half or more of consumers use a food thermometer, or store meat, poultry and seafood on the bottom shelf of their fridge, this still leaves a large percentage of the population who are not regularly adhering to these practices. Similarly, about one-in-five consumers keep leftovers after they have been reheated, place meat or poultry in the same shopping bag as fresh produce and defrost meat or poultry at room temperature (on the countertop). Just under one-in-three say they eat eggs with runny yolks often or always.

CAN YOU PLEASE TELL ME HOW FREQUENTLY YOU DO OR DO NOT ENGAGE IN EACH OF THE FOLLOWING ACTIVITIES?

% Always/Often	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
n=	304	1201	323	300	300	301	305	302	304	406
	%	%	%	%	%	%	%	%	%	%
Wash your hands with soap and water BEFORE preparing food	95	97	96	85	96	80	97	85	95	90
Clean the surface you use to prepare foods on	98	96	97	88	99	83	99	85	97	96
Wash your hands with soap and water AFTER handling raw meat,raw fish	n/a	95	n/a	90	n/a	87	n/a	93	n/a	94
Wash fresh fruits and vegetables before consuming them	90	89	90	79	93	77	91	84	92	90
Closely follow the cooking instructions on food product packaging	n/a	85	n/a	85	n/a	78	n/a	84	n/a	91
Refrigerate leftover food within two hours of cooking	83	82	91	81	92	73	86	77	89	86
Wash your hands with soap and water AFTER handling frozen breaded chicken products such as chicken nuggets, strips or burgers	n/a	80	n/a	72	n/a	62	n/a	70	n/a	76
Rinse poultry (for example: turkey or chicken) before cooking it	75	62	81	56	48	39	61	44	87	68
Put meat, poultry and seafood on the bottom shelf of your fridge, or in a special drawer	55	57	59	52	60	52	57	51	56	58
Use a food thermometer to determine if the food you are preparing is cooked to the recommended temperature	28	49	34	49	24	46	26	43	31	55
Eat eggs with runny yolks	25	30	33	35	28	45	29	40	33	32
Defrost frozen meat or poultry on the counter at room temperature	21	22	22	28	21	39	27	39	21	24
Put meat or poultry and fresh produce in the same shopping bag	18	21	17	23	17	30	15	25	24	17
Keep remaining leftover food after you have reheated it once	13	20	12	28	11	32	16	31	14	23
Wash your reusable grocery bags	19	19	26	22	16	18	20	15	22	23
Refreeze food after it has already been completely defrosted	2	3	<1	9	1	15	1	10	2	3

■ Poor safety practices



A. Hand-Washing

The vast majority of Canadians say that they either ‘always’ or ‘often’ wash their hands with soap and water before preparing food (97%), which is generally consistent with 2010 findings. Another 3% of the population say they only ‘sometimes’ engage in this behaviour.

Overall the percentage of respondents stating ‘always’ or ‘often’ within the target groups has decreased since 2010. Pregnant women (54%) are the least likely to state that they ‘always’ wash their hands before preparing food.

CAN YOU PLEASE TELL ME HOW FREQUENTLY YOU DO OR DO NOT ENGAGE IN EACH OF THE FOLLOWING ACTIVITIES?

... Wash your hands with soap and water BEFORE preparing food

	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
n=	304	1201	323	300	300	301	305	302	304	406
	%	%	%	%	%	%	%	%	%	%
NET - ALWAYS/OFTEN	95	97	96	85	96	80	97	85	95	90
Always	85	86	85	67	80	54	83	58	82	71
Often	11	11	11	17	16	27	14	27	14	19
Sometimes	4	3	3	11	3	16	3	11	3	7
Rarely	<1	<1	1	3	1	2	<1	3	<1	3
Never	<1	<1	-	1	<1	1	-	<1	1	<1
NET - RARELY/NEVER	1	<1	1	4	1	3	<1	3	2	3

Similarly, the majority of the general population (95%) report washing their hands with soap and water after handling raw meat or fish either ‘always’ (89%) or ‘often’ (6%). Only 3% of Canadians report ‘rarely’ or ‘never’ engaging in this behaviour.

Again, when looking at high risk groups, pregnant women (87%) are least likely to report washing their hands ‘always’ or ‘often’ after handling raw meat or fish, which is 8% lower than the general population of Canadians.

CAN YOU PLEASE TELL ME HOW FREQUENTLY YOU DO OR DO NOT ENGAGE IN EACH OF THE FOLLOWING ACTIVITIES?

... Wash your hands with soap and water AFTER handling raw meat or raw fish

	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
n=	304	1201	323	300	300	301	305	302	304	406
	%	%	%	%	%	%	%	%	%	%
NET - ALWAYS/OFTEN	n/a	95	n/a	90	n/a	87	n/a	93	n/a	94
Always	n/a	89	n/a	80	n/a	73	n/a	82	n/a	82
Often	n/a	6	n/a	10	n/a	14	n/a	11	n/a	12
Sometimes	n/a	3	n/a	5	n/a	9	n/a	6	n/a	4
Rarely	n/a	1	n/a	3	n/a	3	n/a	1	n/a	2
Never	n/a	2	n/a	1	n/a	1	n/a	<1	n/a	1
NET - RARELY/NEVER	n/a	2	n/a	4	n/a	4	n/a	2	n/a	2



In 2018, Health Canada wanted to focus specifically on understanding the behaviours of Canadians with respect to frozen, breaded chicken products. The survey asked respondents how frequently they wash their hands with soap and water after handling frozen, breaded chicken products such as chicken nuggets, strips or burgers. Fully four-in-five consumers reported that they do so either ‘always’ (66%) or ‘often’ (14%). Meanwhile another one in ten (11%) report engaging in this practice only ‘sometimes’ and another 9% state that they ‘rarely’ or ‘never’ wash their hands after handling frozen breaded chicken products.

There are limited variations between the target groups, however overall pregnant women are somewhat less likely to report that they frequently wash their hands after handling frozen breaded chicken products. Of this group, 21% (vs 11% of the general population) say they only ‘sometimes’ engage in this and another 13% (vs 4% of the general population) say they ‘rarely’ do.

CAN YOU PLEASE TELL ME HOW FREQUENTLY YOU DO OR DO NOT ENGAGE IN EACH OF THE FOLLOWING ACTIVITIES?

... Wash your hands with soap and water AFTER handling frozen breaded chicken products such as chicken nuggets, strips or burgers

	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
n=	304	1201	323	300	300	301	305	302	304	406
	%	%	%	%	%	%	%	%	%	%
NET - ALWAYS/OFTEN	n/a	80	n/a	72	n/a	62	n/a	70	n/a	76
Always	n/a	66	n/a	54	n/a	43	n/a	49	n/a	58
Often	n/a	14	n/a	18	n/a	19	n/a	21	n/a	18
Sometimes	n/a	11	n/a	17	n/a	21	n/a	18	n/a	14
Rarely	n/a	4	n/a	8	n/a	13	n/a	9	n/a	6
Never	n/a	5	n/a	3	n/a	3	n/a	3	n/a	3
NET - RARELY/NEVER	n/a	9	n/a	11	n/a	17	n/a	12	n/a	9

B. Handling Meat and Poultry

The majority of Canadians (56%) either ‘rarely’ or ‘never’ defrost frozen meat or poultry on the counter at room temperature before preparing a meal, a poor food safety practice. Still, a substantial proportion of the general population, one in five (22%), report frequently engaging in this practice which is of concern.

There is a notable increase, since 2010, in the proportion who frequently (always or often) practice this behaviour among two target groups:

- Pregnant women (39%, vs 21 in 2010); and
- Parents of children 5 and under (39%, vs 27 in 2010).



Seniors and those with compromised immune systems tend to engage in this behaviour with less frequency, by comparison to the other target groups, and these findings are generally consistent with 2010.

CAN YOU PLEASE TELL ME HOW FREQUENTLY YOU DO OR DO NOT ENGAGE IN EACH OF THE FOLLOWING ACTIVITIES?

... Defrost frozen meat or poultry on the counter at room temperature

	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
n=	304	1201	323	300	300	301	305	302	304	406
	%	%	%	%	%	%	%	%	%	%
NET - ALWAYS/OFTEN	21	22	22	28	21	39	27	39	21	24
Always	9	9	8	10	5	13	7	9	7	7
Often	12	13	14	19	15	27	21	30	14	17
Sometimes	27	22	19	33	22	33	19	30	20	33
Rarely	18	20	21	21	23	17	18	16	23	22
Never	33	36	38	18	34	12	35	14	36	21
NET - RARELY/NEVER	51	56	60	39	57	28	53	30	59	44

The majority of Canadians (62%) rinse poultry before cooking it either ‘always’ (51%) or ‘often’ (11%), a practice which may seem like good hygiene but which can in fact spread bacteria over countertops and other foods nearby, such as raw foods or salads. Relatively few (28%) report ‘rarely’ or ‘never’ doing so.

Across the target groups, a higher percentage of seniors (68%) indicate they engage in this practice frequently, while the frequency of rinsing poultry before cooking is somewhat lower among those with compromised immune systems (56%), parents of young children (44%) and pregnant women or those who anticipate becoming pregnant in the next year (39%).

CAN YOU PLEASE TELL ME HOW FREQUENTLY YOU DO OR DO NOT ENGAGE IN EACH OF THE FOLLOWING ACTIVITIES?

... Rinse poultry (for example: turkey or chicken) before cooking it

	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
n=	304	1201	323	300	300	301	305	302	304	406
	%	%	%	%	%	%	%	%	%	%
NET - ALWAYS/OFTEN	75	62	81	56	48	39	61	44	87	68
Always	63	51	67	36	36	25	50	25	78	49
Often	12	11	14	20	13	14	11	19	10	20
Sometimes	11	11	7	15	13	21	15	19	4	14
Rarely	3	9	4	13	15	20	11	19	3	9
Never	11	19	8	16	23	20	13	19	6	9
NET - RARELY/NEVER	14	28	13	29	39	40	24	38	9	17



Very few consumers place meat or poultry and fresh produce in the same shopping back – about one-in-five (21%) say they do. This proportion is higher among pregnant women or those who could be expecting within the next year (30%).

CAN YOU PLEASE TELL ME HOW FREQUENTLY YOU DO OR DO NOT ENGAGE IN EACH OF THE FOLLOWING ACTIVITIES?

... Put meat or poultry and fresh produce in the same shopping bag

	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
n=	304	1201	323	300	300	301	305	302	304	406
	%	%	%	%	%	%	%	%	%	%
NET - ALWAYS/OFTEN	18	21	17	23	17	30	15	25	24	17
Always	10	10	7	5	8	9	7	8	12	2
Often	8	11	11	17	8	21	7	18	11	15
Sometimes	14	20	16	22	16	24	12	26	16	23
Rarely	17	13	17	21	20	22	23	24	16	26
Never	51	46	49	34	48	24	50	25	44	34
NET - RARELY/NEVER	68	59	66	55	68	47	73	49	60	60

C. Preparing Frozen, Breaded Chicken Products

While most Canadians consider frozen, breaded chicken products as raw and needing to be fully cooked (65%), slightly more than one-third (35%) are of the view that these are pre-cooked products and require re-heating only.

The findings for each of the target groups are concerning, especially for seniors where just under half (46%) consider that these products are pre-cooked. Significant proportions of parents with young children (41%) and those with compromised immune systems (40%) also hold this view.

PERCEPTION OF FROZEN, BREADED CHICKEN PRODUCTS

In your opinion, do you consider most frozen, breaded chicken products, such as chicken nuggets and strips to be ...?

	GEN POP	IMMUNO	PREGNANT	PARENTS	SENIORS
n=	1201	300	301	302	406
	%	%	%	%	%
Raw, needing to be fully cooked	65	60	59	63	54
Pre-cooked and needing re-heating only	35	40	41	37	46



When asked about how they prepare frozen breaded chicken products, about three-quarters of Canadians (73%) indicated they cook them in an oven. Other means of cooking are cited with much less frequency for the general population and the ‘at risk’ groups. However, it is notable that a small percentage (about one-in-ten) in each of the target groups uses a toaster oven, while another six per cent of seniors also indicated they use a microwave.

PREPARATION OF FROZEN, BREADED CHICKEN PRODUCTS

In general, how do you prepare frozen, breaded chicken products? [Single-mention]

	GEN POP	IMMUNO	PREGNANT	PARENTS	SENIORS
	2018	2018	2018	2018	2018
n=	1201	300	301	302	406
	%	%	%	%	%
Oven	73	73	72	75	62
Toaster Oven	4	10	9	9	7
Pan fried	3	3	6	6	3
Barbecue	2	<1	<1	1	<1
Microwave	2	3	3	2	6
Deep fried/Fryer/Air fryer	1	1	1	<1	1
Other	1	-	-	-	<1
None	-	-	-	-	-
Do not cook breaded chicken products	14	9	9	6	20

D. Washing Fruits and Vegetables

Nine-in-ten (89%) Canadians report that they either ‘always’ or ‘often’ wash their fruits and vegetables before consuming them, which is consistent with the 2010 findings (90%).

It is seniors who are most likely to ‘always’ (68%) engage in this behaviour and parents who ‘often’ do. Still, 6% of pregnant women and the immunocompromised state that they rarely or never wash their fruits and vegetables.

CAN YOU PLEASE TELL ME HOW FREQUENTLY YOU DO OR DO NOT ENGAGE IN EACH OF THE FOLLOWING ACTIVITIES?

... Wash fresh fruits and vegetables before consuming them

	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
n=	304	1201	323	300	300	301	305	302	304	406
	%	%	%	%	%	%	%	%	%	%
NET - ALWAYS/OFTEN	90	89	90	79	93	77	91	84	92	90
Always	78	68	76	58	78	50	71	51	83	68
Often	12	21	14	21	15	27	20	33	9	22
Sometimes	7	8	6	15	5	18	5	13	5	8
Rarely	1	1	2	5	1	6	2	3	2	1
Never	2	2	2	1	1	-	1	<1	1	1
NET - RARELY/NEVER	3	3	4	6	2	6	4	3	3	2



E. Following Cooking Instructions

New to the 2018 survey, respondents were asked how often they closely follow cooking instructions on food product packaging. Just over three-in-five Canadians (62%) report that they ‘always’ follow these instructions and another 23% state that they ‘often’ do. Conversely, only 3% ‘rarely’ or ‘never’ follow cooking instructions.

Results are generally consistent across target groups with over three-quarters of each of the four ‘at risk’ groups saying they follow cooking instructions with a high degree of regularity.

CAN YOU PLEASE TELL ME HOW FREQUENTLY YOU DO OR DO NOT ENGAGE IN EACH OF THE FOLLOWING ACTIVITIES?

... *Closely follow the cooking instructions on food product packaging*

	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
n=	304	1201	323	300	300	301	305	302	304	406
	%	%	%	%	%	%	%	%	%	%
NET - ALWAYS/OFTEN	n/a	85	n/a	85	n/a	78	n/a	84	n/a	91
Always	n/a	62	n/a	46	n/a	34	n/a	40	n/a	59
Often	n/a	23	n/a	39	n/a	44	n/a	44	n/a	33
Sometimes	n/a	12	n/a	11	n/a	17	n/a	12	n/a	7
Rarely	n/a	2	n/a	3	n/a	4	n/a	4	n/a	1
Never	n/a	1	n/a	1	n/a	1	n/a		n/a	1
NET - RARELY/NEVER	n/a	3	n/a	4	n/a	5	n/a	4	n/a	2

F. Eating Eggs with Runny Yolks

As was the case in 2010, a small but still significant proportion of the population eats eggs with runny yolks (30%, slightly up from 25% in 2010). Of some concern, just under half of pregnant women (45%) do so while the frequency of eating eggs with runny yolks is somewhat lower, but still an issue, among parents (40%), as they may be serving this to their young children, those with compromised immune systems (35%) and seniors (32%).

CAN YOU PLEASE TELL ME HOW FREQUENTLY YOU DO OR DO NOT ENGAGE IN EACH OF THE FOLLOWING ACTIVITIES?

... *Eat eggs with runny yolks*

	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
n=	304	1201	323	300	300	301	305	302	304	406
	%	%	%	%	%	%	%	%	%	%
NET - ALWAYS/OFTEN	25	30	33	35	28	45	29	40	33	32
Always	10	12	13	9	6	12	10	10	12	9
Often	16	18	20	26	21	33	19	30	21	23
Sometimes	22	25	18	27	26	21	24	25	17	24
Rarely	14	14	14	16	12	13	15	12	19	17
Never	38	30	35	23	34	21	33	23	32	27
NET - RARELY/NEVER	53	44	49	39	46	34	48	35	50	44



G. Washing Re-usable Grocery Bags

As in the 2010 survey, few Canadians wash their reusable grocery bags frequently (19%) which is of some concern.

These findings are fairly consistent across the 'at risk' target groups. Frequent washing of reusable grocery bags is lowest among parents of young children (15%) and only slightly higher among pregnant women (18%), those with compromised immune systems (22%) and seniors (23%).

CAN YOU PLEASE TELL ME HOW FREQUENTLY YOU DO OR DO NOT ENGAGE IN EACH OF THE FOLLOWING ACTIVITIES?

... *Wash your reusable grocery bags*

	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
n=	304	1201	323	300	300	301	305	302	304	406
	%	%	%	%	%	%	%	%	%	%
NET - ALWAYS/OFTEN	19	19	26	22	16	18	20	15	22	23
Always	9	9	10	8	4	8	7	6	7	7
Often	10	9	16	14	12	10	13	8	15	16
Sometimes	18	18	21	22	28	23	22	24	18	24
Rarely	14	19	21	24	15	25	19	31	20	26
Never	49	44	31	33	40	34	39	30	40	27
NET - RARELY/NEVER	63	63	53	57	55	59	59	62	59	53

H. Using Food Thermometers

About two-thirds of Canadians (67%) say they own a food thermometer, while another one third (32%) say they do not.

Notably, seniors (66%) and parents (60%) are most likely to own a food thermometer. This drops off among those with compromised immune systems (56%) and pregnant/likely to be expecting women (47%).

OWN A FOOD THERMOMETER

Do you own a food thermometer?

	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
n=	1201	1201	300	300	301	301	302	302	406	406
	%	%	%	%	%	%	%	%	%	%
Yes	67	67	56	56	47	47	60	60	66	66
No	32	32	42	42	51	51	40	40	33	33
Don't know	1	1	2	2	2	2	<1	<1	1	1



Compared to 2010, significantly more Canadians are now using a food thermometer to determine if the food they prepare is cooked to the recommended temperature (49% do so frequently versus 28% in the previous survey). A majority of seniors (55%) use a food thermometer as do almost half of those with compromised immune systems (49%), but usage is slightly lower among pregnant/likely to be expecting women (46%) and parents of young children (43%).

CAN YOU PLEASE TELL ME HOW FREQUENTLY YOU DO OR DO NOT ENGAGE IN EACH OF THE FOLLOWING ACTIVITIES?

... Use a food thermometer to determine if the food you are preparing is cooked to the recommended temperature

	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
n=	304	1201	323	300	300	301	305	302	304	406
	%	%	%	%	%	%	%	%	%	%
NET - ALWAYS/OFTEN	28	49	34	49	24	46	26	43	31	55
Always	12	22	17	18	9	16	13	12	12	18
Often	16	27	16	32	15	30	14	31	19	37
Sometimes	10	26	17	34	17	31	16	35	15	29
Rarely	11	18	16	13	14	18	18	18	12	12
Never	51	6	34	4	44	5	39	5	42	3
NET - RARELY/NEVER	62	24	49	17	58	23	58	23	54	16

I. Cleaning Food Preparation Surfaces

Survey results continue to show that almost all Canadians (96% versus 98% in 2010) are in the habit of cleaning the surfaces that they use to prepare food on. This practice is fairly common across all of the 'at risk' groups as well. Seniors (96%) are most likely to clean a surface before preparing food.

CAN YOU PLEASE TELL ME HOW FREQUENTLY YOU DO OR DO NOT ENGAGE IN EACH OF THE FOLLOWING ACTIVITIES?

... Clean the surface you use to prepare foods on

	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
n=	304	1201	323	300	300	301	305	302	304	406
	%	%	%	%	%	%	%	%	%	%
NET - ALWAYS/OFTEN	98	96	97	88	99	83	99	85	97	96
Always	85	84	81	64	83	53	85	60	79	74
Often	13	12	15	24	16	30	14	25	18	21
Sometimes	1	2	2	8	1	13	-	13	2	3
Rarely	1	1	1	2	-	3	1	1	-	<1
Never	<1	1	<1	2	-	1	<1	<1	1	1
NET - RARELY/NEVER	1	1	1	3	-	4	1	1	1	1



J. Refrigeration of Foods

Most Canadians (82%) say they always or often refrigerate left-over food within two hours of cooking.

This is fairly consistent across the target groups, although we note a decline in the percentage reporting that they follow this practice compared to 2010 across all of the groups.

CAN YOU PLEASE TELL ME HOW FREQUENTLY YOU DO OR DO NOT ENGAGE IN EACH OF THE FOLLOWING ACTIVITIES?

... Refrigerate leftover food within two hours of cooking

	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
n=	304	1201	323	300	300	301	305	302	304	406
	%	%	%	%	%	%	%	%	%	%
NET - ALWAYS/OFTEN	83	82	91	81	92	73	86	77	89	86
Always	62	61	70	50	65	32	60	35	69	59
Often	20	21	21	31	26	41	27	42	20	27
Sometimes	10	13	5	12	5	21	8	16	4	10
Rarely	3	3	2	3	2	4	3	4	3	2
Never	4	2	2	4	1	2	3	2	4	2
NET - RARELY/NEVER	8	5	4	7	3	6	6	6	7	4

Placing meat, poultry and seafood on the bottom shelf of the fridge, or in a special drawer, is a practice which is generally followed by a slim majority (57%) of the population – both the general population and the target groups.

CAN YOU PLEASE TELL ME HOW FREQUENTLY YOU DO OR DO NOT ENGAGE IN EACH OF THE FOLLOWING ACTIVITIES?

... Put meat, poultry and seafood on the bottom shelf of your fridge, or in a special drawer

	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
n=	304	1201	323	300	300	301	305	302	304	406
	%	%	%	%	%	%	%	%	%	%
NET - ALWAYS/OFTEN	55	57	59	52	60	52	57	51	56	58
Always	41	40	41	30	41	20	36	20	44	33
Often	14	17	18	22	19	32	21	30	12	25
Sometimes	12	17	12	24	17	25	15	26	13	20
Rarely	9	9	12	15	7	14	9	15	7	12
Never	24	18	18	9	16	9	20	8	24	10
NET - RARELY/NEVER	33	27	29	24	23	23	28	23	31	22



Refreezing food after it has already been completely defrosted is not a common practice. For the general population, only 3% say they do this is something they do all the time or often. It is somewhat worrisome that one-in-ten or slightly more among two key target groups – pregnant/likely to be expecting women (15%) and parents of young children (10%) – do say that they refreeze food after it’s been completely defrosted. This may be an area where additional education, information and message reinforcement might be helpful.

CAN YOU PLEASE TELL ME HOW FREQUENTLY YOU DO OR DO NOT ENGAGE IN EACH OF THE FOLLOWING ACTIVITIES?

... Refreeze food after it has already been completely defrosted

	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
n=	304	1201	323	300	300	301	305	302	304	406
	%	%	%	%	%	%	%	%	%	%
NET - ALWAYS/OFTEN	2	3	<1	9	1	15	1	10	2	3
Always	1	1	-	4	<1	5	<1	3	1	2
Often	1	2	<1	5	1	10	1	6	1	2
Sometimes	6	10	5	16	3	19	6	19	5	13
Rarely	12	15	16	18	15	24	12	25	17	20
Never	80	72	78	57	80	42	81	47	76	64
NET - RARELY/NEVER	92	87	94	75	95	66	93	72	93	84

K. Handling Leftovers

While relatively few consumers (20%) keep leftovers after they have been reheated once, this represents an increase from 2010 (13%).

The same trend is apparent across all the ‘at-risk’ target groups with almost one-third of pregnant women (32% vs 11% in 2010) and parents of young children (31% vs 16% in 2010) saying that they often or always keep remaining leftover food after reheating it, while this practice is also the case for about one-quarter of those with compromised immune systems (28%) and seniors (23%). Messaging around the risks associated with this practice represents another possible focus of educational outreach.

CAN YOU PLEASE TELL ME HOW FREQUENTLY YOU DO OR DO NOT ENGAGE IN EACH OF THE FOLLOWING ACTIVITIES?

... Keep remaining leftover food after you have reheated it once

	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
n=	304	1201	323	300	300	301	305	302	304	406
	%	%	%	%	%	%	%	%	%	%
NET - ALWAYS/OFTEN	13	20	12	28	11	32	16	31	14	23
Always	3	6	2	9	3	9	4	6	5	7
Often	10	14	10	19	8	24	12	25	9	16
Sometimes	21	26	20	35	21	36	20	32	18	36
Rarely	26	19	26	22	28	18	26	21	25	22
Never	39	36	41	15	40	14	37	16	42	18
NET - RARELY/NEVER	65	55	68	37	68	32	63	37	67	40



L. Checking the Refrigerator Thermometer

Most Canadians are not into the habit of regularly checking the temperature inside their refrigerator. Over half (55%) say they 'rarely' (24%) or 'never' (31%) do.

This is generally the case across the 'at risk' target groups with large proportions of pregnant women (63%) and parents (59%) saying the same. While fewer of those with compromised immune systems (44%) and seniors (41%) say they check their refrigerator temperature infrequently, the balance in these groups tips towards doing so 'sometimes' rather than 'often' or 'always.'

FREQUENCY OF CHECKING REFRIGERATOR TEMPERATURE

How often do you check the temperature inside your refrigerator?

	GEN POP	IMMUNO	PREGNANT	PARENTS	SENIORS
	2018	2018	2018	2018	2018
n=	1201	300	301	302	406
	%	%	%	%	%
NET - ALWAYS/OFTEN	27	21	12	16	27
Always	13	6	2	3	6
Often	14	14	10	13	21
Sometimes	18	35	25	25	32
Rarely	24	23	33	35	27
Never	31	21	30	24	14
NET - RARELY/NEVER	55	44	63	59	41



VI. Communications



Communications

A. Sources and Areas of Interest Related to Food Issues

Respondents were asked, unprompted, to indicate their main source of information on food safety, a slight variation on the question asked in 2010 which focused on food issues more generally. Not surprisingly, in the past eight years traditional media such as newspapers, radio, TV (21% vs. 43% in 2010), while still a prominent source of information, has been eclipsed by the Internet (28% versus 18% who cited 'websites' in 2010). Family and friends are mentioned by one-in-ten (10%). Other mentions include personal experience (8%), product labels and packaging (5%), work or industry experience (3%) and food safety courses (3%).

Results reveal some variation in responses among the target groups, but the overall pattern of lower reliance on traditional media also holds true for all of the groups with the exception of seniors.

- Among seniors, about as many cited traditional media (16%) as a primary information source on food safety issues as did personal experience (17%) and the Internet (10%). For this group, just over one-quarter (27%) are more likely to rely on product labels and packaging.
- For parents of young children, the Internet (21%), personal experience (17%) and products labels/packaging (17%) are cited as their main sources of information in about equal numbers. Very few (6%) cite traditional media.
- Among pregnant women and those who expect to become pregnant within the next year, the three most frequently cited sources include: the Internet (21%), product labels/packaging (16%) and family/friends (14%). Much like parents, very few in this group are inclined to rely on traditional media (7%).
- For those with compromised immune systems, product labels/packaging (21%) and the Internet (18%) are cited in about equal numbers, in addition to personal experience (14%). As with the other target groups, the 2018 results indicate a significant decline in reliance on traditional media (from 46% in 2010 to 9%).

MAIN SOURCE OF INFORMATION ON FOOD ISSUES

What is your MAIN source of information on food safety? [Single-mention]

Mentions of 3% or higher shown	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
n=	304	1201	323	300	300	301	305	302	304	406
	%	%	%	%	%	%	%	%	%	%
The internet ("Websites" in 2010)	18	28	23	18	40	21	31	21	9	10
Newspapers, radio, TV or other media	43	21	46	9	29	7	32	6	57	16
Family/friends	6	10	7	9	9	14	8	11	4	2
Self experience	4	8	5	14	5	9	6	17	9	17
Product labels/packaging	5	5	3	21	1	16	3	17	4	27
Work/Industry experience		3	-	<1	-	1	-	<1	-	<1
Food handling course/Food safety course		3	-	-	-	3	-	1	-	1
Other	<1	2	1	1	-	-	-	<1	-	1
Don't know	4	3	1	-	2	-	4	-	3	-



Respondents are interested in a range of information about food safety as they were in 2010, including: safe food handling practices (18%), cooking instructions (10%), food recalls (9%), expiry dates and best-before dates (9%), food-borne illnesses generally or specifically (6%) and risks associated with different types of foods (4%).

Each of these items were mentioned with greater frequency by the target groups, suggesting that there is a greater appetite for information both general and specific on food safety and safe food handling practices among the ‘at risk’ groups. Information related to safe food handling practices and food recalls were cited most frequently across all the target groups, but there was also a fairly strong degree of interest in food-borne illnesses.

PREFERRED TYPE OF INFORMATION ON FOOD SAFETY

And what type of information on food safety issues do you typically look for? [Single-mention]

Mentions of 4% or higher shown	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
	n=	n=	n=	n=	n=	n=	n=	n=	n=	n=
	304	1201	323	300	300	301	305	302	304	406
	%	%	%	%	%	%	%	%	%	%
Safe food handling practices	19	18	18	33	14	32	17	31	14	32
Cooking instruction/How to cook it/Cooking time/Cooking temp	4	10	7	<1	14	-	9	-	5	-
Food recalls	13	9	18	30	16	30	16	34	12	24
Expiry dates/Freshness/Best before dates	5	9	6	<1	5	-	7	-	7	-
Food-borne illnesses (for example: Listeria, E-coli, etc.)	10	6	8	21	7	20	10	18	7	22
Risks associated with different foods	5	4	6	14	2	16	6	15	7	19
Other	-	2	1	<1	1	-	-	<1	1	<1
Don't know	25	22	20	-	24	-	19	-	29	-

B. Sources of Information during an Outbreak

Respondents were also asked to indicate, unprompted, their main source of information during an outbreak of a food-borne illness such as listeria. Traditional media (such as newspapers, radio and television) continue to dominate in 2018 as they did in 2010, with more than six-in-ten citing these sources. Comparably, far fewer would rely on online sources of information (17%) although this is up slightly from 2010 (10%). Social media is cited by a small number (5%).

The same pattern is found among the target groups, although it is notable that a higher percentage of pregnant women (17%) and parents (12%) would rely on social media, compared to the general population and the other ‘at risk’ target groups.

MAIN SOURCE OF INFORMATION DURING OUTBREAK OF FOOD-BORNE ILLNESS

What about when there is a recall due to a food-borne illness outbreak (e.g., an E. coli outbreak earlier in 2017 that resulted in the recall of flour and flour-based products)? What is your MAIN source of information under these circumstances? [Single-mention]

Mentions of 5% or higher shown	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
	n=	n=	n=	n=	n=	n=	n=	n=	n=	n=
	304	1201	323	300	300	301	305	302	304	406
	%	%	%	%	%	%	%	%	%	%
Newspapers, radio, TV or other media	76	63	75	58	62	36	66	44	89	74
The internet/websites	11	17	17	16	27	19	21	24	5	10
Social media such as Facebook, Twitter, Pinterest, Instagram, etc.	-	5	-	7	-	17	-	12	-	2



C. Effectiveness of Detailed Articles, Brochures and Social Media

Many consumers (84%) say that detailed articles would be quite effective in terms of providing them with information on safe food handling. This result is consistent with 2010 findings for both the general public and across all the target groups. Respondents were asked how effective detailed articles would be at providing them with information on safe food handling.

EFFECTIVENESS OF DETAILED ARTICLES IN PROVIDING INFORMATION

How effective would DETAILED ARTICLES be at providing you with information on safe food handling?

	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
n=	304	1201	323	300	300	301	305	302	304	406
	%	%	%	%	%	%	%	%	%	%
NET - EFFECTIVE	80	84	85	85	83	84	88	85	88	88
Very effective	41	39	42	42	36	40	33	31	47	45
Somewhat effective	39	45	43	43	47	45	55	55	41	43
Not very effective	17	12	12	13	13	12	10	12	8	10
Not at all effective	4	4	3	2	4	4	3	3	4	2
NET - NOT EFFECTIVE	20	16	15	15	17	16	13	15	12	12

Those respondents who felt detailed articles would be very or somewhat effective at providing information on safe food handling were further asked about the best medium to share these articles. The vast majority suggest websites (73%), followed by newspapers (19%) and very few cite magazines (5%). Compared to 2010, these results indicate a significant increase in the use of websites (up from 39% to 73%) to relay this type of content and this reflects the broader trends in how consumers are generally getting their information. Conversely, preference for newspapers has fallen back (from 41% in 2010 to 19%) as it has for magazines (from 16% in 2010 to 5%).

Not unexpectedly, there are some variations across the target groups, although websites dominate as the preferred medium for accessing detailed articles about food safety. It is, however, important to point out that a significant proportion of seniors (42%) still cite newspapers as a preferred medium although this is markedly down from 2010 (64%).

BEST PLACE FOR DETAILED ARTICLES ABOUT FOOD SAFETY

Which of the following would be the BEST place for these detailed articles? Would it be... [Single-mention]

If "Somewhat/Very" Effective	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
n=	239	989	273	255	246	254	266	258	264	357
	%	%	%	%	%	%	%	%	%	%
on a website?	39	73	45	67	66	76	56	82	20	53
in a newspaper?	41	19	48	28	23	19	30	15	64	42
in a magazine?	16	5	7	4	11	5	13	3	15	5
None of the above	3	3	<1	-	-	-	1	-	2	-



Those who indicated a preference for receiving food safety information in detailed articles in newspapers, magazines or websites were asked to specify which exact sources they were referring to. Government sources of information are identified most often, with 15% saying the best place for these articles would be on Health Canada’s website or other government sources (10 per cent). A variety of newspapers, magazines, and publications were also mentioned, with no one media source dominating the list.

WHICH NEWSPAPERS/MAGAZINES/WEBSITES

Can you please tell me which [newspapers/magazines/websites]? [Open end]

If "Newspaper/Magazine/Website" Mentions of 2% or higher are shown	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
n=	231	960	272	255	246	254	263	258	259	357
	%	%	%	%	%	%	%	%	%	%
Health Canada/Santé Canada [In 2010: Health Canada website]	8	15	14	12	20	12	14	13	3	12
News/Local news/Community news (in newspaper, magazine or website)	7	11	6	22	2	18	6	19	8	24
Government/Federal Government/Provincial	*	10	*	21	*	21	*	22	*	18
Internet/Yahoo/Google/Website (general)	8	10	6	16	6	15	9	17	4	12
Social media (e.g., Facebook, Twitter, Instagram, Pinterest)	-	10	-	11	-	14	-	14	-	6
Food/Nutrition/Health related (general) [In 2010: Lifestyle, healthy living, cooking, parenting, family health]	16	6	7	8	15	6	15	7	10	7
CBC	-	4	-	5	-	6	-	3	-	2
Globe/Globe and Mail	2	3	7	6	6	6	6	3	12	10
La Presse	3	2	6	4	2		3	2	4	6
Toronto Star	4	2	8	6	7	5	3	2	10	4
Other	4	10	4	12	7	12	5	9	5	11
Cannot name any specifically	13	16	7	-	10	-	9	-	10	-
DK/NR	5	5	1	-	1	-	2	-	3	-



Respondents were also asked how effective brochures would be at providing them with information on safe food handling. Among the general population of Canadians there has been a significant decline in perceptions regarding the effectiveness of brochures since 2010. Overall, two-thirds of Canadians in 2018 (66%, down from 76%) feel brochures would be very or somewhat effective in this regard and, of this group, only about one-quarter (24%) rate brochures as ‘very effective.’ By comparison to detailed articles (see the findings noted above), brochures appear to be a much less effective, although still reasonably popular, tool.

The target groups gave brochures a higher rating for their effectiveness at providing information on safe food handling compared to the general population (between 7 and 8 out of 10 rated them as effective in each group). Further, effectiveness ratings are up among pregnant women in particular, compared to 2010.

EFFECTIVENESS OF BROCHURES IN PROVIDING INFORMATION

How effective would BROCHURES be at providing you with information on safe food handling?

	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
n=	304	1201	323	300	300	301	305	302	304	406
	%	%	%	%	%	%	%	%	%	%
NET - EFFECTIVE	76	66	72	73	69	77	71	75	72	79
Very effective	23	24	25	23	24	21	31	23	30	21
Somewhat effective	53	42	47	51	45	56	40	53	42	58
Not very effective	18	26	21	21	25	15	19	21	21	17
Not at all effective	6	9	7	6	6	9	10	4	7	4
NET - NOT EFFECTIVE	24	34	28	27	31	23	29	25	28	21



For those who suggested that brochures would be an effective means of providing information about food safety, a range of channels or locations are identified as the most effective ways of getting access to them, including: online websites (83%), grocery stores (81%), pharmacies (74%) in the mall (73%), healthcare professionals (63%) and a website where they could be ordered (45%). There is much more interest in using a wider range of channels to get this information out in the form of brochures than was found in 2010 with significant uptake in each of the channels cited.

The basic pattern of response holds for the various target groups on this issue, but the proportions selecting the top choice access points cited by the general population are lower and do vary versus 2010. Interestingly, though, healthcare professionals receive consistently higher mentions versus 2010 as access points for brochures across each of the target groups.

BEST WAY TO RECEIVE OR HAVE ACCESS TO BROCHURES

Which of the following would be effective ways for you to receive or have access to brochures? [Multi-mention]

If "Somewhat/Very Effective"	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
n=	227	782	232	220	206	231	216	227	216	321
	%	%	%	%	%	%	%	%	%	%
A website to read them	0	83	-	47	-	48	-	54	-	47
In a retail or grocery store	52	81	69	56	68	47	55	57	41	56
At a pharmacy	18	74	41	43	29	33	10	35	12	36
In the mail	35	73	51	33	48	34	35	40	43	28
From your health professional	11	63	34	49	25	44	7	38	5	28
A website to order	13	45	39	16	30	15	15	16	10	13
A 1-800 number to order them	4	26	17	12	6	6	3	6	4	10
None of the above	2	<1	-	1	-	1	<1	-	1	1



The survey also asked Canadians who use social media how effective it would be at providing them with information on safe food handling (data on the use of social media is shown in the next section). Results reveal a shift in attitudes on this since 2010 with the majority of Canadians (63%) believing that social media technologies would be an effective means of providing information on safe food handling (versus 43% in 2010). In fact, the plurality of Canadians (37%) now believe that social media would be a ‘very effective’ source of information on safe food handling (versus just 19% who said the same in 2010).

This shift is also apparent across the various target groups in 2018. Only among seniors do fewer than one-in-two believe that social media would be an effective source of information on safe food handling, but even among this group there is a significant shift since 2010 (44% who rate social media as effective, double the 22% in 2010).

EFFECTIVENESS OF SOCIAL MEDIA IN PROVIDING INFORMATION

How effective would SOCIAL MEDIA (FACEBOOK, TWITTER, ETC.) be at providing you with information on safe food handling?

	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018	2010	2018
n=	304	1201	323	300	300	301	305	302	304	406
	%	%	%	%	%	%	%	%	%	%
NET - EFFECTIVE	43	63	36	57	61	73	52	66	22	44
Very effective	19	37	15	15	28	25	25	27	8	12
Somewhat effective	24	26	21	42	34	48	28	38	14	32
Not very effective	16	13	24	28	19	18	22	24	19	33
Not at all effective	40	24	40	15	19	9	26	11	59	23
NET - NOT EFFECTIVE	57	37	64	43	39	27	48	34	78	56

1. Use of Social Media

Fully 83% of Canadians report using some form of social media in 2018. Facebook (69%) is most frequently cited among the various social media platforms, followed distantly by YouTube (52%), Instagram (32%), Pinterest (27%), Twitter (24%), Snapchat (21%) and Flickr (3%).

Pregnant women (95%) and parents of young children (88%) are the most likely to use some form of social media in 2018, while seniors are the least so inclined (69%). Across all groups, for those using social media, Facebook is the most common.

USE OF SOCIAL MEDIA

Do you personally have an account with or use any of the following? [Multi-mention]

	GEN POP	IMMUNO	PREGNANT	PARENTS	SENIORS
n=	2018	2018	2018	2018	2018
	%	%	%	%	%
Facebook	69	75	82	77	62
YouTube	52	37	54	48	23
Instagram	32	30	65	39	10
Pinterest	27	27	51	28	18
Twitter	24	25	31	38	15
Snapchat	21	15	43	14	2
Flickr	3	1	1	3	1
None of the above	17	17	5	12	31



The majority of Canadians who use social media report that they do so on a daily basis (58%). This pattern largely holds across the target groups but is somewhat lower for both the immune compromised group (51%) and seniors (49%).

EXTENT OF SOCIAL MEDIA USE

To what extent are you using social media (Facebook, Instagram, Twitter)?

	GEN POP	IMMUNO	PREGNANT	PARENTS	SENIORS
	2018	2018	2018	2018	2018
n=	982	250	285	267	279
	%	%	%	%	%
Never	10	5	3	4	8
Once a month	5	7	6	7	9
Once a week	9	11	8	7	13
Several times a week	17	26	24	24	21
Daily	58	51	59	58	49

Notwithstanding the widespread usage of social media, the vast majority of Canadians have not posted anything about food safety in the past year (82%). This is true for the target groups as well, and in fact increases to 89% among seniors.

INCIDENCE OF SHARING/POSTING INFORMATION ABOUT FOOD SAFETY ON SOCIAL MEDIA *

In the past year have you shared or posted information about food safety on social media?

	GEN POP	IMMUNO	PREGNANT	PARENTS	SENIORS
	2018	2018	2018	2018	2018
n=	884	237	277	257	256
	%	%	%	%	%
Yes	18	21	18	19	11
No	82	79	82	81	89

*Asked only of those who use social media regularly (daily/several times a week/once a week/once a month).

The vast majority of social media users also report being unaware of the Healthy Canadians' Facebook page (only 8% aware). Awareness is just slightly higher among pregnant women (19%), parents (17%) and those with immune deficiencies (14%).

AWARENESS OF 'HEALTHY CANADIANS' FACEBOOK PAGE*

Have you heard of the 'Healthy Canadians' Facebook page?

	GEN POP	IMMUNO	PREGNANT	PARENTS	SENIORS
	2018	2018	2018	2018	2018
n=	884	237	277	257	256
	%	%	%	%	%
Yes	8	14	19	17	6
No	92	86	81	83	94

*Asked only of those who use social media regularly (daily/several times a week/once a week/once a month).



D. Trusted Sources of Information

Respondents were also asked who they trust most when it comes to providing them with information on food safety. Results reveal that health professionals and health experts continue to be seen as the most trusted sources of information on food safety (NET 56%). One-in-three Canadians (33%) select health professionals as their most trusted source while nearly one-in-four (23%) select health experts and academics/scientists. Interestingly, however, the proportion who cite governments as their most trusted source of information has increased in 2018 (from 19% in 2010 to 28% in 2018).

The overall findings are generally consistent across the target groups with some minor variations. Compared to the other target groups, pregnant women are the least inclined to cite government as their most trusted source of information. Notably, seniors are the least likely to cite health professionals relative to other target groups and to the general population.

MOST TRUSTED SOURCES OF INFORMATION

Who do you trust the MOST when it comes to providing you with information on food safety?

Mentions of 3% or higher are shown	GEN POP		IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010 n=304 %	2018 n=1201 %	2010 n=323 %	2018 n=300 %	2010 n=300 %	2018 n=301 %	2010 n=305 %	2018 n=302 %	2010 n=304 %	2018 n=406 %
Health professionals (doctors, nurses)	37	33	22	23	24	29	28	23	26	17
Canadian Governments (federal, provincial, municipal) [In 2010: The federal government]	19	28	29	34	29	26	26	35	26	34
Health experts and academics/scientists	27	23	31	27	38	32	33	33	26	27
Consumer and other non-governmental groups	13	9	17	11	7	7	10	5	18	17
Retailers/grocers	4	3	1	4	2	6	3	4	4	3



VII. High-Risk Groups



High-Risk Groups

A. Self-Rated High Risk Groups

As was the case in 2010, significant percentages of those who self-identified as being in one of the defined high risk groups (i.e., people with compromised immune systems, pregnant or those likely to be pregnant within the next year, and seniors), did not consider themselves to be at any greater risk of food poisoning than the average person. In the case of seniors, almost three-quarters (73%) did not view themselves as being at greater risk, while just over half (59%) of women who are pregnant or expect to become pregnant in the next 12 months felt the same. For those with compromised immune systems a smaller but still considerable proportion (43%) did not feel they were at any great risk, although about one-third were uncertain (36% say ‘maybe’).

At the same time, it should be noted that the percentage of those in each of the target groups who feel they are not at risk has come down from 2010. This suggests that awareness of their own vulnerability to complications from food poisoning has improved in the intervening period, although the largest share in each group remain either unconvinced or uncertain of the risks.

SELF-RATED HIGH RISK GROUP*

Would you consider yourself to be at greater risk than average for complications from food poisoning?

	n=	GEN POP		IMMUNO		PREGNANT		SENIORS	
		2010	2018	2010	2018	2010	2018	2010	2018
		-	504	323	300	300	301	304	406
		%	%	%	%	%	%	%	%
Yes, definitely		-	14	28	21	27	14	11	5
Maybe		-	6	10	36	6	27	7	22
No		-	80	63	43	67	59	82	73

*Asked only of those in the target populations.

Parents of young children were specifically asked if they felt their child (5 years of age or younger) was at greater risk than average for complications from food poisoning. In contrast to the other ‘at risk’ target groups, the majority of parents (68%) responded either ‘yes’ (48%) or ‘maybe’ (20%). Nevertheless, about one-third (32%) did not feel their child was any more vulnerable to a food-borne illness.

HIGH RISK GROUP - CHILDREN UNDER 5 YEARS OF AGE*

Would you consider your child who is 5 years old or younger to be at greater risk than average for complications from food poisoning?

	n=	PARENTS	
		2010	2018
			302
		%	%
Yes, definitely		48	
Maybe		20	
No		32	

*Asked only of parents who have a child aged 5 or younger.



B. Precautions Taken to Prevent Food-Borne Illnesses

Among those who do consider themselves, or their young child, to be at greater risk from food poisoning, a majority in each of the target groups say they are taking precautions to protect themselves (or their child in the case of parents with young children). The results across the target groups range from about two-thirds (65%) among those with compromised immune systems to about seven-in-ten for seniors (69%) and pregnant women (72%) to almost three-quarters among parents with children aged 5 and younger (74%).

In all cases, these percentages are much lower compared to the results from 2010 when, across the board, virtually all of those among the subset of those in the 'at risk' groups who said they were at higher risk indicated they were currently taking precautions. This decline is most likely a factor of the shift from a telephone to an online survey and the tendency to answer questions more truthfully as opposed to responding in a more socially desirable way when asked the same question by a live interviewer.

PRECAUTIONS TAKEN TO PREVENT FOOD POISONING*

Would you say you currently take precautions above and beyond what most people do to protect yourself/your child/yourself and your child from food poisoning?

	IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018
n=	121	176	99	136	40	211	55	109
	%	%	%	%	%	%	%	%
Yes	96	65	96	72	88	74	98	69

*Asked of those who consider themselves to be at higher risk.



C. Types of Precautions Taken

Respondents in the ‘at risk’ groups were further probed on the types of precautions they take to protect themselves from food poisoning. The results are markedly different from 2010 but illustrate, as was the case in the previous survey, that there are a wide variety of actions taken including cleaning food preparation surfaces, washing fruits and vegetables, using different cutting boards to avoid cross-contamination, defrosting meat and poultry in the refrigerator, and avoiding certain higher risk foods.

Results are largely consistent across the sub-groups although pregnant women are less likely to say they clean surfaces where they prepare foods and, along with parents, to defrost meat and poultry in the fridge.

TYPE OF PRECAUTIONS TAKEN*

What precautions do you take? [Multi-mention]

	IMMUNO		PREGNANT		PARENTS		SENIORS	
	2010	2018	2010	2018	2010	2018	2010	2018
	n= 114	115	95	98	35	157	53	75
	%	%	%	%	%	%	%	%
Clean surfaces where you prepare food	32	87	19	69	34	87	28	93
Wash fresh fruits and vegetables	25	83	26	74	26	86	17	91
Check the temperature/Cook thoroughly/Prepare food properly	29	-	33	-	17	1	21	1
Wash hands often/Use sanitizer before and after	29	1	41	-	40	1	28	-
Check expiry dates/Best before dates	29	-	26	-	37	-	30	1
Use different cutting boards to avoid cross-contamination	4	78	5	64	11	69	2	67
Avoid certain higher risk foods	18	57	51	65	11	62	15	56
Look at food closely/Examine it/Smell it	8	-	4	-	14	-	9	-
Wash reusable grocery bags	2	31	-	28	6	24	4	32
Defrost meat and poultry in fridge	1	70	-	53	17	59	6	77
Store food properly	30	-	27	-	26	1	19	-
Careful about meat/Use thermometer to cook meat and poultry/Don't eat raw meat	-	2	-	2	-	1	-	1
Buy fresh food	-	-	-	-	-	-	-	-
Choose where I eat out/Restaurants inspected by health inspectors/Don't eat at buffets	-	1	-	-	-	-	-	1
Other	-	-	-	-	-	-	-	1

*Asked of those who said they take precautions.



D. Main Sources of Information for High Risk Groups

When high risk groups were asked about the main sources of information on food safety that one relies on, overall the responses were consistent with the general population. The Internet and websites as well as the newspaper, radio and TV are the primary sources of information for many. Some responses, however did vary by at risk group.

Pregnant women, or those hoping to become pregnant in the next year, are looking to the government (14%) as one of their main sources of information on the topic.

MAIN SOURCE OF INFORMATION ABOUT FOOD SAFETY: PREGNANT

As someone who is pregnant or likely to become pregnant, what is the MAIN source of information about food safety that you rely on or would rely on, given your condition?

		PREGNANT	
		2018	
		n=	301
			%
The internet/websites			30
Newspapers, radio, TV or other media			14
Government			14
Family/friends			10
Industry information			7
Doctor/Physician/Pediatrician			5
Product labels/packaging			5
Social media such as Facebook, Twitter, Pinterest, Instagram, etc.			4
Self experience			4

Those with compromised immune systems are sourcing information more from product labels/packing (14%) and self-experience (13%) compared to the general population.

MAIN SOURCE OF INFORMATION ABOUT FOOD SAFETY: IMMUNO

As someone who has a compromised immune system, or cares for a person with a compromised immune system, what is the MAIN source of information about food safety that you rely on given that you are dealing with this medical condition?

		IMMUNO	
		2018	
		n=	300
			%
Newspapers, radio, TV or other media			27
The internet/websites			19
Product labels/packaging			14
Self experience			13
Government			11
Industry information			6
Family/friends			4

Senior citizens look to the government (13%) for information on the topic before searching the internet and other websites (12%).



MAIN SOURCE OF INFORMATION ABOUT FOOD SAFETY: SENIORS

What is the MAIN source of information about food safety that you rely on for information specific to senior citizens?

		SENIORS	
		2018	
n=		406	
		%	
Newspapers, radio, TV or other media		51	
Government		13	
The internet/websites		12	
Self experience		8	
Product labels/packaging		7	
Family/friends		4	

Parents, looking for food safety information specific to infants and young children, will also source from product labels/packaging (11%) and the government (10%).

MAIN SOURCE OF INFORMATION ABOUT FOOD SAFETY: PARENTS

As someone with a child 5 years and under, what is the MAIN source of information about food safety that you rely on for information specific to infants and very young children?

		PARENTS	
		2018	
n=		302	
		%	
The internet/websites		31	
Newspapers, radio, TV or other media		22	
Product labels/packaging		11	
Government		10	
Self experience		9	
Family/friends		8	
Social media such as Facebook, Twitter, Pinterest, Instagram, etc.		3	



VIII. Appendix



Appendix

A. Call Dispositions

The response rate for the telephone component of the research was 8.5 per cent. Details are shown below.

Call Disposition

	N
Total numbers attempted	95421
UNRESOLVED NUMBERS (U)	19461
Busy	414
No answer	14637
Voicemail	4410
RESOLVED NUMBERS (Total minus U)	75960
<i>OUT OF SCOPE (invalid/non-eligible)</i>	<i>13826</i>
<i>Not-in-service (NIS)</i>	<i>12021</i>
<i>Non-resi/business</i>	<i>1446</i>
<i>Fax/modem</i>	<i>346</i>
<i>Cell/pager</i>	<i>12</i>
<i>Duplicates</i>	<i>1</i>
IN SCOPE NON-RESPONDING (IS)	11000
Refusals – gatekeeper, respondent	5124
Break-offs (interview not completed)	5047
Language barrier	390
Callback missed/respondent not available	364
Illness/Incapable	75
IN SCOPE RESPONDING (R)	2822
Disqualified/Quote filled	1621
Completed	1201
RESPONSE RATE [R / (U + IS + R)]	8.5%

This was calculated according to MRIA standards using the empirical method of response rate calculation, as follows:

- The number of responding participants (completed, disqualified, and over-quota respondents) – 2822
DIVIDED BY
- The sum of the unresolved numbers (busy, no answer, voicemail) – 19461 + the in scope non-responding participants (refusals, language barriers, missed call-backs) – 11000 + the in scope responding participants - 2822



B. Telephone Survey

FOOD SAFETY SURVEY – CANADIANS’ KNOWLEDGE & BEHAVIOUR Final – English Telephone

(T) = tracking **Text in red = modified in 2018**

Good morning/afternoon/evening, this is _____ calling from The Strategic Counsel. We are a professional public opinion research company. I’d like to assure you that we are not trying to sell you anything. Today we are talking to a random sample of Canadians on behalf of Health Canada about food issues.

This survey is approximately 15 minutes long. It is registered with the Marketing Research and Intelligence Association. Your participation is voluntary and completely confidential. Your answers will remain anonymous. May I continue? This call may be monitored or recorded for quality control purposes.

PSEX (T)

Record gender of respondent

(DO NOT ASK)

Male.....	1
Female.....	2

LANGI (T)

Record language of correspondence

(DO NOT ASK)

English.....	1
French.....	2

QAGE (T-QAGE2X)

In what year were you born?

(Enter year)	1
--------------------	---

IF UNDER 18, TERMINATE.

QREGION

What province do you live in?

Alberta.....	1
British Columbia.....	2
Manitoba	3
New Brunswick	4
Newfoundland & Labrador.....	5
Northwest Territories.....	6
Nova Scotia	7
Nunavut.....	8
Ontario.....	9
Prince Edward Island	10
Quebec.....	11
Saskatchewan.....	12
Yukon	13
Outside of Canada [TERMINATE]	14

HH COMP

How many people live in your household, including yourself?

(Enter number)	1
----------------------	---



HH COMP 2

(ASK IF 2+ PERSONS AT HH COMP)

What are the ages of the people in your household?

NOTE TO INTERVIEWER: IF NECESSARY PROMPT: Do you have people in your household who are....

CHECK ALL THAT APPLY

1 year old or less	1
2 years old.....	2
3 years old.....	3
4 years old.....	4
5 years old.....	5
6 years old.....	6
7-10 years old.....	7
11-13 years old.....	8
14-18 years old.....	9
19 years of age or older.....	10
NONE.....	12

HH COMP 3 (T-PARNT)

(ASK IF HH COMP 2 = 1,2,3,4 OR 5)

Are you the parent of the child aged 5 years old or younger?

Yes	1
No.....	2
(DO NOT READ)DK/NR.....	9

PREG1

(ASK IF FEMALE AND AGED 50 YEARS AND YOUNGER)

Are you currently pregnant?

Yes.....	1
No	2
(DO NOT READ)DK/NR.....	9

PREG2

(ASK IF FEMALE, AGED 50 YEARS AND YOUNGER, AND NOT PREGNANT)

Do you hope to become pregnant over the next year?

Yes.....	1
No.....	2
(DO NOT READ)DK/NR.....	9

IMM

Some people with heart disease, diabetes, cancer, HIV, asthma or other medical conditions have a compromised immune system. This means that their bodies cannot produce the same level of immunity to defend against an infectious sickness.

Are you a person with a compromised immune system? That is, are you a person who has a medical condition such as heart disease, diabetes, HIV, asthma or some other condition that makes you less likely to be able to fight off a sickness?

Yes.....	1
No	2
(DO NOT READ)DK/NR.....	9



GP1 (T)

How confident would you say you are right now in Canada's food safety system on a scale where 1 is not at all confident, 7 is completely confident and the midpoint 4 is moderately confident?

- 1. Not at all confident..... 1
- 2..... 2
- 3..... 3
- 4. Moderately confident 4
- 5..... 5
- 6..... 6
- 7. Completely confident..... 7
- (DO NOT READ)DK/NR..... 9

GP4A (T)

When you think of food safety concerns in your home, **what are your top 3 concerns?**

(DO NOT READ)

- Food not handled, stored or refrigerated properly 1
- Cleanliness..... 2
- Expired food..... 3
- Food contamination..... 4
- Proper food inspection..... 5
- Pesticides/Insecticides..... 6
- Additives/Preservatives..... 7
- Proper cooking and cooling instructions..... 8
- Allergies..... 9
- Correct labeling /information..... 10
- Bacteria/Viruses (e.g. Listeria, E.coli, salmonella)..... 11
- Genetically modified foods..... 12
- (HPP) High Pressure Processing..... 13
- Irradiation..... 14
- Other (specify) 77
- (DO NOT READ) DK/NR..... 99

PGP5 (T)

Please tell me the extent to which you agree or disagree with the following statement using a 7-point scale where 1 means you totally disagree, 7 means you totally agree and 4 means you neither agree nor disagree.

GP5B (T)

I feel I have enough information about food safety and how to protect myself and my family from food-borne illness and/or food poisoning.

- 1. Totally disagree 1
- 2..... 2
- 3..... 3
- 4. Neither agree nor disagree 4
- 5..... 5
- 6..... 6
- 7. Totally agree..... 7
- (DO NOT READ)DK/NR..... 9

PAW (T)

Using a 5 point scale where 1 means you have heard nothing and 5 means you have heard a great deal, how much have you heard about the following food related subjects?

(NOTE TO INTERVIEWER: Repeat scale as needed)



QAW2 (T)

Safe food handling?

Nothing 1	1
2.....	2
3.....	3
4.....	4
A great deal 5.....	5
(DO NOT READ)DK/NR.....	9

QAW3 (T)

Proper cooking and cooling instructions?

Nothing 1	1
2.....	2
3.....	3
4.....	4
A great deal 5.....	5
(DO NOT READ)DK/NR.....	9

QAW4 (T)

Proper storage of foods?

Nothing 1	1
2.....	2
3.....	3
4.....	4
A great deal 5.....	5
(DO NOT READ)DK/NR.....	9

QAW5 (T)

Food-borne illness?

Nothing 1	1
2.....	2
3.....	3
4.....	4
A great deal 5.....	5
(DO NOT READ)DK/NR.....	9

QAW6 (T)

Listeria?

Nothing 1	1
2.....	2
3.....	3
4.....	4
A great deal 5.....	5
(DO NOT READ)DK/NR.....	9

QAW7

The importance of hand washing?

Nothing 1	1
2.....	2
3.....	3
4.....	4
A great deal 5.....	5
(DO NOT READ)DK/NR.....	9



QAW8

Proper cooking temperatures?

Nothing 1	1
2.....	2
3.....	3
4.....	4
A great deal 5.....	5
(DO NOT READ)DK/NR.....	9

QAW9

Storing and reheating leftovers?

Nothing 1	1
2.....	2
3.....	3
4.....	4
A great deal 5.....	5
(DO NOT READ)DK/NR.....	9

PKFBI (T)

Food-borne illness is caused by the consumption of food contaminated by bacteria, viruses and parasites. Please indicate whether or not you believe the following statements about food-borne illness to be mostly true or mostly false. **(ROTATE KFBI1-KFBI6)**

KFBI1 (T)

Most food-borne illnesses can be prevented by cooking food thoroughly.

True	1
False.....	2
(DO NOT READ)DK/NR.....	9

KFBI2 (T)

You can tell if a food may cause food-borne illness by its look, smell or taste.

True	1
False.....	2
(DO NOT READ)DK/NR.....	9

KFBI4 (T)

Certain groups of people are at a greater risk of developing complications from food-borne illness.

True	1
False.....	2
(DO NOT READ)DK/NR.....	9

KFBI4B (T)

(ASK IF: KFBI4.EQ.1)

Which groups of people do you think would be at greater risk of developing complications from food-borne illness?

(DO NOT READ-CODE ALL THAT APPLY)

Elderly	1
Children under six years of age.....	2
Pregnant women.....	3
People with pre-existing health issues.....	4
Other (specify)	77
(DO NOT READ)DK/NR.....	99



KFB15 (T)

Freezing food kills the bacteria that can cause food-borne illness.

- True 1
- False..... 2
- (DO NOT READ)DK/NR..... 9

KFB16 (T)

There is very little consumers can do to prevent food-borne illness.

- True..... 1
- False..... 2
- (DO NOT READ)DK/NR..... 9

PKRF (T)

Next, I am going to read you a list of foods and I would like you to tell me to what extent you think each of these foods carries an increased risk of being contaminated by bacteria, viruses or parasites linked to food-borne illness. Please respond on a 7-point scale where 1 means to no extent whatsoever, 7 means to a great extent and 4 means to a moderate extent. (ROTATE KRF1-KRF17)

(NOTE TO INTERVIEWER: Repeat question as needed)

PN: PLEASE ROTATE KRF1-KRF17 SO THAT NO RESPONDENT SEES MORE THAN 8 OF THE 17 ATTRIBUTES

KRF1 (T)

Deli meats (for example: cold cuts, hot dogs)

- 1. No extent whatsoever..... 1
- 2..... 2
- 3..... 3
- 4. A moderate extent..... 4
- 5..... 5
- 6..... 6
- 7. A great extent..... 7
- (DO NOT READ)DK/NR..... 9

KRF3 (T)

Soft pasteurized cheeses (for example: **camembert, brie**)

- 1. No extent whatsoever..... 1
- 2..... 2
- 3..... 3
- 4. A moderate extent..... 4
- 5..... 5
- 6..... 6
- 7. A great extent..... 7
- (DO NOT READ)DK/NR..... 9

KRF4 (T)

Raw seafood **such as sushi, raw oysters, or smoked seafood**

- 1. No extent whatsoever..... 1
- 2..... 2
- 3..... 3
- 4. A moderate extent..... 4
- 5..... 5
- 6..... 6
- 7. A great extent..... 7
- (DO NOT READ)DK/NR..... 9



KRF5 (T)

Unpasteurized juices such as freshly squeezed juices or cider from local farmer’s markets, local orchards, juice bars, etc.

1. No extent whatsoever.....	1
2.....	2
3.....	3
4. A moderate extent.....	4
5.....	5
6.....	6
7. A great extent.....	7
(DO NOT READ)DK/NR.....	9

KRF7 (T)

Hard cheeses (for example: cheddar, swiss)

1. No extent whatsoever.....	1
2.....	2
3.....	3
4. A moderate extent.....	4
5.....	5
6.....	6
7. A great extent.....	7
(DO NOT READ)DK/NR.....	9

KRF8 (T)

Frozen breaded chicken products such as chicken nuggets, strips and burgers

1. No extent whatsoever.....	1
2.....	2
3.....	3
4. A moderate extent.....	4
5.....	5
6.....	6
7. A great extent.....	7
(DO NOT READ)DK/NR.....	9

KRF9 (T)

Pasteurized milk

1. No extent whatsoever.....	1
2.....	2
3.....	3
4. A moderate extent.....	4
5.....	5
6.....	6
7. A great extent.....	7
(DO NOT READ)DK/NR.....	9

KRF10

Uncooked flour

1. No extent whatsoever.....	1
2.....	2
3.....	3
4. A moderate extent.....	4
5.....	5



6.....	6
7. A great extent.....	7
(DO NOT READ)DK/NR.....	9

KRF12

Unpasteurized cheeses

1. No extent whatsoever.....	1
2.....	2
3.....	3
4. A moderate extent.....	4
5.....	5
6.....	6
7. A great extent.....	7
(DO NOT READ)DK/NR.....	9

KRF13

Raw eggs

1. No extent whatsoever.....	1
2.....	2
3.....	3
4. A moderate extent.....	4
5.....	5
6.....	6
7. A great extent.....	7
(DO NOT READ)DK/NR.....	9

KRF14

Sprouts (for example: alfalfa, bean, clover, radish)

1. No extent whatsoever.....	1
2.....	2
3.....	3
4. A moderate extent.....	4
5.....	5
6.....	6
7. A great extent.....	7
(DO NOT READ)DK/NR.....	9

KRF15

Pre-washed, ready to eat vegetables such as lettuce, carrots, etc.

1. No extent whatsoever.....	1
2.....	2
3.....	3
4. A moderate extent.....	4
5.....	5
6.....	6
7. A great extent.....	7
(DO NOT READ)DK/NR.....	9



KRF16

Raw poultry

1. No extent whatsoever.....	1
2.....	2
3.....	3
4. A moderate extent.....	4
5.....	5
6.....	6
7. A great extent.....	7
(DO NOT READ)DK/NR.....	9

KRF16A

Raw ground beef

1. No extent whatsoever.....	1
2.....	2
3.....	3
4. A moderate extent.....	4
5.....	5
6.....	6
7. A great extent.....	7
(DO NOT READ)DK/NR.....	9

KRF17

Melons

1. No extent whatsoever.....	1
2.....	2
3.....	3
4. A moderate extent.....	4
5.....	5
6.....	6
7. A great extent.....	7
(DO NOT READ)DK/NR.....	9

CHICK 1

In your opinion, do you consider most frozen, breaded chicken products, such as chicken nuggets and strips to be ...?

(ROTATE RESPONSES)

NOTE TO INTERVIEWER: READ OPTIONS 1 & 2, DO NOT READ OPTION 9

Raw, needing to be fully cooked	1
Pre-cooked and needing re-heating only.....	2
(DO NOT READ) Unsure/Don't know.....	9

CHICK 2

In general, how do you prepare frozen, breaded chicken products?

NOTE TO INTERVIEWER: READ OPTIONS 1 -5/6, DON'T READ OPTION 7

Oven.....	1
Microwave.....	2
Toaster Oven.....	3
Pan fried.....	4
Barbecue.....	5
Other (specify).....	6
Do not cook breaded chicken products.....	7



(PN: ROTATE QUESTIONS BBD AND ED)

BBD (T)

Most foods carry a "best-before" date. Which of the following statements comes closest to your understanding of best-before dates?

(READ LIST)

- Food that is not consumed before the best-before date is unsafe and should be thrown out..... 1
- Best-before dates indicate when a product is freshest and foods kept past this date are still safe to consume for a while..... 2
- (DO NOT READ)DK/NR..... 9

ED

Many foods carry an "expiry" date. Which of the following statements comes closest to your understanding of expiry dates?

(READ LIST)

- Food that is not consumed before the expiry date is unsafe and should be thrown out..... 1
- Expiry dates indicate when a product is freshest and foods kept past this date are still safe to consume for a while..... 2
- (DO NOT READ) DK/NR..... 9

FHP-A

Do you own a food thermometer?

- Yes 1
- No..... 2
- (DO NOT READ)DK/NR..... 9

PFHP (T)

We would now like to ask you about your food handling practices. Can you please tell me how frequently you do or do not engage in each of the following activities?

(NOTE TO INTERVIEWER: Repeat scale as needed)

PN: PLEASE ROTATE PFHP1-PFHP 23 SO THAT NO RESPONDENT SEES MORE THAN 8 OF THE 16 ATTRIBUTES

NOTE TO INTERVIEWER: IF A SITUATION DOES NOT APPLY TO A RESPONDENT (E.G. A VEGETARIAN DOES NOT EAT POULTRY), PLEASE CODE AS 'NEVER' AS OPPOSED TO 'DK'

FHP1 (T)

(ASK ONLY OF THOSE WHO OWN A FOOD THERMOMETER AT Q.FHP-A)

Use a food thermometer to determine if the food you are preparing is cooked to the recommended temperature?

- Never..... 1
- Rarely..... 2
- Sometimes..... 3
- Often..... 4
- Always..... 5
- (DO NOT READ)DK/NR..... 9

FHP2 (T)

Defrost frozen meat or poultry on the counter at room temperature?

- Never..... 1
- Rarely..... 2
- Sometimes..... 3
- Often..... 4
- Always..... 5
- (DO NOT READ)DK/NR..... 9



FHP4 (T)

Rinse poultry (for example: turkey or chicken) before cooking it?

Never.....	1
Rarely.....	2
Sometimes.....	3
Often.....	4
Always.....	5
(DO NOT READ)DK/NR.....	9

FHP5 (T)

Eat eggs with runny yolks?

Never.....	1
Rarely.....	2
Sometimes.....	3
Often.....	4
Always.....	5
(DO NOT READ)DK/NR.....	9

FHP6 (T)

Wash your reusable grocery bags?

Never.....	1
Rarely.....	2
Sometimes.....	3
Often.....	4
Always.....	5
(DO NOT READ)DK/NR.....	9

FHP7 (T)

Wash your hands with soap and water BEFORE preparing food?

Never.....	1
Rarely.....	2
Sometimes.....	3
Often.....	4
Always.....	5
(DO NOT READ)DK/NR.....	9

FHP10 (T)

Clean the surface you use to prepare foods on?

Never.....	1
Rarely.....	2
Sometimes.....	3
Often.....	4
Always.....	5
(DO NOT READ)DK/NR.....	9

FHP11 (T)

Wash fresh fruits and vegetables before consuming them?

Never.....	1
Rarely.....	2
Sometimes.....	3
Often.....	4
Always.....	5



(DO NOT READ)DK/NR..... 9

FHP15 (T)

Refrigerate leftover food within two hours of cooking?

Never..... 1

Rarely..... 2

Sometimes..... 3

Often..... 4

Always..... 5

(DO NOT READ)DK/NR..... 9

FHP16 (T)

Refreeze food after it has already been completely defrosted?

Never..... 1

Rarely..... 2

Sometimes..... 3

Often..... 4

Always..... 5

(DO NOT READ)DK/NR..... 9

FHP17 (T)

Keep remaining leftover food after you have reheated it once?

Never..... 1

Rarely..... 2

Sometimes..... 3

Often..... 4

Always..... 5

(DO NOT READ)DK/NR..... 9

FHP18 (T)

Put meat or poultry and fresh produce in the same shopping bag?

Never..... 1

Rarely..... 2

Sometimes..... 3

Often..... 4

Always..... 5

(DO NOT READ)DK/NR..... 9

FHP19 (T)

Put meat, poultry and seafood on the bottom shelf of your fridge, or in a special drawer?

Never..... 1

Rarely..... 2

Sometimes..... 3

Often..... 4

Always..... 5

(DO NOT READ)DK/NR..... 9

FHP20

Wash your hands with soap and water AFTER handling raw meat or raw fish?

Never..... 1

Rarely..... 2

Sometimes..... 3



Often.....	4
Always.....	5
(DO NOT READ)DK/NR.....	9

FHP21

Wash your hands with soap and water AFTER handling frozen breaded chicken products such as chicken nuggets, strips or burgers?

Never.....	1
Rarely.....	2
Sometimes.....	3
Often.....	4
Always.....	5
(DO NOT READ)DK/NR.....	9

FHP23

Closely follow the cooking instructions on food product packaging?

Never.....	1
Rarely.....	2
Sometimes.....	3
Often.....	4
Always.....	5
(DO NOT READ)DK/NR.....	9

FRG1

How often do you check the temperature inside your refrigerator? **(READ OPTIONS)**

Never.....	1
Rarely.....	2
Sometimes.....	3
Often.....	4
Always.....	5
(DO NOT READ)DK/NR.....	9

FRG2 (T-FRG1)

To the best of your knowledge, what temperature should refrigerators be kept at? (PN FOR TELEPHONE: READ OPTIONS)

Lower than -2°C	1
Between -2°C and -1°C.....	2
Between 0°C and +2°C.....	3
Between +2°C and +4°C.....	4
Between +4°C and +6°C.....	5
Between +6°C and +8°C.....	6
I don't really have a good idea as to what the temperature should be kept at.....	9

INFO1A (T)

What is your MAIN source of information on food safety?

NOTE TO INTERVIEWER: DO NOT READ LIST; RECORD ONLY FIRST MENTION

Newspapers, radio, TV or other media.....	1
Product labels/packaging.....	2
Family/friends.....	3
Self experience.....	4
The internet.....	5
Industry information.....	6



Grocery stores.....	7
Federal Government.....	8
Provincial Government.....	9
Municipal Government (e.g. City Public Health Units)	10
Social media such as Facebook, Twitter, Pinterest, Instagram, etc.....	11
YouTube.....	12
Blogs.....	13
Cook books/recipes.....	14
Academics/health experts.....	15
Other (specify).....	77
(DO NOT READ)DK/NR.....	99

INFO1B (T)

And what type of information on food safety issues do you typically look for?

NOTE TO INTERVIEWER: DO NOT READ LIST; RECORD ONLY FIRST MENTION

Safe food handling practices.....	1
Risks associated with different foods.....	2
Food recalls.....	3
Food-borne illnesses (for example: Listeria, E-coli, etc.).....	4
Other (specify).....	77
(DO NOT READ)DK/NR.....	99

INFO2A (T)

What about when there is a recall due to a food-borne illness outbreak (e.g., an E. coli outbreak earlier in 2017 that resulted in the recall of flour and flour-based products)? What is your MAIN source of information under these circumstances?

NOTE TO INTERVIEWER: DO NOT READ LIST; RECORD ONLY FIRST MENTION

Newspapers, radio, TV or other media.....	1
Product labels/packaging.....	2
Family/friends.....	3
Self experience.....	4
The internet/websites.....	5
Industry information.....	6
Grocery stores.....	7
Government.....	8
Social media such as Facebook, Twitter, Pinterest, Instagram, etc.....	9
YouTube.....	10
Blogs.....	11
Academics/health experts.....	13
Other (specify).....	77
(DO NOT READ)DK/NR.....	99

INFO3

(ASK THOSE WHO ARE PREGNANT OR LIKELY TO BECOME PREGNANT)

As someone who is pregnant or likely to become pregnant, what is the MAIN source of information about food safety that you rely on or would rely on, given your condition?

NOTE TO INTERVIEWER: DO NOT READ LIST; RECORD ONLY FIRST MENTION

Newspapers, radio, TV or other media.....	1
Product labels/packaging.....	2
Family/friends.....	3
Self experience.....	4
The internet/websites.....	5



Industry information.....	6
Grocery stores.....	7
Government.....	8
Social media such as Facebook, Twitter, Pinterest, Instagram, etc.....	9
YouTube.....	10
Blogs.....	11
Other (specify).....	77
(DO NOT READ)DK/NR.....	99

INFO4

(ASK THOSE WHO HAVE COMPROMISED IMMUNITY AT Q.IMM)

As someone who has a compromised immune system, or cares for a person with a compromised immune system, what is the MAIN source of information about food safety that you rely on given that you are dealing with this medical condition?

NOTE TO INTERVIEWER: DO NOT READ LIST; RECORD ONLY FIRST MENTION

Newspapers, radio, TV or other media.....	1
Product labels/packaging.....	2
Family/friends.....	3
Self experience.....	4
The internet/websites.....	5
Industry information.....	6
Grocery stores.....	7
Government.....	8
Social media such as Facebook, Twitter, Pinterest, Instagram, etc.....	9
YouTube.....	10
Blogs.....	11
Other (specify).....	77
(DO NOT READ)DK/NR.....	99

INFO5

(ASK SENIOR CITIZENS AGED 60+)

What is the MAIN source of information about food safety that you rely on for information specific to senior citizens?

NOTE TO INTERVIEWER: DO NOT READ LIST; RECORD ONLY FIRST MENTION

Newspapers, radio, TV or other media.....	1
Product labels/packaging.....	2
Family/friends.....	3
Self experience.....	4
The internet/websites.....	5
Industry information.....	6
Grocery stores.....	7
Government.....	8
Social media such as Facebook, Twitter, Pinterest, Instagram, etc.....	9
YouTube.....	10
Blogs.....	11
Other (specify).....	77
(DO NOT READ)DK/NR.....	99

INFO6

(ASK PARENTS WITH CHILDREN 5 YEARS AND UNDER)

As someone with a child 5 years and under, what is the MAIN source of information about food safety that you rely on for information specific to infants and very young children?

NOTE TO INTERVIEWER: DO NOT READ LIST; RECORD ONLY FIRST MENTION



Newspapers, radio, TV or other media..... 1
 Product labels/packaging..... 2
 Family/friends..... 3
 Self experience..... 4
 The internet/websites..... 5
 Industry information..... 6
 Grocery stores..... 7
 Government..... 8
 Social media such as Facebook, Twitter, Pinterest, Instagram, etc..... 9
 YouTube..... 10
 Blogs..... 11
 Other (specify)..... 77
 (DO NOT READ)DK/NR..... 99

PSOI (T)

I am going to read you a list of potential sources for information on safe food handling. For each, I would like you to tell me whether it would be a very effective, somewhat effective, not very effective or not at all effective way to provide you with information about safe food handling.

(NOTE TO INTERVIEWER: Repeat scale as needed)

SOI2A (T)

(How effective would...be at providing you with information on safe food handling?) ...detailed articles...

Not at all effective..... 1
 Not very effective..... 2
 Somewhat effective..... 3
 Very effective..... 4
 (DO NOT READ)DK/NR..... 9

SOI2B (T)

(ASK IF: SOI2A EQ.3,4)

Which of the following would be the BEST place for these detailed articles? Would it be...

(READ LIST - SELECT ONLY ONE RESPONSE)

in a newspaper?..... 1
 in a magazine?..... 2
 on a website?..... 3
 (DO NOT READ)None of the above..... 8B
 (DO NOT READ)DK/NR..... 9B

SOI2C (T)

(ASK IF: SOI2B EQ.1,2,3)

Can you please tell me which [newspapers/magazines/websites]?

(OPEN ENDED - RECORD UP TO THREE RESPONSES)

Response please specify..... 77
 (DO NOT READ) Cannot name any specifically..... 98
 (DO NOT READ)DK/NR..... 99

SOI3A (T)

(How effective would...be at providing you with information on safe food handling?) ...brochures...

Not at all effective..... 1
 Not very effective..... 2
 Somewhat effective..... 3
 Very effective..... 4
 (DO NOT READ)DK/NR..... 9



SOI3B (T)

(ASK IF: SOI3A.EQ.3,4)

Which of the following would be effective ways for you to receive or have access to these brochures? Would it be...

(READ LIST - SELECT ALL THAT APPLY)

From your health professional.....	1
At a pharmacy.....	2
In a retail or grocery store.....	3
In the mail.....	4
A 1-800 number to order them.....	5
A website to order.....	10
A website to read them.....	11
(DO NOT READ)None of the above.....	8
(DO NOT READ)DK/NR.....	9

SOI6A (T)

(How effective would...be at providing you with information on safe food handling?)

...social media (Facebook, Twitter, etc.)...

Not at all effective.....	1
Not very effective.....	2
Somewhat effective.....	3
Very effective.....	4
(DO NOT READ)DK/NR.....	9

TRU1 (T)

Who do you trust the MOST when it comes to providing you with information on food safety?

(READ LIST - SELECT ONLY ONE RESPONSE)

PN: ROTATE OPTIONS

Retailers/grocers.....	1
Canadian Governments (federal, provincial, municipal).....	2
Consumer and other non-governmental groups.....	3
Health experts and academics/scientists.....	4
Health professionals (doctors, nurses).....	5
(DO NOT READ) Other (specify)	77
(DO NOT READ)DK/NR.....	9

DEMIN (T)

Now I have a few more questions to be used for statistical purposes only.

SHOP (T)

Approximately how often are you responsible for shopping for food in your household? Is it:

Every day or almost every day.....	1
1-3 times a week.....	2
Once or twice a month.....	3
A few times a year, or.....	4
Never.....	5
(DO NOT READ)DK/NR.....	9

SHOP2 (T)

And approximately how often are you responsible for preparing the main meal in your household? Is it:

Every day or almost every day.....	1
1-3 times a week.....	2
Once or twice a month.....	3



A few times a year.....	4
Never.....	5
(DO NOT READ)DK/NR.....	9

SHOP3

And approximately how often are you responsible for preparing the main meal using the outdoor barbecue? Is it:

Every day or almost every day.....	1
1-3 times a week.....	2
Once or twice a month.....	3
A few times a year.....	4
Never.....	5
(DO NOT READ)DK/NR.....	9

HST2 (T)

(ASK IF AGED 60+ @QAGE; PREGNANT WOMEN OR THOSE EXPECTING TO BECOME PREGNANT WITHIN THE NEXT YEAR – CODE 1@Q PREG1 OR PREG2; OR INDIVIDUALS WITH COMPROMISED IMMUNE SYSTEMS CODE 1@QIMM)

Would you consider yourself to be at greater risk than average for complications from food poisoning?

Yes, definitely.....	1
Maybe.....	2
No	3
(DO NOT READ)DK/NR.....	9

HST2B (T)

(ASK IF A PARENT OF A CHILD AGED 5 OR UNDER – CODE 1 @ Q. HH COMP 3)

Would you consider **your child who is 5 years old or younger** to be at greater risk than average for complications from food poisoning?

Yes, definitely.....	1
Maybe.....	2
No	3
(TELEPHONE ONLY) (DO NOT READ)DK/NR.....	9

HST3A (T)

(ASK IF: HST2 OR HST2B EQ.1,2)

WORDING IF A PARENT OF A CHILD AGED 5 OR UNDER – CODES 1-5 @ Q. HH COMP 2 AND PARENT NOT HIGH RISK:

Would you say you currently take precautions above and beyond what most people do to protect your child from food poisoning?

WORDING IF A PARENT OF A CHILD AGED 5 OR UNDER – CODES 1 @ Q. HH COMP 3 AND PARENT IS HIGH RISK:

Would you say you currently take precautions above and beyond what most people do to protect yourself and your child from food poisoning?

WORDING IF NOT PARENT OF A CHILD AGED 5 OR UNDER @ Q. HH COMP 2 AND IS HIGH RISK:

Would you say you currently take precautions above and beyond what most people do to protect yourself from food poisoning?

Yes.....	1
No.....	2
(DO NOT READ)DK/NR.....	9

HST3A2 (T)

(ASK IF: HST3A.EQ.1)

What precautions do you take?

DO NOT READ-CODE ALL THAT APPLY. ACCEPT UNLIMITED RESPONSES.



Wash fresh fruits and vegetables..... 1
 Wash reusable grocery bags..... 2
 Clean surfaces where you prepare food..... 3
 Defrost meat and poultry in fridge..... 4
 Use different cutting boards to avoid cross-contamination..... 5
 Avoid certain higher risk foods..... 6
 Other (specify)..... 77
 (DO NOT READ)DK/NR..... 99

HST 4

In the past year, have you experienced illness that you thought was due to the food you ate, that is food poisoning?

Yes..... 1
 No..... 2
 (DO NOT READ)DK/NR..... 9

HST 5

Which of the following comes closest to describing your understanding of food poisoning? Would you say that it is...

(READ LIST)

Food poisoning is a mild condition that resolves itself without medical treatment..... 1
 Food poisoning can be mild or severe, and can sometimes send people to the hospital..... 2
 (DO NOT READ)DK/NR..... 9

HST 6

To the best of your knowledge, where are most food poisoning cases contracted? Are they mostly contracted... **(READ LIST)**

PN: ROTATE OPTIONS

At your home..... 1
 In restaurants, take-out, or cafeterias..... 2
 At friends/relatives..... 3
 International travel..... 4
 (DO NOT READ)DK/NR..... 99

HST 7

And, to the best of your knowledge, what are most cases of food poisoning a result of?

Are they mostly a result of... **(READ LIST)**

Unsafe food handling or cooking practices in the kitchen..... 1
 Things that occur before food reaches the kitchen (such as contamination in culture/harvesting/ processing)..... 2
 (DO NOT READ)DK/NR..... 99

SOC MEDIA 1

Do you personally have an account with or use any of the following?

PN: ROTATE OPTIONS. SELECT ALL THAT APPLY. ASK OPTIONS ONE AT A TIME AND RECORD YES/NO.

Facebook..... 1
 Twitter..... 2
 YouTube..... 3
 Flickr..... 4
 Pinterest..... 5
 Instagram..... 6
 Snapchat..... 7
 None of the above **(SKIP TO Q.EDUC)**..... 8
 (DO NOT READ)Prefer not to answer..... 99



SOC MEDIA 2

To what extent are you using social media (Facebook, Instagram, Twitter)? Would that be...

(READ OPTIONS)

Never.....	1
Once a month.....	2
Once a week.....	3
Several times a week.....	4
Daily.....	5
(DO NOT READ)DK/NR.....	9

SOC MEDIA 3

(ASK IF: SOC MEDIA 2 EQ. 2,3,4,5)

In the past year have you shared or posted information about food safety on social media?

Yes.....	1
No.....	2
(DO NOT READ)DK/NR.....	9

SOC MEDIA 3

(ASK IF: SOC MEDIA 2 EQ. 2,3,4,5)

Have you heard of the 'Healthy Canadians' Facebook page?

Yes	1
No.....	2
(DO NOT READ)DK/NR.....	9

EDUC (T)

What is the highest level of schooling that you have completed? **(READ LIST)**

Grade 8 or less.....	1
Some high school.....	2
High School Diploma or equivalent.....	3
Registered Apprenticeship or other trades certificate or diploma.....	4
College, CEGEP, or other non-university certificate or diploma.....	5
University certificate or diploma below bachelor's level.....	6
Bachelor's degree.....	7
Post graduate degree above the bachelor's level.....	8
(DO NOT READ)DK/Refused/Prefer not to answer.....	9

INC20 (T)

Which of the following categories best describes your total household income? That is, the total income of all persons in your household combined, before taxes? **(READ LIST)**

Under \$20,000.....	1
\$20,000 to just under \$40,000.....	2
\$40,000 to just under \$60,000.....	3
\$60,000 to just under \$80,000.....	4
\$80,000 to just under \$100,000.....	5
\$100,000 to just under \$150,000.....	6
\$150,000 and above.....	7
(DO NOT READ)DK/Refused/Prefer not to answer.....	99



BORN

Where were you born? Were you...

Born in Canada.....	1
Not born in Canada, but have been living in Canada for less than 1 year.....	2
Not born in Canada, but living in Canada for 1 year or more, but less than five years.....	3
Not born in Canada, but living in Canada for 5 years or more, but less than 10 years.....	4
Not born in Canada, but living in Canada for 10 years or more.....	5
(DO NOT READ)DK/Refused/Prefer not to answer.....	99

ETHN

What ethnic or cultural group do you belong to? Do you consider yourself mainly...

(READ OPTIONS ONLY IF NECESSARY)

Canadian.....	1
French Canadian/Quebecois/Acadian.....	2
British.....	3
African.....	4
Caribbean.....	5
Central American.....	6
Chinese.....	7
Eastern European.....	8
Middle Eastern.....	9
South American.....	10
South Asian (such as from India, Pakistan, Bangladesh).....	11
Southeast Asian (such as from Vietnam, Philippines, Myanmar).....	12
Mid-West Asian.....	13
East Asian.....	14
French.....	15
North Europe/Scandinavian.....	16
Western European.....	17
Southern European.....	18
First Nations.....	19
American.....	20
Australian/New Zealander.....	21
South African.....	22
Jewish.....	23
Pacific Islander.....	24
Other (specify).....	77
(DO NOT READ)DK/Refused/Prefer not to answer.....	99

LANG

What language do you speak primarily at home?

(DO NOT READ)

English.....	1
French.....	2
Tagalog.....	3
Mandarin.....	4
Cantonese.....	5
Punjabi.....	6
Hindi.....	7
Urdu.....	8
Tamil.....	9
Arabic.....	10



Spanish.....	11
Italian.....	12
Creole.....	13
Other (specify).....	77
(DO NOT READ)DK/Refused/Prefer not to answer.....	99

THNK (T)

Thank you for completing our survey.

End of Interview

Completion	1D
------------------	----

QFIL (T)

ASK IF: IEMPTY (QEND)

We regret but your responses have shown that you are in a group that is already completed. Thank you for taking the time to assist us in our data collection.

THNK2 (T)

ASK IF: IEMPTY (QEND)

We regret but your responses have shown that you are ineligible to participate in this survey. Thank you for your time.



C. Online Survey

FOOD SAFETY SURVEY – CANADIANS’ KNOWLEDGE & BEHAVIOUR Final – English Online

(T) = tracking **Text in red = modified in 2018**

Thanks for agreeing to participate in this survey. This survey is being conducted by Health Canada and covers a range of topics with a particular focus on food issues. It should take you about 15 minutes to complete. This survey is registered with the Marketing Research and Intelligence Association. Your participation is voluntary and completely confidential. Your answers will remain anonymous.

PSEX (T)

Please indicate your gender:

- Male..... 1
- Female..... 2

LANGI (T)

Record language of correspondence

(DO NOT ASK)

- English..... 1
- French..... 2

QAGE (T-QAGE2X)

In what year were you born?

- (Enter year) 1

IF UNDER 18, TERMINATE.

QREGION

What province do you live in?

- Alberta..... 1
- British Columbia..... 2
- Manitoba 3
- New Brunswick 4
- Newfoundland & Labrador..... 5
- Northwest Territories..... 6
- Nova Scotia 7
- Nunavut..... 8
- Ontario..... 9
- Prince Edward Island 10
- Quebec..... 11
- Saskatchewan..... 12
- Yukon 13
- Outside of Canada **[TERMINATE]**..... 14

HH COMP

How many people live in your household, including yourself?

- (Enter number) 1



HH COMP 2

(ASK IF 2+ PERSONS AT HH COMP)

What are the ages of the people in your household? CHECK ALL THAT APPLY.

1 year old or less	1
2 years old.....	2
3 years old.....	3
4 years old.....	4
5 years old.....	5
6 years old.....	6
7-10 years old.....	7
11-13 years old.....	8
14-18 years old.....	9
19 years of age or older.....	10
NONE.....	12

HH COMP 3 (T-PARNT)

ASK IF HH COMP 2 = 1,2,3,4 OR 5

Are you the parent of the child aged 5 years old or younger?

Yes	1
No.....	2

PREG1

(ASK IF FEMALE AND AGED 50 YEARS AND YOUNGER)

Are you currently pregnant?

Yes.....	1
No	2

PREG2

(ASK IF FEMALE, AGED 50 YEARS AND YOUNGER, AND NOT PREGNANT)

Do you hope to become pregnant over the next year?

Yes.....	1
No	2
Don't know.....	9

IMM

Some people with heart disease, diabetes, cancer, HIV, asthma or other medical conditions have a compromised immune system. This means that their bodies cannot produce the same level of immunity to defend against an infectious sickness.

Are you a person with a compromised immune system? That is, are you a person who has a medical condition such as heart disease, diabetes, HIV, asthma or some other condition that makes you less likely to be able to fight off a sickness?

Yes.....	1
No	2
Don't know.....	9



GP1 (T)

How confident would you say you are right now in Canada’s food safety system?

1. Not at all confident.....	1
2.....	2
3.....	3
4. Moderately confident	4
5.....	5
6.....	6
7. Completely confident.....	7

GP4A (T)

When you think of food safety concerns in your home, what are your top 3 concerns?

PN: OPEN ENDED QUESTION. GIVE RESPONDENTS PLACE TO WRITE TOP 3 CONCERNS.

Food not handled, stored or refrigerated properly	1
Cleanliness.....	2
Expired food.....	3
Food contamination.....	4
Proper food inspection.....	5
Pesticides/Insecticides.....	6
Additives/Preservatives.....	7
Proper cooking and cooling instructions.....	8
Allergies.....	9
Correct labeling /information.....	10
Bacteria/Viruses (e.g. Listeria, E.coli, salmonella).....	11
Genetically modified foods.....	12
(HPP) High Pressure Processing.....	13
Irradiation.....	14
Other (specify)	77

PGP5 (T)

Please tell me the extent to which you agree or disagree with the following statement:

GP5B (T)

I feel I have enough information about food safety and how to protect myself and my family from food-borne illness and/or food poisoning.

1. Totally disagree	1
2.....	2
3.....	3
4. Neither agree nor disagree	4
5.....	5
6.....	6
7. Totally agree.....	7

PAW (T)

How much have you heard about the following food related subjects? **PN: ROTATE QAW2-9**

QAW2 (T)

Safe food handling?

Nothing 1	1
2.....	2
3.....	3
4.....	4
A great deal 5.....	5



QAW3 (T)

Proper cooking and cooling instructions?

Nothing 1	1
2.....	2
3.....	3
4.....	4
A great deal 5.....	5

QAW4 (T)

Proper storage of foods?

Nothing 1	1
2.....	2
3.....	3
4.....	4
A great deal 5.....	5

QAW5 (T)

Food-borne illness?

Nothing 1	1
2.....	2
3.....	3
4.....	4
A great deal 5.....	5

QAW6 (T)

Listeria?

Nothing 1	1
2.....	2
3.....	3
4.....	4
A great deal 5.....	5

QAW7

The importance of hand washing?

Nothing 1	1
2.....	2
3.....	3
4.....	4
A great deal 5.....	5

QAW8

Proper cooking temperatures?

Nothing 1	1
2.....	2
3.....	3
4.....	4
A great deal 5.....	5



QAW9

Storing and reheating leftovers?

Nothing 1	1
2.....	2
3.....	3
4.....	4
A great deal 5.....	5

PKFBI (T)

Food-borne illness is caused by the consumption of food contaminated by bacteria, viruses and parasites. Please indicate whether or not you believe each of the following to be mostly true or mostly false.

PN: ROTATE KFBI1-KFBI6

KFBI1 (T)

Most food-borne illnesses can be prevented by cooking food thoroughly.

True	1
False.....	2

KFBI2 (T)

You can tell if a food may cause food-borne illness by its look, smell or taste.

True	1
False.....	2

KFBI4 (T)

Certain groups of people are at a greater risk of developing complications from food-borne illness.

True	1
False.....	2

KFBI4B (T)

(ASK IF: KFBI4.EQ.1)

Which groups of people do you think would be at greater risk of developing complications from food-borne illness?

PN: OPEN ENDED QUESTION. GIVE RESPONDENTS PLACE TO WRITE 4 TYPES OF PEOPLE.

Elderly	1
Children under six years of age.....	2
Pregnant women.....	3
People with pre-existing health issues.....	4
Other (specify)	77

KFBI5 (T)

Freezing food kills the bacteria that can cause food-borne illness.

True	1
False.....	2

KFBI6 (T)

There is very little consumers can do to prevent food-borne illness.

True.....	1
False.....	2

PKRF (T)

To what extent do you think each of the following foods carries an increased risk of being contaminated by bacteria, viruses or parasites linked to food-borne illness?

PN: ROTATE KRF1-KRF17



KRF1 (T)

Deli meats (for example: cold cuts, hot dogs)

1. No extent whatsoever.....	1
2.....	2
3.....	3
4. A moderate extent.....	4
5.....	5
6.....	6
7. A great extent.....	7

KRF3 (T)

Soft pasteurized cheeses (for example: **camembert, brie**)

1. No extent whatsoever.....	1
2.....	2
3.....	3
4. A moderate extent.....	4
5.....	5
6.....	6
7. A great extent.....	7

KRF4 (T)

Raw seafood **such as sushi, raw oysters, or smoked seafood**

1. No extent whatsoever.....	1
2.....	2
3.....	3
4. A moderate extent.....	4
5.....	5
6.....	6
7. A great extent.....	7

KRF5 (T)

Unpasteurized juices **such as freshly squeezed juices or cider from local farmer’s markets, local orchards, juice bars, etc.**

1. No extent whatsoever.....	1
2.....	2
3.....	3
4. A moderate extent.....	4
5.....	5
6.....	6
7. A great extent.....	7

KRF7 (T)

Hard cheeses (for example: cheddar, swiss)

1. No extent whatsoever.....	1
2.....	2
3.....	3
4. A moderate extent.....	4
5.....	5
6.....	6
7. A great extent.....	7



KRF8 (T)

Frozen breaded chicken products such as chicken nuggets, strips and burgers

1. No extent whatsoever.....	1
2.....	2
3.....	3
4. A moderate extent.....	4
5.....	5
6.....	6
7. A great extent.....	7

KRF9 (T)

Pasteurized milk

1. No extent whatsoever.....	1
2.....	2
3.....	3
4. A moderate extent.....	4
5.....	5
6.....	6
7. A great extent.....	7

KRF10

Uncooked flour

1. No extent whatsoever.....	1
2.....	2
3.....	3
4. A moderate extent.....	4
5.....	5
6.....	6
7. A great extent.....	7

KRF12

Unpasteurized cheeses

1. No extent whatsoever.....	1
2.....	2
3.....	3
4. A moderate extent.....	4
5.....	5
6.....	6
7. A great extent.....	7

KRF13

Raw eggs

1. No extent whatsoever.....	1
2.....	2
3.....	3
4. A moderate extent.....	4
5.....	5
6.....	6
7. A great extent.....	7



KRF14

Sprouts (for example: alfalfa, bean, clover, radish)

1. No extent whatsoever.....	1
2.....	2
3.....	3
4. A moderate extent.....	4
5.....	5
6.....	6
7. A great extent.....	7

KRF15

Pre-washed, ready to eat vegetables such as lettuce, carrots, etc.

1. No extent whatsoever.....	1
2.....	2
3.....	3
4. A moderate extent.....	4
5.....	5
6.....	6
7. A great extent.....	7

KRF16

Raw poultry

1. No extent whatsoever.....	1
2.....	2
3.....	3
4. A moderate extent.....	4
5.....	5
6.....	6
7. A great extent.....	7

KRF16A

Raw ground beef

1. No extent whatsoever.....	1
2.....	2
3.....	3
4. A moderate extent.....	4
5.....	5
6.....	6
7. A great extent.....	7

KRF17

Melons

1. No extent whatsoever.....	1
2.....	2
3.....	3
4. A moderate extent.....	4
5.....	5
6.....	6
7. A great extent.....	7



CHICK 1

In your opinion, do you consider most frozen, breaded chicken products, such as chicken nuggets and strips to be ...?

(ROTATE RESPONSES)

- Raw, needing to be fully cooked 1
- Pre-cooked and needing re-heating only..... 2
- Unsure/Don't know..... 9

CHICK 2

In general, how do you prepare frozen, breaded chicken products? (Check one)

- Oven..... 1
- Microwave..... 2
- Toaster Oven..... 3
- Pan fried..... 4
- Barbecue..... 5
- Other (specify)..... 6
- Do not cook breaded chicken products..... 7

(PN: ROTATE QUESTIONS BBD AND ED)

BBD (T)

Most foods carry a "best-before" date. Which of the following statements comes closest to your understanding of best-before dates?

- Food that is not consumed before the best-before date is unsafe and should be thrown out..... 1
- Best-before dates indicate when a product is freshest and foods kept past this date are still safe to consume for a while..... 2

ED

Many foods carry an "expiry" date. Which of the following statements comes closest to your understanding of expiry dates?

- Food that is not consumed before the expiry date is unsafe and should be thrown out..... 1
- Expiry dates indicate when a product is freshest and foods kept past this date are still safe to consume for a while..... 2

FHP-A

Do you own a food thermometer?

- Yes 1
- No..... 2
- Don't know..... 9

PFHP (T)

How frequently do you engage in each of the following activities?

PN: PLEASE RANDOMIZE ORDER OF FHPI-FHP24

FHP1 (T)

(ASK ONLY OF THOSE WHO OWN A FOOD THERMOMETER AT Q.FHP A)

Use a food thermometer to determine if the food you are preparing is cooked to the recommended temperature?

- Never..... 1
- Rarely..... 2
- Sometimes..... 3
- Often..... 4
- Always..... 5



FHP2 (T)

Defrost frozen meat or poultry on the counter at room temperature?

Never.....	1
Rarely.....	2
Sometimes.....	3
Often.....	4
Always.....	5

FHP4 (T)

Rinse poultry (for example: turkey or chicken) before cooking it?

Never.....	1
Rarely.....	2
Sometimes.....	3
Often.....	4
Always.....	5

FHP5 (T)

Eat eggs with runny yolks?

Never.....	1
Rarely.....	2
Sometimes.....	3
Often.....	4
Always.....	5

FHP6 (T)

Wash your reusable grocery bags?

Never.....	1
Rarely.....	2
Sometimes.....	3
Often.....	4
Always.....	5

FHP7 (T)

Wash your hands with soap and water BEFORE preparing food?

Never.....	1
Rarely.....	2
Sometimes.....	3
Often.....	4
Always.....	5

FHP10 (T)

Clean the surface you use to prepare foods on?

Never.....	1
Rarely.....	2
Sometimes.....	3
Often.....	4
Always.....	5



FHP11 (T)

Wash fresh fruits and vegetables before consuming them?

- Never..... 1
- Rarely..... 2
- Sometimes..... 3
- Often..... 4
- Always..... 5

FHP15 (T)

Refrigerate leftover food within two hours of cooking?

- Never..... 1
- Rarely..... 2
- Sometimes..... 3
- Often..... 4
- Always..... 5

FHP16 (T)

Refreeze food after it has already been completely defrosted?

- Never..... 1
- Rarely..... 2
- Sometimes..... 3
- Often..... 4
- Always..... 5

FHP17 (T)

Keep remaining leftover food after you have reheated it once?

- Never..... 1
- Rarely..... 2
- Sometimes..... 3
- Often..... 4
- Always..... 5

FHP18 (T)

Put meat or poultry and fresh produce in the same shopping bag?

- Never..... 1
- Rarely..... 2
- Sometimes..... 3
- Often..... 4
- Always..... 5

FHP19 (T)

Put meat, poultry and seafood on the bottom shelf of your fridge, or in a special drawer?

- Never..... 1
- Rarely..... 2
- Sometimes..... 3
- Often..... 4
- Always..... 5



FHP20

Wash your hands with soap and water AFTER handling raw meat or raw fish?

- Never..... 1
- Rarely..... 2
- Sometimes..... 3
- Often..... 4
- Always..... 5

FHP21

Wash your hands with soap and water AFTER handling frozen breaded chicken products such as chicken nuggets, strips or burgers?

- Never..... 1
- Rarely..... 2
- Sometimes..... 3
- Often..... 4
- Always..... 5

FHP23

Closely follow the cooking instructions on food product packaging?

- Never..... 1
- Rarely..... 2
- Sometimes..... 3
- Often..... 4
- Always..... 5

FRG1

How often do you check the temperature inside your refrigerator?

- Never..... 1
- Rarely..... 2
- Sometimes..... 3
- Often..... 4
- Always..... 5

FRG2 (T-FRG1)

To the best of your knowledge, what temperature should refrigerators be kept at?

- Lower than -2°C 1
- Between -2°C and -1°C..... 2
- Between 0°C and +2°C..... 3
- Between +2°C and +4°C..... 4
- Between +4°C and +6°C..... 5
- Between +6°C and +8°C..... 6
- I don't really have a good idea as to what the temperature should be kept at..... 9

PN: INFO 1A, 1B, 2A, 3, 4, 5, 6 ARE CLOSED ENDED QUESTIONS. PLEASE INCLUDE THE ANSWER CATEGORIES AND ROTATE THEM. CHECK ONE.

INFO1A (T)

What is your MAIN source of information on food safety?

- Newspapers, radio, TV or other media..... 1
- Product labels/packaging..... 2
- Family/friends..... 3
- Self experience..... 4
- The internet..... 5



Industry information.....	6
Grocery stores.....	7
Federal Government.....	8
Provincial Government.....	9
Municipal Government (e.g. City Public Health Units).....	10
Social media such as Facebook, Twitter, Pinterest, Instagram, etc.....	11
YouTube.....	12
Blogs.....	13
Cook books/recipes.....	14
Academics/health experts.....	15
Other (specify).....	77

INFO1B (T)

And what type of information on food safety issues do you typically look for?

Safe food handling practices.....	1
Risks associated with different foods.....	2
Food recalls.....	3
Food-borne illnesses (for example: Listeria, E-coli, etc.).....	4
Other (specify).....	77

INFO2A (T)

What about when there is a recall due to a food-borne illness outbreak (e.g., an E. coli outbreak earlier in 2017 that resulted in the recall of flour and flour-based products)? What is your MAIN source of information under these circumstances?

Newspapers, radio, TV or other media.....	1
Product labels/packaging.....	2
Family/friends.....	3
Self experience.....	4
The internet/websites.....	5
Industry information.....	6
Grocery stores.....	7
Government.....	8
Social media such as Facebook, Twitter, Pinterest, Instagram, etc.....	9
YouTube.....	10
Blogs.....	11
Academics/health experts.....	13
Other (specify).....	77

INFO3

(ASK THOSE WHO ARE PREGNANT OR LIKELY TO BECOME PREGNANT)

As someone who is pregnant or likely to become pregnant, what is the MAIN source of information about food safety that you rely on or would rely on, given your condition?

Newspapers, radio, TV or other media.....	1
Product labels/packaging.....	2
Family/friends.....	3
Self experience.....	4
The internet/websites.....	5
Industry information.....	6
Grocery stores.....	7
Government.....	8
Social media such as Facebook, Twitter, Pinterest, Instagram, etc.....	9
YouTube.....	10



Blogs.....	11
Other (specify).....	77

INFO4

(ASK THOSE WHO HAVE COMPROMISED IMMUNITY AT Q.IMM)

As someone who has a compromised immune system, or cares for a person with a compromised immune system, what is the MAIN source of information about food safety that you rely on given that you are dealing with this medical condition?

Newspapers, radio, TV or other media.....	1
Product labels/packaging.....	2
Family/friends.....	3
Self experience.....	4
The internet/websites.....	5
Industry information.....	6
Grocery stores.....	7
Government.....	8
Social media such as Facebook, Twitter, Pinterest, Instagram, etc.....	9
YouTube.....	10
Blogs.....	11
Other (specify).....	77

INFO5

(ASK SENIOR CITIZENS AGED 60+)

What is the MAIN source of information about food safety that you rely on for information specific to senior citizens?

Newspapers, radio, TV or other media.....	1
Product labels/packaging.....	2
Family/friends.....	3
Self experience.....	4
The internet/websites.....	5
Industry information.....	6
Grocery stores.....	7
Government.....	8
Social media such as Facebook, Twitter, Pinterest, Instagram, etc.....	9
YouTube.....	10
Blogs.....	11
Other (specify).....	77

INFO6

(ASK PARENTS WITH CHILDREN 5 YEARS AND UNDER)

As someone with a child 5 years and under, what is the MAIN source of information about food safety that you rely on for information specific to infants and very young children?

Newspapers, radio, TV or other media.....	1
Product labels/packaging.....	2
Family/friends.....	3
Self experience.....	4
The internet/websites.....	5
Industry information.....	6
Grocery stores.....	7
Government.....	8
Social media such as Facebook, Twitter, Pinterest, Instagram, etc.....	9
YouTube.....	10



Blogs.....	11
Other (specify).....	77

PSOI (T)

In your opinion, how effective are each of the following sources at providing you with information on safe food handling?

PN: ROTATE SOI2A, SOI3A, AND SOI6A.

SOI2A (T) Detailed articles

SOI3A (T) Brochures

SOI6A (T) Social media (Facebook, Twitter, etc.)

Not at all effective.....	1
Not very effective.....	2
Somewhat effective.....	3
Very effective.....	4

SOI2B (T)

(ASK IF: SOI2A EQ.3,4)

Which of the following would be the BEST place for these detailed articles? Would it be... **(CHECK ONE)**

in a newspaper?.....	1
in a magazine?.....	2
on a website?.....	3

SOI2C (T)

(ASK IF: SOI2B EQ.1,2,3)

Can you please tell me which [newspapers/magazines/websites]?

PN: OPEN ENDED. ALLOW SPACE FOR 3 RESPONSES.

SOI3B

(ASK IF: SOI3A.EQ.3,4)

Which of the following would be effective ways for you to receive or have access to brochures? Would it be...**(SELECT ALL THAT APPLY)**

PN: ROTATE OPTIONS

From your health professional.....	1
At a pharmacy.....	2
In a retail or grocery store.....	3
In the mail.....	4
A 1-800 number to order them.....	5
A website to order.....	10
A website to read them.....	11
None of the above.....	8

TRU1 (T)

Who do you trust the MOST when it comes to providing you with information on food safety?

PN: ROTATE OPTIONS. SELECT ONLY ONE RESPONSE.

Retailers/grocers.....	1
Canadian Governments (federal, provincial, municipal).....	2
Consumer and other non-governmental groups.....	3
Health experts and academics/scientists.....	4
Health professionals (doctors, nurses).....	5



DEMIN (T)

Now I have a few more questions to be used for statistical purposes only.

SHOP (T)

Approximately how often are you responsible for shopping for food in your household? Is it:

- Every day or almost every day..... 1
- 1-3 times a week..... 2
- Once or twice a month..... 3
- A few times a year, or..... 4
- Never..... 5

SHOP2 (T)

And approximately how often are you responsible for preparing the main meal in your household? Is it:

- Every day or almost every day..... 1
- 1-3 times a week..... 2
- Once or twice a month..... 3
- A few times a year..... 4
- Never..... 5

SHOP3

And approximately how often are you responsible for preparing the main meal using the outdoor barbecue? Is it:

- Every day or almost every day..... 1
- 1-3 times a week..... 2
- Once or twice a month..... 3
- A few times a year..... 4
- Never..... 5

HST2 (T)

(ASK IF AGED 60+ @QAGE; PREGNANT WOMEN OR THOSE EXPECTING TO BECOME PREGNANT WITHIN THE NEXT YEAR – CODE 1@Q PREG1 OR PREG2; OR INDIVIDUALS WITH COMPROMISED IMMUNE SYSTEMS CODE 1@QIMM)

Would you consider yourself to be at greater risk than average for complications from food poisoning?

- Yes, definitely..... 1
- Maybe..... 2
- No 3

HST2BN (T)

(ASK IF A PARENT OF A CHILD AGED 5 OR UNDER – CODE 1 @ Q. HH COMP 3)

Would you consider **your child who is 5 years old or younger** to be at greater risk than average for complications from food poisoning?

- Yes, definitely..... 1
- Maybe..... 2
- No 3

HST3A (T)

(ASK IF: HST2 OR HST2B EQ.1,2)

WORDING IF A PARENT OF A CHILD AGED 5 OR UNDER – CODES 1-5 @ Q. HH COMP 2 AND PARENT NOT HIGH RISK:

Would you say you currently take precautions above and beyond what most people do to protect your child from food poisoning?

WORDING IF A PARENT OF A CHILD AGED 5 OR UNDER – CODES 1 @ Q. HH COMP 3 AND PARENT IS HIGH RISK:

Would you say you currently take precautions above and beyond what most people do to protect yourself and your child from food poisoning?



WORDING IF NOT PARENT OF A CHILD AGED 5 OR UNDER @ Q. HH COMP 2 AND IS HIGH RISK:

Would you say you currently take precautions above and beyond what most people do to protect yourself from food poisoning?

- Yes..... 1
- No..... 2

HST3A2 (T)

(ASK IF: HST3A.EQ.1)

What precautions do you take? CHECK ALL THAT APPLY.

CLOSED-ENDED QUESTION. PLEASE INCLUDE THE ANSWER CATEGORIES BELOW.

- Wash fresh fruits and vegetables..... 1
- Wash reusable grocery bags..... 2
- Clean surfaces where you prepare food..... 3
- Defrost meat and poultry in fridge..... 4
- Use different cutting boards to avoid cross-contamination..... 5
- Avoid certain higher risk foods..... 6
- Other (specify)..... 77

HST 4

In the past year, have you experienced illness that you thought was due to the food you ate, that is food poisoning?

- Yes..... 1
- No..... 2

HST 5

Which of the following comes closest to describing your understanding of food poisoning? Would you say that it is....

- Food poisoning is a mild condition that resolves itself without medical treatment..... 1
- Food poisoning can be mild or severe, and can sometimes send people to the hospital..... 2

HST 6

To the best of your knowledge, where are most food poisoning cases contracted? Are they mostly contracted...

PN: ROTATE OPTIONS

- At your home..... 1
- In restaurants, take-out, or cafeterias..... 2
- At friends/relatives..... 3
- International travel..... 4

HST 7

And, to the best of your knowledge, what are most cases of food poisoning a result of?

Are they mostly a result of...

- Unsafe food handling or cooking practices in the kitchen..... 1
- Things that occur before food reaches the kitchen (such as contamination in culture/harvesting/ processing) 2

SOC MEDIA 1

Do you personally have an account with or use any of the following? CHECK ALL THAT APPLY.

PN: ROTATE OPTIONS.

- Facebook..... 1
- Twitter..... 2
- YouTube..... 3
- Flickr..... 4
- Pinterest..... 5
- Instagram..... 6



Snapchat.....	7
None of the above (SKIP TO Q.EDUC).....	8

SOC MEDIA 2

To what extent are you using social media (Facebook, Instagram, Twitter)? Would that be...

Never.....	1
Once a month.....	2
Once a week.....	3
Several times a week.....	4
Daily.....	5

SOC MEDIA 3

(ASK IF: SOC MEDIA 2 EQ. 2,3,4,5)

In the past year have you shared or posted information about food safety on social media?

Yes.....	1
No.....	2

SOC MEDIA 3

(ASK IF: SOC MEDIA 2 EQ. 2,3,4,5)

Have you heard of the 'Healthy Canadians' Facebook page?

Yes	1
No.....	2

EDUC (T)

What is the highest level of schooling that you have completed?

Grade 8 or less.....	1
Some high school.....	2
High School Diploma or equivalent.....	3
Registered Apprenticeship or other trades certificate or diploma.....	4
College, CEGEP, or other non-university certificate or diploma.....	5
University certificate or diploma below bachelor's level.....	6
Bachelor's degree.....	7
Post graduate degree above the bachelor's level.....	8
Prefer not to answer.....	9

INC20 (T)

Which of the following categories best describes your total household income? That is, the total income of all persons in your household combined, before taxes?

Under \$20,000.....	1
\$20,000 to just under \$40,000.....	2
\$40,000 to just under \$60,000.....	3
\$60,000 to just under \$80,000.....	4
\$80,000 to just under \$100,000.....	5
\$100,000 to just under \$150,000.....	6
\$150,000 and above.....	7
Prefer not to answer.....	99

BORN

Where were you born? Were you...

Born in Canada.....	1
Not born in Canada, but have been living in Canada for less than 1 year.....	2
Not born in Canada, but living in Canada for 1 year or more, but less than five years.....	3



Not born in Canada, but living in Canada for 5 years or more, but less than 10 years.....	4
Not born in Canada, but living in Canada for 10 years or more.....	5
Prefer not to answer.....	99

ETHN

What ethnic or cultural group do you belong to? Do you consider yourself mainly...	
Canadian.....	1
French Canadian/Quebecois/Acadian.....	2
British.....	3
African.....	4
Caribbean.....	5
Central American.....	6
Chinese.....	7
Eastern European.....	8
Middle Eastern.....	9
South American.....	10
South Asian (such as from India, Pakistan, Bangladesh).....	11
Southeast Asian (such as from Vietnam, Philippines, Myanmar).....	12
Mid-West Asian.....	13
East Asian.....	14
French.....	15
North Europe/Scandinavian.....	16
Western European.....	17
Southern European.....	18
First Nations.....	19
American.....	20
Australian/New Zealander.....	21
South African.....	22
Jewish.....	23
Pacific Islander.....	24
Other (specify).....	77
Prefer not to answer.....	99

LANG

What language do you speak primarily at home?	
English.....	1
French.....	2
Tagalog	3
Mandarin.....	4
Cantonese.....	5
Punjabi.....	6
Hindi.....	7
Urdu.....	8
Tamil.....	9
Arabic.....	10
Spanish.....	11
Italian.....	12
Creole.....	13
Other (specify).....	77
Prefer not to answer.....	99



THNK (T)

This concludes our survey. Thank you very much for participating in this study. You may now close this window.
End of Interview

Completion 1D

QFIL (T)

ASK IF: ISEMPY (QEND)

We regret but your responses have shown that you are in a group that is already completed. Thank you for taking the time to assist us in our data collection.

THNK2 (T)

ASK IF: ISEMPY (QEND)

We regret but your responses have shown that you are ineligible to participate in this survey. Thank you for your time.