

Ipsos Reid

BioAccess Commercialization Centre

Perceptions of GMO Foods among Canadians Quantitative Report











Agriculture and

Agriculture et Agri-Food Canada Agroalimentaire Canada



December 2013











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Background & Objectives



- BioAccess Commercialization Centre is a not-for-profit organization that has provided business and commercialization support to western Canada's functional food and natural health product industry since 2006.
 - Since inception, BioAccess has seen a growing demand for health and wellness products in Canada. Unfortunately, information about the actual wants and needs of Canadian consumers are not readily available to small and medium sized companies. This represents a commercialization barrier, as access to strategic information is required to properly assess market opportunities and target new product development.
- BioAccess commissioned Ipsos Reid to conduct research to assess Canadian's perceptions and understanding of genetically engineered /GMO foods.
- The first phase of the research involved the completion of a series of focus groups with primary grocery shoppers in Vancouver and Mississauga to explore perceptions of GMO foods and to inform the second quantitative phase involving a survey of Canadians.
- Specifically the research was designed to develop a deeper understanding of:
 - Awareness of and attitudes toward GMOs or genetically engineered foods;
 - Influence of product claims (including non-GMO) on purchase decisions;
 - Likelihood of purchasing genetically engineered foods; and,
 - Sources of information for genetically engineered foods, and the credibility of these sources.

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Methodology



- The research was conducted via CATI with a total of 1200 interviews completed over the telephone between November 21st and December 8th, 2013.
- Working with BioAccess, Ipsos designed a survey instrument that averaged 16 minutes in length and interviews were conducted in both English and French.
- The sample frame was as follows:

	British Columbia	Alberta	Saskatchewan /Manitoba	Ontario	Quebec	Atlantic	Total Canada
Number of Interviews	N=161	N=128	N=78*	N=460	N=288	N=85*	1,200
Margin of Error	+/- 7.7	+/-8.7	+/-11.1	+/-4.6	+/-5.8	+/-10.6	+/- 2.8

- Margin of error represents how close a random sample's results are to the "true" figures of an entire population.
 - For instance, based on a randomly selected sample of 460, we can be certain that survey results from Ontario will be within 4.6 percentage points of the true population figure, 19 times out of 20.
- Results deemed statistically significantly higher are indicated by a lettering system a result is significantly different if it falls outside of the margin of error when comparing two sample groups. For the purposes of the report, when a letter appears by a result, it denotes that the result is significantly higher within that sample group compared to the group indicated by the letter.

* Please note that sample base sizes for these markets, while proportionate to the Canadian population, are small and should be interpreted with caution.



Methodology continued



- For the purposes of the study, respondents were provided with the following definition of genetically engineered or genetically modified organisms:
 - ... Genetically engineered or genetically modified organisms (GMOs) are plants, animals or microbes where selected individual genes have been introduced, eliminated or rearranged in ways that do not normally occur in nature. These changes can increase resistance to pests or disease, introduce tolerance to herbicides or change the nutritional properties of foods.

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Awareness of and Purchase Intent toward GMOs

- Nearly all Canadians are aware of genetically modified foods (85%) or foods containing GMOs (81%). Upon being read a description, 95% say they are aware of genetically modified foods, with nearly two-in-three (63%) claiming to understand what they are.
 - Understanding of GMOs is highest in BC (76%) and Alberta (71%), and lowest in Quebec (55%). There are no regional differences in awareness.
- Among those aware of GMOs, approximately four-in-ten correctly understand that they are scientifically/genetically altered/modified. One-in-four identify GMOs as having health/safety concerns, while one-in-five identify them as having benefits (such as growing faster, allowing mass production of food, and being resistant to diseases/insects).
- Respondents were given a list of particular food items and asked if each item contains GMOs. Chicken (77%), corn chips (74%), and meat, such as pork or beef (72%), were most commonly identified as containing GMOs. Squash (37%) and tofu (42%) were least commonly identified as containing GMOs.
- Three quarters (74%) of Canadians say the GMO-free product claim influences their decision to purchase particular foods, with 40% saying the claim has "a lot" of influence. It has no influence for one quarter (27%) of Canadians.
 - Atlantic Canadians are most influenced by GMO free product claims (80% say it has a lot/little influence), while Albertans are the least influenced (67%).
- While 71% of Canadians say they would avoid buying food with GMOs, only 52% say they would pay more for GMO free food (no regional differences).
- Approximately three-in-ten (29%) say they are likely to purchase genetically engineered foods/GMOs in the future, with those in Atlantic Canada being most likely (35% are likely; 38% unlikely) and those in Saskatchewan/Manitoba being least likely (27%; 44%).
 - The two most common reasons for not being likely to purchase genetically engineered foods/GMOs are concerns about safety (41%) and not knowing enough about them (24%).





Attitudes toward GMOs

- Approximately three-in-four Canadians believe the long term effects of eating genetically modified foods are not well known (76% agree), that they were developed to increase the profitability of food producers/manufacturers (75%), that they are common in most grocery stores (72% and that, if presented with the opportunity, they would avoid buying foods containing GMOs (71%).
- Approximately one-in-four Canadians (28%) are confident that, if there were any health risks associated with eating them, the government would not allow sale of foods containing GMOs (50% are not confident). A similar proportion feel that foods containing GMOs can be part of a healthy diet (26%; 43%).
- When asked to decide if the following statements are true or false, most Canadians said that "foods containing GMOs are strictly regulated for safety" (53%), "non-GMO foods are more nutritious" (55%), and "animal feed that includes... GMOs poses no risk to animal or human health" (71%) are false.
 - Respondents in Quebec and Alberta are less likely to say that the statement "foods containing GMOs are strictly regulated for safety" is false (49% and 42%, respectively).
- Canadians are split on whether the statements "non-GMO foods are more expensive" (48% true; 43% false) and "certified organic foods do not contain GMOs" (47%; 43%) are true or false. Their level of agreement with the idea that there is a need to grow foods containing GMOs to keep pace with the world's demand for food is also split (39% agree, 37% disagree).





Sources of Information on GMOs

- When asked where respondents had heard about which foods contain GMOs, TV/radio news programs (39%) and magazines/newspapers (38%) were the top two sources, followed by the internet (29%).
- The most common sources of information on genetically engineered foods are the internet (57%), TV/radio news programs (57%), and magazines/newspapers (54%).
 - On the internet, Canadians are most likely to use search engines (81%), government websites (42%) and Wikipedia (40%) to find information on GMOs.
 - While the internet is the most common source of information on GMOs, it is also perceived to have little credibility (only 30% say it is a credible source).
- The most credible sources of information on GMOs are scientific studies/papers (75% find them credible; 9% not credible) and health professionals (74%; 8%), followed by government agencies such as Health Canada (59%; 19%), farmers/growers (53%; 14%) and books (51%; 15%).
 - Retailer staff (12%; 51%) and social media (13%, 55%) are perceived to be the least credible sources.

Perceptions of Food & Dietary Health

- The vast majority (88%) of Canadians believe that the foods and beverages they consume affect their health. This study found no differences in this belief between regions of Canada.
- Approximately half (47%) have made changes to their diet due to specific health concerns. Respondents in Quebec were least likely (33%), compared to those in Atlantic Canada (58%) and Saskatchewan/Manitoba (55%), who were most likely.









Perceptions of Food & Dietary Health—Region



			%	Agree, Rated 4 o	r 5		
	Total (n=1,200)	British Columbia (n=161) (A)	Alberta (n=128) (B)	Saskatchewan/ Manitoba (n=78) (C)	Ontario (n=460) (D)	Quebec (n=288) (E)	Atlantic (n=85) (F)
I believe the foods and beverages I consume affect my health	88%	92%	93%	89%	86%	85%	91%
I have made changes to my diet because of a specific health concern	47%	52 % _E	42%	55% _E	53% _E	33%	58% _E

ABCDEF: Significantly higher than sub-group represented by that letter.

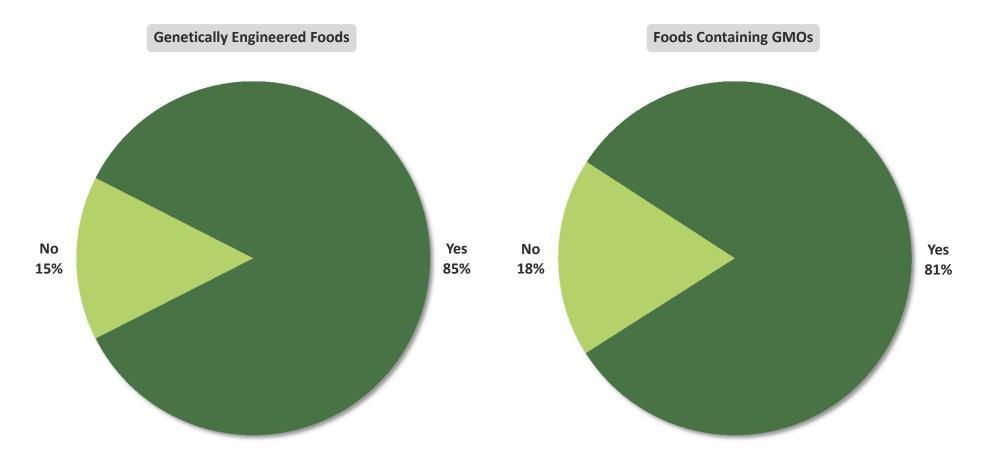
Base: All respondents

Q1a. Using a scale of 1 to 5, where 1 is strongly disagree and 5 is strongly agree, please tell me your level of agreement or disagreement with each of the following statements...



Awareness of Genetically Engineered Foods/GMOs





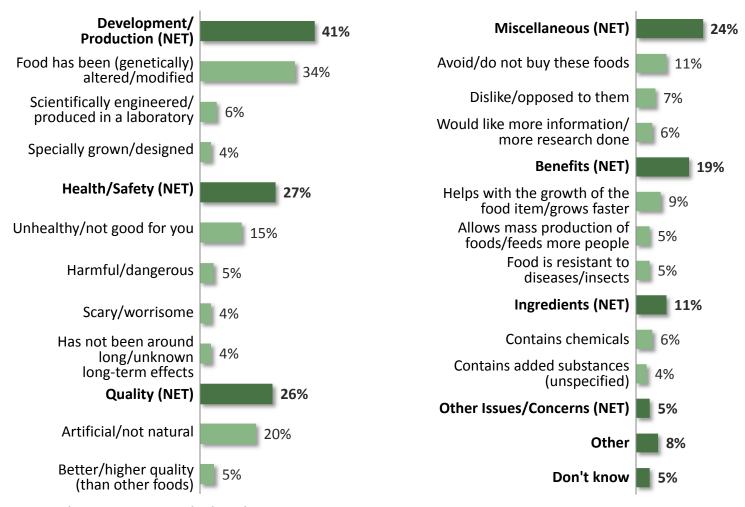
Base: All respondents (1,200)

Q1. Before today, were you aware of...



Unaided Knowledge of Foods containing GMOs





Note: Only mentions 4% or higher shown.

Base: Aware of genetically engineered foods or GMOs (n=1,076)

Q1a. When you hear the term Genetically Engineered Foods or Foods containing genetically modified organisms (GMOs) what does it mean to you?

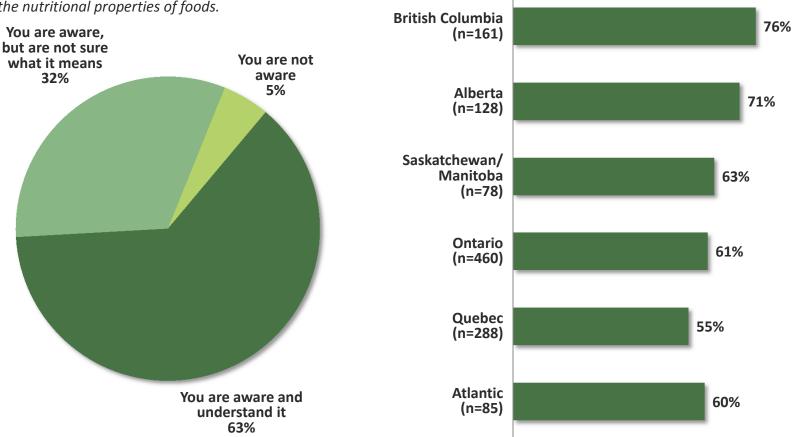


Aided Awareness and Understanding of GMOs



Aware and Understand – Region

PROMPT: Genetically engineered or genetically modified organisms (GMOs) are plants, animals or microbes where selected individual genes have been introduced, eliminated or rearranged in ways that do not normally occur in nature. These changes can increase resistance to pests or disease, introduce tolerance to herbicides or change the nutritional properties of foods.



Base: All respondents (1,200)

Q2. Based on having heard this description, which of the following best represents your understanding of genetically engineered foods or foods containing genetically modified organisms (GMOs)?



Aided Awareness and Understanding of GMOs



					% Total A	wareness				
			Aį	ge		Gen	der		Income	
	Total (n=1,200)	18 to 34 (n=125) (A)	35 to 44 (n=182) (B)	45 to 54 (n=290) (C)	55+ (n=574) (D)	Male (n=390) (E)	Female (n=810) (F)	Under \$50K (n=327) (G)	\$50K-\$100K (n=349) (H)	Over \$100K (n=300) (I)
You are aware and understand it	63%	61%	68% _D	69 % _D	58%	69% _F	60%	50%	63 % _G	77 % _{GH}
You are aware, but are not sure what it means	32%	34%	29%	27%	34% _C	26%	34% _E	41 % _I	33% ₁	21%
You are not aware	5%	5%	3%	5%	7%	5%	6%	8%।	4%	2%
Don't know	<1%	1%	-	-	1%	1% _F	<1%	1%	-	-

ABCDEFGHI: Significantly higher than sub-group represented by that letter.

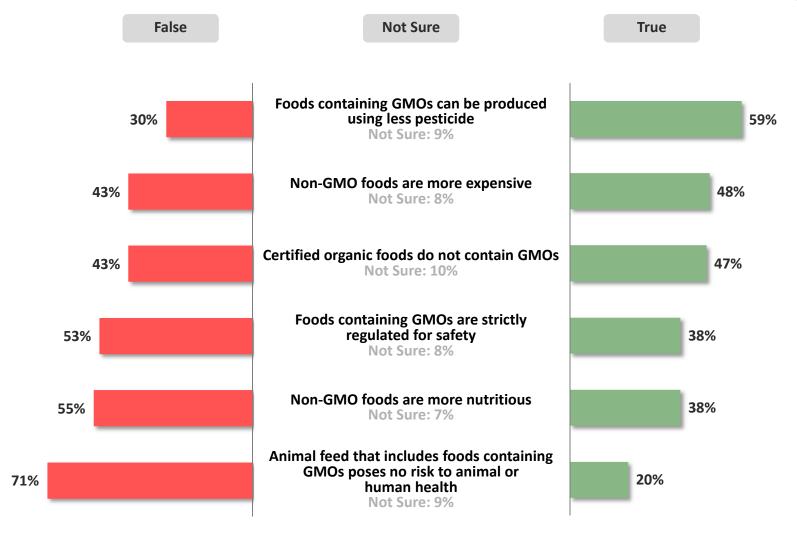
Base: All respondents

Q2. Based on having heard this description, which of the following best represents your understanding of genetically engineered foods or foods containing genetically modified organisms (GMOs)?



Believability of Statements about Foods Containing GMOs





Base: Aware of genetically engineered foods or GMOs (n=1,153)

Q3. As far as you know, please tell me if each of the following statements about genetically engineered foods or foods containing genetically modified organisms (GMOs) are true or false.



Knowledge of Food Containing GMOs – Region



				% True			
	Total (n=1,153)	British Columbia (n=159) (A)	Alberta (n=124) (B)	Saskatchewan/ Manitoba (n=75) (C)	Ontario (n=439) (D)	Quebec (n=272) (E)	Atlantic (n=84) (F)
Foods containing GMOs can be produced using less pesticide	59%	54%	62%	69%	58%	61%	59%
Non-GMO foods are more expensive	48%	43%	49%	45%	50%	48%	45%
Certified organic foods do not contain GMOs	47%	47%	46%	57% _D	43%	50%	45%
Foods containing GMOs are strictly regulated for safety	38%	24%	42 % _A	36%	36% _A	49% _{ADF}	34%
Non-GMO foods are more nutritious	38%	41% _E	40% _E	31%	44% _E	28%	33%
Animal feed that includes foods containing GMOs poses no risk to animal or human health	20%	21%	26%	24%	20%	17%	15%

ABCDEF: Significantly higher than sub-group represented by that letter.

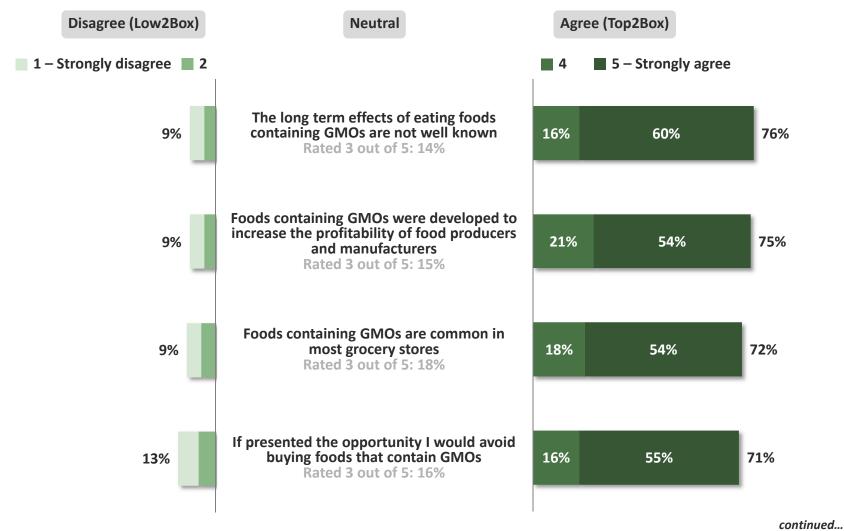
Base: Aware of genetically engineered foods or GMOs

Q3. As far as you know, please tell me if each of the following statements about genetically engineered foods or foods containing genetically modified organisms (GMOs) are true or false.



Attitudes Towards Food Containing GMOs





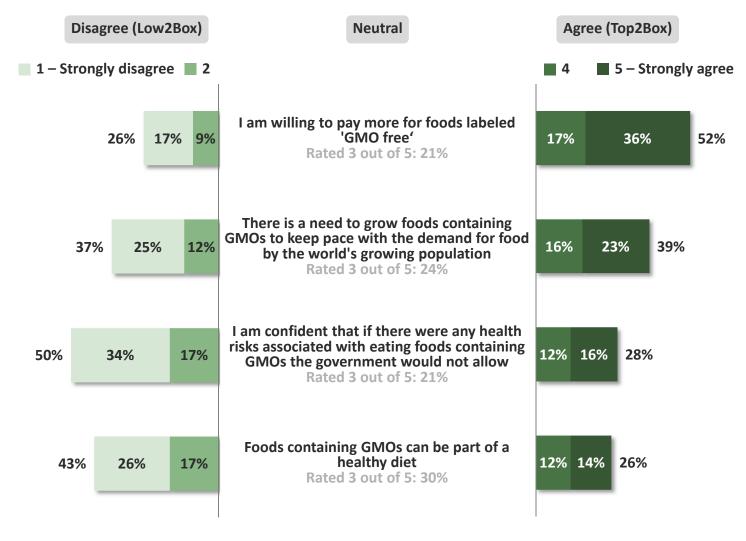
Base: Aware of genetically engineered foods or GMOs (n=1,153)

Q6. On a scale of 1 to 5, where 1 is strongly disagree and 5 is strongly agree, please tell me your level of agreement with each of the following statements that could be made about genetically engineered foods or foods containing GMOs.



Attitudes Towards Food Containing GMOs *continued*





Base: Aware of genetically engineered foods or GMOs (n=1,153)

Q6. On a scale of 1 to 5, where 1 is strongly disagree and 5 is strongly agree, please tell me your level of agreement with each of the following statements that could be made about genetically engineered foods or foods containing GMOs.



Attitudes Towards Foods Containing GMOs – Region



			Тор	2Box (Rated 4 o	r 5)		
	Total (n=1,153)	British Columbia (n=159) (A)	Alberta (n=124) (B)	Saskatchewan/ Manitoba (n=75) (C)	Ontario (n=439) (D)	Quebec (n=272) (E)	Atlantic (n=84) (F)
The long term effects of eating foods containing GMOs are not well known	76%	78%	68%	75 %	7 5%	81% _B	84 % _B
Foods containing GMOs were developed to increase the profitability of food producers and manufacturers	75%	73%	72%	75%	74%	79%	71%
Foods containing GMOs are common in most grocery stores	72%	76%	77%	70%	70%	70%	69%
If presented the opportunity I would avoid buying foods that contain GMOs	71%	67%	65%	75%	71%	76%	67%

ABCDEF: Significantly higher than sub-group represented by that letter.

Base: Aware of genetically engineered foods or GMOs

Q6. On a scale of 1 to 5, where 1 is strongly disagree and 5 is strongly agree, please tell me your level of agreement with each of the following statements that could be made about genetically engineered foods or foods containing GMOs.

continued...



Attitudes Towards Food Containing GMOs – Region *continued*



			Тор	2Box (Rated 4 o	r 5)		
	Total (n=1,153)	British Columbia (n=159) (A)	Alberta (n=124) (B)	Saskatchewan/ Manitoba (n=75) (C)	Ontario (n=439) (D)	Quebec (n=272) (E)	Atlantic (n=84) (F)
I am willing to pay more for foods labeled 'GMO free'	52%	47%	51%	52%	51%	58%	51%
There is a need to grow foods containing GMOs to keep pace with the demand for food by the world's growing population	39%	35%	44%	54% _{AEF}	40%	33%	34%
I am confident that if there were any health risks associated with eating foods containing GMOs the government would not allow	28%	15%	32% _A	24%	27 % _A	36 % _{AD}	27%
Foods containing GMOs can be part of a healthy diet	26%	23%	28%	25%	29%	22%	24%

ABCDEF: Significantly higher than sub-group represented by that letter.

Base: Aware of genetically engineered foods or GMOs

Q6. On a scale of 1 to 5, where 1 is strongly disagree and 5 is strongly agree, please tell me your level of agreement with each of the following statements that could be made about genetically engineered foods or foods containing GMOs.

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Attitudes Towards Foods Containing GMOs – Age, Gender, Income



				Т	op2Box (R	ated 4 or 5	5)			
			Ąį	ge		Ger	ıder		Income	
	Total (n=1,153)	18 - 34 (n=121) (A)	35 - 44 (n=178) (B)	45 - 54 (n=282) (C)	55+ (n=546) (D)	Male (n=375) (E)	Female (n=778) (F)	Under \$50K (n=304) (G)	\$50K - \$100K (n=341) (H)	Over \$100K (n=297) (l)
The long term effects of eating foods containing GMOs are not well known	76%	72 %	81%	78%	77%	74%	78%	7 5%	76%	78%
Foods containing GMOs were developed to increase the profitability of food producers and manufacturers	75%	77%	76%	76%	72%	78%	73%	74%	73%	78%
Foods containing GMOs are common in most grocery stores	12%	79 % _D	72 % _D	72 % _D	64%	73%	71%	67%	71%	79 % _{GH}
If presented the opportunity I would avoid buying foods that contain GMOs	71%	71%	78 % _D	71%	68%	64%	74 % _E	75%	69%	69%

ABCDEFGHI: Significantly higher than sub-group represented by that letter.

Base: Aware of genetically engineered foods or GMOs

Q6. On a scale of 1 to 5, where 1 is strongly disagree and 5 is strongly agree, please tell me your level of agreement with each of the following statements that could be made about genetically engineered foods or foods containing GMOs.

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Attitudes Towards Foods Containing GMOs – Age, Gender, Income continued



				Т	op2Box (R	ated 4 or 5	5)			
			Ąį	ge		Gen	ıder		Income	
	Total (n=1,153)	18 - 34 (n=121) (A)	35 - 44 (n=178) (B)	45 - 54 (n=282) (C)	55+ (n=546) (D)	Male (n=375) (E)	Female (n=778) (F)	Under \$50K (n=304) (G)	\$50K - \$100K (n=341) (H)	Over \$100K (n=297) (I)
I am willing to pay more for foods labeled 'GMO free'	57%	55%	52%	50%	52%	46%	56 % _E	56%	51%	53%
There is a need to grow foods containing GMOs to keep pace with the demand for food by the world's growing population	39%	43%	39%	33%	39%	47% _F	34%	40%	38%	43%
I am confident that if there were any health risks associated with eating foods containing GMOs the government would not allow	28%	33%	24%	24%	28%	32%	26%	33% _H	24%	25%
Foods containing GMOs can be part of a healthy diet	/h%	28%	27%	23%	26%	31% _F	23%	26%	26%	30%

ABCDEFGHI: Significantly higher than sub-group represented by that letter.

Base: Aware of genetically engineered foods or GMOs

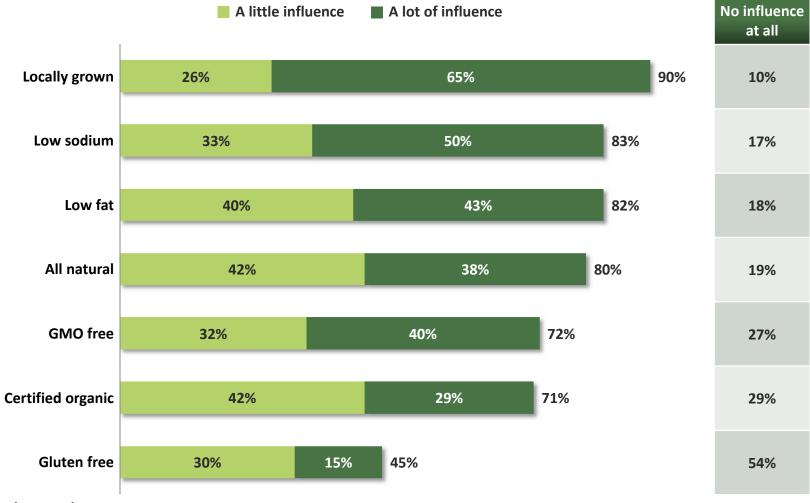
Q6. On a scale of 1 to 5, where 1 is strongly disagree and 5 is strongly agree, please tell me your level of agreement with each of the following statements that could be made about genetically engineered foods or foods containing GMOs.

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Influence of Product Claims





Base: All respondents (n=1,200)

Q2a. I am now going to ask you about how much influence different product claims have on your decision to purchase a particular food as part of your groceries. Would you say the product claim... has a lot of influence, a little influence or no influence at all on your purchase decision?



Influence of Product Claims – Region



			A Lot of Influe	nce/A Little Influe	ence (Top2Box)		
	Total (n=1,200)	British Columbia (n=161) (A)	Alberta (n=128) (B)	Saskatchewan/ Manitoba (n=78) (C)	Ontario (n=460) (D)	Quebec (n=288) (E)	Atlantic (n=85) (F)
Locally grown	90%	89%	92%	94% _D	88%	92%	88%
Low sodium	83%	76%	86% _A	77%	84% _A	83%	93% _{ACDE}
Low fat	82%	71%	80%	85% _A	81% _A	89% _{ABD}	88% _A
All natural	80%	72%	81%	84% _A	80% _A	83% _A	86% _A
GMO free	72%	76%	67%	73%	70%	71%	80% _B
Certified organic	71%	79 % _{BD}	67%	68%	68%	73%	77%
Gluten free	45%	48%	44%	46%	44%	46%	46%

ABCDEF: Significantly higher than sub-group represented by that letter.

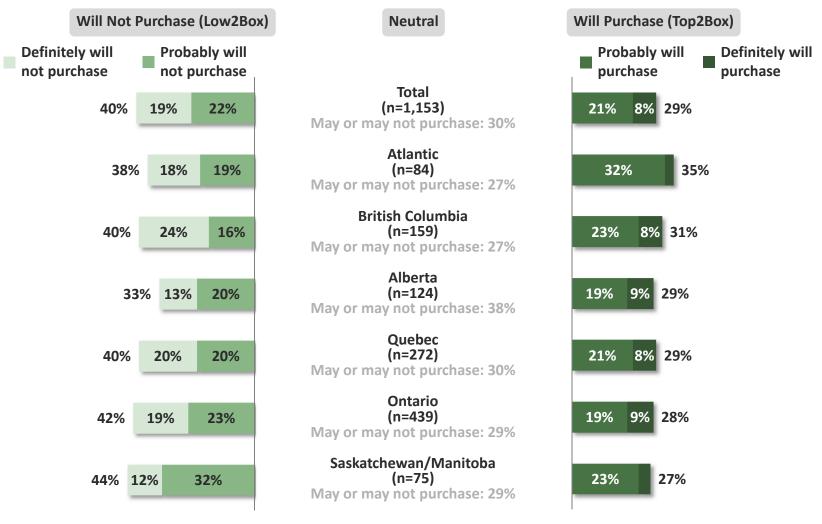
Base: All respondents

Q2a. I am now going to ask you about how much influence different product claims have on your decision to purchase a particular food as part of your groceries. Would you say the product claim... has a lot of influence, a little influence or no influence at all on your purchase decision?



Likelihood to Purchase Foods Containing GMOs





Base: Aware of genetically engineered foods or GMOs

Q7. How likely would you be to purchase genetically engineered foods or foods containing genetically modified organisms (GMOs) in the future?

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Likelihood to Purchase Foods Containing GMOs – Age, Gender, Income 💰



			A	ge		Gen	der	Income		
	Total (n=1,153)	18 - 34 (n=121) (A)	35 - 44 (n=178) (B)	45 - 54 (n=282) (C)	55+ (n=546) (D)	Male (n=375) (E)	Female (n=778) (F)	Under \$50K (n=304) (G)	\$50K - \$100K (n=341) (H)	Over \$100K (n=297) (I)
Definitely will purchase	8%	13% _D	9%	7%	5%	13% _F	6%	7%	7%	11%
Probably will purchase	21%	27 % _D	20%	20%	18%	27% _F	18%	18%	22%	27 % _G
May or may not purchase	30%	34%	31%	26%	27%	25%	32%	29%	33%	26%
Probably will not purchase	22%	18%	17%	25%	25 % _B	20%	22%	26%	20%	19%
Definitely will not purchase	19%	7%	21% _A	21% _A	25% _A	14%	21 % _E	20%	17%	16%
Don't know	1%	1%	1%	1%	1%	1%	1%	0%	2%	1%

ABCDEFGHI: Significantly higher than sub-group represented by that letter.

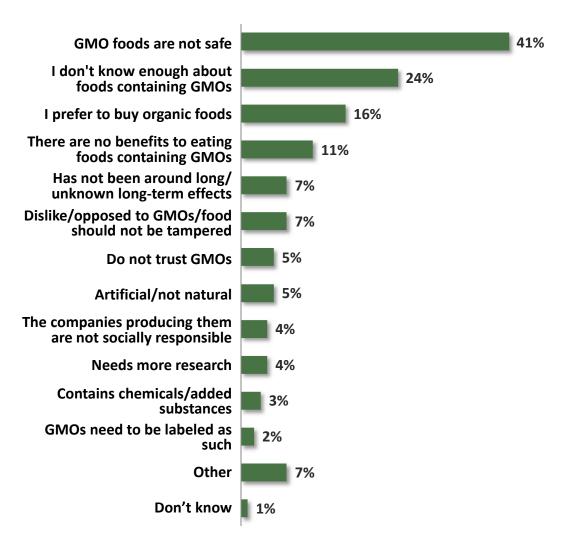
Base: Aware of genetically engineered foods or GMOs

Q7. How likely would you be to purchase genetically engineered foods or foods containing genetically modified organisms (GMOs) in the future?



Reasons For Not Purchasing GMOs





Base: Probably/definitely not likely to purchase genetically engineered foods or GMOs (n=507)



Reasons For Not Purchasing GMOs – Region



	Total (n=507)	British Columbia (n=74)* (A)	Alberta (n=44)** (B)	Saskatchewan/ Manitoba (n=37)** (C)	Ontario (n=196) (D)	Quebec (n=119) (E)	Atlantic (n=37)** (F)
GMO foods are not safe	41%	38%	53% _F	56%	40%	40%	28%
I don't know enough about foods containing GMOs	24%	18%	18%	14%	25%	29%	39% _A
I prefer to buy organic foods	16%	18%	8%	22%	15%	18%	13%
There are no benefits to eating foods containing GMOs	11%	7%	8%	14%	12%	12%	8%
Has not been around long/ unknown long-term effects	7%	4%	13%	7%	6%	6%	8%
Dislike/opposed to GMOs/ food should not be tampered with	7%	11%	16%	5%	6%	2%	3%
Do not trust GMOs	5%	4%	8%	9%	7%	1%	5%
Artificial/not natural	5%	5%	-	5%	8% _E	2%	3%
The companies producing them are not socially responsible	4%	3%	-	-	4%	7%	6%
Needs more research	4%	5%	12% _D	2%	3%	3%	-
Contains chemicals/ added substances	3%	4% _E	2%	2%	3%	-	5% _E
GMOs need to be labeled as such	2%	3%	-	-	4%	-	-
Other	8%	14% _{BCE}	-	2%	10% _B	5%	10 % _B
Don't Know	1%	1%	-	2%	1%	-	5% _E

Q8. And why do you feel that way?



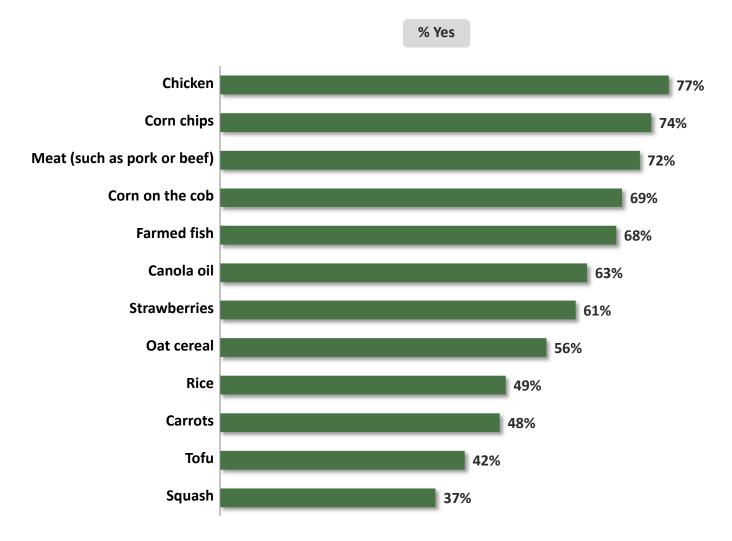
Types of Foods Containing GMOs





Foods Believed to Contain GMOs





Base: Aware of genetically engineered foods or GMOs (n=1,153)

Q4. I am now going to read a list of food items that are currently available at grocery stores. Please tell me if you believe these items contain GMOs or have been genetically engineered.



Foods Believed to Contain GMOs - Region



		_		% Yes			
	Total (n=1,153)	British Columbia (n=159) (A)	Alberta (n=124) (B)	Saskatchewan/ Manitoba (n=75) (C)	Ontario (n=439) (D)	Quebec (n=272) (E)	Atlantic (n=84) (F)
Chicken	77%	69%	75%	75%	82% AE	73%	80%
Corn chips	74%	81%	72%	72%	73%	71%	78%
Meat (such as pork or beef)	72%	71%	68%	69%	77% _E	68%	73%
Corn on the cob	69%	75%	63%	63%	69%	71%	61%
Farmed fish	68%	74 % _E	71% _E	66%	73% _E	55%	71% _E
Canola oil	63%	67% _E	73% _E	76% _{EF}	67% _E	49%	58%
Strawberries	61%	63%	56%	55%	63%	62%	55%
Oat cereal	56%	62%	53%	53%	58%	52%	53%
Rice	49%	57% BE	39%	48%	53% BE	42%	50%
Carrots	48%	48%	45%	34%	50% _C	51% _c	47%
Tofu	42%	55% BEF	34%	42%	46% BE	34%	35%
Squash	37%	31%	35%	25%	42% AC	38%	36%

ABCDEF: Significantly higher than sub-group represented by that letter.

Base: Aware of genetically engineered foods or GMOs

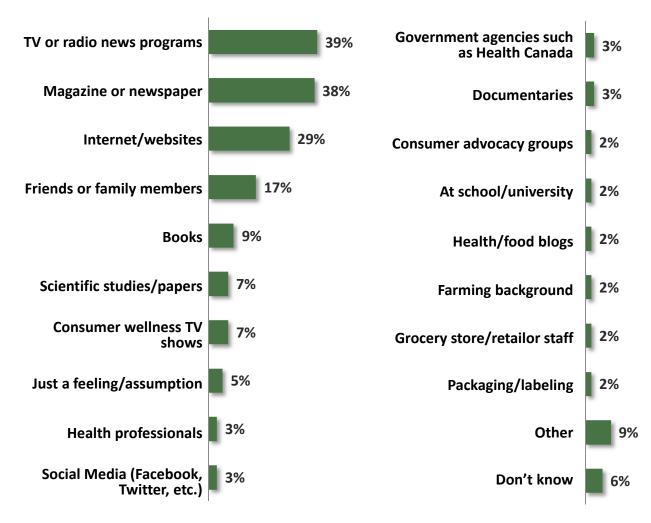
Q4. I am now going to read a list of food items that are currently available at grocery stores. Please tell me if you believe these items contain GMOs or have been genetically engineered.

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Where Information Came From





Note: only responses of 2% or more are shown

Base: Believe food contain GMOs or have been genetically engineered (n=1,124)

Q5. For those foods that you said contain GMOs or are genetically engineered, where did you hear about it?



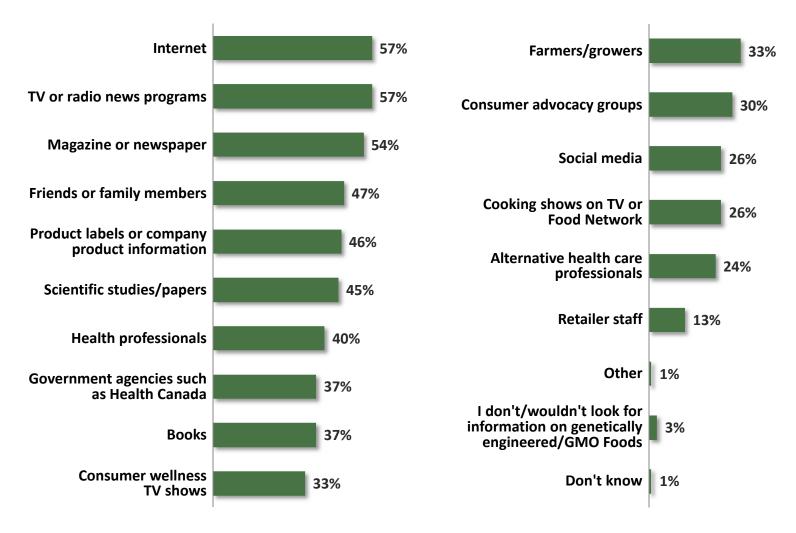






Sources of Information





Base: All respondents (n=1,200)

Q9. Which of the following sources do you use to get information on genetically engineered foods or foods containing genetically modified organisms (GMOs)?

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Sources of Information – Region



	Total (n=1,200)	British Columbia (n=161) (A)	Alberta (n=128) (B)	Saskatchewan/ Manitoba (n=78) (C)	Ontario (n=460) (D)	Quebec (n=288) (E)	Atlantic (n=85) (F)
Internet	57%	70 % _{DE}	63% _E	65% _E	59 % _E	42%	61% _E
TV or radio news programs	57%	57 % _E	67% _E	59% _E	60% _E	43%	65% _E
Magazine or newspaper	54%	62% _{CE}	58% _E	46%	61% _{CE}	35%	64% _E
Friends or family members	47%	58% _E	59% _E	55% _E	51% _E	27%	52 % _E
Product labels or company product information	46%	42%	45%	43%	49% _E	40%	59% AE
Scientific studies/papers	45%	50% _E	50%	40%	48% _E	39%	40%
Health professionals	40%	40% _E	47% _E	36%	45% _E	29%	48% _E
Government agencies such as Health Canada	37%	35%	41% _E	37%	40% _E	28%	50% AE
Books	37%	44% _E	45% _E	31%	39% _E	24%	49% _{CE}
Consumer wellness TV shows	33%	27%	34%	31%	31%	37%	48% _{AD}

ABCDEF: Significantly higher than sub-group represented by that letter.

Base: All respondents (n=1,200)

Q9. Which of the following sources do you use to get information on genetically engineered foods or foods containing genetically modified organisms (GMOs)?

continued...



Sources of Information – Region *continued*



	Total (n=1,200)	British Columbia (n=161) (A)	Alberta (n=128) (B)	Saskatchewan/ Manitoba (n=78) (C)	Ontario (n=460) (D)	Quebec (n=288) (E)	Atlantic (n=85) (F)
Farmers/growers	33%	35% _E	37% _E	37% _E	40% _E	16%	41% _E
Consumer advocacy groups	30%	35% _E	27%	34% _E	32% _E	21%	34 % _E
Social media	26%	27% _E	35% _E	30% _E	27 % _E	16%	41% _{DE}
Cooking shows on TV or Food Network	26%	21%	36% AE	23%	26%	23%	32%
Alternative health care professionals	24%	30 % _E	33% _E	21%	26 % _E	15%	21%
Retailer staff	13%	10%	14%	15%	15% _E	8%	18% _E
Other	1%	1%	1%	1%	-	1%	-
I don't/won't look for information on genetically engineered/GMO Foods	2%	2%	2%	1%	3%	1%	3%
Don't know	1%	1%	1%	-	1%	2%	-

ABCDEF: Significantly higher than sub-group represented by that letter.

Base: All respondents (n=1,200)

Q9. Which of the following sources do you use to get information on genetically engineered foods or foods containing genetically modified organisms (GMOs)?



Sources of Information – Age, Gender, Income



			A	ge		Gender		Income		
	Total (n=1,200)	18 - 34 (n=125) (A)	35 - 44 (n=182) (B)	45 - 54 (n=290) (C)	55+ (n=574) (D)	Male (n=390) (E)	Female (n=810) (F)	Under \$50K (n=327) (G)	\$50K - \$100K (n=349) (H)	Over \$100K (n=300) (I)
Internet	57%	66% _D	67% _D	62 % _D	44%	52%	60% _E	50%	59% _G	65% _G
TV or radio news programs	57%	49%	52%	62% _{AB}	63% _{AB}	53%	59%	55%	58%	64% _G
Magazine or newspaper	54%	42%	55% A	59% _A	60% _A	54%	54%	44%	55% _G	64% _{GH}
Friends or family members	47%	52%	47%	48%	43%	43%	49%	45%	50%	49%
Product labels or company product information		49%	48%	46%	43%	40%	49% _E	44%	46%	53 % _G
Scientific studies/papers	45%	51% _D	46%	44%	41%	46%	45%	44%	42%	48%
Health professionals	40%	40%	41%	43%	39%	39%	41%	41%	40%	40%
Government agencies such as Health Canada		38%	39%	37%	37%	38%	37%	33%	35%	44% _{GH}
Books	37%	32%	35%	39%	40%	37%	37%	37%	30%	41% _H
Consumer wellness TV shows	33%	30%	33%	34%	37%	28%	36% _E	35%	33%	36%

ABCDEFGHI: Significantly higher than sub-group represented by that letter.

Base: All respondents

Q9. Which of the following sources do you use to get information on genetically engineered foods or foods containing genetically modified organisms (GMOs)?

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Sources of Information – Age, Gender, Income *continued*



			Aį	ge		Gender		Income		
	Total (n=1,200)	18 - 34 (n=125) (A)	35 - 44 (n=182) (B)	45 - 54 (n=290) (C)	55+ (n=574) (D)	Male (n=390) (E)	Female (n=810) (F)	Under \$50K (n=327) (G)	\$50K - \$100K (n=349) (H)	Over \$100K (n=300) (I)
Farmers/growers	33%	30%	33%	34%	35%	31%	34%	34%	30%	36%
Consumer advocacy groups	30%	22%	28%	33% _A	34% _A	27%	31%	26%	28%	37% _{GH}
Social media	26%	31% _D	26%	31% _D	21%	23%	28%	29%	26%	30%
Cooking shows on TV or Food Network		27%	25%	29%	24%	25%	26%	26%	24%	29%
Alternative health care professionals	1/1%	18%	24%	26%	27% _A	19%	26 % _E	26%	23%	22%
Retailer staff	13%	13%	12%	12%	13%	12%	13%	11%	13%	15%
Other		1%	1%	1%	-	1%	<1%	1%	1%	<1%
I don't/won't look for information on genetically engineered/GMO Foods	3%	3%	3%	1%	3 % _C	2%	3%	3%	1%	3%
Don't know	1%	2%	1%	1%	2%	2%	1%	1%	2%	2%

ABCDEFGHI: Significantly higher than sub-group represented by that letter.

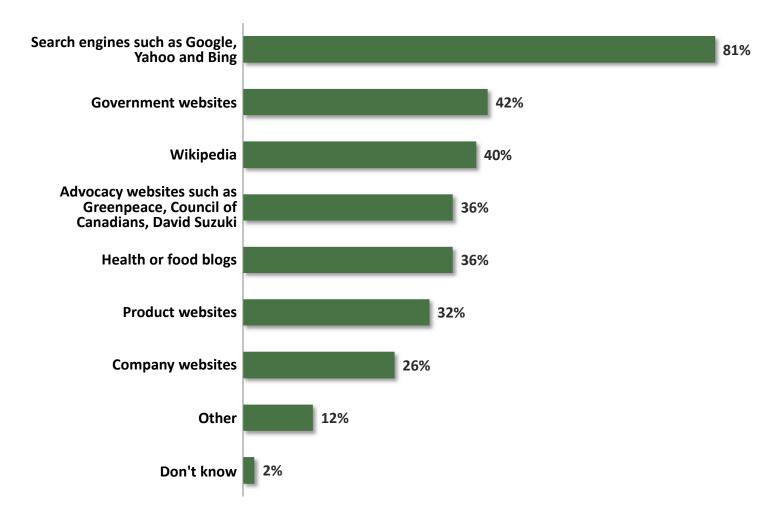
Base: All respondents

Q9. Which of the following sources do you use to get information on genetically engineered foods or foods containing genetically modified organisms (GMOs)?



Websites Used For Finding Information





Base: Internet/websites used to get information (n=644)

Q10. You mentioned using the internet/websites as an information source for genetically engineered foods or foods containing GMOs. What types of websites do you use?



Websites Used For Finding Information – Region



	Total (n=644)	British Columbia (n=110) (A)	Alberta (n=77)* (B)	Saskatchewan/ Manitoba (n=43)** (C)	Ontario (n=259) (D)	Quebec (n=105) (E)	Atlantic (n=50)* (F)
Search engines such as Google, Yahoo and Bing	81%	80%	79%	79%	84%	77%	90%
Government websites	42%	37%	49% _E	43%	45% _E	31%	56% _E
Wikipedia	40%	32%	35%	37%	44%	44%	36%
Advocacy websites such as Greenpeace, Council of Canadians, David Suzuki	36%	46% _{CE}	29%	21%	39 % _{CE}	26%	44% _C
Health or food blogs	36%	45% _E	41%	31%	36%	29%	28%
Product websites	32%	25%	28%	45% _{AE}	34%	23%	47% AE
Company websites	26%	16%	22%	33%	34 % AE	16%	26%
Other	12%	11%	10%	12%	14%	12%	6%
Don't know	2%	-	5% _A	3%	2%	1%	-

^{*} Small base size, interpret with caution.

ABCDEF: Significantly higher than sub-group represented by that letter.

Base: Internet/websites used to get information

Q10. You mentioned using the internet/websites as an information source for genetically engineered foods or foods containing GMOs. What types of websites do you use?

^{**} Very small base size, interpret with extreme caution.



Credibility of Information Sources



Not credible

(Low2Box)

9%

8%

19%

14%

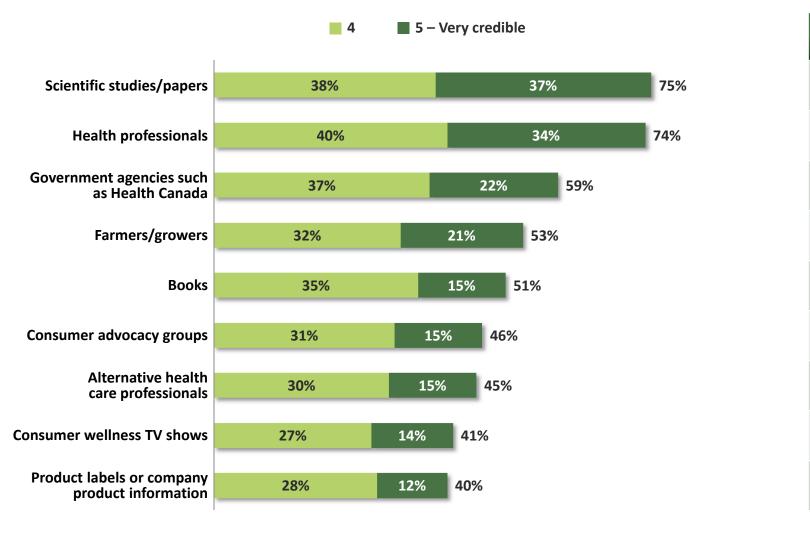
15%

19%

24%

22%

25%



continued...

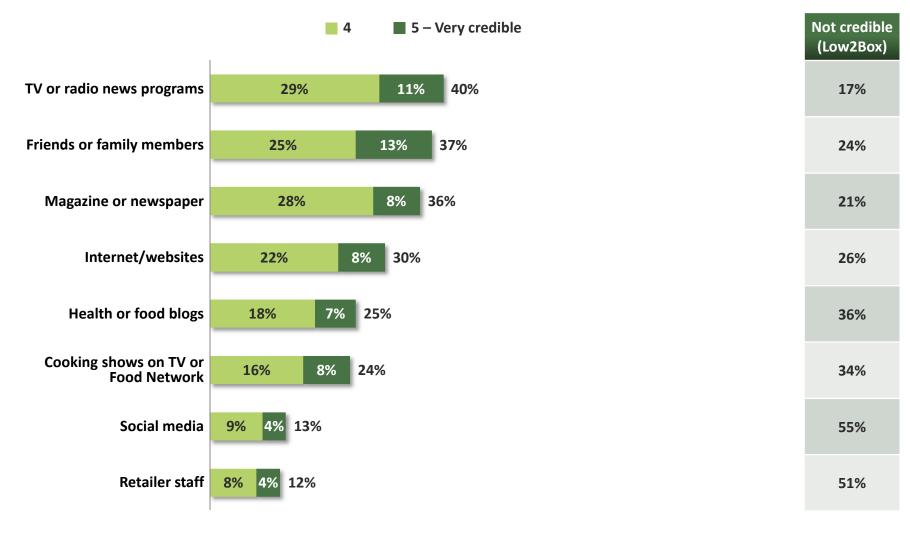
Base: All respondents (n=1,200)

Q11. Thinking about the credibility of different information sources for foods and using a scale of 1 to 5 where '1' means 'Not at all credible' and '5' means 'Very credible,' how would you rate the credibility of...



Credibility of Information Sources *continued*





Base: All respondents (n=1,200)

Q11. Thinking about the credibility of different information sources for foods and using a scale of 1 to 5 where '1' means 'Not at all credible' and '5' means 'Very credible,' how would you rate the credibility of...

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Credibility of Information Source – Region



			Тор	o2Box (Rated 4 o	r 5)		
	Total (n=1,200)	British Columbia (n=161) (A)	Alberta (n=128) (B)	Saskatchewan/ Manitoba (n=78) (C)	Ontario (n=460) (D)	Quebec (n=288) (E)	Atlantic (n=85) (F)
Scientific studies/papers	75%	74%	73%	65%	75 %	82% _{CD}	74%
Health professionals	74%	56%	76 % _A	75% _A	73% _A	83% _{AD}	82% _A
Government agencies such as Health Canada	59%	43%	63% _A	59%	55% _A	70% AD	69% _{AD}
Farmers/growers	53%	46%	51%	53%	59% _{AE}	48%	59%
Books	51%	43%	45%	41%	50%	62% ABCDF	45%
Consumer advocacy groups	46%	40%	34%	41%	40%	68% ABCDF	37%
Alternative health care professionals	45%	43%	50% _F	56% _{EF}	47% _{EF}	39%	32%
Consumer wellness TV shows	41%	31%	44% _{AD}	36%	32%	59% ABCDF	43%
Product labels or company product information	40%	33%	39%	44%	35%	51% _{AD}	47%

ABCDEF: Significantly higher than sub-group represented by that letter.

Base: All respondents

Q11. Thinking about the credibility of different information sources for foods and using a scale of 1 to 5 where '1' means 'Not at all credible' and '5' means 'Very credible,' how would you rate the credibility of...

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Credibility of Information Source – Region *continued*



			Тор	o2Box (Rated 4 o	r 5)		
	Total (n=1,200)	British Columbia (n=161) (A)	Alberta (n=128) (B)	Saskatchewan/ Manitoba (n=78) (C)	Ontario (n=460) (D)	Quebec (n=288) (E)	Atlantic (n=85) (F)
TV or radio news programs	40%	28%	32%	31%	37%	53% ABCD	47% AB
Friends or family members	37%	37%	40%	42%	35%	40%	33%
Magazine or newspaper	36%	33%	35%	35%	35%	45% _{ADF}	25%
Internet/websites	30%	28%	25%	28%	29%	34%	32%
Health or food blogs	25%	22%	23%	31%	23%	28%	23%
Cooking shows on TV or Food Network	24%	16%	25%	28%	21%	33% _{ADF}	19%
Social media	13%	13%	11%	8%	12%	17%	13%
Retailer staff	12%	5%	10%	17% _A	11% _A	16% _A	9%

ABCDEF: Significantly higher than sub-group represented by that letter.

Base: All respondents

Q11. Thinking about the credibility of different information sources for foods and using a scale of 1 to 5 where '1' means 'Not at all credible' and '5' means 'Very credible,' how would you rate the credibility of...

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Credibility of Information Source – Age & Gender



			Тор	2Box (Rated 4 o	r 5)			
			A	ge		Gender		
	Total (n=1,200)	18 to 34 (n=125) (A)	35 to 44 (n=182) (B)	45 to 54 (n=290) (C)	55+ (n=574) (D)	Male (n=390) (E)	Female (n=810) (F)	
Scientific studies/papers	75%	82% _D	76%	78 % _D	69%	76%	75%	
Health professionals	74%	82% _{CD}	80% _{CD}	71%	68%	71%	76%	
Government agencies such as Health Canada	59%	73 % _{CD}	63% _D	55%	50%	58%	60%	
Farmers/growers	53%	55%	57%	54%	49%	44%	58% _E	
Books	51%	57 % _D	49%	51%	46%	51%	51%	
Consumer advocacy groups	46%	46%	47%	46%	46%	40%	49% _E	
Alternative health care professionals	45%	48%	50%	41%	42%	37%	49% _E	
Consumer wellness TV shows	41%	37%	39%	44%	43%	36%	44% _E	
Product labels or company product information	40%	45%	38%	44% _D	36%	35%	43% _E	

ABCDEF: Significantly higher than sub-group represented by that letter.

Base: All respondents

Q11. Thinking about the credibility of different information sources for foods and using a scale of 1 to 5 where '1' means 'Not at all credible' and '5' means 'Very credible,' how would you rate the credibility of...

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Credibility of Information Source – Age & Gender *continued*



			Тор	2Box (Rated 4 o	r 5)			
			A	ge		Gender		
	Total (n=1,200)	18 to 34 (n=125) (A)	35 to 44 (n=182) (B)	45 to 54 (n=290) (C)	55+ (n=574) (D)	Male (n=390) (E)	Female (n=810) (F)	
TV or radio news programs	40%	35%	43%	42%	41%	35%	42%	
Friends or family members	37%	36%	31%	37%	41 % _B	36%	38%	
Magazine or newspaper	36%	30%	36%	42 % _A	39%	37%	36%	
Internet/websites	30%	31%	31%	33%	27%	29%	30%	
Health or food blogs	25%	25%	23%	24%	24%	21%	26%	
Cooking shows on TV or Food Network	24%	24%	21%	22%	25%	21%	25%	
Social media	13%	14%	13%	14%	13%	14%	13%	
Retailer staff	12%	13%	10%	9%	14%	11%	12%	

ABCDEF: Significantly higher than sub-group represented by that letter.

Base: All respondents

Q11. Thinking about the credibility of different information sources for foods and using a scale of 1 to 5 where '1' means 'Not at all credible' and '5' means 'Very credible,' how would you rate the credibility of...









Demographics – Region



	Total (n=1,200)	British Columbia (n=161) (A)	Alberta (n=128) (B)	Saskatchewan/ Manitoba (n=78) (C)	Ontario (n=460) (D)	Quebec (n=288) (E)	Atlantic (n=85) (F)
			Gender				
Male	33%	34%	31%	31%	36% _F	34%	23%
Female	67%	67%	70%	69%	64%	66%	77 % _D
			Age				
18 to 34	28%	20%	34% _A	42% _{ADF}	25%	33% AD	21%
35 to 54	35%	35%	28%	32%	34%	38%	39%
55+	35%	39% _E	35%	25%	40% _{CE}	27%	38%
Mean	48.5	51.6 _{CE}	47.1	45.4	50 _E	45.3	50.2 _E
			Income				
Under \$35,000	15%	15% _B	6%	25% _{BD}	14% _B	20 % _B	17% _B
\$35,000 to \$49,999	11%	11%	13%	11%	10%	13%	9%
\$50,000 to \$74,999	15%	10%	13%	15%	16%	18% _A	16%
\$75,000 to \$99,999	16%	19% _D	20 % _D	22 % _D	12%	16%	15%
\$100,000 to \$149,999	14%	16%	20%	9%	14%	13%	19%
\$150,000 or more	11%	9%	12%	13%	14% _E	7%	12%

ABCDEF: Significantly higher than sub-group represented by that letter.

Base: All respondents



Demographics – Region



	Total (n=1,200)	British Columbia (n=161) (A)	Alberta (n=128) (B)	Saskatchewan/ Manitoba (n=78) (C)	Ontario (n=460) (D)	Quebec (n=288) (E)	Atlantic (n=85) (F)
			Education				
Have not completed high school	5%	3%	4%	4%	6%	6%	6%
High school graduation	16%	13%	18%	21%	16%	16%	17%
Trades/apprenticeship certification	5%	6%	7%	11% _D	3%	7 % _D	4%
Some college	8%	12% _F	7%	8%	8%	7%	3%
College graduate	19%	22%	25%	26%	18%	16%	21%
Some university	7%	8%	5%	5%	6%	11% _D	4%
University graduate	38%	36%	33%	25%	43 % _C	37%	44% _C
		Who Ma	kes the Househo	old Grocery List			
You	80%	84%	81%	85%	78%	77%	82%
Your partner/spouse	16%	12%	17%	12%	17%	16%	16%
Other family member	2%	2%	-	3%	3%	2%	-
Other	2%	2%	2%	-	2%	4%	2%

ABCDEF: Significantly higher than sub-group represented by that letter.

Base: All respondents



Demographics – Region



	Total (n=1,200)	British Columbia (n=161) (A)	Alberta (n=128) (B)	Saskatchewan/ Manitoba (n=78)* (C)	Ontario (n=460) (D)	Quebec (n=288) (E)	Atlantic (n=85)* (F)
		Monthly H	lousehold Spend	ling on Groceries			
1 to 200	12%	12%	9%	12%	15%	11%	6%
201 to 400	30%	28%	26%	32%	33%	27%	33%
401 to 600	29%	26%	32%	28%	29%	27%	29%
601 to 800	12%	11%	10%	16%	10%	13%	18%
801 to 1000	17%	16%	17%	11%	18%	17%	14%
1001 and above	5%	5%	6%	1%	5%	5%	9% _C
Mean	\$543.00	\$564.60 _D	\$ 597.80 _D	\$518.80	\$493.10	\$ 579.30 _D	\$ 591.50 _D

ABCDEF: Significantly higher than sub-group represented by that letter.

Base: All respondents





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