CAPI
THE CANADIAN AGRI-FOOD POLICY INSTITUTE

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Industry Implications of Evolving Consumer Behaviour

Report prepared for CAPI by
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List of Abbreviations

AAFC	Agriculture and Agri-Food Canada
CAPI	Canadian Agri-Food Policy Institute
CCFI	Canadian Centre for Food Integrity
CI	confidence interval
DEI	diversity, equity, and inclusion
DV	dependent variable
IV	independent variable

1 Introduction

This report has been commissioned by Agriculture and Agri-food Canada (AAFC) as part of the AgriCommunication Initiative (Stream 2). The purpose of this report, and subsequent industry engagement, is to inform and engage with agriculture and agri-food producers about the evolving expectations and behaviours of Canadian consumers, particularly as it relates to sustainable agriculture. This is to support the overall objective of AgriCommunication, which is to increase Canadians' connection to and confidence in the Canadian agriculture and agri-food sector.

Sustainable agriculture is a recognized priority for the federal government of Canada. In addition to being a government priority, consumers have become increasingly interested in the sustainability aspects of the food that they buy. Consumer awareness of issues may sometimes translate into new buying habits. Consumer behavioural trends can give rise to opportunities as well as risks for the agriculture and agri-food sector as it aims to improve its competitiveness.

This report aims to provide an overview of the main consumer trends in the food sector and their implications, with a goal of informing and engaging the agriculture and food sector in order to increase the sector's awareness and alignment with evolving consumer behaviours and expectations.

As requested by AAFC, the report primarily focuses on sustainable agriculture trends, though not exclusively. Sustainable agriculture, as defined by AAFC, refers to agricultural practices that not only meet current market or societal needs, but also take into account present and future environmental (i.e., climate change, packaging and waste, biodiversity), social (i.e., public trust, labour, animal welfare), and economic (i.e., local food systems) impacts.

This report aims to support both government and industry stakeholders in understanding why and how consumer behaviour, demand, and expectations evolve over time in the medium-term and to what extent these consumer trends will potentially impact the agriculture and agri-food sectors. This will support ongoing dialogue within and between governments and industry on how to best position the sector to respond to these trends.

2 Executive summary

This study examined Canadian consumer's attitudes and preoccupations with respect to food purchases. Through interviews with industry experts and close examination of survey data, four trends were identified that are expected to influence consumers' food choices over the medium-term, i.e. roughly the next 10 years. Future consumer behaviour is not easy to predict; unanticipated factors and events may result in unexpected change. Industry experts do not necessarily agree on the trends that will be most influential in the future.

A preoccupation with environmental sustainability is one factor that is expected by many experts to influence food choices in the future. Many Canadians are currently concerned about the impact of food production, distribution, and consumption on the environment. They also register concern about the impacts of climate change on food production. As climate change and other environmental issues become increasingly noticeable to individuals in their daily lives, as well as an enduring focus of the media's attention, consumer concern about environmental sustainability is expected by many industry experts to grow. A preoccupation with environmental sustainability influences consumer behaviour in a variety of ways, including through a preference for locally produced food, and efforts to reduce food waste. However, it is not easy for consumers to discern how food choices impact the environment. There is a low level of reliance on label claims to identify sustainably produced food, combined with scepticism about companies' environmental claims. Consumers are expected to continue to seek information about ways to reduce the negative environmental impact of food choices and they will look to government and industry to provide credible, reliable, and relevant information about environmental impacts. Companies and industries that effectively communicate an environmental advantage may stand to benefit from improved performance on the Canadian market, though several experts doubted that consumer willingness to pay a price premium for more environmentally sustainable food would increase.

Consumer interest in impact of diet on personal health is expected by many experts to be an enduring trend. After price, the nutritional and quality attributes of food tend to be the most influential determinants of food decisions, as reported by consumers in surveys. Specific food-health preoccupations are driven by new scientific knowledge as well as media- or celebrity-based fads that are sometimes quite short-lived. However, despite changes in the specifics, the underlying consumer desire to better understand how food choices affect health outcomes has persisted over decades and is expected by many experts to persist into the future. Current health-related trends that are expected to have staying power include the trend toward increasingly personalization of diets based on gender, age, and/or specific health concerns. The trend toward personalization is enabled in part by new information technologies that make it possible for consumers to use their personal information to generate specific dietary recommendations. This trend is expected to result in increased market segmentation and niche market opportunities. Consumers are also expected to remain interested in increasing the amount of protein in their diets, especially plant-based proteins.

Recent high food price inflation has focussed the Canadian consumer's attention on food affordability, while pandemic-related supply disruptions generated concern about food availability. Many experts expressed the view that heightened concern about food security could continue to drive consumer behaviour for at least the next few years. Underlying this view is an expectation among some experts that disruptions to global food production and distribution systems will be frequent. Consumers have been responding to food price increases by "trading down" in a variety of ways: they are shopping at discount stores, choosing private-label products, taking increasing advantage of product sales, and buying less fresh and/or high-protein food. They may also be seeking to reduce food waste. A preoccupation with food security may motivate some consumers to seek out locally produced food. Locally produced food is viewed as good for the local economy and also as a potentially more reliable source of supply, due to shorter supply chains. Local foods may, however, be more expensive than their imported counterparts. Ensuring reliable access to healthy food, including in remote or underserved markets, was highlighted as a priority by many of the experts interviewed.

The fourth and final trend identified as part of this study is increased consumer interest in the social sustainability of the food system. Unlike the other three trends discussed, this is an emerging trend that has yet to have a major impact on the Canadian marketplace, but it is expected by some experts to be more influential in the future. The trend is driven in part by a concern for the well-being of food system workers (grocery cashiers, farm labourers, meat cutters, etc) that came to prominence during the pandemic. It is also driven by a growing focus on diversity, equity, and inclusion and by the movements that seek to improve the position of historically marginalized groups in Canadian society. Finally, this trend includes the relatively more longstanding concern regarding the welfare of farm animals. Younger adults are particularly interested in social sustainability. This interest is expected by some experts to drive changes in food purchasing behaviour that are similar to those behaviours already observed with respect to environmental sustainability. Products and brands that are associated by consumers with social attributes such as, for e.g., better treatment of workers, improved animal welfare, or indigenous ownership may come to enjoy an advantage in the marketplace. At the present time, however, there is typically insufficient information available for consumers to differentiate between products on the basis of social sustainability and consequently this trend may represent a risk as much as an opportunity. A perceived disregard for social sustainability, through apparent mistreatment of workers for example, will cause increasing reputational damage to businesses in the food system.

3 Methodology

This report represents the outcome of research effort by Darcie Doan Consulting, the Canadian Agri-food Policy Institute (CAPI), and the Canadian Centre for Food Integrity (CCFI).

Sources

Sources for identifying the most influential and enduring consumer trends include all materials used in the literature review, particularly the Canadian Centre for Food Integrity's recent reports. The bibliography lists all sources used in the literature review. Given the focus of this study on trends and expectations for the future, particular emphasis was placed on publications that extrapolate results into the future, or that comment on trends that are expected to persist into the future.

Trends were validated through one-on-one discussions. Darcie Doan Consulting conducted 11 one-on-one videoconference discussions with industry experts to inform the findings presented here. Each discussion was approximately 45 minutes in length. Tyler McCann, CAPI's managing director, conducted one discussion. A representative of AAFC attended each of these discussions. One participant provided written responses to the discussion questions. Taken together, the consultation process with industry experts included 13 participants.

Industry experts were from the following sectors: grocery retail (4), food marketing, market research, and food innovation (4), food and food ingredient manufacturing (3), agri-food investing (1) and academia (1). The discussions were semi-structured, and guided by a set of questions regarding which trends the industry expert believed would be most influential over consumer behaviour in the coming decade, how those trends are influencing and will influence consumer behaviour, and how their company/industry is responding or intends to respond to the trends. See Annex 1 for a copy of the discussion guide.

Trends were refined and described by drawing on a review of relevant industry and academic literature, as well as data analysis. The literature review included recent, relevant, and publicly available materials regarding consumer trends in the Canadian food and beverage market including academic research into consumer attitudes and behaviour, public opinion research reports, trend reports, forecasts and reports by industry insiders, and studies of actual food and beverage spending.

Quantitative analysis, in the form of econometrics and aggregated queries, was performed on data provided by CCFI from its consumer trust surveys. The surveys were conducted by Ipsos in the years 2018 through 2022, inclusive. The resulting datasets were five distinct cross-sections; that is, individuals could not be tracked through the years as in longitudinal or panel data. However, observations were pooled together such that trends could be identified through time, to the degree that survey questions were similar enough to permit standardization of variables across each of the five datasets. The set of variables used in this report can be found in the appendix. The survey sample sizes (n, number of observations) are pictured in Figure 3.1.

Figure 3.1. Survey data sample sizes.

Year	n (observations)
2022	2,918
2021	2,202
2020	2,903
2019	2,189
2018	1,509
Total	11,721

Data source: CCFI. (2018-2022). *Consumer trust research.* [Dataset].

Econometric Analysis

In keeping with scholarly work done on consumer behaviour in relation to food, the econometric models used were logistic regressions (see Gad Mohsen & Dacko, 2013; Rana & Paul, 2017). The data were also queried to validate the econometric results and supplement the data visualization contained throughout this report. All econometric models and queries were weighted using the weight variable provided by CCFI.

The dependent variables in the models are those which have been identified as trends for this report: environmental sustainability, health or nutrition, the cost of food, and social sustainability issues. For the purposes of econometric modelling, consumers needed to be classified according to their interest or level of concern with each of these trends. Wherever possible, a dependent variable was created according to a ten-point Likert scale wherein respondents were asked to rate their level of concern with these issues. Occasionally, survey questions were not structured in such a way, and so as a proxy for concern with an issue, we used information about whether or not respondents had sought information in the recent past about an issue. These instances are clearly outlined in the report. The appendix also contains a complete list of variables and the corresponding survey questions in each year.

Many graphs and analyses in this report compare the outcome (probability) from the logistic model to the average predicted probability of a particular outcome, which appears as a horizontal red line in several graphs. The average predicted probability is useful because it shows the probability of obtaining a particular outcome if the independent variables for the observations in the model are allowed to be their observed values. This sets a baseline against which another value can be compared, such as the predicted probability of the same outcome when one of the independent variables is fixed at a particular value. The average predicted probability is computed by taking the parameters of the model in question, plugging in the observed values for the IVs, computing the probability of obtaining the desired DV value, and then taking the average probability across all observations in the model sample. The average predicted probability was restricted to the model sample (and not the entire data sample) for all analysis so that it was more comparable when used as a baseline against other predicted probabilities obtained from the model results.

4 Context and framework

Definition of "trend" and criteria used

This report includes information about consumer demand divided into four "trends." For the purposes of this study, a trend is defined as an underlying attitude or preoccupation that is growing in importance over time and driving consumer behaviour.

The criteria used to choose which trends would potentially be included in this project are:

(1) Trend is consumer-driven (as opposed to mainly industry- or producer-driven)
(2) Trend is broad enough to encompass several associated consumer behaviours, yet not so broad as to be all-encompassing or impossible to clearly define
(3) Trend is expected by experts interviewed to endure over the medium term (10 years or so)
(4) Trend is viewed by experts interviewed as being highly influential on consumer behaviour in terms of food purchase decisions.

Discussion of uncertainty in forecasting and in consumer surveys

This study draws on recent experience and data and attempts to extrapolate into the future. It is important to acknowledge at the outset that many commentators and experts interviewed feel that it is particularly difficult to make reliable forecasts or predictions at the present time.

The past several years, starting in 2020 and continuing through to the present day, have been characterized by widespread upheaval and disruption. These disruptions, starting with the COVID-19 pandemic and including the current war in Ukraine, have had major impacts on the daily lives of Canadians as well as the markets in which they participate. The timing, extent, and nature of the disruptions caused by these events would have been difficult even for experts to accurately foresee. For this reason, many market and consumer experts are currently somewhat reluctant to speculate about the future. Confidence in their ability to extrapolate from recent conditions is low, and most are acutely aware that the future may contain additional disruptive events that result in a break from recent trends. Current high food price inflation rates are a case in point. While there was broad consensus that this is a major preoccupation of consumers that is driving behaviour change, experts were generally reluctant to express definitive expectations regarding future food price inflation.

The current high level of uncertainty about the future amounts to a caveat on the interpretation of results presented in this report. While the future is always unknowable, it seems particularly so at the present time. This report includes, where appropriate, an indication of the types of events or forces that might disrupt or reverse trends. An assessment of the likelihood that trends will be disrupted or reversed is beyond the scope of this report.

Accuracy of survey data as it pertains to behaviour

A second important caveat relates to the accuracy of consumer survey data. Much of the evidence presented in this report is survey evidence gathered by the Canadian Centre for Food Integrity (CCFI) or other consumer research entities. While surveys are carefully designed to be as representative as possible of a given population and come with estimates of accuracy based on sample size, they cannot correct for systematic errors in responses. Survey respondents report on their attitudes, priorities, and behaviours using imperfect memory and influenced by a variety of cognitive biases. Reported behaviours typically do not reflect actual behaviours with perfect accuracy and may be systematically biased. For example, studies have shown that consumers often overstate their willingness to pay (Li & Kallas, 2021). For this reason, and where possible, survey results have been supplemented with data on actual purchase behaviour. However, the public availability of purchase data is very limited, and therefore it is included in this report only to a small extent. In many cases, purchase data was not available and therefore it was not possible to verify whether reported behaviour matches actual behaviour.

Some points regarding interpretation of findings

This is a report about food purchase behaviour and attitudes. When interpreting the findings presented, it is useful to keep the following general points in mind.

Almost all Canadians participate in the market for food products at least occasionally; exceptions would include young children and the institutionalized. This study therefore includes virtually everyone in Canada and we should expect a high degree of variability, reflective of the full diversity of Canadian consumers. For every trend identified, there will be one or several groups of people who buck the trend. The focus of this study is on the broader trends that are currently shaping the food demands of a significant proportion of the population, or that are expected to do so in the future. Many niche markets exist, and while these may represent important opportunities for some companies, they are generally not the focus of this report.

Food choices are heavily influenced by subjective judgements about preferred taste, texture, and flavour of food. These judgements are, in turn, influenced by experience and may evolve over the course of time. These judgements, while important determinants of food purchases, will not be a focus of this report. For the purposes of this study, we will assume that people wish for their food to “taste good” —however they define that — and we will focus on other factors influencing food choices. Taste will only be discussed when there are trade-offs with other preoccupations, such as the health-promoting attributes of food.

While consumers do put effort into some food product decisions, the amount of effort is limited by the routine nature of the purchase, as well as the relatively low purchase price of individual food items. Food shopping is a routine activity typically undertaken under time pressure. A typical trip to the grocery store will involve hundreds of individual decisions. Food shoppers will allocate only seconds to most of the food purchase decisions that they face. Some academics refer to these purchases as “low-involvement” purchases, which can be contrasted with “high-involvement” purchases that are high-value and non-routine (Principles of Marketing, 2022). The purchase of a car, for example, is a high-involvement purchase which is typically preceded by a significant period of research into makes and models and the reputation of the manufacturer, along with a test drive of the specific vehicle that might be purchased.

In some cases, consumer views are not well-informed or are the product of misinformation. The purpose of this study is to report on consumer trends, not to evaluate the logic or evidence behind those trends. For example, some consumers may associate local food with improved environmental outcomes and therefore choose to increase their consumption of food produced in their home province or region. An assessment of the scientific evidence regarding the environmental impacts of locally produced food is beyond the scope of this report.

Clusters: The concerned vs. the unconcerned consumer

When it comes to food, a sizeable segment of the consumer population demonstrates a high level of interest or concern in the following cluster of issues: cost of food, environmental sustainability, food loss and waste in Canada, nutrition, and animal welfare. For the purposes of analysis, we call a consumer "concerned" if they rate their level of concern as 8 or higher over these five issues. For the question of nutrition, the survey questions in 2020 through 2022 did not ask about level of concern with nutrition, but whether or not consumers had sought out information about healthy eating in the past two years (2020 and 2021) or the past six months (2022). We deemed a consumer to be "concerned" if, in addition to having a high level of concern with the previous three issues, they also responded "yes" to this question.

The "concerned consumer" represents 13.16% of the Canadian population. The majority of concerned consumers are women (65%) while only about a third (35%) are men. Seniors, who comprise 21.75% of the entire sample, comprise 25.15% of all "concerned consumers." Finally, those with more education (unfinished university or an undergraduate/graduate degree) have a lower representation in the "concerned consumer" category than in the entire sample. This means that those with more formal education are less inclined to belong to the group of consumers who have a high level of concern for a cluster of issues.

Figure 4.1. The "concerned consumer" by demographic category.

	Representation in entire sample	Share of concerned consumer segment
Males	48.45%	34.90%
Females	51.55%	65.10%
Seniors	21.75%	25.15%
Unfinished university	9.01%	8.02%
Undergraduate degree	17.43%	11.68%
Graduate degree	9.33%	8.82%

Data source: CCFI. *Consumer trust research.* [Dataset].

The concerned consumer can be contrasted with the consumer who reports having a very low level of concern with this same set of five issues (or who has not sought out information about the issue, in the case of nutrition for 2022 through 2020). For the purposes of analysis, we set the threshold of level of concern at 2 or lower, where 0 represents "not at all concerned." The unconcerned consumer is rarer than the concerned consumer, comprising only 0.33% of the entire sample.

It is easy to assume that the cost of food is a concern for everyone, but the data show that there is actually a significant difference between the consumer who is concerned versus unconcerned with the cluster of four issues (environmental sustainability, food waste, nutrition, and animal welfare). Sixty percent (60.45%) of concerned consumers (with the four issues – all but cost) rate their level of concern with the cost of food at a 10, while for unconcerned consumers, it is only 18.10%. This large difference indicates that the cost of food is not a concern for everyone, and in fact, is of low concern for the unconcerned consumer. In addition, when analysing the unconcerned consumers above, removing the cost of food from the cluster of issues did not increase the share of unconcerned consumers to a large portion of the sample: it increased from 0.33% to 1.00%. In summary, if consumers have a very low level of concern with environmental sustainability, food waste, nutrition, and animal welfare, they also tend to have a low level of concern with the cost of food.

5 Trend #1: Sustainability

General description

Many Canadians are concerned about the environmental impact of food production, distribution, and consumption. As climate change and other environmental issues become increasingly noticeable to individuals in their daily lives, as well as an enduring focus of the media's attention, consumer concern about environmental sustainability is expected by many industry experts to grow over the medium term.

An interest in environmental sustainability influences consumer behaviour in a variety of ways, including choices about the types of products to buy, preferred suppliers of those products, and the way in which they are consumed. However, it is not easy for consumers to discern exactly how food choices impact the environment; they are sometimes presented with conflicting information about these choices and their impacts. Consumers will continue to be open to information about ways to reduce the negative environmental impact of their own food choices and they will look to government and industry to provide consistent, reliable information about environmental impacts and to take action to support environmental sustainability.

Consumer attitudes and opinions associated with and/or driving this trend

a) Main forces and events influencing consumer opinion about the trend

Concern about environmental sustainability has been growing steadily over the past decade, largely driven by ever-increasing awareness regarding climate change and its impacts. Many Canadians have personally experienced a weather event or seasonal climate variation that could be ascribed to climate change. Most Canadians will be aware, through the media, of extreme weather severely impacting other people around the world. Increasingly, there is a sense that climate change is a growing threat to many of the environmental systems that underpin quality of life.

Recent survey results confirm that Canadians are increasingly concerned with climate change. A 2021 survey by Abacus found that 70% of Canadians believe that there is solid or conclusive evidence of global warming, and of these, 75% believe that human activity is the cause of global warming. Both metrics grew over the preceding five years. The 2023 Global Trends Report by Ipsos (Ipsos, 2023) found that almost three-quarters of Canadians agree with the statement, "We are heading for environmental disaster unless we change our habits quickly."

CCFI's tracking of concern about food system issues also finds a persistently high level of concern about climate change, with about half of Canadians reporting being very concerned about this issue consistently since 2017. Furthermore, there is evidence that consumers view climate change as a threat to the food system. The 2022 public trust survey by CCFI found that almost half (46%) of Canadians view climate change as *the greatest* threat to Canada's food system.

There is evidence that, when it comes to food, consumers strongly associate the broader term of "sustainability" with environmental issues. CCFI's 2020 survey regarding public trust among consumers found that, when asked to define what it means for food to be sustainably grown, the most popular definition by far was "has a positive impact on climate change and the environment" (Canadian Centre for Food Integrity, 2021).

b) Any relevant demographic and socioeconomic characteristics associated with or driving the trend

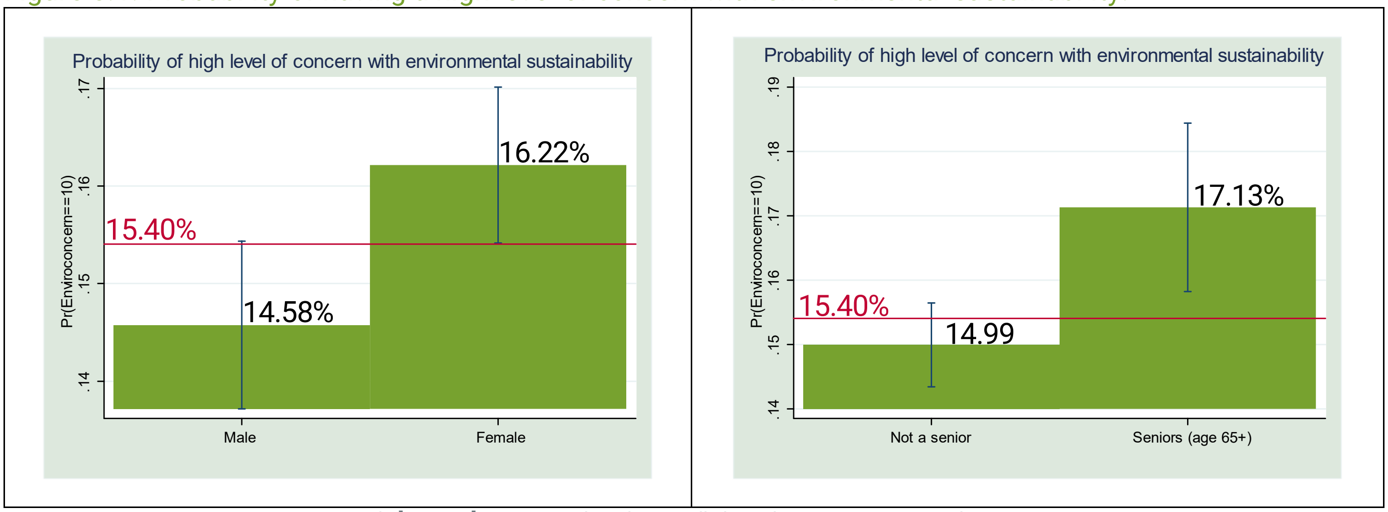
The CCFI surveys asked consumers about sustainability in each year. In 2022, consumers were asked whether they had sought out information in the last six months about "sustainable or environmentally friendly food production," and in 2021 and 2020, in the past two years. Respondents were labelled as "being concerned with sustainability" if they answered "Yes" to any of those questions. In 2019 and 2018, respondents were asked to state their degree of concern, from 1 to 10, with "environmental sustainability in farming," with 0 being no concern at all and 10 being very concerned.

Of those who declared being "very concerned" with the environment, women were somewhat more likely than men to have this concern (Figure 5.1). The likelihood of responding with a 10 ("very concerned") was 16.22%

among women, while only 14.58% among men. Notably, the 95% confidence interval for both genders did overlap with the average predicted probability of 15.40% (the red line below), which means that we cannot say with 95% confidence that either gender's actual likelihood of being "very concerned" with the environment is different from the average predicted probability.

Seniors were also more likely to report being very concerned with the environment than non-seniors (below age 65) (Figure 5.1). The likelihood of seniors was 17.13%, while for non-seniors, 14.99%. The seniors' 95% CI lay above the average predicted probability of 15.40%.

Figure 5.1. Probability of having a high level of concern with environmental sustainability.

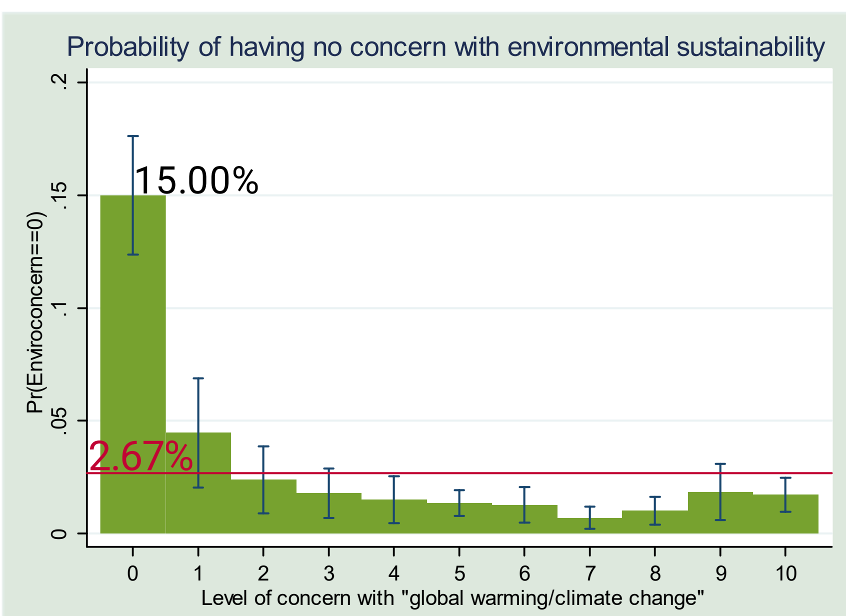


Data source: CCFI. *Consumer trust research*. [Dataset]. Image produced internally based on econometric analysis.

The econometric results above are confirmed by conducting queries of the data. Over the entire survey sample (n=11,709), 15.67% of respondents said they were "very concerned" with the environment; this percentage was higher for seniors (18.09%) and lower for non-seniors (15.00%).

The multinomial logistic regression was repeated to predict the outcome of reporting a zero (not at all concerned) about the environment (Figure 5.2). Consumers who were not at all concerned with climate change (level=0) had a 15.00% chance of also not being concerned with the environment, far above the average predicted probability of 2.67% (the red line).

Figure 5.2. Concern with global warming as a predictor of no concern with environmental sustainability.



Data source: CCFI. *Consumer trust research*. [Dataset]. Image produced internally based on econometric analysis.

These results are confirmed by querying the survey data. The share of respondents reporting no level of concern (0) with the environment is 2.76% of the entire sample, but when looking at only those who also report having no concern (0) with "global warming/climate change," 37.47% of respondents report having no level of concern with the environment (not pictured).

Consumer behaviour associated with this trend

Canadians look to governments and industry to do more to improve environmental outcomes, but they are also seeking to reduce their own emissions and environmental impact where they can. One way in which consumers seek to reduce their own environmental impact, or carbon footprint, is through their food product choices.

However, unlike some other attributes, such as price, the environmental impact of a good is not directly discernible at the point of sale. Consumers must therefore rely on indirect signals, and they face a potentially confusing set of choices around what is or isn't sustainably produced.

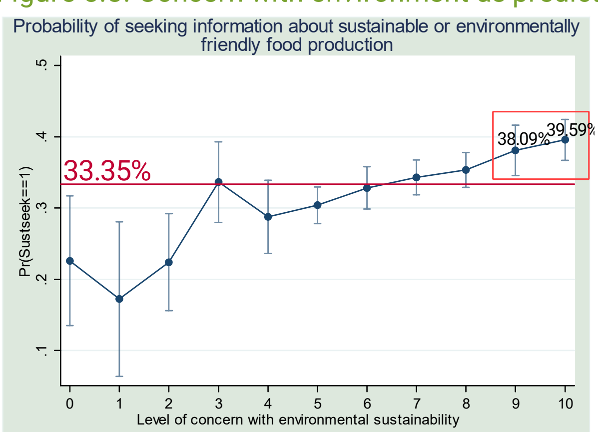
Qualitative research conducted with Canadians by AAFC in 2022 suggests that Canadian consumers are unable to assess the impact of agriculture on the environment, nor are they confident in their ability to identify sustainable agriculture practices or products (Earnscliffe Strategy Group, 2022).

> *I think, unfortunately, that when it comes to environmental sustainability, people know that it matters but they don't know what to do. "Am I doing the right things? Should I be doing something else?" There is a desire to act, but there are price constraints and also constraints around knowing what to do. – Industry expert*

Given the priority placed on the issue, along with the lack of knowledge about what to do about it, it is no surprise that concern about environmental impacts is associated with information-seeking and self-education behaviour. In the 2022 public trust survey by CCFI, thirty percent of all Canadians reported that they sought out information about sustainable or environmentally friendly food production in the past six months. The proportion was much higher among those who expressed a high degree of concern with environmental sustainability and climate change.

There is a statistically significant relationship between concern for the environment and seeking out information about sustainability: the more concerned people are with the environment, the more likely they are to seek out information about sustainability. The multinomial regression analysis revealed that those who were "very concerned" with the environment (10) had a 39.59% chance of also reporting that they had sought out information about sustainable or environmentally friendly food production, higher than the average predicted probability of 33.35%. As pictured in Figure 5.3, the 95% CIs of both levels 9 and 10 lay above the expected value (probability) of all respondents in the model (n=6,923) seeking out this information (33.35%).

Figure 5.3. Concern with environment as predictor of seeking information about sustainable food production.



Data source: CCFI. *Consumer trust research.* [Dataset]. Image produced internally based on econometric analysis.

These results are from a model which controlled for concern with food loss and waste (at the household level and overall in Canada), whether or not they sought information about nutrition and healthy eating, whether or not respondents thought that organic foods are healthier than non-organic foods, level of concern with climate change, income per adult in the household, senior status (age 65 and over), and gender.

According to industry experts, consumers often research food-related issues before visiting the grocery store. Consumers look to social media and other online sources for information about production practices. They also speak with friends and others that they view as being knowledgeable about food.

a) Logos and label statements

Consumers may also use signals that are available at the point of purchase, such as logos or statements made by food manufacturers and retailers, to identify environmentally sustainable food. CCFI's 2022 public trust survey found that a minority of Canadians (25%) report seeking out assurance logos when they shop. These logos and statements may be present on product packaging, in-store signage, or as part of an online-shopping product listing. In this context there are a variety of logos and statements that are used in an attempt to communicate information about production practices for e.g. Canada Organic, free-range, non-GMO project verified, Rainforest Alliance, Marine Stewardship Council Certification, PC Free-From, Canada Roundtable on Sustainable Beef certified, and others. CCFI's 2022 public trust survey found that, among those who seek out logos, non-GMO and Canada organic logos are the most commonly sought.

Consumer understanding of these logos/statements and the production standards that underpin them is likely to be incomplete. Industry experts express that Canadian consumers find the multiplicity of production-related logos confusing.

Finally, there are issues with the credibility of logos and label statements among consumers. CCFI's 2022 public trust survey found that only 12% of Canadians say that sustainable food labels are very believable; most find them only somewhat believable. The survey also found that the labels that consumers find most believable are those, such as nutrition fact tables and country of origin, that are consistently presented on packaged foods and backed by regulation.

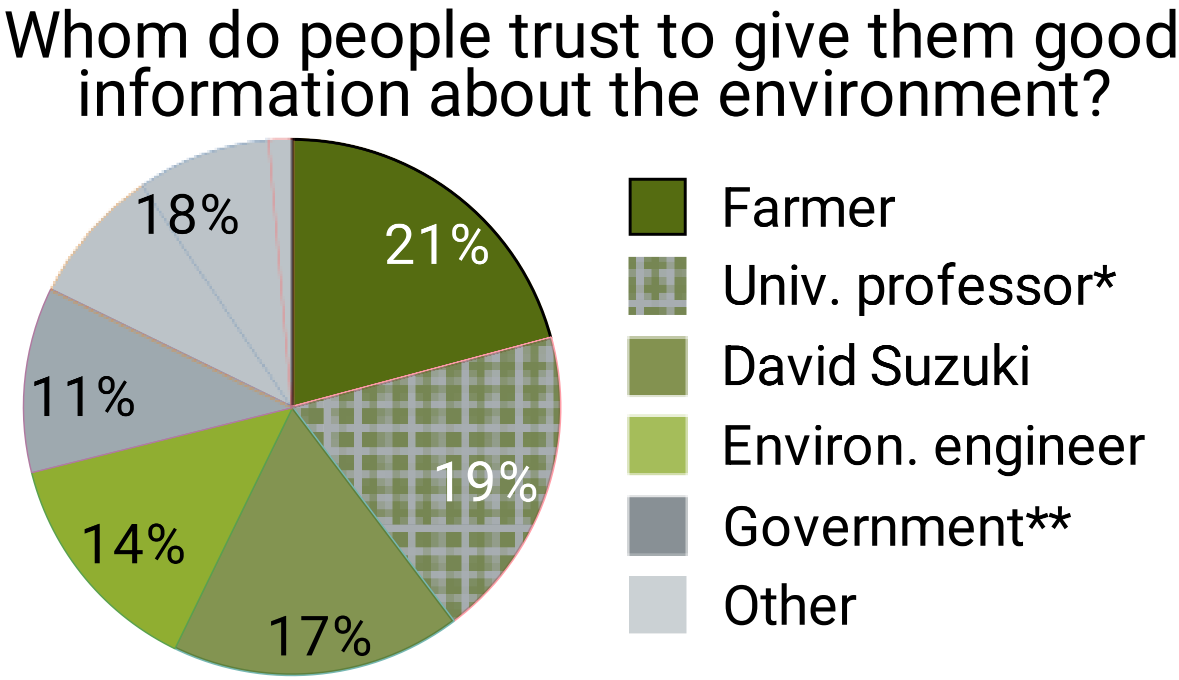
More generally, consumers are sceptical of environmental claims made by companies, whether these are shown on the label or elsewhere. CCFI's 2022 survey found that 41% of Canadians reported being "very concerned" about "greenwashing or misleading information about how a company's products are environmentally sound." A 2021 EY survey of Canadian consumers also found that there is a sustainability education gap among consumers and a lack of trust around sustainability claims — 73% of respondents in that survey said they needed more information to make better environmental choices when shopping, while 66% expressed a lack of trust in sustainable products due to deceptive marketing (Ernst & Young Global Limited, 2021). Industry experts corroborate that consumers are sceptical about environmental logos and label claims.

Some industry experts are calling for more consistent, harmonized metrics about sustainability to help consumers make informed decisions. Some experts also note that none of the labels or statements available in the Canadian food marketplace speak directly to greenhouse gas emissions associated with production. Given the growing preoccupation with climate change, demand for this type of information is expected by some to grow.

Other industry experts expressed a preference for telling their environmental "story" online or through social media rather than on the label, both because of consumer scepticism regarding label claims but also because the label is viewed as an already-crowded space in which it is difficult to effectively communicate additional information.

The trustworthiness of environmental information is a growing consumer issue. CCFI survey results suggest that farmers and professors are viewed as a credible source of production-related information (Figure 5.4). In 2019, the CCFI public trust survey asked respondents to rate various actors according to their believability about food-related issues (Canadian Centre for Food Integrity, 2019). On the environment, farmers received the greatest number of votes (21%) for being "very believable," followed by university professors specializing in environmental sciences. Government ranked near the bottom, receiving only 11% of all votes as "very believable."

Figure 5.4. Distribution of “very believable” votes, 2019.



*Univ. professor who specializes in environmental science
**Government environmental engineer

Data source: CCFI. (2019). *Consumer trust research.* [Dataset]. Image produced internally.

b) Most consumers will not pay more for food billed as “more sustainable”

While concern about the environmental impact of food production may be growing, it is not driving most consumers to seek out products that are billed as more environmentally friendly, particularly if they cost more. Several industry experts expressed that the majority of consumers are not willing to pay more for products that are perceived as having an environmental benefit. CCFI’s 2022 public trust survey results support the assertion that most consumers are not willing to pay a premium. More than half (54%) of Canadian consumers say they rarely or never seek out items that have a minimal environmental impact, even if they cost more. Only 6% say they always do so (compared to the 37% who say they always seek out lower cost items).

A meta-analysis of 80 studies of willingness to pay for sustainable food found that European and Asian consumers are more likely to be willing to pay a premium for food billed as sustainable, compared to their North American counterparts (Li & Kallas, 2021). However, even in Europe, willingness to pay more is confined to a minority of consumers. A 2021 survey by Euromonitor found that only 12% of European consumers were willing to pay more for food that was “sustainably-produced or raised” or “environmentally-conscious or eco-friendly", respectively (Euromonitor International, 2021).

The meta-analysis also found that willingness to pay varied by sustainability claim, with higher willingness to pay for organic food compared to other claims. Caution should be used when interpreting willingness to pay for organic food as willingness to pay for environmentally sustainable food. Studies, including the meta-analysis cited here, have shown that consumers associate organic food with human health benefits more strongly than they associate it with environmental benefits. However, according to some industry experts, the line between “good for me” and “good for the planet” may be increasingly blurred.

c) Short-hand strategies

Given the complexity of agricultural production systems and the lack of a clear metric that could be used to discern between products on the basis of environmental impact, it is no surprise that many consumers resort to using simplified strategies in an attempt to make environmentally responsible choices. Consumers who are preoccupied with environmental impacts may choose short-hand strategies such as reducing food or packaging waste, or choosing locally produced food. These strategies do not require a close examination of label statements or a great deal of product-related research and can be applied with relative ease at the point of sale. Another main advantage of these strategies is that they do not necessarily cost more money and may sometimes even result in cost savings. According to industry experts, rather than paying more for food viewed as sustainably produced, consumers are increasingly looking for ways to both reduce their spending and reduce their environmental impact.

d) Local food = environmentally sustainable

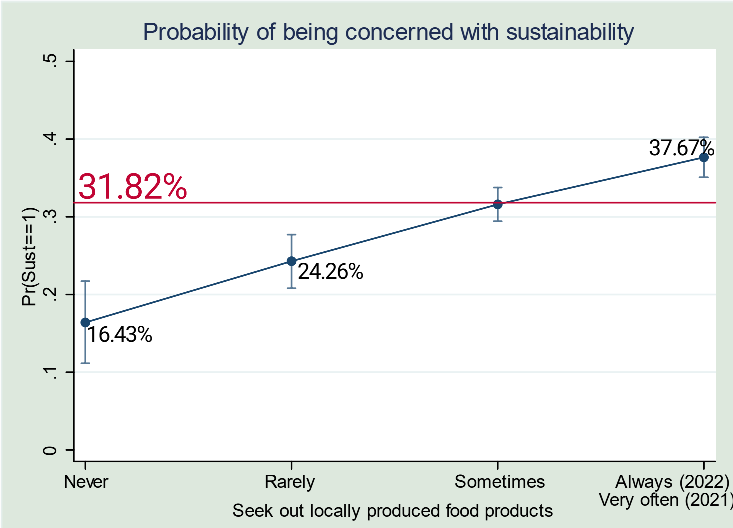
There is a widespread association between local and sustainable food among Canadian consumers. This connection likely rests on the reduced distance to market (and hence reduced GHG emissions from transport) and perhaps on an increased level of trust in local producers to care for the environment, when compared to foreign producers.

When asked in the 2020 CCFI public trust survey to define what it means for food to be grown sustainably, 31% of all Canadians equated sustainable food with locally produced food. In a 2022 survey of consumers by Dalhousie University's Agri-Food Analytics Lab, environmental sustainability was the third most common reason given for buying local food (Agri-Food Analytics Lab, 2022b). The most common reasons given revolved around supporting the local economy and local farmers through local food purchases.

Statistical analysis of CCFI survey results conducted as part of this study supports the connection between concern about sustainability and interest in local food. The econometric models support the claim that people who seek information about local food are more concerned with sustainability than those who do not seek out local food. The 2022 and 2021 CCFI surveys asked respondents how often they seek out locally produced food products: always, sometimes, rarely, or never. The multinomial logistic model showed that those who responded "always" had a 37.57% chance of also being concerned with sustainability, versus a probability of 16.43% for those who responded "never." In the multinomial logistic model, all four levels of responses about seeking out local food ("always" (2022) or "very often" (2021); "sometimes"; "rarely"; and "never") were statistically significant predictors of whether or not a person will be concerned with sustainability. These results were found after controlling for the following covariates: time, concerns over or reductions in food loss and waste (at both the national and household levels), seeking information or being concerned about access to information about nutrition, concern with climate change, and the demographic characteristics of age, education, income, and gender.

The gradual probabilities are pictured in Figure 5.5. The red line represents the average of the predicted probability of being concerned with sustainability (31.82%) across the sample included in this multinomial logistic model. This sample was restricted to 2021 and 2022 because the CCFI survey only asked the question about local food in those years. Those who "always" (2022) or "very often" (2021) sought information about local food had a 37.67% chance of also being concerned about sustainability – higher than the average of the predicted probability (31.82%) across the same sample. For those who reported "never" (4) or "rarely" (3) seeking out information about local food had lower-than-average probabilities of also being concerned with sustainability: 16.43% and 24.26%, respectively.

Figure 5.5. Seeking out locally produced foods as a predictor of being concerned with sustainability.



Data source: CCFI. *Consumer trust research.* [Dataset]. Image produced internally based on econometric analysis.

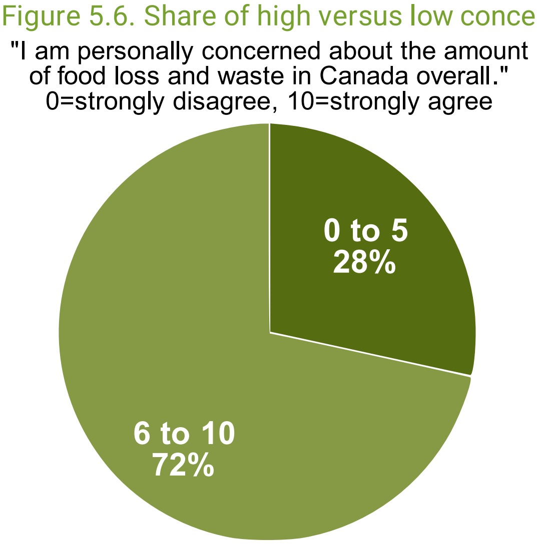
e) Reducing waste = environmentally sustainable

Seeking to reduce waste wherever possible, including food waste and packaging waste, is another relatively simple rule used by consumers seeking to make environmentally responsible food choices. Strategies that reduce or eliminate food and packaging waste are viewed as win-win in the sense that they reduce environmental impacts and may also help consumers save money.

Quantitative analysis reveals that food waste awareness and focus has risen through time. The CCFI surveys consistently ask participants each year to report their agreement with the following statement: “I am personally concerned about the amount of food loss and waste in Canada overall,” with 0 meaning “strongly disagree,” 10 meaning “strongly agree,” and 5 meaning “neither agree nor disagree.” The share of respondents answering “strongly agree” (red line in Figure 5.7) has ranged from year to year, going from 15.6% in 2018 and trending upward in recent years to 24.7% in 2022. The share of respondents who disagreed with the statement (score of 4 or lower) has also generally declined.

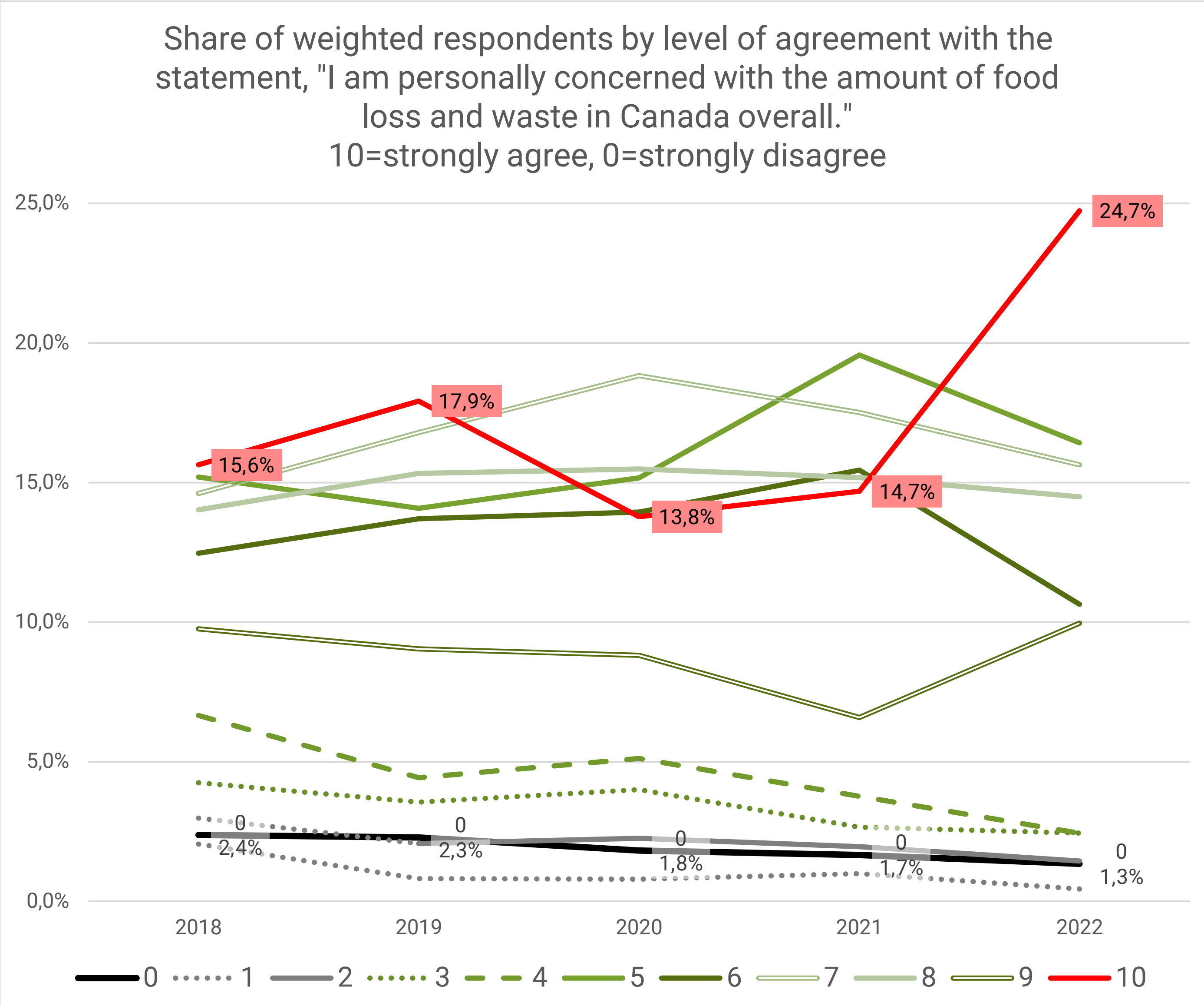
Each survey year, the categories 6 through 10 have contained the overwhelming majority of responses; in the five-year sample, 72% (pictured in Figure 5.6) have responded with a score of 6 or greater, leaving 28% in the 0 to 5 category. These trends through time and across respondents imply that food waste is increasingly “on the radar” of the average Canadian.

Figure 5.6. Share of high versus low concern about food loss and waste in Canada.



Data source: CCFI. (2018-2022). *Consumer trust research.* [Dataset]. Image produced internally.

Figure 5.7. Concern with food loss and waste in Canada, 2018-2022.



Data source: CCFI. (2018-2022). *Consumer trust research.* [Dataset]. Image produced internally.

In the 2018 public trust survey, CCFI asked consumers a series of questions about attitudes and behaviours associated with food waste, including who they believe is responsible for reducing food waste in Canada (Canadian Centre for Food Integrity, 2018). The results showed that consumers feel that they are personally responsible for reducing food waste, and in fact that they view themselves as more responsible than other food system actors. In terms of household behaviours that consumers feel contribute most to the problem of food waste, throwing out leftovers, allowing food to expire before using, and simply buying too much food were viewed as the biggest culprits.

Some industry experts report large increases in purchases of discounted food that are at or near the end of shelf life, including fresh produce. These product offerings are sometimes positioned by the retailer as a choice that helps rescue food that would otherwise end up in a landfill.

Experts indicated that consumers are also looking to reduce the amount of food that they waste at home. Some are reducing the quantities of highly perishable food that they buy in an attempt to avoid throwing out food that has spoiled.

Packaging waste is another category of waste that consumers are seeking to avoid. Sixty percent of consumers say they “always” or “sometimes” seek out grocery store items that use less packaging according to CCFI’s 2022 survey results. Buying in bulk is another strategy that may help both to save money and to reduce packaging waste. Industry experts report that some consumers are also looking for recyclable and refillable packaging.

Recent industry responses to environmental sustainability trend

Food manufacturers and retailers are responding in a wide variety of ways to the consumer interest in environmental sustainability, including through changes to marketing strategies, packaging, labels, and the types of information they provide to consumers about their company and their products. Several industry experts mentioned that the choices they were making to improve environmental performance were driven by investor pressure and government regulation (or the potential for regulation) as much as or more than consumer demand. There was a sense among some experts that consumers are currently only beginning to consider the environmental impact of their food choices, but that investments now are necessary to keep ahead of the trend, given how long it could take to implement meaningful changes to production.

Food retailers and manufacturers are actively seeking ways to reduce waste throughout their operations. These include reductions to everything from the water used in manufacturing to the energy used to heat and cool stores. Reducing food waste, including by finding ways to use byproducts of food manufacturing processes, are another important way that manufacturers and retailers are seeking to reduce waste. These changes, while environmentally motivated, may also result in operational efficiencies and reduced costs or new income streams in some cases. Some retailers are also seeking to stock more local food and in-season produce.

> *There are opportunities to increase our offerings of local food. Not only because consumers are interested in buying it, but because it helps us to meet our own environmental commitments as well. We are interested in putting more seasonal produce on the shelves. – Industry expert*

Food manufacturers and retailers are also responding by making voluntary changes to reduce packaging waste, especially plastic packaging waste. These are typically costly changes that are difficult to reverse, and therefore they imply a medium-term commitment to environmental objectives. For e.g., Bimbo Canada is replacing its plastic bread ties with recycled, compostable cardboard bread ties. Several retail experts mentioned that their customers look to the store to offer options that help the consumer to reduce packaging waste, such as bulk buying. Retailers and manufacturers also mentioned the changing regulatory requirements related to plastic packaging that require investment and changed practices.

Upstream food producers are also making changes to production methods to reduce greenhouse gas emissions from primary production. For example, PEI beef producers are experimenting with the addition of seaweed to animal feed to reduce methane emissions from cattle.

New business practices and models are emerging, particularly around the issue of food waste. For e.g. Loblaw company has partnered with Flashfood to take advantage of the growth in consumer demand for food rescue opportunities. Flashfood partners with select grocery stores and food distributors and alerts consumers, via an app, to time-sensitive, discounted, near-expiry food for sale in their vicinity.

Finally, food producers, manufacturers, and retailers are making increasing effort to communicate with their customers regarding the environmental issues that matter to them. Given the complexity of this information and the limited space available on product packaging, much of this information is provided on company websites. Canadian food and grocery company websites typically include a section on environmental performance or initiatives. The types of information provided by companies include reports on the actions already taken to improve environmental outcomes, but also their future-oriented commitments to take additional action. In this context, several food industry players in Canada have committed to achieving net zero greenhouse gas emissions, and Maple Leaf Foods is notable as being the first to say that they have already reached carbon neutrality. Some industry experts indicated that they are increasingly using social media, and social media influencers, to get their stories out. Given the existing consumer scepticism about environmental claims, the choice of a credible spokesperson to carry the message is an important one. On the other hand, some industry experts noted a reluctance on the part of companies to make environmental claims, for fear of being accused of greenwashing. A few experts noted that consumer scepticism regarding the purchase of carbon credits is particularly high.

a) Expected future of the consumer attention toward environmental sustainability

Industry experts expect that consumers will remain concerned with the environmental impact of food production, distribution, and consumption and, as discussed, industry players are making changes to their operations in anticipation of this trend's continuance.

Recent history would suggest that concern about environmental issues is persistent, insofar as it has remained an important factor influencing attitudes and behaviour throughout a series of crises unrelated to environmental issues, i.e., the COVID-19 pandemic and a war in Ukraine. Even when confronted with food system disruptions, high prices, and shortages of essential products, consumers continued to report high levels of concern about environmental issues.

Underlying this trend is a continued focus by the media and opinion leaders on environmental issues, particularly climate change. While anthropogenic climate change remains controversial among some groups of Canadians, it is accepted as fact by the majority. Furthermore, Canadians are increasingly likely to directly experience a severe weather event that is related to climate change. As experience of severe weather becomes commonplace, climate-change-induced anxiety is expected to become more widespread. In this context, Canadian consumers are expected to be even more strongly supportive of actions that reduce GHG emissions and improve environmental outcomes more broadly.

It is expected to remain challenging for consumers to make food product choices on the basis of environmental criteria, particularly when it comes to criteria directly related to agricultural production. Environmental issues are myriad, and agricultural production is not well understood outside the agriculture profession. However, despite the difficulty, consumers are not expected to give up. They will continue to seek out and/or be receptive to information about environmental impacts and will be drawn to products and companies that appear to be making stronger efforts to reduce impacts.

b) Potential disruptors of trend

Price effects/economic decline. Consumers are seeking several different outcomes from their food choices and will trade these objectives off against each other when there appears to be a conflict between them. When sustainably produced food costs more than its alternative, consumers will balance sustainability against cost and may choose to buy the less expensive item. They may also, at least implicitly, expect food producers, manufacturers, and retailers to prioritize cost savings over investments in environmental sustainability in order to keep food affordable. This price effect will be particularly important in times of economic downturn or instability, including the present time. However, this is not to say that consumers are expected to abandon their concern about environmental issues when economic times are tough, simply that their willingness to pay for environmental attributes may decline. When under severe economic pressure, consumers will favour solutions that reduce costs (or at least do not increase them) while also achieving environmental goals, such as reduced waste and improved efficiency.

c) Implications for industry and government decision-makers

While many Canadians recognize that their own food product choices have an impact on environmental sustainability, and adjust their behaviour in consequence, they also expect governments and the agri-food industry to take action to improve environmental outcomes.

Governments, in particular, are expected to play a role in addressing environmental issues. They have the ability to regulate (and tax, and subsidize) many aspects of production, distribution, and sale of food products, and therefore their impact goes far beyond that of any individual consumer or even groups of consumers. Insofar as environmental sustainability is a public good, it suffers from the same problem as all other public goods: free markets do not supply it in sufficient quantity. Governments typically play an important role in correcting market failures in the case of environmental goods and services.

Governments may also have a role to play in providing information about environmental aspects of the food system. There is conflicting and inconsistent information available about many environmental impacts of food production. Consumers are confused by the crowded and chaotic informational environment, and are not confident that they can trust what they are reading/hearing. This makes it very challenging for consumers to make rational choices about how to improve the environmental outcome of their food choices. In this context, governments may have a role to play by making the provision of information mandatory, verifying claims, or even by supporting the development of voluntary standards and claims that provide the types of information consumers are looking for in a clear, consistent manner.

Food producers and manufacturers have an opportunity to differentiate themselves from their competitors on the basis of their environmental performance, and to use this as a competitive advantage in the Canadian market. This will require, in some cases, changes to production and manufacturing practices. It will also require a sustained measurement and communications effort, to ensure that customers understand what they are doing and the impact that it has. Given the low level of understanding of agricultural production among consumers, and the limited time/effort accorded to individual product purchase decisions by the same, communication will remain a major challenge. In this regard, it will be important to devise simple and clear messages/statements. As was discussed above, claims that are clear, consistent, and directly related to the most important environmental issues are likely to be the most impactful. If these standards/statements are harmonized across the food system and backed by credible verification, so much the better.

Companies and brands/products that succeed in differentiating themselves based on environmental performance may not necessarily be able to charge a premium price, as environmental responsibility evolves to become “table stakes” in the minds of many consumers. In this context, efforts to improve environmental outcomes, and a reputation for taking effective action, will increasingly be a core part of a company’s brand. The lack of a convincing story regarding environmental performance may become an increasing reputational liability. The absence of environmental impact information may be interpreted either as an effort to hide something, or an indication that a company does not care. On the other hand, if environmental claims are unsubstantiated (or appear to be so), companies may be accused of “greenwashing” or worse.

6 Trend #2: Contribution of food to health

General description of the trend

Canadian consumers have been preoccupied with the health impacts of their food choices for some time and are expected to remain preoccupied with them. The preoccupation with diet and health has been a long-standing factor influencing many food choices, though the nature of that influence has changed over time. Specific food-health preoccupations are driven by new scientific knowledge as well as media- or celebrity-based fads that are sometimes quite short-lived. However, despite changes in the specifics, the underlying consumer desire to better understand how food choices affect health outcomes has persisted over decades and is expected to persist into the future.

Consumer attitudes and opinions associated with and/or driving this trend

The focus of diet-health concerns changes as knowledge and public opinion about food and health evolve - recall the rise of low- or no-fat products in the 1980’s and early 90’s. Specific food-related health trends may be short or long-lived and are sometimes highly media-influenced.

In CCFI’s most recent (2022) survey, consumers chose quality, freshness, and nutritional value as the top factors, after price, that influence their choice of food products. These three factors can be directly or indirectly related to the health value of food, indicating that health is a top priority. A 2021 study by Deloitte confirms consumers high and growing level of interest in diet and health, with 64% of consumers saying that, in the past year, they had grown more interested in how their diets affect their overall health and immunity (Deloitte, 2021).

In recent years, there have been a number of diet trends such as the Keto and Paleo diets that emphasize, among other things, dramatically reduced grains and carbohydrates intake, combined with higher protein intake. Most industry experts do not expect these trends to be particularly long-lived. Some experts expressed that consumers are in fact demonstrating “diet fatigue” and are less likely to follow a specific diet, especially if it is highly restrictive. A 2020 study by Dalhousie University’s Agri-food Analytics lab found that more than twice as many Canadians have tried and dropped the Keto diet (9%) than Canadians who remain with the program (Agri-Food Analytics Lab, 2020a). Of the 4% Canadians who reported being on the Keto diet, 24% had just started while a further 42% had started less than a year ago.

We have seen a backlash against specific diet trends, especially highly restrictive diets. “Diet culture” is being rejected. There is also a backlash against the often-unreasonable standards of beauty and health that underly diet culture, with more and more consumers choosing to reject standards that require, for example, slimness and low body weight. Customers don’t want to be told what is best for them; they want to feel empowered to make their own healthy choices based on research they have done. – Industry expert

On the other hand, industry experts report that consumers are increasingly interested in diet and health advice that responds to their own unique circumstances. They seek out food products based on what they understand to be best for their own individual health status and life stage. According to the 2023 Nourish Trend Report, the personalization of healthy food choices is especially important for younger adults, and it is enabled by technology that makes it easier to customize diets based on specific concerns and the latest scientific knowledge about those concerns (Nourish Food Marketing, 2023).

Quantitative analysis of CCFI survey results sheds further light on the consumer concern with healthy food. The CCFI surveys asked respondents several types of questions using words such as “health,” “nutrition,” and “quality.” In 2022 and 2021, respondents were asked: “In the past six months, have you sought any information about nutrition and healthy eating?” In 2020, it was “in the past two years”; respondents simply responded “Yes” or “No.”

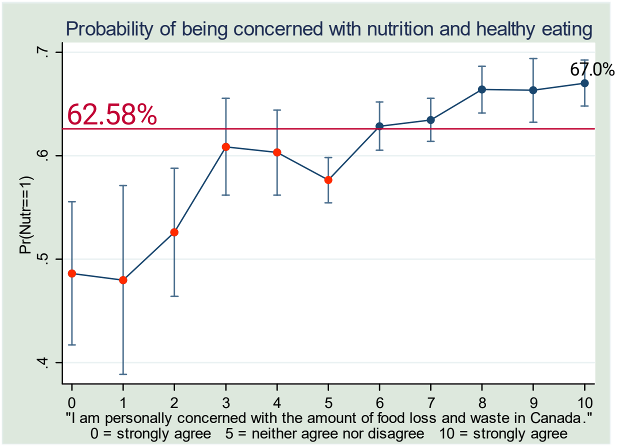
In 2019 and 2018, respondents were asked their level of concern about having “access to accurate information to make healthy food choices,” with 0 meaning no concern at all, and 10 meaning they were very concerned about the issue.

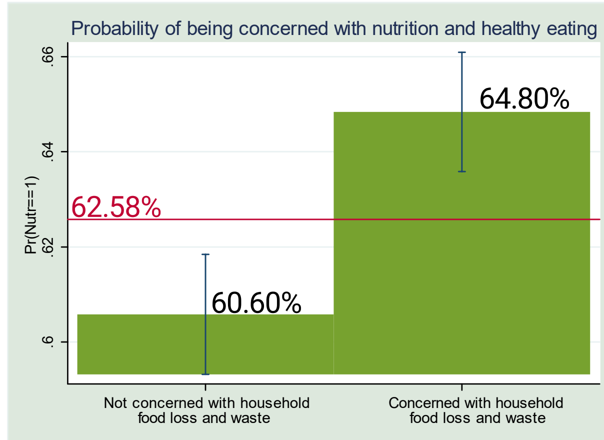
For the purposes of quantitative analysis, we classed respondents as “concerned about nutrition” if they either answered “Yes” to the question in 2022 through 2020, or a score of 6 or greater in 2019 or 2018. This exercise effectively split the sample in two: those who are concerned with nutrition (and therefore, we assume, health); and those who are not. The average probability over the entire sample of being concerned with nutrition was 62.58% (see Figure 6.1).

Logistic regression showed that concern with food loss and waste in Canada was a significant predictor of being concerned with nutrition and healthy eating. Those who reported that they strongly agreed that they were personally concerned with the amount of food loss and waste in Canada had a 67.0% probability of also being concerned with nutrition, higher than the average predicted probability of being concerned with nutrition and healthy eating, which was 62.58% (red line pictured in Figure 6.1). All those whose level of agreement was 6 or greater had probabilities higher than this average. All those whose level of agreement was 0 (strongly agree) through 5 (neither agree nor disagree) – visualized in Figure 6.1 as red dots – were less likely than average to be concerned with nutrition and healthy eating.

Those who either reported reducing food loss and waste at home (2022, 2019, 2018) or being concerned with their own household food loss and waste (level 6 or greater on a 10-point scale of agreement; 2021, 2020) had a 64.80% chance (above average) of also being concerned with nutrition, compared to a 60.6% (below the average predicted probability of 62.58%) if they did not report this behaviour or concern.

Figure 6.1. Food loss and waste as a predictor of concern with nutrition and healthy eating.





Data source: CCFI. (2018-2022). *Consumer trust research.* [Dataset]. Images produced internally based on econometric analysis.

From 2020 to 2022, concern with nutrition may have decreased or been eclipsed by other concerns. The share of respondents reporting they had sought information about nutrition and healthy eating (in the past six months for 2022; in the past two years for 2021 and 2020) was 56% in 2022, down from 62% in 2021 and 65% in 2020.

The highest likelihood of being concerned with health was 82.8% and was found in the group of people who were also concerned with sustainability. For those not concerned with sustainability, the likelihood of being concerned with health was 45.6%, far below the average overall probability (62.58%, red line in Figure 6.1) of being concerned with health. This is evidence of the "clustering" effect mentioned earlier, whereby consumers tend to either be very concerned with a lot of issues, or not concerned with any issues.

Any relevant demographic and socioeconomic characteristics associated with or driving the trend.

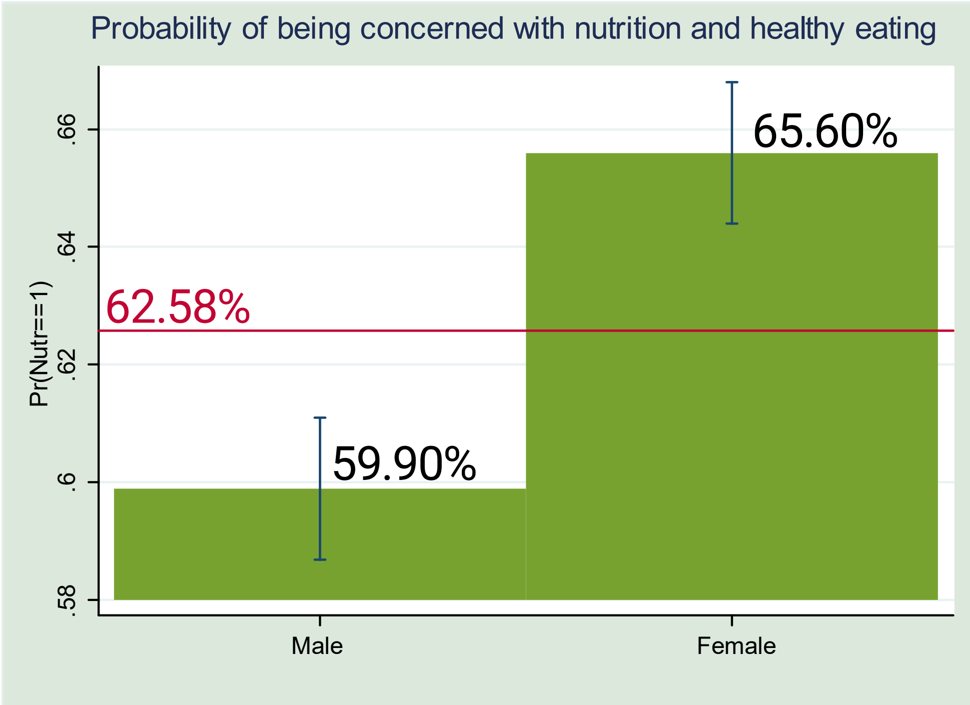
According to a 2021 survey by Deloitte, women and young consumers (18-34) are more likely than men or older adults to report seeking out foods they perceive as healthier (Deloitte, 2021).

The CCFI survey asks respondents how often they seek out information about nutrition and healthy eating (2022 through 2020) and their concern with having access to "accurate information to make healthy food choices" (2019 and 2018). For the purposes of analysis, we deemed respondents to be concerned with nutrition if they either reported seeking out information about nutrition and healthy eating (2022 through 2020), or had a level of concern of 7 or greater on the question of having accurate information to make healthy food choices (2019 and 2018).

A logistic regression model was used with concern about nutrition as the dependent variable (Figure 6.2). Results from the econometric model revealed that women are more likely (65.60% probability) to be concerned with nutrition than men (59.90% probability). Females' likelihood, including the 95% confidence interval, was above the average predicted probability (the red line pictured here), while males' likelihood including 95% CI was below the average predicted probability of 62.58%. The large span between these confidence intervals means it is safe to conclude that men and women have different levels of concern with nutrition and healthy eating.

A query of the entire dataset supported this econometric result: of those who were concerned with nutrition, 57.2% were women and 42.8% were men.

Figure 6.2. Gender as a predictor of being concerned with nutrition and healthy eating.



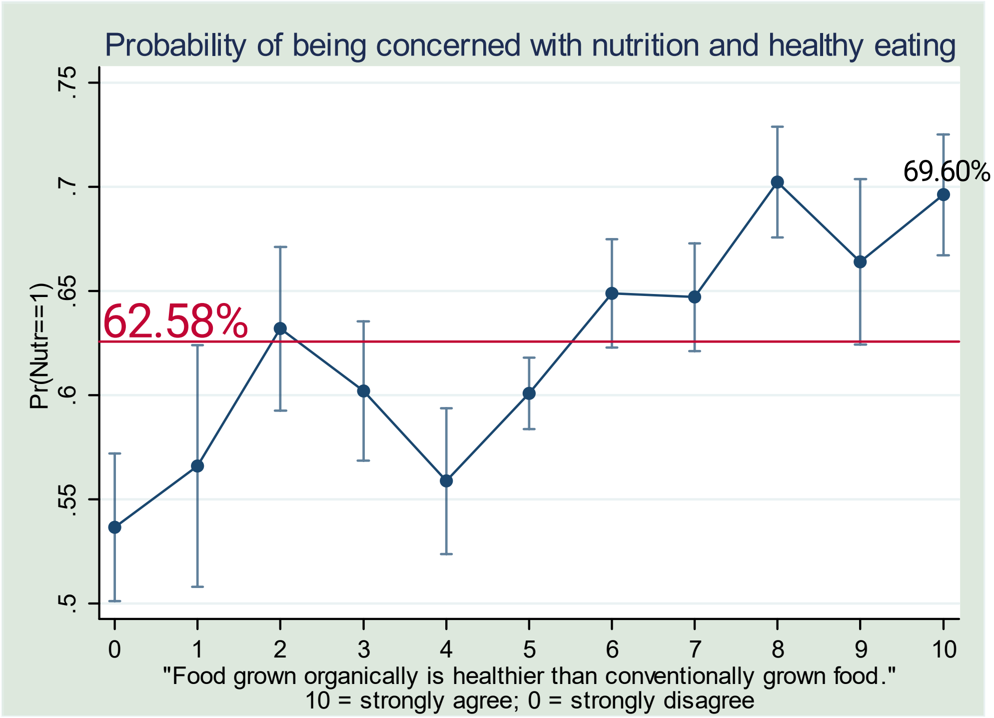
Data source: CCFI. *Consumer trust research.* [Dataset]. Image produced internally based on econometric analysis.

Industry experts expressed that, while specific health concerns differ by age group, concern about the effect of diet on health crosses generational lines. Older adults may be more focussed on managing age-related illness and disease through their dietary choices, while younger adults may be looking to improve their general wellness and prevent illness by eating a more "clean" or "wholesome" diet that includes less processed food. Several experts pointed to the demand among younger adults for "clean labels" where the ingredient list is short and the ingredients themselves are easy to recognize (see, for example, Nourish Food Marketing, 2023). With longer average life spans, Canadians are spending a significant period of time in the "older adult" category, and several experts emphasized that this group represents an important market not only because of their longevity but because of their relative wealth compared to younger adults.

"As you look at that Boomer/Silver economy, there is a lot of emphasis on things that are put into the grocery cart that help to mitigate health issues... so lower in saturated fat, lower in sugar, lower in salt. All of those things that help people to cope with health issues." – Industry expert

Another significant predictor of concern with nutrition was believing that organic foods are healthier than non-organic foods. For those who strongly agreed (10) with the statement, "Food grown organically is healthier than conventionally grown food," the likelihood of being concerned with nutrition was 69.60% (Figure 6.3), compared to a likelihood of 53.6% for those who strongly disagreed (0). All respondents whose level of agreement with the organic food statement was 6 or greater had a greater-than-average probability of also being concerned with nutrition; the 95% confidence intervals were also almost entirely beyond the average predicted probability of 62.58% (the red line in Figure 6.3).

Figure 6.3. Views on organic food as a predictor of concern with nutrition and healthy eating.



Data source: CCFI. *Consumer trust research*. [Dataset]. Image produced internally based on econometric analysis.

Consumer behaviours associated with the trend

a) Seeking out information and willingness to pay

Consumer attitudes and perceptions about the relationship between diet and health change through time, as new knowledge becomes available. Those who value health and nutrition highly therefore spend time and effort seeking information and developing their knowledge on this topic. The 2022 public trust survey by CCFI found that 56% of Canadians say they had sought out information about nutrition and healthy eating in the past six months. In 2021 and 2020, the question asked whether this information had been sought within the last two years: the share of respondents answering “Yes” was 62% (2021) and 65% (2020). A 2019 study by Dalhousie University’s Agri-food Analytics lab found that friends and family are the most common source of healthy-eating advice, followed by “general research” and social media. Social media was a relatively more important source of information for younger adults.

Consumers may also be relatively more willing to pay more for foods perceived to be healthier, as opposed to foods that are perceived to be better for the environment. According to 2022 research by CCFI, 66% of Canadians say they “always” or “sometimes” seek out food products that are the healthiest, even if they cost more. This may reflect a general consumer acceptance of the fact that, oftentimes, there is a trade-off between cost and health attributes. Some foods commonly perceived as healthy, such as fresh produce, are also perceived as expensive. A 2021 study by Dalhousie University’s Agri-food Analytics lab found that eating fresh produce was synonymous with healthy eating for most Canadians, and the number one reason why they did not eat more fresh produce - cited by almost 40% of Canadians - was cost (Agri-Food Analytics Lab, 2021a).

b) Choosing more fruit and vegetables, and less meat and dairy products

While the strategies used by consumers for discerning healthy from unhealthy food vary widely, some common behaviours include buying more fresh fruits and vegetables and buying less meat and dairy.

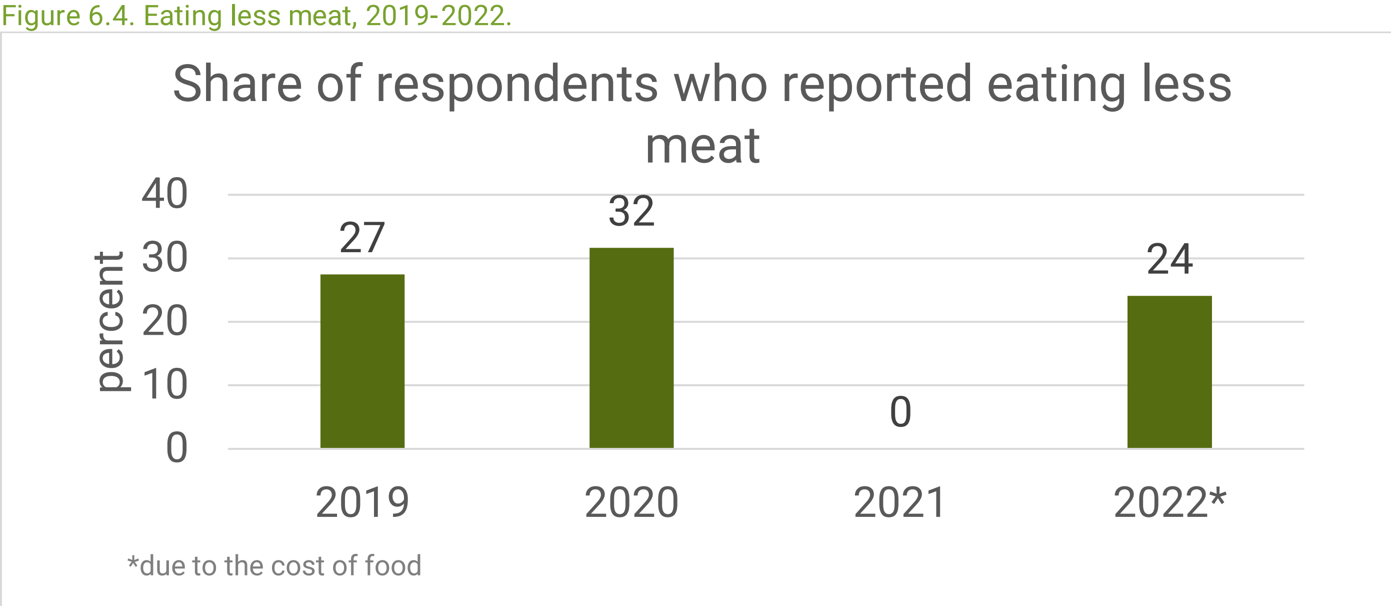
A study of produce-buying behaviour and attitudes by Dalhousie University Agri-food Analytics Lab found that health benefits motivate Canadians to buy produce; almost three in four Canadians mentioned health benefits as an important reason to buy produce, with 65% of respondents indicated a preference for fresh produce. According to industry experts, local fruit and vegetables are viewed as particularly healthy as they are more strongly associated with freshness, compared to product that has travelled long distances to market. Survey research by Deloitte (2021) confirms this focus on fresh produce for health; when asked what types of healthy choices they had been making in the past year, 85% of Canadians said they spent more on fresh produce (Deloitte, 2021).

Consumers are also increasingly preoccupied with protein and are seeking to increase their overall protein intake. A 2023 study of attitudes toward protein by the Agri-food Analytics Lab asked Canadians what their preferred source of protein is: almost 50 percent chose animal proteins, while only 12.3 percent chose plant-based proteins (Agri-Food Analytics Lab, 2023b). Just over a quarter of Canadians (28%) indicated that they like animal and plant-based proteins equally. Industry experts report that demand is growing for food and beverage products with added proteins. These proteins are increasingly showing up in products, such as breads and pancake mixes, that would not otherwise be high-protein foods. A study published in 2019 by the National Research Council in collaboration with the Agri-Food Innovation Council estimated that more than 40% of the Canadian population is actively trying to incorporate more plant-based proteins into their diets (Agri-food Innovation Council, 2019). The updated Canada Food Guide also emphasizes the need to eat more protein-rich foods and offers specific suggestions for how to replace some animal-based protein with plant-based proteins. According to CCFI's 2022 survey results, 28% of Canadians reported seeking out information about plant-based meat alternatives in the past six months.

Industry experts and survey results confirm that many consumers are seeking to replacing meat and dairy with plant-based alternatives. The 2023 study by Dalhousie University's Agri-food Analytics Lab into plant-based protein confirms that in Canada, consumers choose plant-based meat and dairy alternatives primarily for their perceived health benefit and nutritional value, with taste, environmental benefits and/or animal welfare concerns as secondary reasons. This study found that 42% of Canadians had consumed a dairy alternative product in the last 12 months. More than half of them claimed to have done so regularly (i.e. at least once a week). The frequency of consumption of plant-based dairy alternatives was generally higher than with plant-based meat alternatives.

According to CCFI survey results, the vast majority of Canadians report eating meat at least once per week. Very few (2%) say they never eat meat. However, a sizeable minority claims to have reduced their meat consumption over the past year, and this proportion is rising year over year (Figure 6.4). From 2019 to 2020, the percentage of respondents who reported eating less meat rose from 27.44% to 31.63%. In 2022, the percentage was 24.07%, but the question was not strictly about eating less meat; it was eating less meat due to the rising cost of food. This nuance may help explain the change from 2020 to 2022. The question was not asked in 2018 or 2022. Health is the most commonly given reason for reducing meat consumption.

Figure 6.4. Eating less meat, 2019-2022.



Data source: CCFI. *Consumer trust research*. [Dataset]. Image produced internally.

According to some industry experts, the growth in demand for plant-based faux meat products was driven initially by curiosity about these new products combined with a strong marketing push. This interest may now be falling off – though the committed minority are expected to continue to buy plant-based meat alternatives – with a concomitant increased interest in lower cost animal and plant-based proteins. According to experts, these lower cost proteins include eggs, lentils, beans, canned fish, and some types of meat. Cost-based drivers for reduced meat consumption will be discussed further in the section of this report that deals with affordability.

c) Choosing to buy organic food

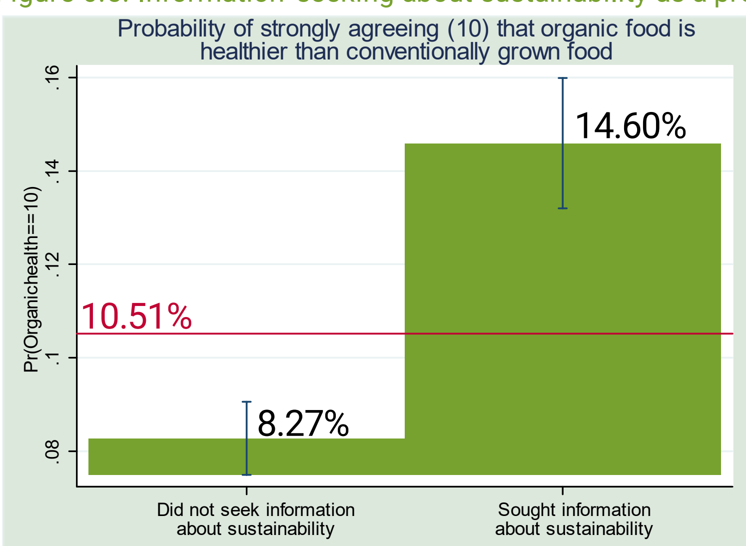
For some consumers, organic food is synonymous with healthier food. The health benefits of organic are perceived by some to be related to characteristics such as higher nutrient content in organic food as well as a lack of pesticide residues on organic products. According to industry experts, a preference for organic may also be part of a wholistic approach to health, where the consumer views their own health as indirectly related to the well-being of animals, soil, plants and the environment more generally. Some industry experts associate this more wholistic view with younger adults, particularly the so-called Gen Z. As this generation moves into its family-rearing stage, several experts expect it to become a larger market segment responsible for a greater share of total grocery spending.

Each year, consumers are asked in the CCFI survey the degree to which they agree with the following statement: “Food grown organically is healthier than conventionally grown food,” with 10 meaning “strongly agree” and 0 meaning “strongly disagree.” The percentage of respondents who strongly agree has been approximately 10% each year; by far the majority of respondents declared a 5 (“neither agree nor disagree”); this category has grown from 16.4% of respondents in 2018 to 32.5% in 2022.

Multinomial logistic regression showed that the best predictors of thinking that organic food is healthier than non-organic food were seeking out information about sustainability, and income per adult in the household. Higher levels of income per adult in the household meant that respondents were less likely to strongly agree with the statement that organic food is healthier than non-organic food.

For those who reported having sought out information about sustainable or environmentally friendly food production, the likelihood of also strongly agreeing with the statement about organic food was 14.60% (Figure 6.5) – higher than the average predicted probability of 10.51% for all observations in the model (n=8,012). For those who did not report seeking information about sustainable food production, the likelihood of strongly agreeing with the statement about organic food was 8.27% – again, lower than the average predicted likelihood (red line pictured here). Both 95% CIs lay completely beyond (above or below) the red line, indicating that we can say with 95% certainty that those who did (did not) seek information about sustainable food production were more (less) likely than the average person to think that organic food is healthier than conventionally grown food.

Figure 6.5. Information-seeking about sustainability as a predictor of views about organic food.



Data source: CCFI. *Consumer trust research.* [Dataset]. Image produced internally based on econometric analysis.

d) Personalization of health choices

While the above are shared strategies for choosing healthy foods, there are many sub-trends within the general trend that reflect an individual's understanding of their own unique dietary needs. According to some industry experts, diet-health concerns are becoming increasingly specific and personal, with individuals seeking to optimize their diet for their own unique circumstances including age, gender, activity level, as well as any specific ailments they may have. There is a vast amount of information currently available on the internet about diet and its links to specific health concerns. Experts expect this trend to grow rapidly in the coming years, creating opportunities for products that respond directly to the health or nutritional needs of a subset of the population. However, as in other domains, information overload in the area of health and nutrition can create confusion. According to industry experts, grocery stores and pharmacies are increasingly likely to employ a nutritionist who can help customers to cut through the confusion by providing personalized, expert advice at the point of sale.

The trend toward personalization is enabled by technology. Fitbits and even continuous glucose monitors (typically used only by diabetics but now being marketed to non-diabetics) along with associated apps, make personalized data and recommendations about how to improve personal health outcomes available to their users. These apps are being used by some consumers to generate real-time information about the impact of dietary choices on their own physical state and generate plans and recommendations for actions that will improve their personal health.

Recent industry responses to the trend

The food and grocery industry has responded to the preoccupation with health in a variety of ways.

Food retailers with their own private labels have created entirely new logos and brands to signal to consumers when foods have health benefits over their competitors. For example, Loblaw's PC Blue Menu products may be lower in fat, salt or sugar, or higher in protein than comparable products. They are packaged in distinctive all-blue formats and easily identifiable in the store.

Retailers such as Metro and Loblaws are also employing nutritionists to provide advice to customers about healthy eating. Nutritionists generate online content with links to in-store offerings, and they may also be present on-location in select retail stores to offer in-person advice.

At the food manufacturer level, the consumer interest in plant-based protein has resulted in a variety of new product offerings, from plant-based "bacon" to pancake mixes, tortillas, and snack bars with added plant protein. This in turn has created new demand for plant-based protein ingredients that are easy to add to existing products.

Expected future of this trend

It is difficult to predict with certainty how the consumer focus on health will translate into specific behaviours – in part because of the rise and rapid decline of specific diet fads that tend to be very influential for only a short period. However, there is widespread agreement that the links between diet and health will continue to be a factor driving food choices.

Some industry experts believe that consumers will be drawn to foods that offer benefits for their specific situation. This could result in a proliferation of lucrative niche-markets targeting the nutritional needs of, for example, new moms wanting to boost their milk production or elderly people wishing to prevent memory loss. These opportunities will, in turn, create new demand for food ingredients that are associated with specific health benefits.

With the recent moves of Canadian food retailers into the pharmacy business, some experts expect that there may be more investments that are designed to leverage the connections between nutrition and health. This will have both generalized and personalized applications. At a general level, there is expected to be an increased integration between the pharmacy and grocery sections of stores, with food products cross-marketed as medicine (Nourish Food Marketing, 2023). At a personalized level, there will be an opportunity to integrate data from pharmacy and grocery to build a much more complete picture of consumer behaviour. This data will be leveraged by companies looking to make personalized product suggestions. The recent study by Deloitte into the future of food in Canada (2021) predicts that companies will shift from data collection to predictive analytics and invest further in digital apps that provide nutritional guidance, ingredient lists, and recipe suggestions to their customers.

Potential disruptors of trend

a) Unhealthy eating in stressful times

Several industry experts emphasized that it is important to put consumer intentions to eat well in a broader context. While consumers are interested in optimizing their food consumption for health, sales of junk food and high-fat-salt-sugar products are not necessarily expected to decline. Food choices remain an important domain of indulgence, especially when consumers are under stress. While most Canadians are seeking to maintain a diet that is, on balance, healthy and nourishing, they are also choosing to indulge in foods that are tasty, familiar and comforting. Consumers who are worried about their own financial situation, a pandemic, or the uncertain global environment more generally, are likely to indulge in comfort foods. A 2021 report from the Agrifoods Analytics Lab at Dalhousie University found 42.3 per cent of Canadians said they had gained weight unintentionally during the pandemic (Agri-Food Analytics Lab, 2021b). Should the future contain major disruptive events such as pandemics, war, and climate change, some experts expect that consumers will turn to food as comfort, with consequent impacts on the size of the market occupied by foods that are widely understood to be "unhealthy."

b) Concerns regarding data privacy

The personalization of healthy eating advice depends, at least in part, on having access to personal health information. Growth in the use of personalized health monitoring is expected by some to be limited by the consumer desire for privacy and control over their data. According to some industry experts active in data collection, consumers are increasingly aware of the privacy concerns around the use of their data. They are sensitive to marketing efforts, including personalized product suggestions, that would appear to be based on detailed knowledge of their concerns and recent behaviour. This trend toward greater preoccupation with data privacy may limit the extent to which companies are able to tailor their advice to individuals based on their health information.

Implications of this trend for industry and government decision-makers

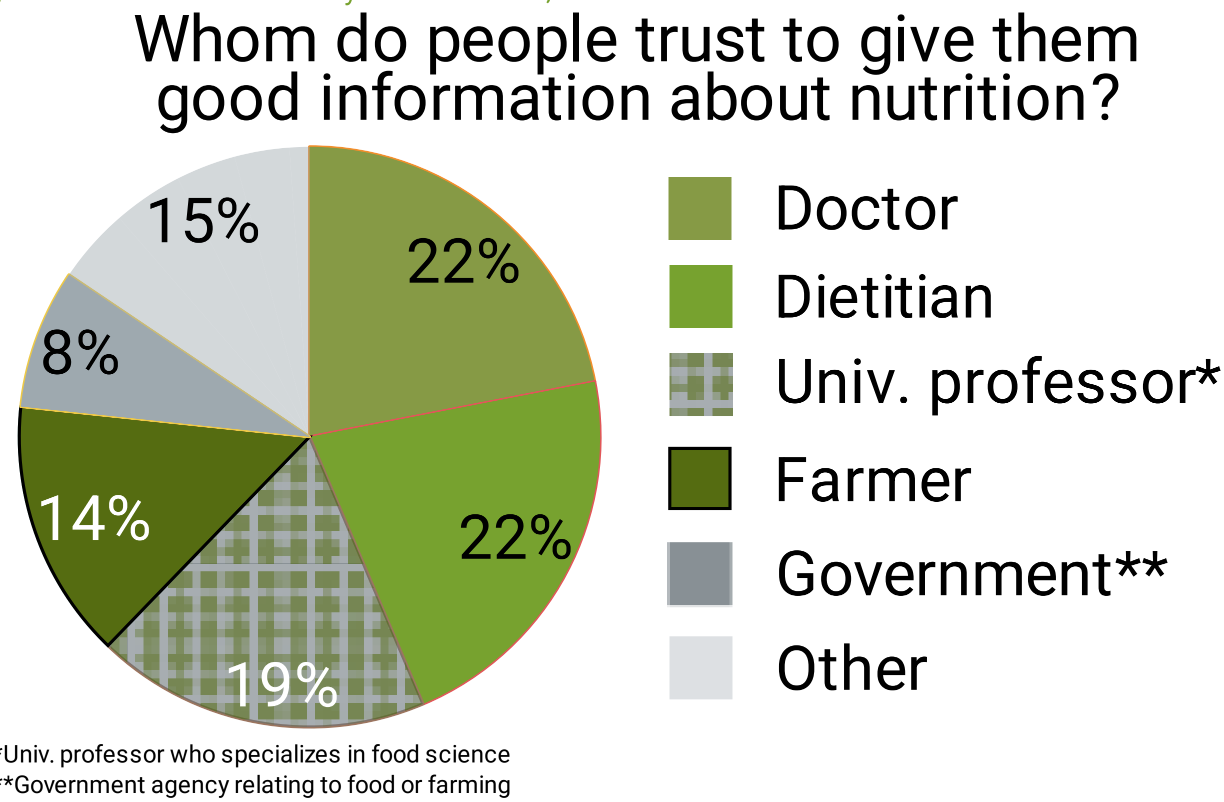
The trend toward healthy eating, broadly defined, offers many opportunities to the food and retail industry. Companies that bring to market products that are convincingly portrayed as "healthier" than competing products will have a real advantage that may, in many cases, translate into both a larger share of the market and a price premium. Products that overcome some of the obstacles to healthier eating, including price or convenience, may be particularly successful. Given how rapidly health trends can change, staying on top of new developments and continuous innovation will be important for food industry players.

The animal-based food industry faces some specific headwinds when it comes to healthy eating trends. Diets rich in animal products are associated by some with specific health issues such as high blood pressure and cardiovascular disease. Efforts to communicate the health benefits of animal-based food products, as well as the place of meat and dairy products in a healthy diet, can help to counter the perception that foods derived from animals are less healthy than plant-based foods.

Governments have a continued role to play in communicating neutral, evidence-based advice about nutrition and health to a consumer that may be drowning in a sea of information. The Canada Food Guide remains an important (if not the most important) source of information on a complex topic. Similarly, mandated nutrition fact tables are a relatively highly trusted source of information for consumers.

Both government and industry may wish to use medical professionals or academics as spokespeople regarding health issues. The 2019 CCFI survey asked respondents to evaluate the reliability of various individuals or groups as sources of information. As pictured in Figure 6.6, medical professionals such as dietitians and doctors received 44% of "very reliable" votes when it came to giving information about nutrition. University professors received 15%, while government ranked near the bottom with 8% of all "very reliable" votes. Farmers (producers) received 14% of all "very reliable" votes.

Figure 6.6. Distribution of "very reliable" votes, 2019.



Data source: CCFI. (2019). *Consumer trust research.* [Dataset]. Image produced internally.

7 Trend #3: Affordability and availability

General description

While assessments of value for money have always been an important part of consumer purchasing decisions, concerns around affordability and access have increased in importance recently due to a series of shocks that have affected both the price and the availability of food products. Furthermore, there is an expectation among some experts that shocks to food production and distribution systems will be frequent in future years. Underlying this are expectations about extreme weather events, global insecurity and risks to trade, and rising costs for labour/resources/inputs.

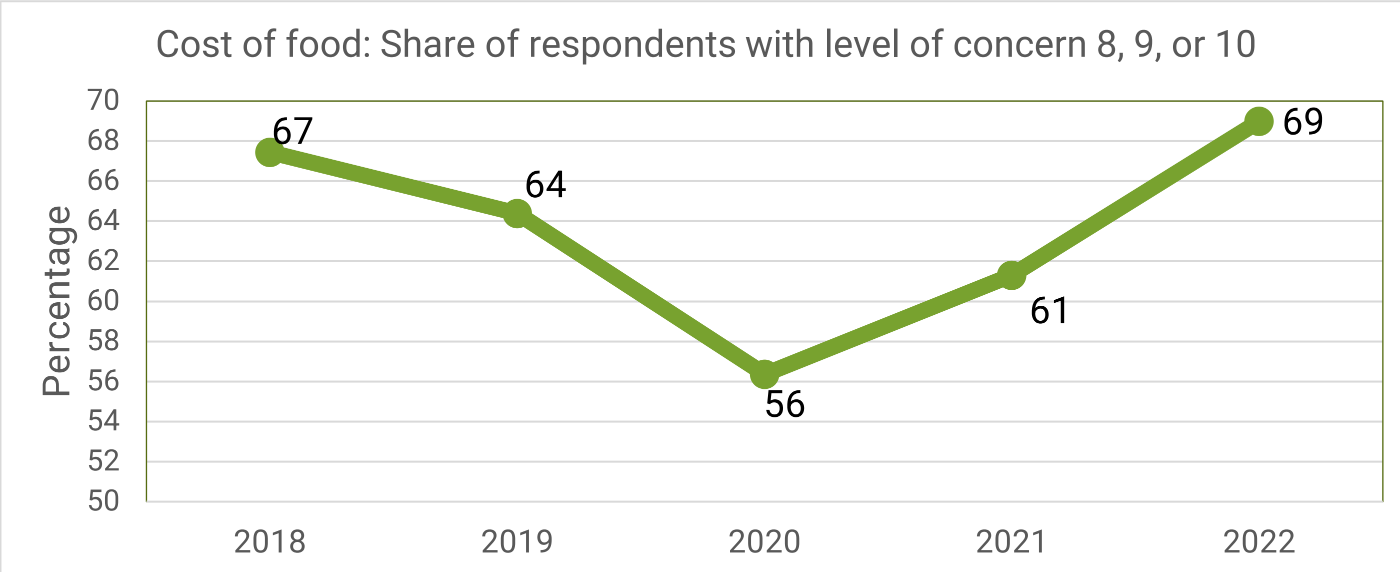
Consumers are expected to show a higher degree of preoccupation with food availability and affordability over the medium term, when compared to the decade prior to 2020. This increasing preoccupation with the security of access to food is expected to drive a range of consumer behaviours, from store-switching to changing the types of foods purchased.

Consumer attitudes and opinions associated with and/or driving this trend

According to industry experts, the pandemic sharpened consumer focus on food availability. Subsequent shocks, including those caused by the war in the Ukraine, have resulted in a sustained focus on food security. While an understanding of underlying forces may not be strong among consumers, they are keenly aware of the impacts on their own grocery spending and their ability to access their favourite products on a consistent basis.

According to CCFI consumer surveys, the percentage of all Canadian consumers who are highly preoccupied with "cost of food" (as measured by the percentage of those who selected an 8-10 (extremely concerned) rating from a scale of 0-10) has risen in recent years from 56% in 2020, to 61% in 2021, to 69% in 2022 (Figure 7.1).

Figure 7.1. High level of concern with the cost of food, 2018-2022.



Data source: CCFI. (2018-2022). *Consumer trust research.* [Dataset]. Image produced internally.

The rapid food price increases experienced since late 2021 have caused sticker shock among Canadian consumers. Statistics Canada reports an across-the-board food price inflation rate of over 11% in September and October 2022, with category-specific rates ranging from almost 23% (flour and flour mixes) to 6% (meat products) (Fradella, 2022).

a) Perception about contributors to the cost of food

Several recent surveys have explored consumer attitudes regarding who or what is responsible for the recent food price inflation. A 2023 survey by the Agri-food Analytics lab that examined attitudes about high grocery prices found that Canadians are divided regarding who or what to blame (Agri-Food Analytics Lab, 2023a). Roughly 30% of Canadians blamed price gouging by grocery chains, while another 30% thought that general inflation (or monetary/fiscal policies) was to blame as the main contributing factor for higher food prices. CCFI's 2022 public trust survey also explored this issue, with different results. Relatively few Canadians thought that grocery stores (11%) or food manufacturers (13%) were to blame for higher prices, while many more people tended to blame higher prices on general inflation (55%) or the cost of fuel (57%). About one quarter of Canadians indicated that they thought government was responsible.

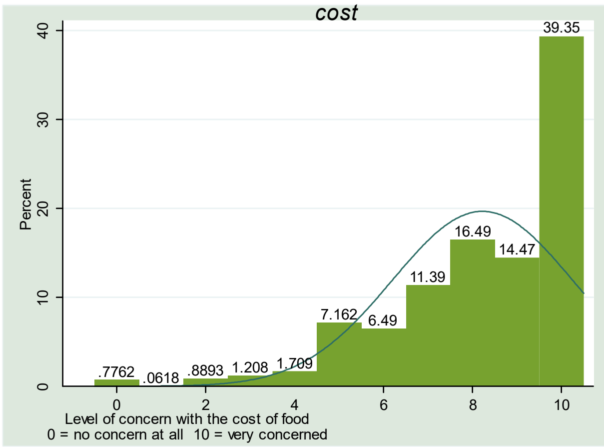
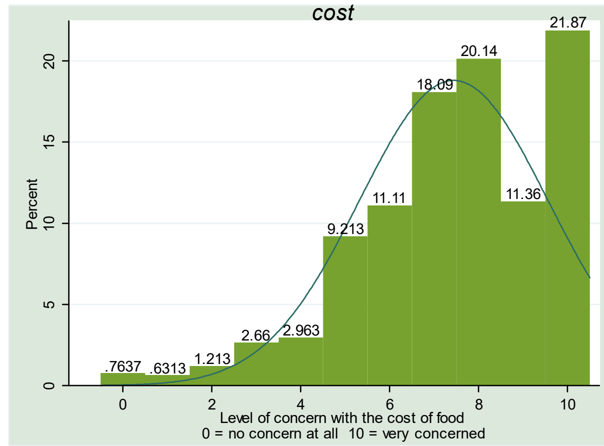
b) Econometric predictors of concern with the cost of food

The multinomial logistic model revealed that the most significant predictors of having a high level of concern (10) with the cost of food were: concern with environmental sustainability; concern with household waste (or actively reducing food loss and waste at home); having a high level of concern (10) about food loss and waste in Canada overall; and, to a lesser degree, income per adult in the household.

A high level of concern about cost of food is widespread but, as might be expected, it is highest among low-income Canadians. In 2022, almost half (48%) of low-income Canadians (defined as those from households with annual income below $40K) rated their level of concern about the cost of food as a 10/10, and a further 27% rated it as an 8 or 9 out of 10. Among those in the highest income category, concern was lower but still pronounced: 30% of Canadians from households in 2022 with annual income over $100K rated their concern with cost of food at a 10/10, and a further 32% rated their concern as an 8 or 9.

When analysed across all years (2018-2022), the trends are similar, as pictured in Figure 7.2: 39.35% of low-income households were "very concerned" (level 10) with the cost of food, while only 21.87% of high-income households. The concentration of level 10 responses ("very concerned") is strongest in low-income households, and a more even distribution (more responses at levels 5 through 9) in high-income households. Responses from both types of households were mostly 5 or higher, with very small shares being below level 5 (moderate concern): 4.65% for low-income households, and 8.33% for high-income. The small numbers in the lower levels of concern in both low- and high-income households may be an indication that a preoccupation with affordability is, to some extent, independent of the actual ability of Canadians to pay their grocery bills. For some Canadians, food insecurity is a real and growing challenge, while for others it is a perception or fear. However, whether real or perceived, this preoccupation can drive behaviour change.

Figure 7.2. Histogram of concern with the cost of food, low-income and high-income.

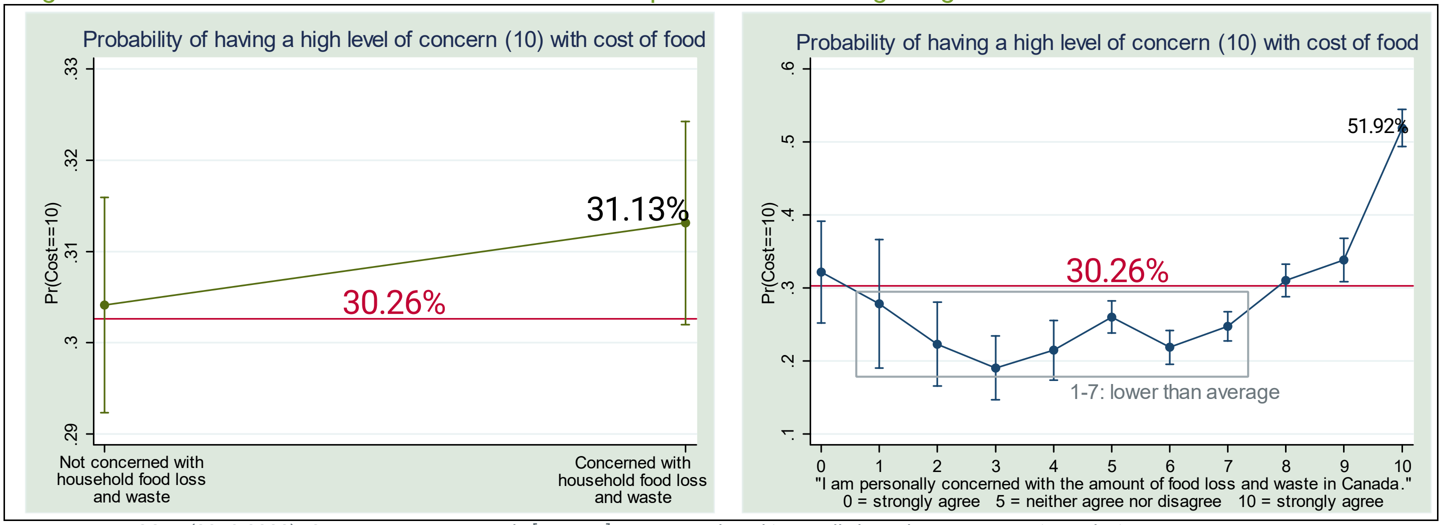
Low-income (<$40K), all years	High-income, all years*
	
*In 2019, the threshold for high income was $120,000 or greater; the threshold was $100,000 all other years.	

Data source: CCFI. (2018-2022). *Consumer trust research.* [Dataset]. Images produced internally.

The average predicted probability of responding with a 10 (“very concerned”) to the question about the cost of food was 30.26% across the model sample (n=10,213) and is represented by the red line pictured in Figure 7.3. For respondents who were very concerned with household food loss and waste or who “strongly agreed” with the household food waste question, the probability of being “very concerned” with the cost of food was 31.13% – higher than the average predicted probability of 30.26% – with a 95% confidence interval lying almost entirely above the average probability of being very concerned with the cost of food. However, because the red line falls within the two CIs, it is possible that the likelihood of being concerned with the cost of food is not different than the average predicted probability of 30.26%.

Those who were “very concerned” (10) with the amount of food loss and waste in Canada overall had a 51.92% chance of also being very concerned with the cost of food (Figure 7.3). For respondents scoring 8 or higher on level of concern with food loss and waste overall in Canada, their probabilities were higher than the average predicted probability (30.26%) across the model sample (n=10,213) of being very concerned with the cost of food. For those scoring 1 through 7 on level of concern with waste in Canada, the probability was lower than the predicted average of being very concerned with the cost of food. The red line passes through the 95% confidence intervals for levels 0, 1, and 8 (0=”not at all concerned” with the amount of food loss and waste in Canada overall); this means that for these levels of concern with food loss and waste in Canada, the likelihood of also being “very concerned” with the cost of food could actually be the same as the average predicted probability of being “very concerned” with the cost of food, and indeed neither higher nor lower.

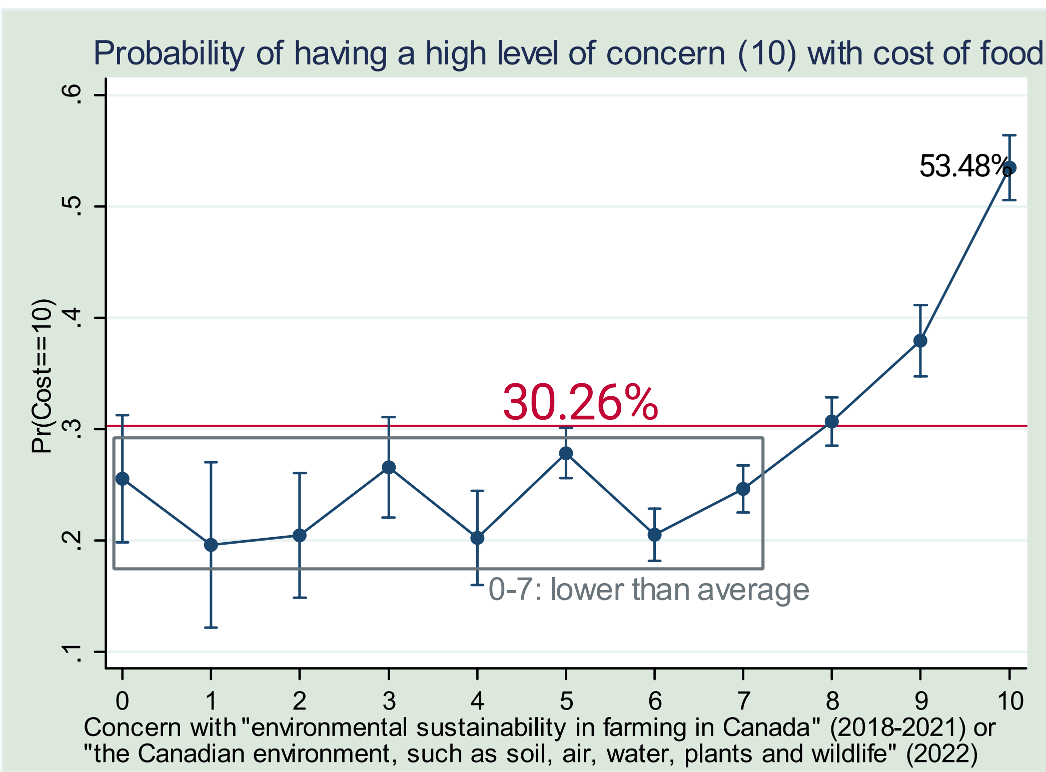
Figure 7.3. Concern with food loss and waste as a predictor of having a high level of concern with cost of food.



Data source: CCFI. (2018-2022). *Consumer trust research*. [Dataset]. Image produced internally based on econometric analysis.

Respondents who were "very concerned" about the environment (10), the probability of also being very concerned with the cost of food was 53.48% (Figure 7.4), far above the average predicted probability (the red line) of 30.26%. Similarly to concern with overall food loss in Canada, those who scored 8 or above on level of concern with the environment had an above-average probability of also being very concerned with the cost of food. Those who scored 0 through 7 on level of concern with the environment, pictured in the grey box at right, had below-average chances of being very concerned with the cost of food.

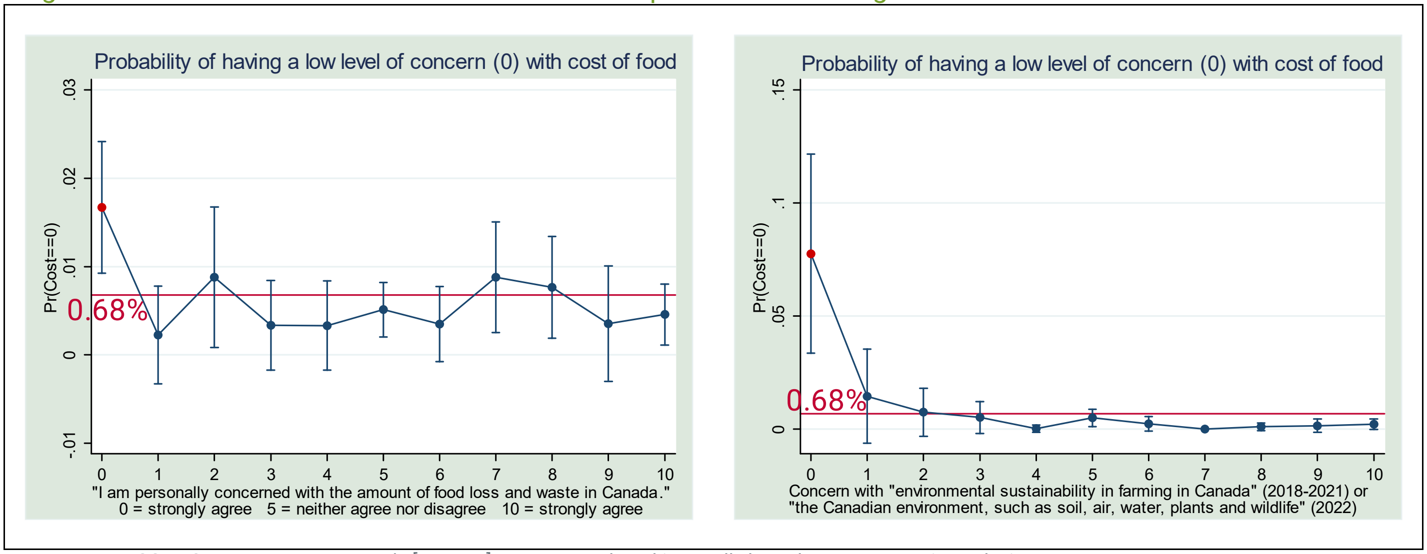
Figure 7.4. Concern with the environment as a predictor of having a high level of concern with cost of food.



Data source: CCFI. (2018-2022). *Consumer trust research*. [Dataset]. Image produced internally based on econometric analysis.

As pictured in Figure 7.5, those who were not at all concerned about food loss and waste in Canada overall (the red dot in the first panel) and those who had no concern about environmental sustainability (second panel) were far more likely than the average predicted probability (the red line) to also have no concern about the cost of food. This is evidence of the clustering effect mentioned earlier: when consumers have a low level of concern about a particular topic, they may have a low level of concern about many other topics.

Figure 7.5. Concern with food loss and waste as a predictor of having a low level of concern with cost of food.



Data source: CCFI. *Consumer trust research.* [Dataset]. Images produced internally based on econometric analysis.

Impacts of the trend on behaviours

As with the other trends discussed, a preoccupation with cost of food is associated with information-seeking behaviour. In CCFI's 2022 public trust survey, almost half (47%) of Canadians said that they had sought out information about how to spend less on the food that they eat in the last six months.

A preoccupation with the cost of food is also associated with channel switching. In CCFI's 2022 survey, Canadians were asked how, if at all, they were adapting their behaviours in response to the rising cost of food, and the most common response was *eating out less*, cited by over four in ten (42%). The propensity to eat at home jumped during pandemic lockdowns, when take-out became the only restaurant option, and now risks becoming a fixed habit. Some industry experts reported that consumers have substituted prepared meals from the grocery store for some of their restaurant dining. Others highlighted a growing demand for fast food meals – viewed by consumers as both cheap and filling – suggesting that consumers are still eating out regularly, but only at lower-priced restaurants.

In some cases, consumers are simply choosing to buy and/or consume less food. Several industry experts mentioned an upsurge in theft. There has also been a widely reported increased reliance on food banks. One industry expert mentioned a trend towards reconfiguring eating patterns by replacing one or more meals per day with snacks. This reconfiguration may result in cost-savings through an overall reduction in the amount of food consumed as well as a reduced need for expensive, centre-of-plate proteins.

Consumers are also spending their grocery dollars more intentionally and with greater care. Several industry experts reported that consumers are "trading down" in a variety of ways, including buying more private label products, shopping at discount stores, taking advantage of sales and promotions to a greater extent, and even changing the types of products that they buy.

> *The consumer will tend to trade down to discounters first in shelf-stable stuff. They will go to a large discount store and buy volume if they have the cash to buy in bulk, and then they will go to their neighbourhood store to buy produce.*

A higher level of price sensitivity also reveals itself in greater uptake on in-store promotions and sales. According to one industry expert, the proportion of the grocery basket that is typically purchased "on deal" is about a third, but of late that proportion is creeping upwards and approaching 50%.

In terms of changes to the type of products that people are buying, industry experts are seeing a shift toward more shelf-stable products that can be purchased in bulk to take advantage of volume discounts or price promotions, as opposed to fresh food. There has also been a shift toward more frozen meat and produce, for similar reasons.

Experts interviewed are also reporting significant changes in where people shop, with a shift toward discount banner stores (e.g. Food Basics, No Frills) or others, such as Costco and Walmart, that have a reputation for charging lower mark-ups. They are also increasingly shopping for some shelf-stable products at dollar stores. A 2023 study by Nielson IQ reports that discount retailer and dollar share of total food trade in Canada was 45.8% in 2022 and that sales in this segment increased by 11% in the last quarter of 2022 (Allison, 2023).

While store-switching could be viewed as a temporary response to a shock, one retail industry expert reported that once consumers start shopping at discount stores, they typically continue doing so. Therefore, even if food inflation slows, discount stores may continue to attract a bigger share of the market.

Analysis of CCFI data conducted as part of this study confirms the relationship between store-switching and a preoccupation with affordability. Pearson correlation showed a statistically significant relationship between store-switching and: the ranking of food affordability as an issue (1 to 7), being more concerned about the affordability of healthy food than a year ago, and seeking out information in the last six months on how to spend less on food. In multinomial logistic regression, those who changed grocery stores were more likely to report seeking information in the last 6 months about how to spend less on food.

Another primary savings strategy for US and Canadian consumers is to purchase less expensive brands. Several industry experts reported a recent shift from branded to private label products. According to the same 2023 study by Nielson IQ, private label product sales grew steadily — and faster than national brands — over the last 3 quarters of 2022 with private label share of total consumer packaged goods sales exceeding 19% in the US, a record high, and 18.5% in Canada.

Local food = more reliable?

Industry experts reported that some consumers view local food as being more reliably available. There are shorter supply chains, which implies increased security of access. Concerns about lack of reliability may prompt consumers to do more local sourcing. According to the 2022 public trust survey by CCFI, 65% of Canadians say they “often” or “sometimes” seek out food products that are locally grown or produced, even if they cost more. According to a survey by Dalhousie University’s Agri-food Analytics Lab, the most important reason given by Canadian consumers who say they buy local is to support local farmers, followed by the desire to support the local economy (Agri-Food Analytics Lab, 2022b). Both stated reasons suggest that consumers place value on the existence of local food supply chains as part of a local economy. Industry experts also expressed that consumers value local food because of its contribution to the local economy and a greater sense of connection to the producer. According to industry experts, consumers may choose a grocery store based mainly on the extent to which it stocks and promotes locally produced food.

Industry experts also report that there is sometimes a tension between the consumer tendency to want to source more food locally and the desire to keep overall costs down. Locally produced food may be more expensive than the competing imported product.

People really want to buy local but they don’t know what that means. They don’t understand that local production is actually more expensive, in some cases, than the rest. People want to support local if they can, but they don’t understand the economics behind it. – Industry expert

Local sourcing could also take the form of directly seeking out suppliers either through farmer’s markets or buying directly from the farmer or wholesaler. According to some industry experts, some marketing models that bypass the grocery store are becoming more popular. Models such Community-Shared-Agriculture which offer a subscription to a seasonal “basket” of produce direct from the farm may be viewed as offering security to the consumer as well as the producer. The internet and social media are making it easier for farmers and wholesalers to reach consumers directly, bypassing retail. The 2021 study by Deloitte into the future of food in Canada predicts that new forms of subscription services may emerge for food staples, providing consumers with greater certainty about the affordability and availability of products in a volatile market.

Local sourcing could also take the form of home production of food. Some experts see an increase in the trend towards having a vegetable garden at home, and/or doing more food preservation at home. A 2020 study by the Agri-food Analytics Lab looked specifically at this trend and found that approximately half of all Canadians grew some fruit or vegetables at home in 2020 and of those, almost 20% did so for the first time that year (Agri-Food Analytics Lab, 2020b). Results also showed that concern about food shortages (related to the pandemic) and food affordability were important motivators for home gardening. A follow-up survey by the same entity in 2022 showed that the gardening trend continued strong and was likely to be motivated by food prices and food quality post-pandemic (Agri-Food Analytics Lab, 2022a).

The whole gardening thing is another indication of sustainability, inflation, and healthy eating. That thing is resurging. We have never sold so many canning supplies. They learned how to do it during COVID when they had nothing else to do and now it's about keeping costs down and sustainability. - Industry expert

Not all consumers will respond to concern about food insecurity by going local. According to the 2022 public trust survey by CCFI, the proportion of Canadians who agree with the statement, “I do not care where my food was produced if it is affordable, safe, and healthy” grew in 2022 compared to previous years, though it still represents only a quarter of Canadians.

Recent industry responses to the trend

Grocers in Canada have been under considerable consumer pressure to “do something” to respond to high food price inflation. Loblaw froze prices on its “no-name” brand food products for three months ending January 31, 2023. Metro announced that it would not accept price increases from its suppliers over the 2022 holiday season. As the price of food ingredients and other inputs continue to rise, price freezes can only be a temporary response, however.

Some packaged goods manufacturers have reduced the size of their offerings, while holding prices relatively flat. This change is often referred to as “shrinkflation” and may be viewed by customers as sneaky, since the packaging size change would seem to be designed to go unnoticed.

Across the food and grocery industry, there has been increased emphasis on support to food banks and food rescue efforts.

Some food manufacturers and retailers are increasing their emphasis on local production and local sourcing. For example, the Weston Homegrown Innovation Challenge seeks to identify and scale-up solutions that will permit year-round commercial-scale berry production in Canada. One retail industry expert mentioned that they are increasing their transparency with respect to private label product by revealing who the manufacturers are when they are from the local area. This move reduced their flexibility to change suppliers but is nevertheless worthwhile because local is viewed so positively by their customers.

Expected future of the trend

Many experts consulted as part of this study expect that pressure on food prices and availability will continue and that consumer preoccupation with food affordability and access will therefore persist. Many also expressed that is very difficult to predict what will happen to food prices over the medium-term, with some saying that we are in “unforecastable” times characterized by a high degree of volatility and uncertainty. Despite this, there is a sense among many that some of the underlying factors driving high prices, such as geopolitical instability and climate change, will persist and continue to cause supply disruptions that ripple through the food system. Several industry experts specifically mentioned the persistent severe water shortages in regions such as the southwestern US which mean that cheap imports of produce may no longer be relied upon by Canadian consumers.

To counteract this instability, there is expected to be continued effort to develop local production systems with shorter and possibly more secure supply chains. Efforts to substitute local production for imported food are expected by several experts to be costly, and these costs will be passed on to consumers.

Potential disruptors of the trend

Should agricultural production increase significantly in the future, either in response to favourable climatic conditions, new technologies, or both, many of the pressures on the food system that are predicted by experts would not materialize. Similarly, should current geopolitical instability abate, and global supply chains become more secure than they currently are, imported food will be easily accessible. Both above factors would increase the supply of food available in Canada (and globally) and, everything else being equal, this would be expected to put downward pressure on food prices.

On the demand side, household income growth could start to outpace food price inflation. Alternatively, prices of other goods (i.e. housing, transport, energy etc) could fall. In either of these scenarios, households would have relatively more income available for the purchase of food, in which case food price inflation would be less of a concern.

If food prices were to stabilize or decline relative to other key prices in the economy, consumers would be expected to revert, at least partially, to their former food-buying habits, thereby reversing the behavioural trends discussed earlier in this section either in whole or in part.

An assessment of whether these scenarios are likely is beyond the scope of this report.

Implications of the trend for government and industry decision-makers

Should there continue to be steep increases in the price of food, especially relative to general inflation, consumers are expected to continue to make food choices that are reflective of a high degree of price sensitivity. Discount food brands and discount retailers are expected to benefit from this trend, at the expense of national brands and higher-end retail stores.

Food manufacturers and retailers may struggle to maintain their customer’s trust in an inflationary environment. Any appearance of greed on the part of a food or grocery company will erode confidence and could cause customers to switch products, brands or stores. Efforts to increase transparency around pricing and sourcing are likely to be appreciated by Canadian consumer and may help to counter the backlash against high prices. The draft Grocery Code of Conduct is one such effort that, if well-communicated to the consumer, could help to increase trust. Recent research by the Agri-food Analytics Lab found that among those Canadians who were aware of the draft Code, almost 70% were supportive of it (Agri-Food Analytics Lab, 2023a).

While farmers are generally viewed as having less power over the prices that are charged to consumers, this is not always the case. It is possible that, as prices continue to rise, consumers may feel that farmers should do more to keep prices low. Where prices are partially controlled by producers, i.e. supply-managed poultry, eggs, and dairy, farm groups may face the same type of pressure as food companies and food retailers in terms of the need to communicate effectively with consumers regarding their pricing decisions.

Governments are also likely to come under pressure to do more to keep prices low or stable, whether through direct regulation of prices, or through competition policy. The same study by the Agri-food Analytics lab quoted above found that 44% of Canadians believe that governments should intervene and regulate the price of some staples at the grocery store.

On the demand side, governments play an important role in income redistribution through social programs that assist low-income Canadians to pay for necessities such as food. As food prices rise, governments may be expected to revisit social assistance rates. Governments may also come under increased pressure to address the specific food security needs of remote or vulnerable populations, including indigenous communities.

Finally, both government and industry may consider taking steps to increase the security and reliability of food supply chains that serve the Canadian market. This could include investments in local production of food, such as certain types of produce, that is commonly shipped long distances. It could also include an increased focus on securing agreements with key suppliers that lock-in quantities, prices, or both. The concepts of "reshoring" and "food sovereignty" are relevant in this context.

8 Trend #4: Social sustainability

General description

Social sustainability refers to a concern with the treatment and position of people in society. Social sustainability is related to the idea of social justice, and with the push toward diversity, equity, and inclusion in all their forms. Recent events have brought new momentum to movements seeking improved social outcomes. While this trend is not yet a major force shaping Canadians' food choices, it is expected to increase in importance with time as people, especially young people, expect that these values will be embraced by actors throughout the business world, including those in the food system.

Also included in social sustainability is a concern with animal welfare. The treatment of animals in agriculture has long been a preoccupation for a minority of Canadians. Concern for the welfare of farm animals is expected to be a persistent concern for Canadians.

Consumer attitudes and opinions associated with and/or driving the trend

The pandemic brought to the fore the essential nature of the work done by medical professionals, but also by people in the agriculture and food industry. The work of grocery store cashiers, farm labourers, meat cutters and others in the food system was noticed and appreciated in a way that it was not prior to the crisis. Early in the pandemic, COVID-19 outbreaks among temporary foreign workers resulted in a media spotlight on the working conditions on Canadian farms and in meat processing plants. While the pandemic's impact on food systems has largely abated, the renewed appreciation of food industry workers that it brought about is expected by some to persist.

Other social forces, such as the Black Lives Matter movement and the push towards reconciliation with Canada's indigenous peoples, are expected to continue to shape societal expectations. Increasingly, consumers want to see that the companies they do business with are making efforts to improve the position of historically marginalized groups and advance equity and inclusivity. Industry experts expressed that social inclusion is particularly important to younger Canadians, i.e. Millennials and Gen Z.

As discussed earlier in this report, many Canadians are concerned about the impact of the food they are eating on their own personal health. Some Canadians are also more broadly concerned about the ability of the food system to generate enough food for all Canadians, and about health outcomes for society generally. Particularly in the current climate of high food price inflation, there appears to be more concern regarding the ability of vulnerable groups in society to get enough healthy food to eat.

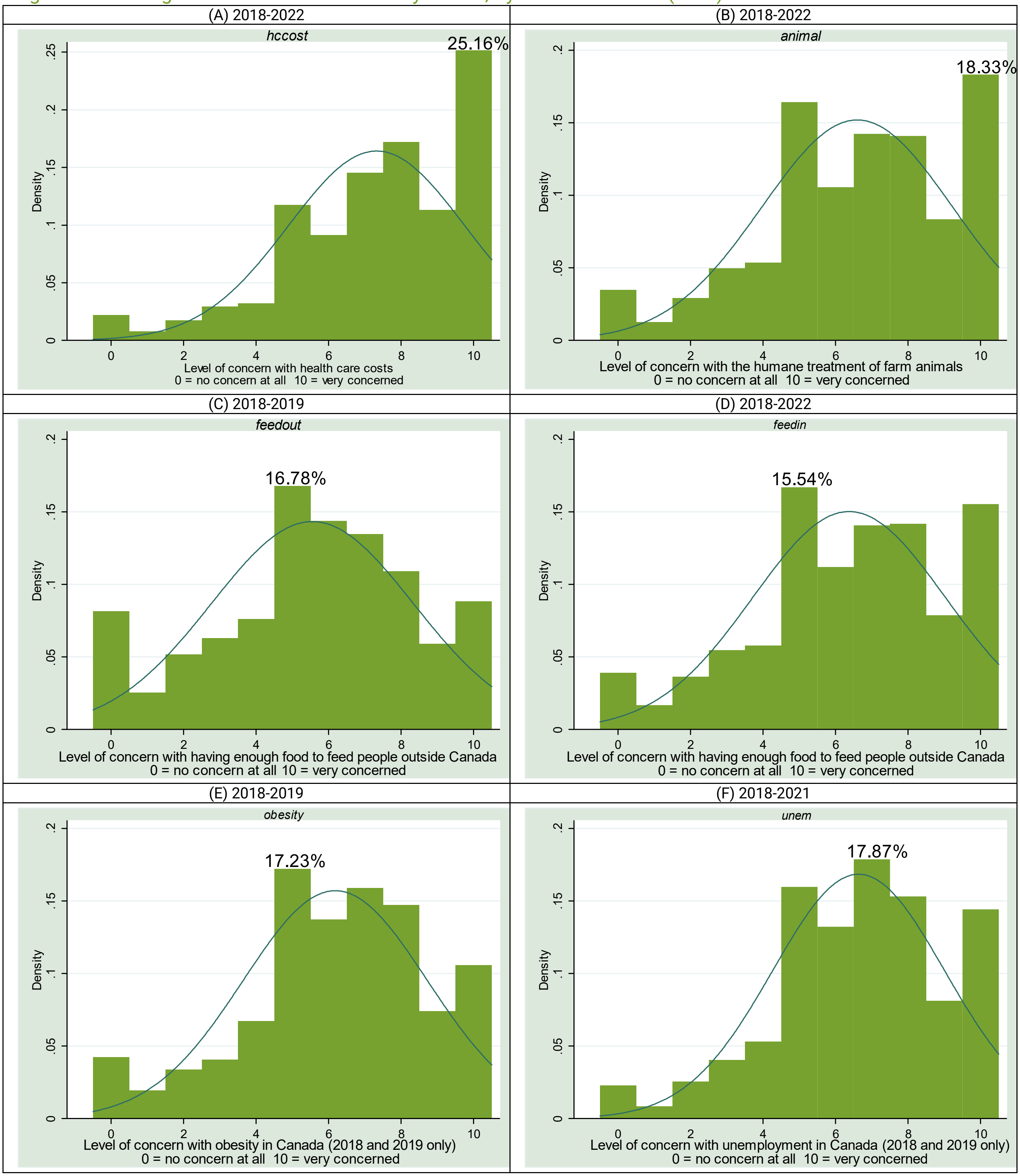
Finally, concern for animal welfare is another important factor shaping consumer demand. While animal welfare has been a long-standing concern for a minority of shoppers, its influence is expected by several industry experts to grow as people increasingly humanize their pets and extend their concern to include the wellbeing of other animals as well. Incidents of abuse of farm animals that are caught on video typically garner significant media attention, particularly on social media.

The CCFI surveys asked various questions related to social sustainability (Figure 8.1): health care costs, humane treatment of farm animals, and having enough food to feed people in Canada in 2018 through 2022. In 2018 through 2021, respondents were asked about unemployment in Canada. In 2018 and 2019, respondents were asked about obesity in Canada and having enough food to feed people outside Canada.

The weighted frequency distributions of these variables by level of concern are displayed in Figure 8.1. Health care costs (panel A) had the largest within-variable share of responses as a level 10, at 25.16% of all responses.

The humane treatment of animals on farms (panel B) is another variable where level 10 had the greatest frequency (18.33%) of responses. Three variables had level 5 (moderate concern) as the largest share of in-variable responses (moderate concern): having enough food to feed people outside of Canada (16.78%, panel C); having enough food to feed people in Canada (15.54%, panel D) and obesity in Canada (17.23%, panel E).

Figure 8.1. Histograms of social sustainability issues, by level of concern (0-10).

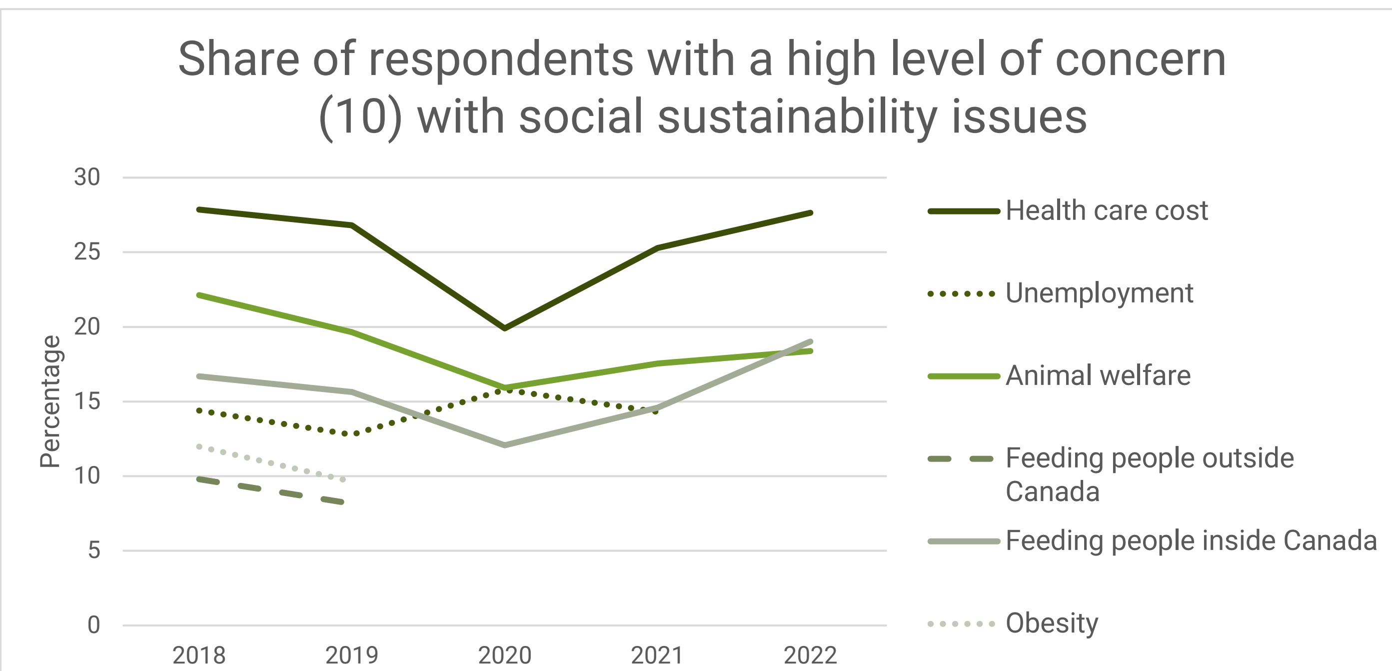


The trends through time of these six issues is shown in CCFI tracks concern with animal welfare through time since 2018. Approximately 60% of Canadians consistently (every year since 2018) indicated that they have no problem eating the products of animal agriculture, as long as the animals were treated “decently and humanely.” Approximately a third of Canadians consistently (since 2018) indicated that they believe that animals are treated humanely in Canadian agriculture, while a larger proportion (roughly 60%) indicated they were unsure. Taken together, these two results suggest that Canadians have a background level of concern about animal welfare that has the potential to result in reduced meat and dairy consumption, if they were to be exposed to information that changed their views on the humane treatment of animals in Canadian agriculture. Research by CCFI in 2022 into what drives trust in the food system overall found that the wellbeing of farm animals is an important driver of trust, ranking third out of all potential trust-drivers. Only food safety and transparency of nutritional information ranked more highly than the wellbeing of farm animals, in terms of the factors that contribute to overall trust in the food system.

Figure 8.2. The share of respondents with a high level of concern (10) on health care cost, feeding people inside Canada, and animal welfare declined from 2018 to 2020, but increased in 2021 and 2022. The share with a high level of concern about unemployment has increased or decreased from year to year, most recently decreasing from 2020 to 2021.

CCFI tracks concern with animal welfare through time since 2018. Approximately 60% of Canadians consistently (every year since 2018) indicated that they have no problem eating the products of animal agriculture, as long as the animals were treated “decently and humanely.” Approximately a third of Canadians consistently (since 2018) indicated that they believe that animals are treated humanely in Canadian agriculture, while a larger proportion (roughly 60%) indicated they were unsure. Taken together, these two results suggest that Canadians have a background level of concern about animal welfare that has the potential to result in reduced meat and dairy consumption, if they were to be exposed to information that changed their views on the humane treatment of animals in Canadian agriculture. Research by CCFI in 2022 into what drives trust in the food system overall found that the wellbeing of farm animals is an important driver of trust, ranking third out of all potential trust-drivers. Only food safety and transparency of nutritional information ranked more highly than the wellbeing of farm animals, in terms of the factors that contribute to overall trust in the food system.

Figure 8.2. High level of concern with social sustainability issues, 2018-2022.



Data source: CCFI. (2018-2022). *Consumer trust research.* [Dataset]. Image produced internally.

Impact of this trend on consumer behaviours

At the present time, this trend is not having a major impact on consumer behaviour in terms of food choices. That said, there are several indications that concern about social sustainability is at least somewhat influential and may be growing in influence. Social sustainability should be considered an emerging trend, as opposed to environmental sustainability which is more established in the Canadian market.

Retail industry experts report that perceptions regarding inclusivity and the treatment of labour are important drivers in the choice of a grocery store at which to shop. Consumers value stores that are welcoming to all regardless of one's culture, race, or gender identity, as well as businesses that treat their employees well and pay them a living wage. Industry experts report that these factors rank on par with environmental sustainability factors in terms of the consumer's choice of a grocery store.

CCFI's 2022 survey asked Canadian consumers if they had sought out information about labour and human rights in food production in the past six months. Almost one quarter (22%) indicated that they had done so. While the propensity to seek out this type of information is much lower than for other food-related topics such as nutrition and healthy eating (56%), it may be indicative of a growing interest.

Recent growth in Fair Trade product interest is another indicator of this trend. The Fair Trade movement and associated product certification schemes were borne out of a concern with the low wages and working conditions of agricultural workers in developing countries producing commodities such as cocoa, sugar, and coffee, and Fair Trade certification remains limited to imported products only. Fair Trade products typically command a price premium and they represent a niche market in Canada, but research commissioned by Fair Trade Canada shows that awareness of the Fair Trade mark among Canadians has been increasing rapidly (Fair Trade Canada, 2023). Young Canadians are most likely to recognize the mark. Many (almost 80%) of those who are aware of the certification mark claim that they have purchased at least one Fair Trade product in the last six months.

While there is some evidence that consumers are also concerned about the treatment of farm workers in Canada, it is less clear that this concern is currently influencing their food choices. At present, there is no way to differentiate between food products on the basis of how farm and food processing workers are treated (or paid). The United Food and Commercial Workers Union urges Canadians to "use the power of your shopping cart" to ensure that companies pay a living wage and respect the rights of food workers (United Food and Commercial Workers Union, 2023). However, information about wage rates and working conditions are typically unavailable publicly.

When it comes to animal welfare, the 2022 CCFI survey found that more than a quarter of Canadians reported seeking information about the treatment of farm animals in the past six months. It is unclear how they are using that information. Vegetarianism and veganism are chosen by only a small minority of Canadians and likely only a portion of them chose to eliminate animal products from their diet for animal welfare reasons. From 2019 to 2020 – the two years where the question about diet classification (vegan, vegetarian, or mostly plant-based) was identical – the percentage of respondents answering "Yes" increased from 2.19% to 6.39%. Some consumers may be choosing to buy products, such as free-range eggs or meat, that are perceived as having animal welfare benefits and that are labelled as such at the grocery store.

Industry responses to the trend

Many Canadian businesses are including social factors as part of their overall sustainability goals. Several industry experts indicated that these efforts, like environmental sustainability, may be motivated as much by investor pressure as by consumer demand. Nevertheless, there is a sense that they are viewed favourably by customers and have at least an indirect impact on customer retention. For example, as part of the sustainability section on the company's website, Bimbo Canada highlights the diversity and inclusion training it has delivered to staff, as well as its efforts to promote worker wellbeing through mental health initiatives. Companies are also highlighting their commitment to broader social goals including food security and community-building through donations to food banks and community organizations.

In the current context of worsening labour shortages, the agriculture and food industry is also acutely aware of the need to ensure that the sector (and their company) is viewed as a good one in which to work. Employers are seeking ways to attract and retain employees through improved working conditions and commitments to diversity and inclusivity. Maple Leaf Canada's job advertisements, for example, put strong emphasis on the company's training, benefits, and DEI programs.

A few companies are trying to set themselves apart through their commitment to social sustainability. In the United States, there is a fledgling movement that has created a "Food Justice Certification" program for businesses that "recognize the importance of fair labour practices." Only a handful of businesses are currently certified, all of them American. It remains to be seen if this movement or something similar gathers steam in Canada.

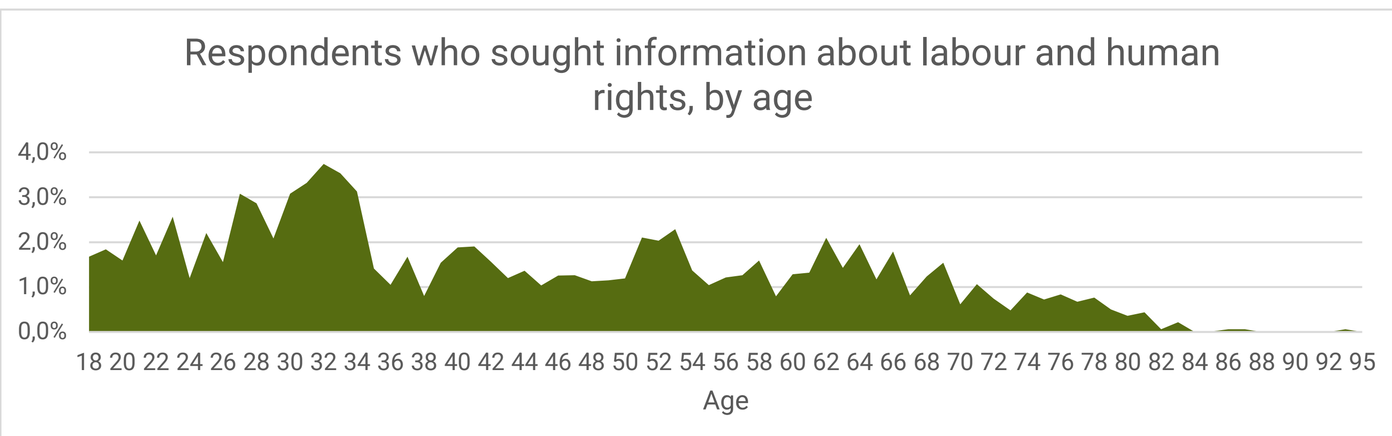
Some Canadian farm organizations are explicitly embracing a vision of agriculture that includes a more diverse farm population. The National Farmers Union, for example, has a Black, Indigenous, and People of Colour advisory committee that aims to "identify, diminish and ultimately eliminate the barriers preventing racialized farmers from accessing land and growing sustainable farm operations."

When it comes to animal welfare, which is a more long-standing trend, several Canadian companies do try to set themselves apart on this basis. For example, Nutrafarms is an Ontario company that markets free-range, pastured chickens as well as grass-fed beef and cage-free pork. A&W maintains a set of animal welfare standards for its suppliers that it claims are more stringent than industry norms.

Expected future of the trend

Research shows that diversity, equity, and inclusion (DEI) is especially important to younger generations of Canadians, and it is expected to remain an important value as they age. As can be seen in Figure 8.3, respondents in their early 30s comprise the largest category of people who have sought information about labour and human rights in food production (in the past six months, for 2022, and the past two years, 2020 and 2020). Because it tends to be the younger generations who are thinking about these issues, social sustainability factors are expected to grow in importance over the coming decade.

Figure 8.3. Distribution of respondents who sought information about labour and human rights, by age.



Data source: CCFI. *Consumer trust research.* [Dataset]. Image produced internally.

As the trend is in its beginning stages, it remains to be seen how it will ultimately shape Canadian consumer demand for food. Some industry experts expect that DEI and labour considerations will be an increasingly important factor used by consumers to make choices between competing food brands. However, in order for this to come about, more company-specific information would need to be made easily available to consumers about the factors that are most important to them. Like environmental sustainability, social sustainability is a complex subject that may be challenging to effectively communicate, particularly at the point of sale.

Implications of the trend for government and industry decision-makers

Industry experts agree that a perceived lack of concern for workers, animal welfare, and social equity is likely to be harmful to the reputation of businesses in the food system. Serious reputational damage can be caused by incidents that appear to be cases of animal or worker abuse. Proactively taking steps to demonstrate a commitment to the fair treatment of workers, to animal welfare, and to broader social goals are likely to reap reputational dividends, even though they may or may not translate into a price premium for specific brands or products.

That said, lucrative niche markets may arise for those businesses that are able to successfully differentiate themselves on social sustainability factors such as black, indigenous, or people of colour leadership/ownership. According to one industry expert, a growing interest in indigenous food systems and culinary traditions in particular is resulting in opportunities for indigenous companies active in the food space.

Governments will come under increasing scrutiny when it comes to regulatory topics such as animal welfare, labour standards, and the temporary foreign worker program. There may be pressure for stricter enforcement of existing rules, or the creation of new rules. Canadians may also look to governments to do more, including through agricultural programming, to encourage diversity in the farm and food sector.

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10 Appendices

Appendix 1. Variables used in econometric models.

var	2022	2021	2020	2019	2018
cost	I am more concerned about the affordability of healthy food than I was a year ago. [10=strongly agree; 0=strongly disagree]				
hhwaste	Have you [reduced food waste in your home] because of the rising cost of food in the past 12 months?	How concerned are you about food loss and waste in your own home?		I waste less food today than I did year ago. [10=strongly agree; 0=strongly disagree]	
wastecanada [10/0=strongly agree/disagree]	I am personally concerned about the amount of food loss and waste in Canada overall				
sust	In the past six months, have you sought any information about sustainable or environmentally friendly food production?	In the past two years, have you sought any information about environmentally friendly or sustainable food production?		Environmental sustainability in farming [How concerned are you about...]	
sustseek	In the past six months, have you sought any information about sustainable or environmentally friendly food production?	In the past two years, have you sought any information about sustainable or environmentally friendly food production?		NA	
enviroconcern [How concerned are you about...]	The Canadian environment, such as soil, air, water, plants and wildlife	Environmental sustainability in farming in Canada		Environmental sustainability in farming	
nutr	In the past six months, have you sought any information about nutrition and healthy eating?	In the past two years, have you sought any information about nutrition and healthy eating?		Access to accurate information to make healthy food choices [How concerned are you about...]	
local	Would you say that you always, sometimes, rarely, or never seek out food products that are locally grown or produced, even if they cost more?		[Food is grown / raised locally] Which of the following statements best describe what it means to you when food is grown sustainably?	NA	NA
eatlessmeat	Have you [eaten less meat] because of the rising cost of food in the past 12 months?	NA	Thinking back over the past year, would you say that your overall trend in the amount of meat you eat has increased / decreased a lot/little, or stayed the same?		NA
plant	In the past six months, have you sought any information about plant-based, meat alternative types of foods?	In the past two years, have you sought any information about plant-based, meat alternative types of foods?		NA	NA

var	2022	2021	2020	2019	2018
vegan	Have you [eaten vegan] because of the rising cost of food in the past 12 months?	NA	Sometimes, people classify themselves based on the types of foods that they consume. Which of the following apply? [Vegan]	*Question about veganism only triggered if respondent declares not eating meat.*	NA
climchange	Global warming/climate change [How concerned are you about…]				
organichealth [10/0=strongly agree/disagree]	Food grown organically is healthier than conventionally grown food.			Food grown organically is more healthful than conventionally grown food.	
quality [How concerned are you about…]	The availability of quality food for you and your family	NA	The availability of quality food for you and your family	NA	NA
cost	Cost of food [How concerned are you about…]			Rising cost of food [How concerned are you about…]	
feedin	Having enough food to feed people in Canada [How concerned are you about…]				
feedout	NA	NA	NA	Having enough food to feed people outside Canada [How concerned are you about…]	
animal	Humane treatment of farm animals [How concerned are you about…]				
obesity	NA	NA	NA	Obesity in Canada [How concerned are you about…]	
unemployment	NA	Unemployment in Canada [How concerned are you about…]			
hccost	Health care costs [How concerned are you about…]			Rising health care costs [How concerned are you about…]	
labour	In the past six months, have you sought any information about labour and human rights in food production?	In the past two years, have you sought any information about labour and human rights in food production?		NA	NA

Appendix 2. Semi-structured discussion guide.

AAFC Consumer Trends Research

One-on-one discussion guide

Purpose and introduction:

Hello. I am Darcie Doan, hired by the Canadian Agri-food Policy Institute to conduct discussions with industry experts such as yourself about the trends that are shaping Canadian demand for food.

Agriculture and Agri-Food Canada has commissioned this work, and a representative of AAFC (name) is sitting in on this discussion just to listen. I am also recording our discussion so that I do not have to take detailed notes. The recording will not be shared with anyone and will be destroyed at the end of this project. I also want to assure you that the views you express today will be kept anonymous, insofar as they will not be attributed to you in my report.

Thank you so much for your participation. The information you provide today will help government and industry better understand, anticipate, and respond to the consumer-driven trends that are shaping the food system. Before we begin, do you have any questions for me?

Questions

What are the 3 or 4 main trends that you believe are influencing Canadian consumer demand for food? (i.e. what, in your experience, are the main factors influencing Canadian consumers in their decisions about food purchases that are likely to remain influential over the next decade or so?)

If sustainability, health, inflation/price, or convenience not mentioned: You did not mention X as one of the main trends. Why is that?

Prompts below will be repeated for each of the main trends identified in the first question.

Can you expand on what you mean by X? How is this trend influencing the way in which people are making food purchase decisions?

How do you expect this trend to continue to shape consumer demand over the next decade, i.e. will its influence change over time and if so, how?

[if applicable] Thinking now about your own business, how do you see Trend X playing out in your business?

How does Trend X influence which products people are buying?

How does Trend X influence the way in which people are making purchase decisions?

Do you expect the influence of this trend on your business to change in the future? If so, how?

How has your business responded to this consumer trend? What changes have you made to the products you offer or how you offer them?

What additional changes are you planning to make, in response to this trend?

What, if any, specific investments are you making, or are you planning to make, that respond to this trend?

[optional: if time permits] How well-prepared do you think the Canadian agri-food industry is to respond to this consumer trend over the next decade?

[optional, if time permits] What, if any, additional actions are needed by industry or government in order to be better prepared to address this trend?

Conclusion:

That is the end of my questions, but before I bring the discussion to a close, do you have any final comments about the subjects we have been discussing?

Thanks again for your participation. The Canadian Agri-food Policy Institute will be scheduling webinars in the fall of 2023, during which we will present the results of these discussions as well as our data analysis. We will ensure that you are invited to hear the results.