CAPI
THE CANADIAN AGRI-FOOD POLICY INSTITUTE

August 2023

Industry Implications of Evolving Consumer Behaviour

Report prepared for CAPI by
Darcie Doan and Angèle Poirier

The Canadian Agri-Food Policy Institute
960 Carling Avenue, CEF Building 60
Ottawa, ON K1A 0C6
www.capi-icpa.ca

This report was funded in part by the Government of Canada under the AgriCommunication Program.

Table of Contents

List of Abbreviations

AAFC	Agriculture and Agri-Food Canada
CAPI	Canadian Agri-Food Policy Institute
CCFI	Canadian Centre for Food Integrity
DEI	diversity, equity, and inclusion
BIPOC	black, indigenous, people of colour

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.

Agriculture and food, and the farmers, processors, retailers and other value-chain partners are responsible for responding to the needs and wants of a variety of actors. Changes driven by government and investors are relatively well understood. For example, sustainable agriculture is a priority for the federal government of Canada. Investors around the world are pressuring value chains to also improve their sustainability.

However, changing consumer preferences and their impact may be less well understood along the value chain. Consumer awareness of issues like sustainability, and other changing preferences, 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

Food choices can matter to Canadians. For some, the food they eat is an expression of their identity and deeply held values. Canadians are interested in how food is produced, how it influences their health, and perhaps most importantly, how to ensure reliable access to affordable supplies of it.

This study examined Canadian consumers' attitudes and preoccupations with respect to food purchases. Through interviews with industry experts and a 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. The trends discussed here arise out of consumer interests and concerns that are expected to persist. That said, 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 and businesses often see different challenges and opportunities based on their unique situations.

Canadians are increasingly concerned about environmental issues, particularly climate change, with almost 30% indicating climate change and the environment is one of their top 3 issues of concern. This concern spills over into food choices and is expected by many experts to continue influencing food choices well into the future. 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. Seniors are more likely to express very high levels of concern with the environmental sustainability of agricultural production, though younger adults are more likely to say that their purchase decisions are influenced by (perceived) climate impact.

A preoccupation with environmental sustainability can influence 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 skepticism about companies' environmental claims.

Consumers are expected to continue to seek information about ways to reduce the negative environmental impact of food choices. 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 consumer willingness to pay a price premium for more environmentally sustainable food may not increase.

Consumers are very interested in the impact of diet on health and well being. This is a relatively longstanding interest that is expected to remain highly influential in the coming decade. After price, the nutritional and quality attributes of food tend to be the most influential determinants of food decisions. 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 is persistent.

Women and young adults are the most likely to be interested in healthy eating, though diet and health concerns cross generational lines. 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 latest 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 fresh produce and protein in their diets, especially plant-based proteins.

While price has always mattered to consumers, recent high food price inflation has focussed the Canadian consumer's attention on food affordability. Pandemic-related supply disruptions generated a new set of concerns 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 and possibly longer. Underlying this view is an expectation among some experts that disruptions to global food production and distribution systems will be frequent in the coming decade. There is also some evidence that food price shocks influence consumer behaviour even after the shock has abated. Concern regarding the cost of food is currently widespread, though as might be expected, lower income Canadians demonstrate a higher degree of concern than do higher-income Canadians. Consumers have been responding to food price concerns 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 are also seeking to reduce food waste. A preoccupation with food security may also motivate some consumers to seek out locally produced food. Locally produced food is viewed as good for the local economy and as a potentially more reliable source of supply due to shorter supply chains. Local foods may, however, be more expensive than their imported counterparts. Reliable access to affordable healthy food, including in remote or underserved markets, was highlighted as a priority by many of the experts interviewed.

The fourth and final trend is increased consumer interest in the social sustainability of the food system. Unlike the other three trends , this is an emerging trend that has yet to have a major impact on the Canadian marketplace. 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.

The interest in social sustainability is expected by some several experts to be more widespread in the coming years and to drive changes in food purchasing behaviour. 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.

These four trends present opportunities and challenges for the agri-food sector. The domestic market is only one of many markets served by Canadian food producers and manufacturers. It is also a very competitive market, where Canadians regularly chose products from around the world. Canadians' elevated expectations from the food system can therefore create challenges and opportunities for domestic producers and processors.

Canadians want affordable, healthy food that supports environmental and social sustainability. They demonstrate a preference for locally produced food and express confidence in Canadian farmers. On the other hand, consumers are both confused by and somewhat skeptical of certain claims by food manufacturers and retailers and may be reluctant to pay more for intangible attributes such as environmental sustainability.

The Canadian agriculture and food industry is well positioned to respond to many Canadian consumer priorities. However effective communication with Canadian consumers about issues that matter to them will be critical. In a crowded information environment characterized by misinformation and confusion, getting one's message across is not easy. This is especially the case for complex issues such as environmental impact. Responding to changing preferences may require broad effort to maintain consumer acceptance that offers little return, but it may also create niche value-added opportunities. Efforts to improve transparency along the value chain through increased measurement and reporting will help improve consumer sentiment and satisfy investors. Concrete changes to production or business processes may also be needed.

The intersection of consumer preference, investor pressure, and government priority can drive the need for change, but challenges passing costs on to cost conscious consumers or building a business case for investment creates an opportunity and potential need for a public policy response.

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).

3.1 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 Appendix 2. Semi-structured discussion guide. 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. As with any survey, selection bias may be reflected in the results; that is, caution should be used when applying any inferences to the general population.

The 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 Appendix 1. The survey sample sizes (n, number of observations) are displayed here and totalled 11,721 observations.

Figure 3.1. Number of observations in CCFI survey data.

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

3.2 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 in the CCFI dataset.

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 (health care costs, animal welfare, feeding people inside and outside Canada, unemployment, and obesity). 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 contains a complete list of variables and the corresponding survey questions in each year.

4 Context and framework

4.1 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.

4.2 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 somewhat reluctant to speculate about the future. This reluctance may also be impacting investment decisions and how companies are approaching future planning.

Confidence in the ability to extrapolate trends 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 and the staying power of recent behaviour change.

The elevated uncertainty about the future amounts to a caveat on 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.

4.3 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 or bias in responses. Selection bias is common in survey data, as there may be a difference between those who opt to take a survey, and those who forego responding to a survey. Inferences should therefore be applied with caution.

Survey respondents report on their attitudes, priorities, and behaviours using imperfect memory and are 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 for environmental attributes (S. Li & Kallas, 2021). Some refer to this as the "say-do gap." 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 extremely 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, quantitatively, whether reported behaviour matches actual behaviour. Interviews with industry experts were used to gather qualitative information regarding purchase behaviour of consumers. The four interviews with retail sector experts were particularly valuable in this regard, given their access to sales data across all food categories and their use of this data to make business decisions.

4.4 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 sizeable 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. It is worth noting here that Canada's increasingly ethnically diverse population is an important factor influencing food tastes and preferences. In 2021, according to Statistics Canada, almost one-quarter (23.0%) of the population was (or had been) a landed immigrant or permanent resident in Canada. Immigration is the main driver of population growth in Canada, given low birth rates (Statistics Canada, 2022). First- and second-generation Canadians may prefer foods that are associated with their countries and cultures of origin. These tastes and preferences, when introduced to Canada, can drive broad-based changes in demand that represent opportunities for Canadian food producers, restaurants, and retailers (Powell, 2016).

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 and may not read labels or ingredient lists, even if they feel that certain ingredients should be avoided (Aguiar et al., 2018). 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.

4.5 Clusters: The concerned vs. the unconcerned consumer

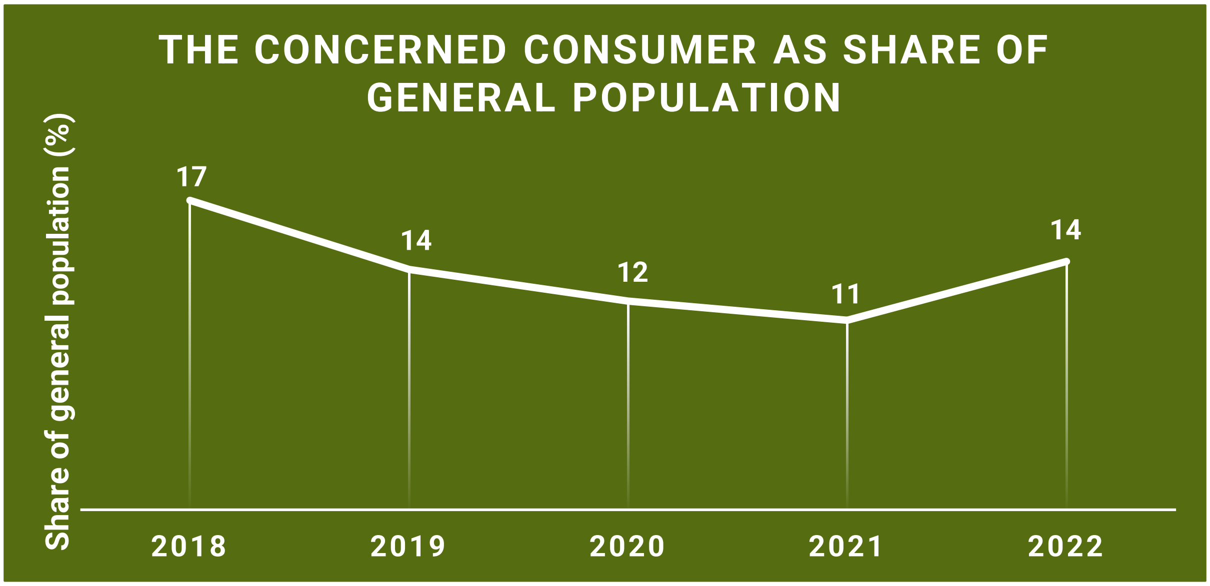
Most of this report is organized by theme and includes a focus on those consumers who demonstrate relatively greater interest in that topic area. However, we have found that the same people who are interested in one aspect of the food system are also interested in its other aspects. In other words, there is a subset of the Canadian population that is interested in most if not all food-related topics and devotes more attention to food in general than do other Canadians. We call this subset the "concerned consumer." The concerned consumer is likely to seek information on a range of food topics from nutrition to environmental impact. They make food choices based on a set of strongly held values or beliefs about food. They are also likely to make linkages between food system issues. The concerned consumer may influence the food-related opinions of other, less concerned consumers, insofar as they are viewed by their peers as knowledgeable. The concerned consumer is therefore an important target for communications and advocacy.

Figure 4.1. The concerned consumer.

The "concerned consumer" is one who has a high degree of concern (8 or more) with five issues: the cost of food, environmental sustainability in farming, 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 about cost of food, environmental sustainability, food loss and waste in Canada, nutrition, and animal welfare as 8 or higher. The "concerned consumer" represented 14% of the Canadian population in 2022, an increase from 2021 (11%) and 2020 (12%).

Figure 4.2. Concerned consumer through time.



Two-thirds (67%) of concerned consumers are women, even though they only represent 51% of the general population in 2022 (see Figure 4.3). The fact that women tend to perform a larger share of the meal preparation and grocery shopping when compared to men (Beardsworth & Keil, 2002, p. 90) could explain the overrepresentation of women in the concerned consumer segment. Seniors are also somewhat overrepresented among concerned consumers: they comprise 22% of the general population but 25% of all "concerned consumers" in 2022.

Low-income households (those earning $40,000 per year or less) are overrepresented in the concerned consumer category: they represent 34% of the concerned consumer segment in 2022, compared to 25% of the general population. This relatively greater interest in food system issues among lower income households may reflect a greater preoccupation with food security. Other research corroborates the idea that low-income households (albeit in the United States) are concerned with healthy eating, prefer local food to that with a lot of "food miles" (although geographic and economic barriers exist), prefer supporting the local community with one's grocery shopping even if it costs more, and are more likely to participate in informal food systems such as gardening and food bartering (Webber & Dollahite, 2008).

Figure 4.3. The concerned consumer, by sociodemographic characteristics (2022).

	Representation in entire sample	Share of concerned customer segment
Males	48.53%	33.36%
Females	51.47%	66.64%
Seniors	21.75%	25.15%
Unfinished university	11.84%	10.48%
Undergraduate degree	12.85%	10.62%
Graduate degree	8.42%	6.83%
Low income (<$40K)	26.73%	36.22%
High income (>$100K)	21.49%	14.62%

Econometric analysis confirms that those who are concerned with one of the five issues in the cluster are more likely to be concerned with all five. This rang true for each of the five issues and after controlling for concern with household food loss and waste, year of survey, thinking that organic food is healthier than conventionally grown food, concern with climate change, senior status, and gender.

Those who are concerned with the cost of food (level 10 only) have a higher-than-average likelihood of also being concerned with the other four issues in the cluster (21.56% > 14.59%). Those concerned with the cost of food at level 9 or less did not differ compared to the rest of the sample in their likelihood of also being concerned with the other four issues.

Figure 4.4. The concerned consumer, by area of concern, 2018-2022.

Issue of concern	Level of concern	Likelihood of simultaneously being concerned with the other 4 issues	Average likelihood across model sample of being concerned with the other 4 issues
Cost of food	10	21.56%	14.59%
Environmental sustainability	8	16.97%	15.90%
	9	24.60%	
	10	31.11%	
Food loss and waste in Canada overall	8	18.34%	17.01%
	9	22.18%	
	10	27.72%	
Nutrition	N/A*	20.69%	18.28%
Animal welfare	8	17.97%	16.04%
	9	23.21%	
	10	27.55%	

* Recall that in 2020, 2021, and 2022, the nutrition question did not ask about degree of concern, but rather, whether the respondent had recently sought out information about healthy eating. If the answer was "yes," the observation was coded as being concerned with nutrition. For this reason, this variable is binary rather than ordinal with 10 levels of concern.

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 much rarer than the concerned consumer, comprising only 0.33% of the entire sample. However, this may reflect selection bias: respondents who were willing to complete a consumer trust survey may be more concerned about food-related issues than persons who opted out of responding to the survey.

Most Canadians fall into a moderately concerned category, where their concern regarding food issues falls in the 3-7 range. Given that all Canadians eat, it is to be expected that almost all Canadians would have at least a moderate level of interest in or concern about at least a few food topics.

It could be assumed that the cost of food is a concern for everyone, but the data show that those who are concerned about the cluster of four issues (environmental sustainability, food waste, nutrition, and animal welfare) are also significantly more concerned about the cost of food. Sixty percent (60.67%) of concerned consumers (with the four issues – all but cost) rate their level of concern with the cost of food at a 10 out of 10, while for the general population, it is only 30.96%.

4.5.1 Implications for industry and government decision-makers

The share of concerned, moderately concerned and unconcerned consumers underscore that Canadians have an interest, and are concerned in how their food is produced. This reinforces the need for industry to communicate and engage with consumers to respond to their needs and may validate efforts around public trust and engagement. The heightened concern across a basket of issues demonstrates that the industry needs to speak to a range of issues when responding to consumer concerns.

However, other findings discussed later in the report highlight the challenge that concerned consumers have some difficulty translating some of those concerns into action when purchasing food. Just because a consumer is concerned about a basket of issues does not mean that they are able to realize that concern in the purchases they make. The reasons for this dynamic reflects the reality that consumers are making shopping decisions with limited budgets, information, and time.

There is an interesting challenge for the industry in trying to strike a balance between responding to these broad concerns shared by a broad cross section of consumers and the reality that consumers may not be able to action that concern. Navigating this balance may mean that the industry needs to respond to consumers' concerns, but there may be limited opportunities to capture additional value broadly. The opportunities to capture value may be more niche and are related to specific trends as outlined in sections 5 through 8, including in areas where the consumer concern may be more actionable, as with the trend towards healthy foods.

5 Trend #1: Sustainability

5.1 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.

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

5.2.1 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 found that almost three-quarters of Canadians agree with the statement, "We are heading for environmental disaster unless we change our habits quickly" (Ipsos, 2023). A July 2023 Abacus survey (n=2,486) revealed that 29% of respondents counted "climate change and the environment" among the top three issue facing Canada today, up from 27% in June 2023 (Coletto, 2023).

CCFI's tracking of concern about food system issues also finds a persistently elevated 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.

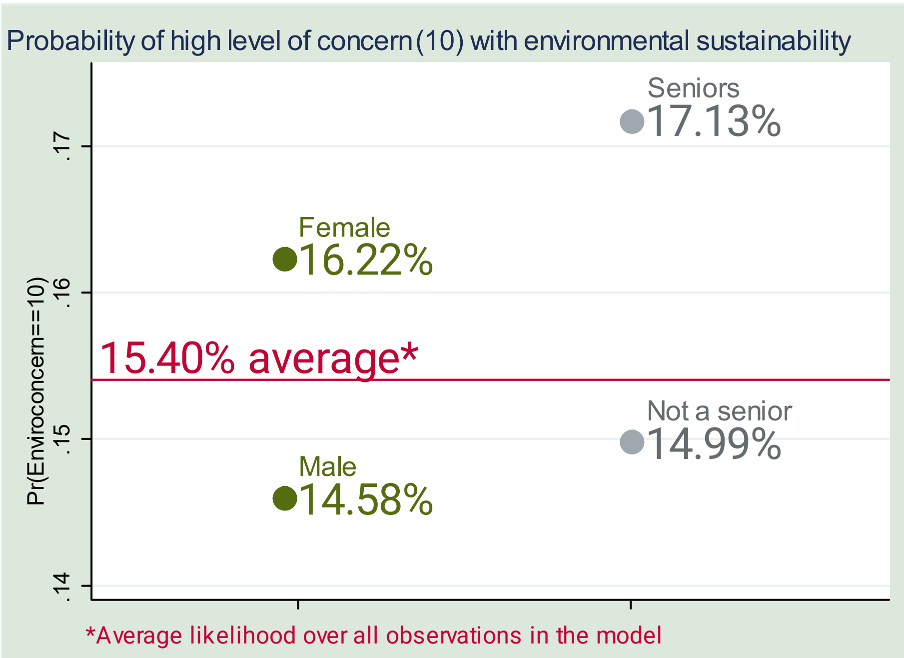
There is evidence that, when it comes to food, consumers strongly associate the broader term of "sustainability" with environmental issues. CCFI's 2020 survey regarding public trust among consumers found that, when asked to define what it means for food to be sustainably grown, the most popular definition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

5.2.2 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.

Econometric analysis revealed that certain demographics were more likely to declare being “very concerned” (level 10) with environmental sustainability: women (16.22% likelihood vs. 14.58% for men); and seniors (17.13% vs. 14.99% for non-seniors). These demographic differences also held true for levels 9, 8, and 7. Those aged 18 to 35 were more likely to have a level of concern of 9 or 8, but not 10.

Figure 5.1. Concern with environmental sustainability.



Data source: CCFI surveys, 2018 through 2022; image produced internally based on econometric model results.

While older generations may report higher levels of concern, there is some evidence that younger people are more likely to make purchase decisions based on perceived climate impact. Recent research by BCG suggests that young Canadians may be more likely to make product choices based on perceived climate impact than older adults. More than half (54%) of consumers in their recent survey said climate impact was at least somewhat important to them when making a purchasing decision. Among high-income Gen Z respondents, this figure rose to 83%. Furthermore, almost one-third (31%) of respondents reported they had reduced or stopped consuming some products or services due to their perceived climate impact. The top categories affected included foods and beverages (Gott et al., 2023).

5.3 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

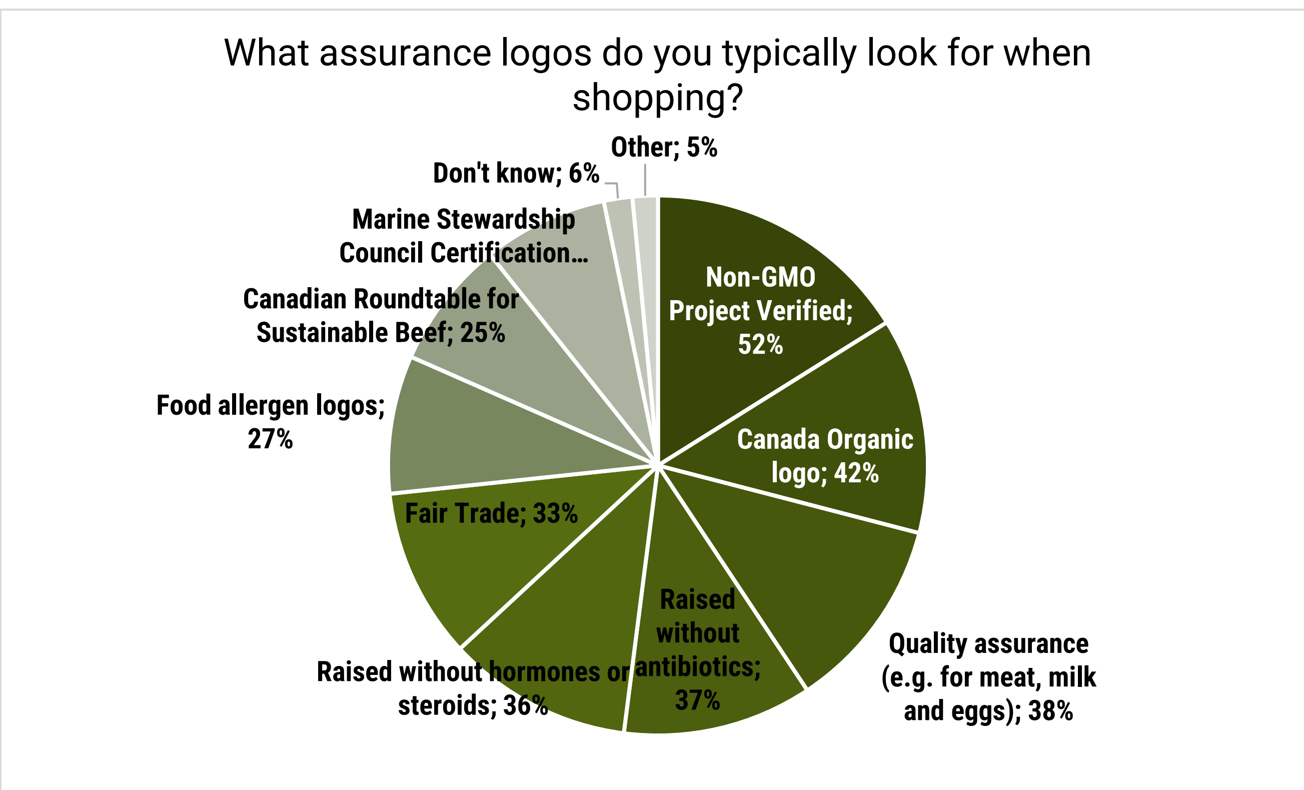
Given the priority placed on the issue, along with the lack of knowledge about what to do about it, it is no surprise that concern about environmental impacts is associated with information-seeking and self-education behaviour. In the 2022 public trust survey by CCFI, thirty percent of all Canadians 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.

5.3.1 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. Assurance 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 to communicate information about production practices: for example, Canada Organic, free-range, non-GMO project verified, Rainforest Alliance, Marine Stewardship Council Certification, PC Free-From, Canada Roundtable on Sustainable Beef (CRSB) certified, and others.

CCFI's 2022 public trust survey found that a minority of Canadians (25%) report seeking out assurance logos when they shop. Among those who seek out logos, non-GMO and Canada organic logos are the most commonly sought. The breakdown is pictured in Figure 5.2. Because respondents could select more than one logo, the percentages do not add up to 100.

Figure 5.2. Assurance logos.



Data source: CCFI survey, 2022; image created internally.

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. The CRSB also found that trust in the product or brand carrying a certification logo is the most influential factor in whether consumers trust the logo (CRSB, 2022, p. 6).

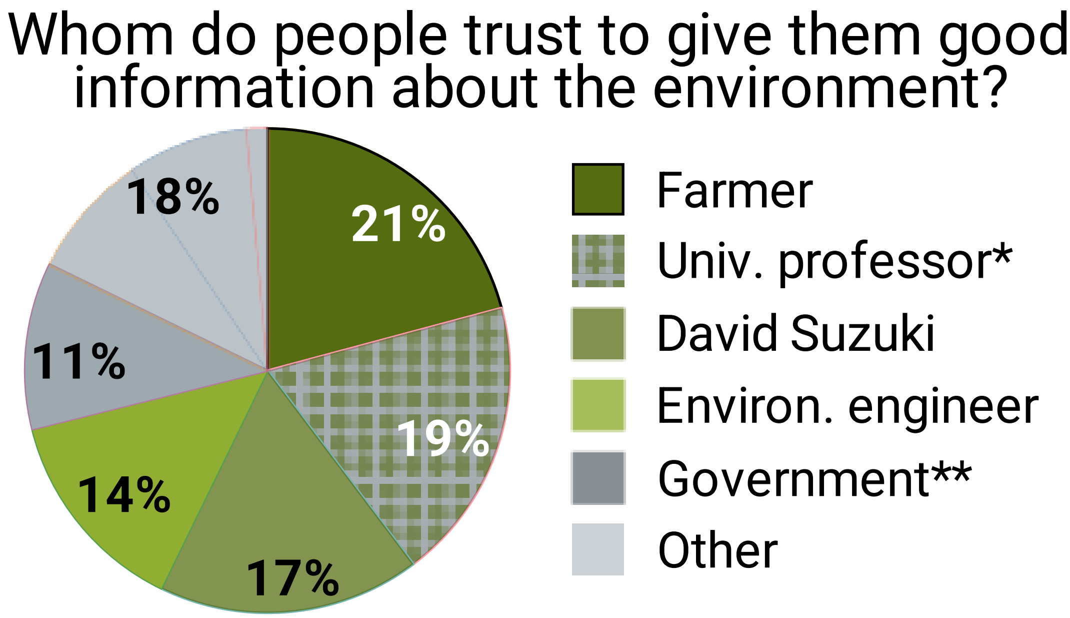
More generally, consumers are sceptical of environmental claims made by companies, whether these are shown on the label or elsewhere. CCFI's 2022 survey found that 41% of Canadians reported being "very concerned" about "greenwashing or misleading information about how a company's products are environmentally 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). The CRSB found that 67% of Canadians "don't know much" about beef production and sustainability, but many reported wanting to know more (CRSB, 2022, p. 20). 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. 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.

The trustworthiness of environmental information is a growing consumer issue. As pictured here, CCFI survey results suggest that farmers and professors are viewed as a credible source of production-related information. 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 5.3. Sources of information about the environment.



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

Data source: CCFI survey, 2019; image created internally.

5.3.2 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 (S. 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. This phenomenon is discussed further in the next section of the report that details the healthy eating trend.

5.3.3 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 understandable that many consumers resort to using simplified strategies 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 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.

5.3.4 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.

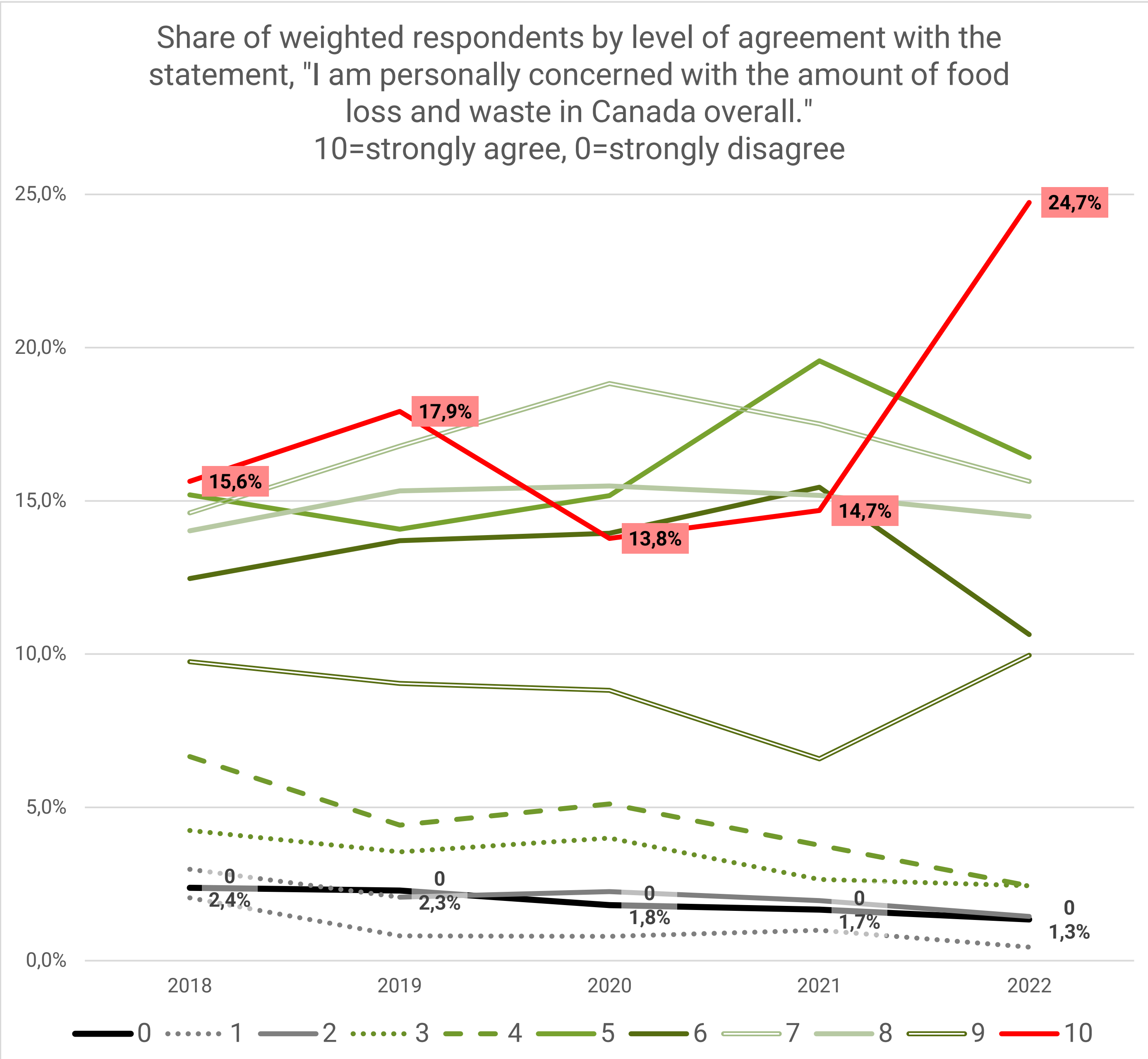
The econometric models support the claim that people who seek information about local food are more concerned with sustainability than those who do not seek out local food. The 2022 and 2021 CCFI surveys asked respondents how often they seek out locally produced food products: always, sometimes, rarely, or never. 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."

5.3.5 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.

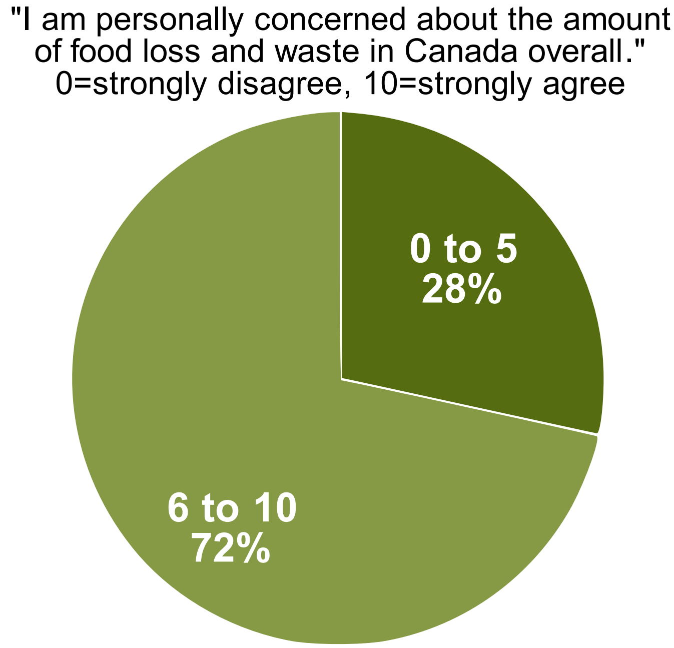
Quantitative analysis reveals that food waste awareness and focus has risen through time. The CCFI surveys consistently ask participants each year to report their agreement with the following statement: "I am personally concerned about the amount of food loss and waste in Canada overall," with 0 meaning "strongly disagree," 10 meaning "strongly agree," and 5 meaning "neither agree nor disagree." The share of respondents answering "strongly agree" (red line below) 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.

Figure 5.4. Concern with food loss and waste in Canada.



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

Figure 5.5. Concern with food loss and waste in Canada (0-5 and 6-10).



Data source: CCFI surveys 2018 through 2022; image created 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 which 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.

5.4 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.

The first step in addressing environmental impacts is to begin measuring them. This can be an elaborate and costly exercise in itself. Maple Leaf Foods, for example, measures and accounts for all its GHG emissions, including those of the agricultural producers who supply Maple Leaf with hogs and chickens under contract (Maple Leaf Foods, 2022). Maple Leaf Foods uses this emissions information to calculate the amount of offset credits it must purchase to achieve and maintain a claim of carbon neutrality. Many companies in the food and grocery retail industries include detailed measurement of environmental impacts in their regular reports to shareholders, however that information likely does not make its way to consumers.

Measurement is typically only the first necessary step. Once impacts are measured, food retailers and manufacturers are actively seeking ways to reduce them. One of the more obvious ways to reduce environmental impact is 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.

Agricultural producers are also developing ways to collectively measure and report on their environmental performance. The Canadian Roundtable on Sustainable Beef, for example, has developed a set of certification standards and assurance protocols for beef producers and beef processors. These include standards pertaining to water quality, pasture management, and soil health (CRSB, 2017). Beef that has been produced according to the standards is eligible to bear the CRSB-certified logo. Retailers such as Walmart Canada and restaurants including MacDonalds Canada have committed to purchase CRSB-certified beef. 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. 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 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; it has remained a key 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, soaring prices, and shortages of essential products, consumers continued to report elevated 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.

5.4.1 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 food that is billed as sustainably produced 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 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.

5.4.2 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. Given the challenges individuals have acting on environmental concerns at the grocery store, they may prioritize action on it at the ballot box, expecting governments to deliver the environmental outcomes they are looking for.

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 a vital role in correcting market failures in the case of environmental goods and services. In recognition of this fact, both federal and provincial governments have introduced a range of environmental programming that helps to offset the costs of on-farm environmental improvements. In addition, all segments of the value chain are subject to environmental regulation.

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 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 in supporting the provision of information by verifying claims, or through 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 based on 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 effort, to ensure that impacts are quantified and verifiable. It is important to note that not all measurement and reporting is for the purpose of communicating with customers or shareholders. Certain types of measurement and reporting may be required by law, for e.g., large food manufacturing facilities are required to measure and report their GHG emissions to federal and/or provincial governments.

Voluntary environmental reporting is highly variable. For example, the GHG emissions on which companies report voluntarily may be limited only to their direct emissions (scope 1) or may also include emissions associated with energy purchases, upstream activities, and downstream uses (scope 2 and 3). The GHG emissions from farming are typically an upstream activity (scope 3) that is not included in a food manufacturing company's or a grocery retailer's climate-related disclosures. That said, several companies active in Canada, including McCain Foods and Loblaw, have plans to reduce their upstream emissions intensity.

Measuring the full environmental impacts of food production would involve the farm level measurement of key variables such as land and water use as well as greenhouse gas emissions. Developing accurate measures of environmental impact at the farm level is a key challenge, given the high degree of variability in production systems as well as the natural systems that underpin them. At the present time, many food companies who report on upstream emissions resort to using average values based on surveys of producers or other proxy measures. Maple Leaf's greenhouse gas emissions measurement protocol, for example, uses the same GHG emissions per animal for hogs and chickens produced under contract and in its own livestock barns. Agricultural producers (or groups of producers) who have the data to back up claims of improved environmental performance may have an advantage when it comes to doing business with food companies that have made their own environmental commitments.

The benefits, or need, of producers to present this data to food processors may be more important than presenting the information to consumers. Farmers may increasingly be expected to report emissions, fertilizer and pesticide use, and other detailed production data to enable claims by processors and manufacturers about food being "more sustainable."

The value of this data to producers will have to be balanced against the cost of collecting it. There may be opportunities for specific groups of producers to band together and share this cost, particularly when they have reason to believe that their environmental performance is better than the average, or better than their main competitors'. There may also be opportunities to share this cost with the buyers of agricultural commodities.

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 with consumers about environmental performance will remain a major challenge. When the information that consumers are seeking is not available from a credible source, they may rely on other, less reliable sources to fill the gap. In this regard, it will be important for industry and government experts to devise simple, clear and convincing 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.

The preference of many consumers for local food, and the association between local food and improved environmental outcomes, are key assets for Canadian food producers. They suggest that consumers will be more likely to believe local producers and manufacturers' environmental claims when compared to those of foreign competitors. Messaging that links local production to environmental outcomes will help capitalize on these reputational assets and help drive sales of grown-in or made-in-Canada products.

There is tension between, on the one hand, a need to make investments to measure and improve environmental performance and, on the other hand, a limited ability to pass this cost on to buyers/consumers. Companies and brands/products that succeed in differentiating themselves based on environmental performance may not necessarily be able to charge a premium price. Consumers currently demonstrate a limited willingness to pay for environmental attributes, due in part to a lack of clarity around what various claims mean combined with a lack of trust and concern about "greenwashing."

While it may be difficult to secure an environmental premium, environmental responsibility may evolve to become "table stakes" in the minds of many consumers in the sense that they will expect the agri-food industry to improve environmental outcomes as a basic requirement of doing business. There are already examples where this is evolving to include retailers or restaurants including minimum environmental standards for suppliers. These standards may become the cost of market access to the retail shelf or restaurant menu, rather than a premium price paid to producers.

The dynamics outlined above present three market-driven scenarios for the industry: 1) higher-value niche opportunities where value chains can present credible, meaningful data to make environmental claims that enable premium pricing; 2) broader approaches that likely leverage industry-wide data or practices to enable mass claims of environmental sustainability without delivering a premium, and 3) no additional actions that enable no claims and deliver no premium.

While it may not be clear which scenarios will be the most likely, there are considerable risks associated with doing nothing. The lack of a convincing story regarding environmental performance may become an increasing reputational liability. When the information that consumers are seeking is not available from a credible source, they may rely on other, less reliable sources to fill the gap. 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 about its environmental impact. 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

6.1 General description of the trend

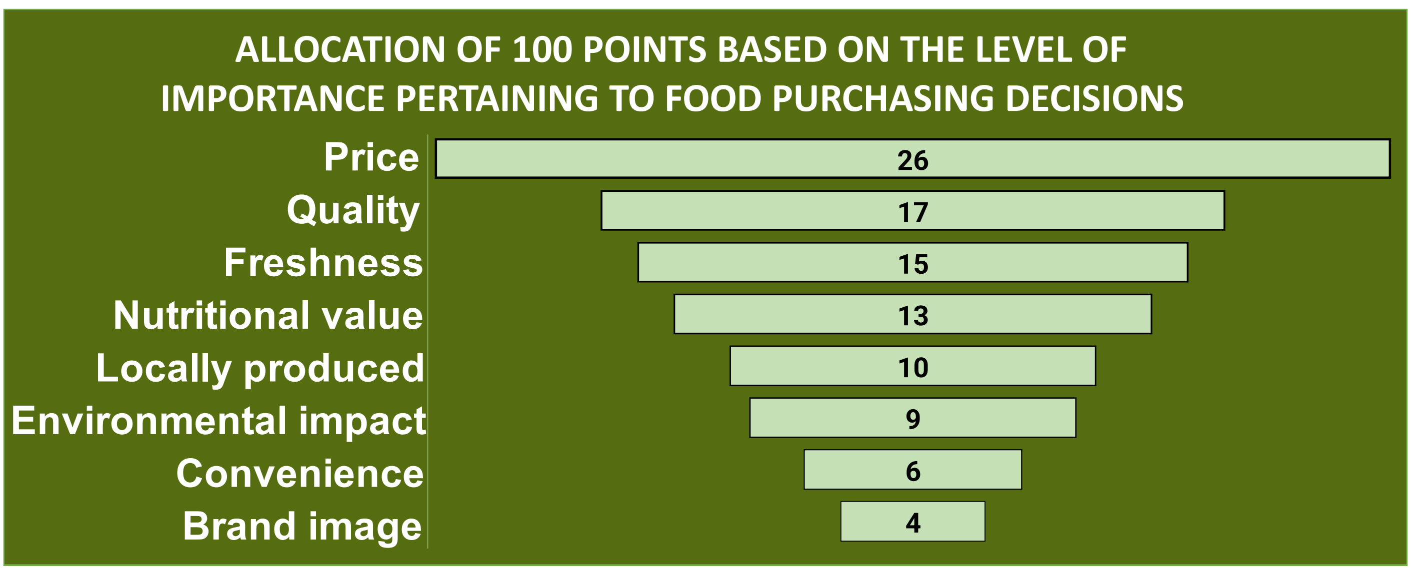
Canadian consumers have been preoccupied with the health impacts of their food choices for some time and are expected to remain preoccupied with them. The preoccupation with diet and health has been a long-standing factor influencing many food choices, though the nature of that influence has changed 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.

6.2 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 rapid rise of low- or no-fat products in the 1980's and early 90's in response to new evidence linking saturated fats to heart disease. 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 (pictured here). These three factors can be directly or indirectly related to the health value of food, indicating that health is a top priority.

Figure 6.1. Number of points (out of 100) allocated to food purchasing factors.



Data source: CCFI survey, 2022; image created internally.

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). Analysis of CCFI survey data confirms that almost two third of Canadians are quite interested in the health aspects of food choices (see variable *nutr* in Appendix 1).

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).

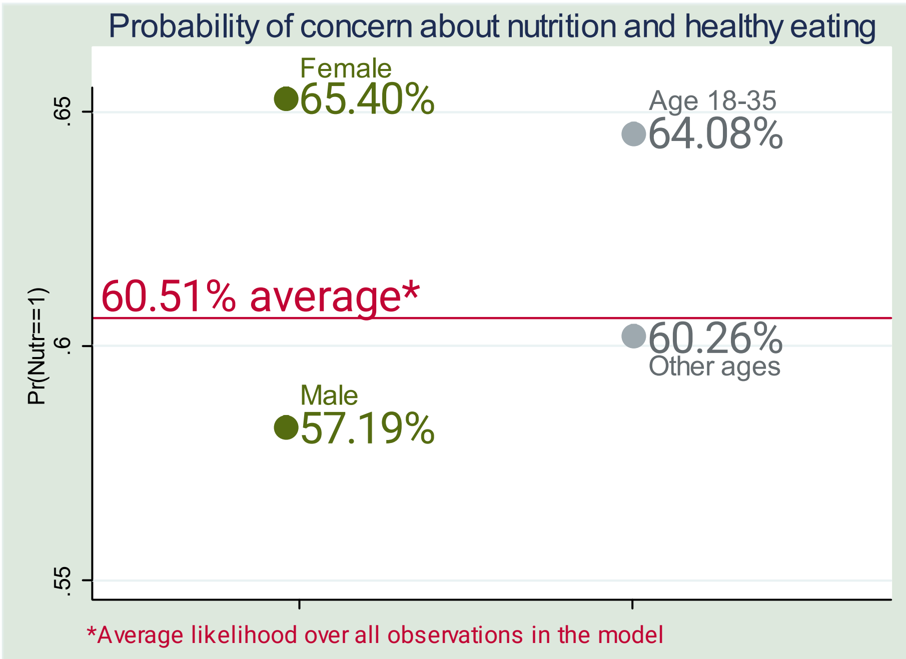
Econometrics reveal that those concerned about the amount of food loss and waste are more likely than average to also be interested in healthy eating (67.0% vs. 62.58%). Moreover, the highest likelihood of being concerned with health (82.8%) was found in the group of people who were also concerned with sustainability. This points to the clustering effect discussed earlier: there is a segment of the population who are simultaneously concerned with a cluster of issues.

6.2.1 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).

Analysis of CCFI survey results reveals similar demographic trends. Those more concerned with having access to information about nutrition and healthy eating are women (65.40% vs. 57.19% for men), and consumers aged 18 through 34 (64.08% vs. 60.26% for all other age groups). There was no significant difference for seniors.

Figure 6.2. Concern with nutrition.



Data source: CCFI surveys, 2018 through 2022; image created internally based on results from econometric results.

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 (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*

6.3 Consumer behaviours associated with the trend

6.3.1 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). More consumers report seeking information about healthy eating than other issues such as how to spend less money on food, local production, and food safety, to name a few. 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.

Figure 6.3. Canadians are interested in nutrition.

Source: CCFI. (2022). Public trust research. [Report].

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).

6.3.2 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 indicating 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).

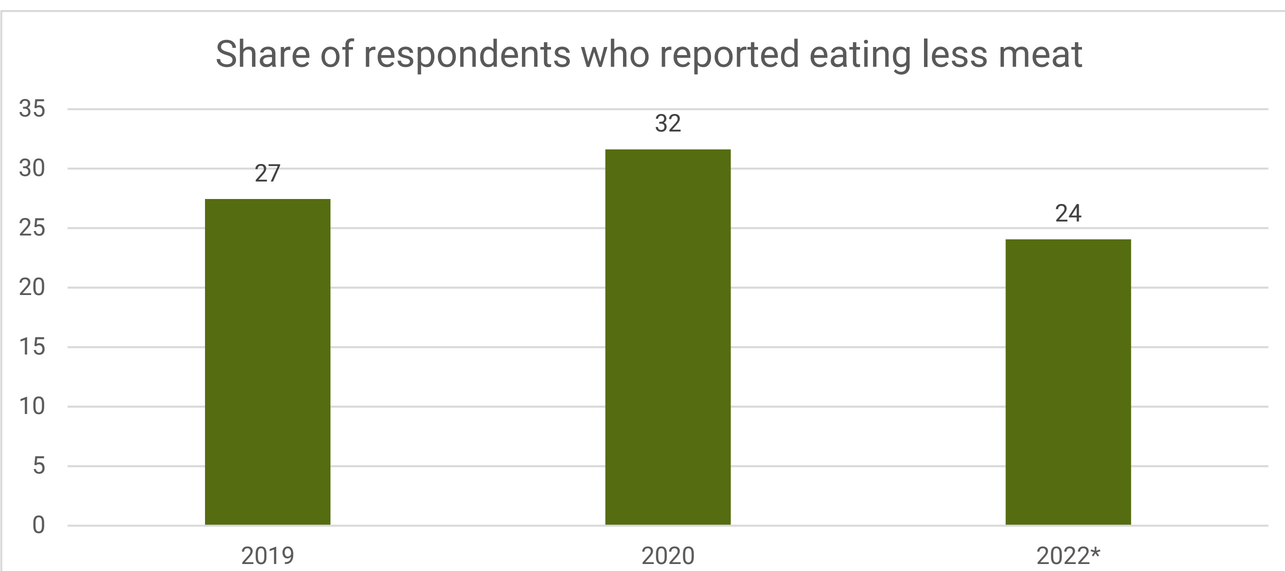
Consumers are also increasingly preoccupied with protein and are seeking to increase their overall protein intake. A 2023 study of attitudes toward protein by the Agri-food Analytics Lab asked Canadians what their preferred source of protein is: almost 50 percent chose animal proteins, while only 12.3 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. The CRSB reported that 34% of respondents had decreased their beef consumption from 2019 to 2020, with cost being the number one reason (CRSB, 2022, p. 13). Similarly, according to CCFI survey data, 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 2021. Health was the most commonly given reason for reducing meat consumption (CCFI), compared to the number two reason according to CRSB data (CRSB, 2022, p. 13).

Figure 6.4. Eating less meat.



Source: CCFI. (2019-2022). Public trust research. [Report].
*Ate less meat *due to the cost of food*.

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.

6.3.3 Choosing to buy organic food

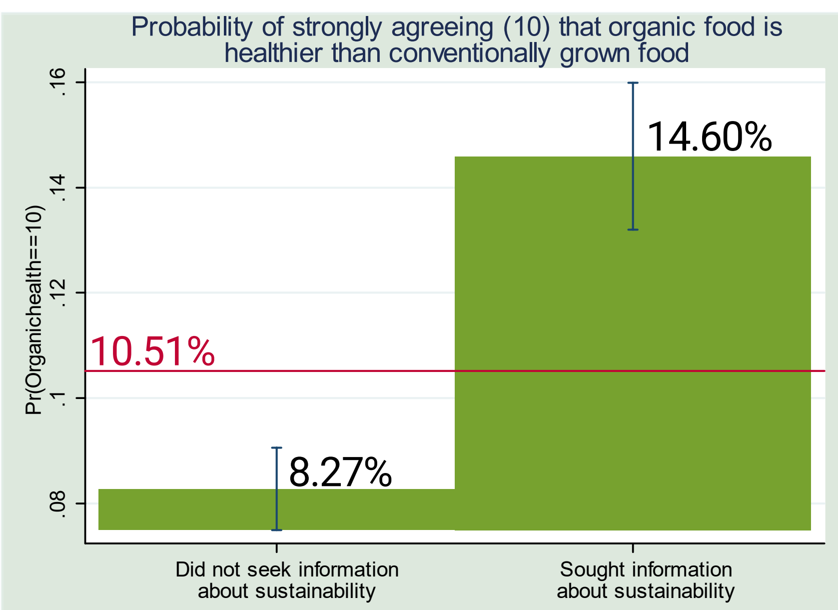
For some consumers, organic food is synonymous with healthier food. The health benefits of organic are perceived by some to be related to characteristics such as higher nutrient content in organic food as well as a lack of pesticide residues on organic products. According to industry experts, a preference 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.

Analysis of the CCFI survey data confirms that a belief in the health benefits of organic food is associated with an interest in environmental sustainability. 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.

Econometric analysis 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. Level of education did not affect the likelihood of thinking that organic food is healthier than non-organic food.

For those who report having sought out information about sustainable or environmentally friendly food production, the likelihood of also strongly agreeing with the statement about organic food is higher than for those who do not report having sought out information about sustainable food production (14.60% vs. 8.27%). The average predicted likelihood of thinking that organic food is healthier than conventional food is 10.51% (red line pictured below).

Figure 6.5. Organic food vs. conventionally grown food.



Data source: CCFI surveys, 2018 through 2022; image created internally based on results from econometric models.

6.3.4 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. The health concerns that drive consumers to change their diets will not, according to several experts, be limited to physical health concerns. A rise in interest in mental health is expected by some experts to increasingly influence food choices, with a subset of the population looking to optimize their diet for improved mental health and brain function. For example, attention has recently been focused on the connection between gut bacteria and mental health with a consequent surge in interest in fermented foods, such as yogurt or kimchi, that promote a healthy gut (Jones, 2023). There is a vast amount of information currently available in books and on the internet about diet and its links to a wide range of specific health concerns, including mental health (A. Li, 2022).

Experts expect this trend toward personalization 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 around 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 or over the internet.

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.

6.4 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. Growing demand for meat and dairy alternatives has also created entirely new uses for existing ingredients, for e.g. oat-based "milk" using Canadian oats is manufactured by the Canadian company Earth's Own.

6.5 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 fleeting 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 increasingly 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 (Nourish Food Marketing, 2023).

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. 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. Loyalty programs, such as PC Optimum, that include detailed customer data regarding both grocery and pharmacy purchases will accelerate the trend. 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.

6.6 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.”

6.6.1 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 personal health data 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 may decline to participate in loyalty programs due to these concerns. They may also be sensitive to marketing efforts, including personalized product suggestions, that would appear to be based on detailed knowledge of their interests 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 personal health information.

6.7 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 trend toward personalization may give rise to specific opportunities for suppliers of foods with specific functional properties. Recent and anticipated future demand growth for flaxseed, for example, can largely be attributed to its health benefits for both humans and animals (in pet food; see Fortune Business Insights, 2020). Research into the functional properties of foods is ongoing, and continuously yields discoveries regarding new properties of both well-known and relatively unknown foods. Health claims will continue to drive sales of food products, especially when they address the health concerns of sizeable market segments. This new demand will, in turn, create opportunities for agricultural producers and suppliers of ingredients.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.

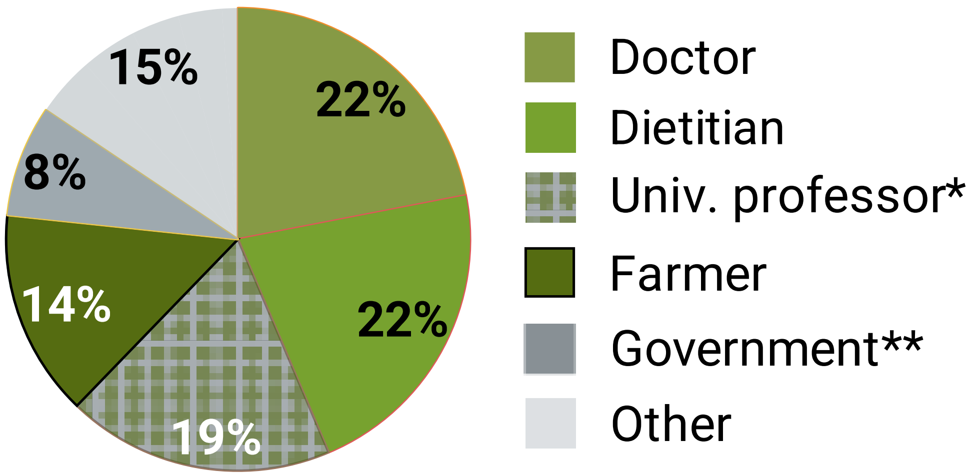
On the other hand, the rise in plant-based meat and dairy alternatives presents opportunities for food manufacturers and suppliers of ingredients. Many large food companies, including Maple Leaf, ADM, and Cargill, are active in developing and selling plant proteins. Demand for these new, high-value-added products can be expected to create additional demand for field crops. While plant-based proteins can be extracted from most crops, pulses enjoy a naturally high protein content and stand to benefit relatively more from the increased demand for plant proteins. Canadian farmers are among the world's leading producers of pulse crops.

Where there are significant value-added market opportunities and a need to spur investment to capitalize on them, the Government may intervene using tools of industrial policy. For example, the Government of Canada has invested in the Protein Industries Cluster which brings together companies active in plant-based protein to develop strategies for industry development and co-fund investments in technology research and commercialization (Innovation, Science and Economic Development Canada, 2023).

Governments also 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, though not the most important, source of information on a complex topic (Charlebois, 2014). Similarly, mandated nutrition fact tables are a relatively highly trusted source of information for consumers. The Government of Canada also regulates the use of health claims on food labels. 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 at right, 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. Sources of information about nutrition.

Whom do people trust to give them good information about nutrition?



*Univ. professor who specializes in food science
**Government agency relating to food or farming

Source: CCFI data, 2019; image created internally.

7 Trend #3: Affordability and availability

7.1 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.

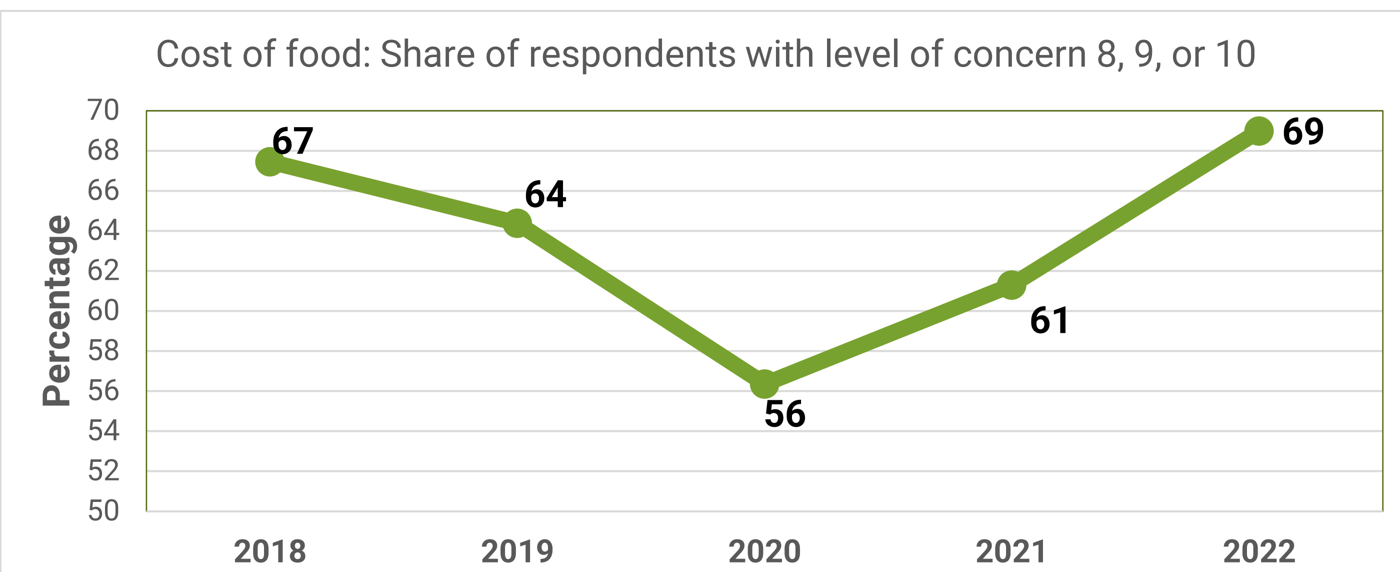
Consumers are expected to show a higher degree of preoccupation with food availability and affordability over the medium term, when compared to the decade prior to 2020. This increasing preoccupation not only results from recent supply disruptions and higher prices, but rather, it is an ongoing response to the future shocks to food production and distribution that are expected by several experts. 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.

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

According to industry experts, the pandemic sharpened consumer focus on food availability. Many consumers were confronted, for the first time in their lives, with empty store shelves during the early weeks of the pandemic when supply chain disruptions coincided with runs on certain grocery staples. Subsequent shocks, including those caused by the war in 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" (levels 8 through 10) has risen in recent years from 56% in 2020, to 61% in 2021, to 69% in 2022. This is higher than the previous highest level of 67% in 2018, as pictured here.

Figure 7.1. Concern with cost of food through time.



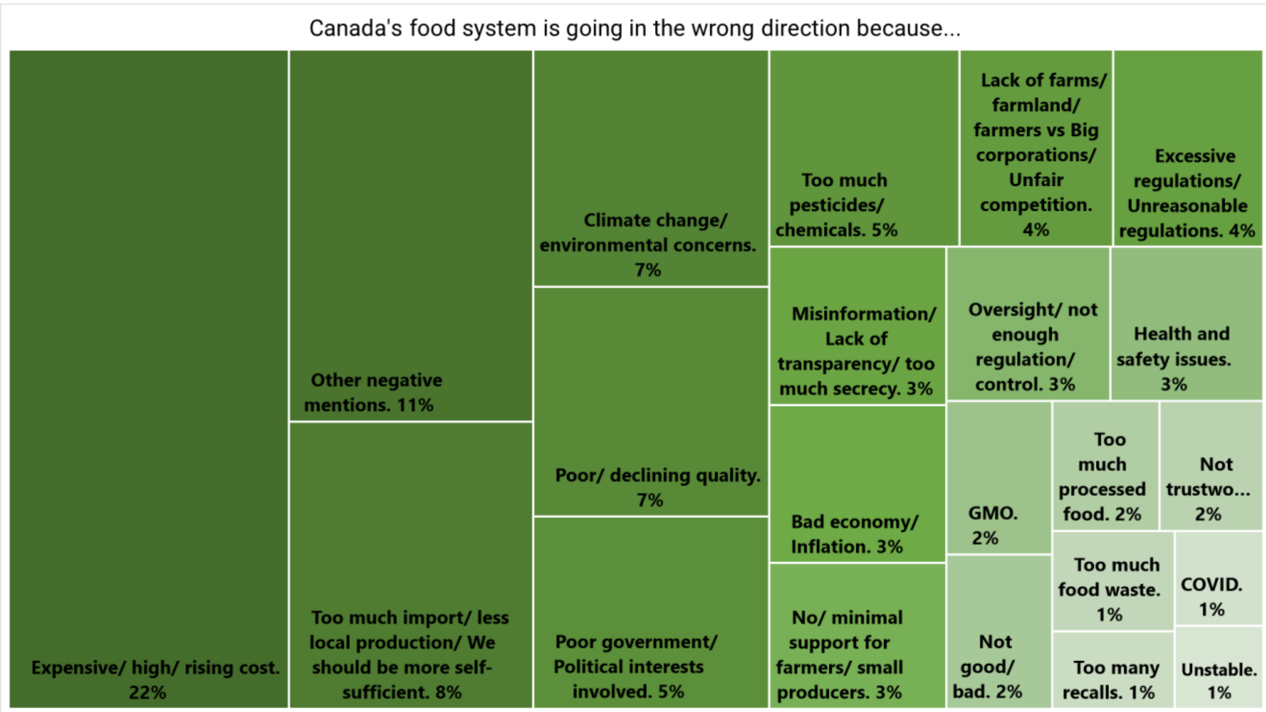
Source: CCFI survey data; image created internally.

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).

Moreover, the cost of food is the most common reason that consumers claim Canada's food system is going in the "wrong direction." The 2022 CCFI survey reveals that, of the 24% who feel it is going in the wrong direction (43% don't know, and 33% think it is going in the right direction), 22% say it is because it is more expensive or because of high/rising costs. The figure below reveals that the other leading reasons the food system is going in the "wrong direction" are: not enough local food, concerns with climate change, and declining food quality.

Figure 7.2. Reasons to believe that Canada's food system is going in the wrong direction.



Data source: CCFI survey data, 2022; image created internally.

7.2.1 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.

7.2.2 Econometric predictors of concern with the cost of food

As discussed earlier in this report, very high levels of concern about the cost of food tend to "cluster" with elevated levels of concern about other food system issues: concern with environmental sustainability, concern with household waste (or actively reducing food loss and waste at home), and concern about food loss and waste in Canada overall. For instance, the average consumer has a 30.26% chance of being very concerned (level 10) with the cost of food; this likelihood rises to 51.92% for consumers who are also very concerned (level 10) with the amount of food loss and waste in Canada, and to 53.48% for those who are also very concerned about the environment. This reflects the fact that there is a subset of the Canadian population that is relatively more interested in food-related topics and may be more likely to see connections between these topics. The connection between environment and affordability may also reflect a belief that environmental degradation could negatively affect food production and drive food prices higher.

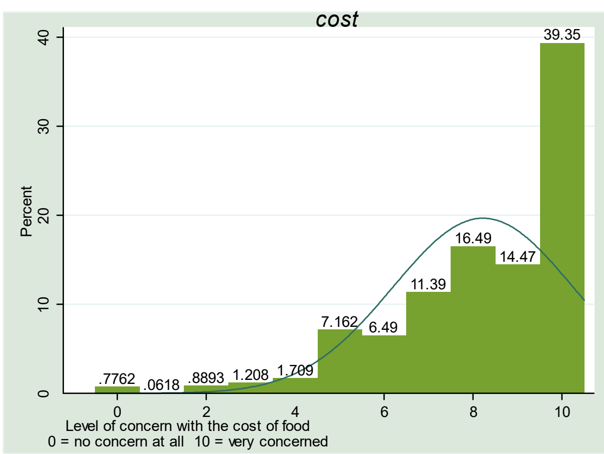
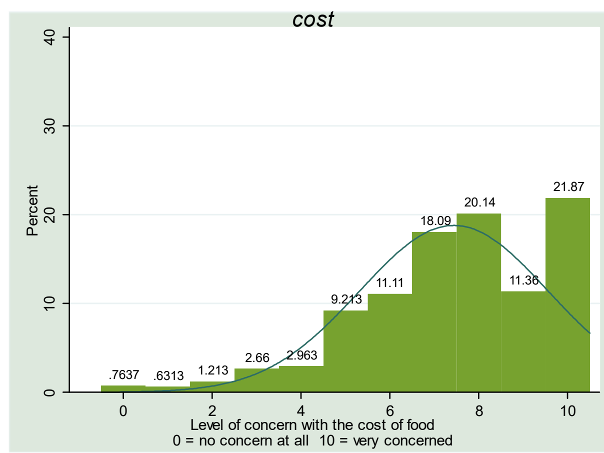
The “unconcerned consumer” is also revealed in the affordability trend. Those who are not at all concerned about food loss and waste in Canada overall (level 0) are more than twice as likely as the average consumer to also have no concern (level 0) with the cost of food (1.67% vs. less than 1% on average). The same is true for consumers unconcerned with environmental sustainability (7.76% vs. less than 1% likelihood of having no concern about the cost of food). This is further evidence of the clustering effect: when consumers have a low level of concern about one particular issue, they are more likely to have a low level of concern about other issues. Recall, however, that the “unconcerned consumer” comprises only 0.33% of the population.

7.2.3 Demographic and socioeconomic characteristics associated with or driving the trend

An elevated 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, the trends are similar, as pictured below: 39% of low-income households were “very concerned” (level 10) with the cost of food, while only 22% of high-income households.

Few respondents rated their levels of concern about cost of food below a 5 (moderate concern). This 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 7.3. Level of concern with the cost of food (0-10), by 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.

The demographic analysis reveals that those aged 18 to 35 are actually less likely to be concerned (levels 8, 9, or 10) with affordability, after controlling for income . Unlike many other issues, neither women nor seniors are more likely to be concerned with affordability than men and non-seniors.

7.3 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. - Industry expert*

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. Consumers may also be responding to the rising cost of living: according to a July 2023 Abacus survey (n=2,486), 72% of respondents count the rising cost of living among the top three issues facing Canada; this is up from 71% in June 2023 (Coletto, 2023). 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.

7.4 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. The same survey revealed that, of those who believe Canada's food system is going in the "wrong direction," the second most common reason (behind affordability) was a lack of attention to local food ("too much import / less local production / we should be more self-sufficient). 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, in some cases, be more expensive than competing food produced further away.

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, certain marketing models that bypass the grocery store are becoming more popular. 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.

7.5 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.

7.6 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 exceedingly 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 soaring 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.

7.7 Potential disruptors of the trend

Should agricultural production increase significantly in the future, either in response to favourable climatic conditions, innovative 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. Analysis of global food demand and supply factors by experts would suggest, however, that global food markets are likely to be subject to more frequent supply-side shocks. This, combined with anticipated higher demand in emerging economies, is likely to push prices upwards (Mbow et al., 2019).

On the demand side, Canadian 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. However, they may not revert completely. Some industry experts expect that habits developed in response to recent high rates of inflation, such as shopping at discount retailers, will persist. History has shown that significant shocks can result in lasting consumer behaviour change. People who lived through the Great Depression, for example, remained preoccupied with cost per unit of nutrition for decades to come. Some depression-era attitudes toward food may even have been passed down from generation to generation (Chandler, 2016).

7.8 Implications of the trend for government and industry decision-makers

Consumers are expected to continue to make food choices that are reflective of a high degree of price sensitivity in the coming years. Even if food price inflation rates slow, some industry experts expect that consumer behaviour changes may be “sticky” in the sense that they persist beyond the conditions that gave rise to them. 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 (or post-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 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 pressure from food companies and food retailers to keep their prices low, especially when it is increasingly difficult for the latter to communicate effectively with consumers regarding price increases (Sands, 2022).

The need to keep production costs down, while still responding to environmental concerns, creates a significant challenge for farmers and processors. Solutions that can potentially deliver both outcomes, such as the adoption of precision agriculture, present a unique opportunity for Canadian agriculture to communicate how they are keeping food costs down while they are improving the environment.

Conversely, there is a risk of a negative public reaction to policies that may increase the cost of food. This dynamic was seen following the government's announcement of its 30% fertilizer emission reduction target. While not the intent of the policy, media impression was that it could lead to reduced fertilizer use, reduced food production, and increased food prices (Skerritt, 2022). In an era of increased concern about food prices, it is critical to consider the impact of public and private policies on food affordability.

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 Agri-food Analytics lab found that 44% of

Canadians believe that governments should intervene and regulate the price of some staples at the grocery store (Agri-Food Analytics Lab, 2023a).

On the demand side, governments play a key 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. The concepts of “reshoring” and “food sovereignty” are relevant in this context. Locally produced food is less vulnerable to transportation system disruptions, geopolitical instability, and severe climate risks that may be endemic to regions from which Canada imports (e.g., water shortages in California or intense storms in the Caribbean). On the other hand, the development of local supply chains can be costly. There may be high upfront costs related to needed infrastructure and machinery as well as higher ongoing costs, for example, to cover energy used in greenhouses where the local growing season is not long enough. Another strategy to increase security of supply is to diversify the sources of supply. While this could include local production, it could also simply be several geographically diverse sources of imports.

Efforts to improve security and reliability could also include an increased focus on securing agreements with key suppliers that lock-in quantities, prices, or both. The use of contracts to govern transactions in agriculture and food markets is a long-standing practice. That said, many agriculture and food commodities are still traded on spot markets. The grocery store can itself be considered a type of spot market, with the consumer as the ultimate price-taker in any given store on any given day. With increasing concern about high and volatile prices, food buyers throughout the supply chain may increasingly seek to avoid spot markets by entering into contracts that shift the burden of production and/or price risk to others. The pricing and distribution of risk in these contracts may be a function of the relative market power of buyers and sellers. Large food manufacturers, for example, may be able to use their market power to shift the burden of risk to agricultural producers through contract terms. Appropriate risk-sharing and risk-pricing is expected to be an increasingly prominent issue throughout the food system.

8 Trend #4: Social sustainability

8.1 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.

8.2 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 key 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. CCFI has tracked 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.

The CCFI surveys asked various questions which may be grouped under the theme of social sustainability. In all years, CCFI has asked about the “humane treatment of farm animals” (level of concern 0 through 10) and about “having enough food to feed people in Canada” (level of concern 0 through 10). In 2018 through 2021, respondents were asked about concern with “unemployment in Canada” (level of concern 0 through 10). In 2018 and 2019, respondents were asked about their level of concern with “obesity in Canada” and “having enough food to feed people outside Canada” (0 through 10 for both questions).

The weighted frequency distributions of these variables by level of concern are displayed below. Health care costs (panel A) had the largest within-variable share of responses as a level 10 at 25.16% of all responses on level of concern. The humane treatment of animals on farms (panel B) is another variable where level 10 had the greatest in-variable frequency of responses at 18.33% of all responses. Three variables had level 5 (moderate concern) as the largest share of in-variable responses: 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. Set of six social sustainability issues, by level of concern.

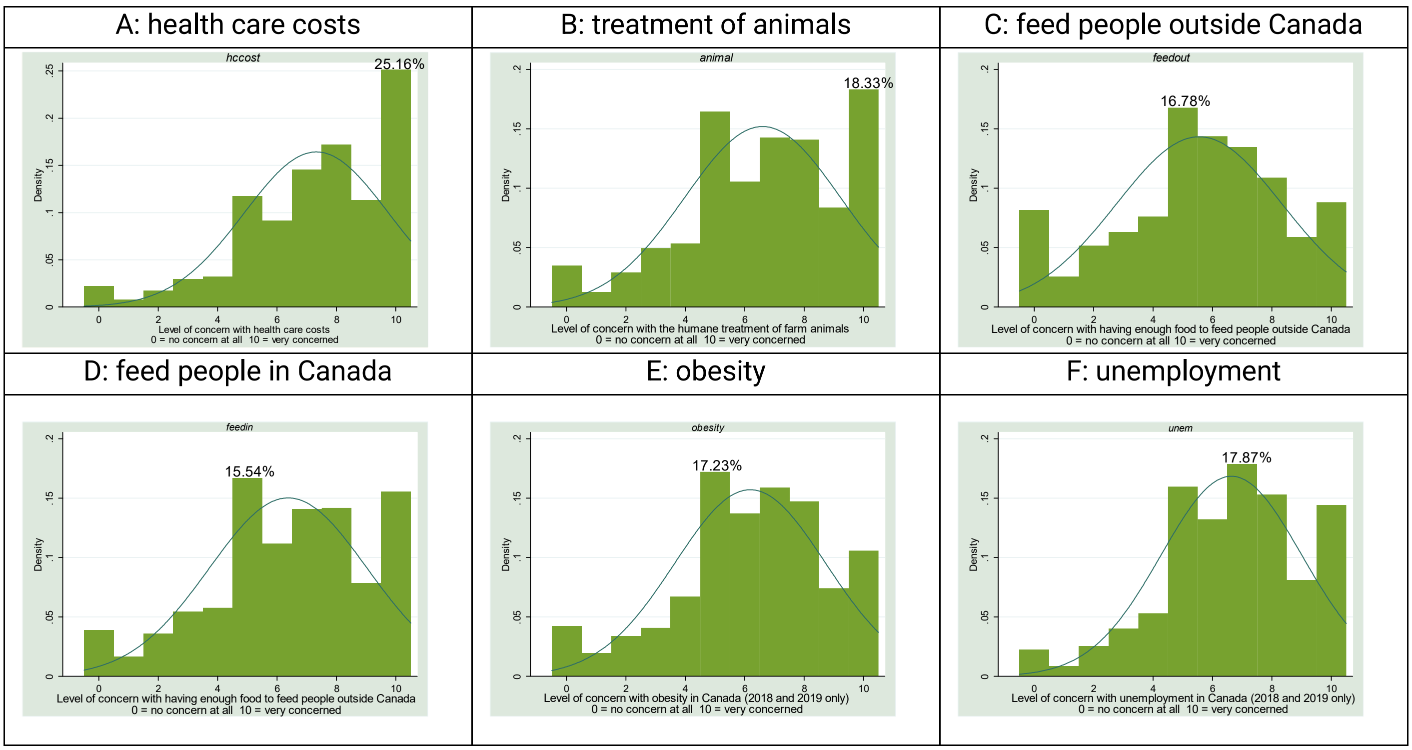
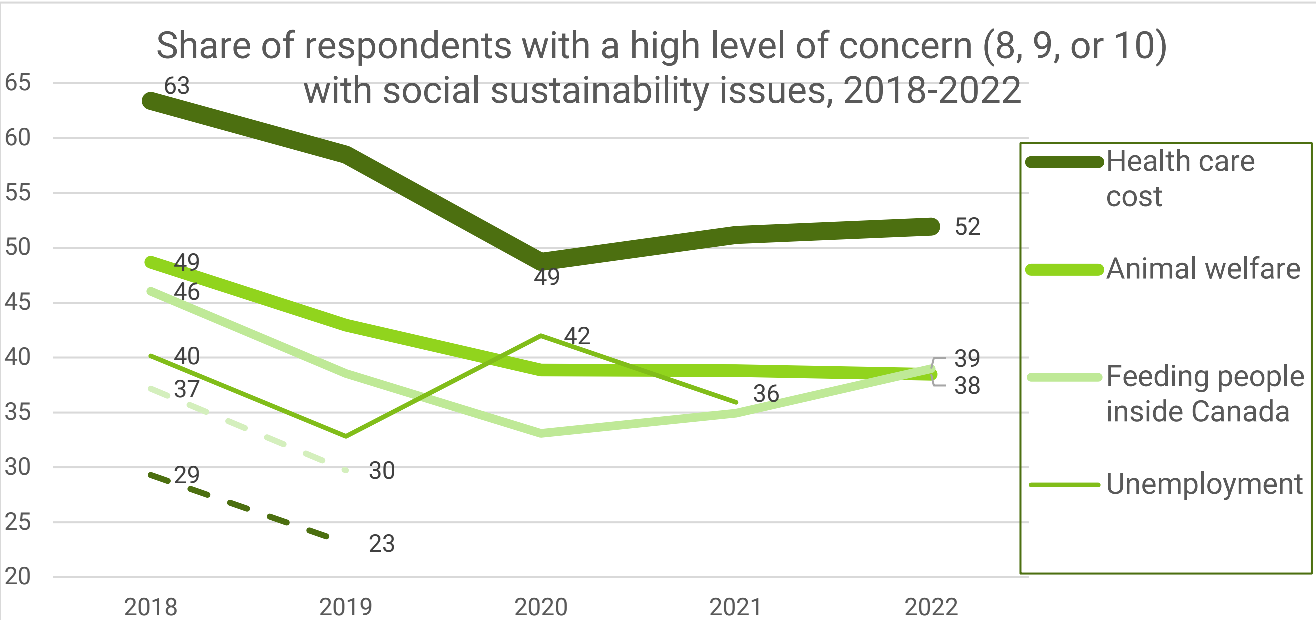


Figure 8.2 shows the evolution through time of the share of respondents concerned (levels 8, 9, or 10) with social sustainability issues. The number one issue is health care cost, with 52% of respondents in 2022 having this concern, compared with 39% for the number two issue, feeding people inside Canada. Concern with health care cost, animal welfare, and feeding people inside Canada declined from 2018 to 2020. The share of respondents concerned with with health care costs and feeding people inside Canada increased from 2021 to 2022. Concern with unemployment is the most volatile of the six issues, landing at 36% in 2021, down from 42% in 2020.

The variability in concern highlights the challenge of understanding the long term trend in social sustainability. While Canadians had been becoming less concerned, that trend reversed in 2020. While it is not possible to assign causation, the reverse does correlate to the beginning of the pandemic. It may be that the shock of COVID-19 made Canadians more sensitive to the social impacts of the food system.

Figure 8.2. Social sustainability concerns through time.



8.2.1 Demographic and socioeconomic characteristics associated with or driving the trend

A summary table of the demographic and socioeconomic characteristics associated with each of the six social sustainability issues is displayed here and further discussed below.

Figure 8.3. Social sustainability concerns by sociodemographic characteristics.

	Health care cost	Animal welfare	Unemployment	Feeding people in Canada	Feeding people outside Canada	Obesity
High income	Less	Less		Less	Less	
Low income		More				
Women		More			More	More
Seniors	More	Less				Less
Age 18-35	Less	Less				

A dark cell indicates no difference in likelihood of being very concerned with that social sustainability issue compared to the set of respondents not in possession of that demographic characteristic (e.g., women vs. men).

Data source: CCFI surveys, 2018 through 2022; table created internally based on results from econometric models.

Those with high income (annual household income greater than $100K) are less likely than households with less income to be concerned with most social sustainability issues than those in lower income brackets (specifically: having enough food to feed people inside and outside Canada, health care costs, and animal welfare).

Low-income respondents (annual household income less than $40K) are more likely than households with higher levels of income to be concerned with only one social sustainability issue: animal welfare. Low-income status makes no difference in the likelihood of being very concerned with health care costs, unemployment, feeding people inside and outside Canada, and obesity. These results imply that low-income households have greater concerns than social sustainability, such as food affordability (see section 7.2.3).

Women are more likely than men to be concerned with animal welfare, having enough food to feed people outside Canada, and obesity. Gender makes no difference in the likelihood of being very concerned with health care costs, unemployment, and feeding people in Canada.

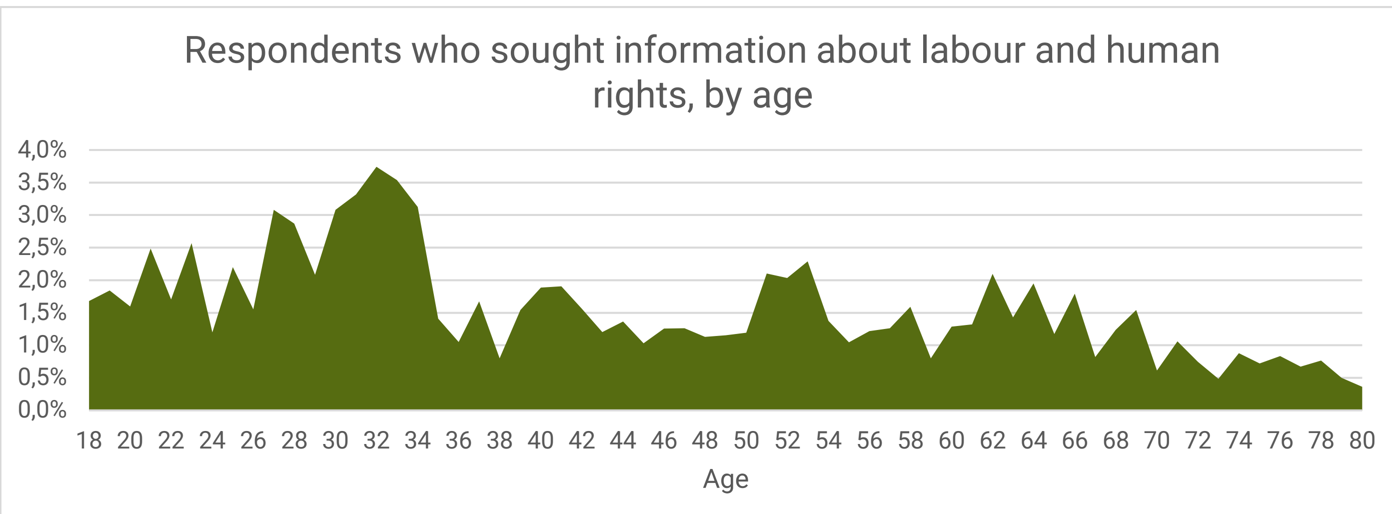
Seniors are more likely than non-seniors to be concerned about health care costs, but less likely for animal welfare and obesity. Being a senior makes no difference in the likelihood of being very concerned about unemployment or feeding people.

Consumers aged 18 to 35 are less likely than other age groups to be very concerned about health care costs and animal welfare. This age group is neither more nor less likely to be concerned about unemployment, feeding people, or obesity. However, this analysis groups ages 18 to 35 into one group; results could differ when looking at a smaller slice, such as those aged 30 to 35.

Notably, demographic characteristics make no difference in the likelihood of being concerned with the issue of unemployment. This implies that it is equally concerning across all ages, genders, and income brackets.

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 below, 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 the 2022 survey, and the "past two years" for surveys 2020 and 2021). 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 8.4. Labour and human rights.



8.3 Impact of this trend on consumer behaviours

At the present time, the trends in concerns with social sustainability issues are 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.

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.

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. According to the 2022 CCFI survey, 33% of consumers typically look for the Fair Trade logo when shopping, compared with 52% for Non-GMO Project Certified (the leading logo) and 24% for the logo in last place, the Marine Stewardship Council (Canadian Centre for Food Integrity, 2022).

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. However, these labels may not always be trusted: 46% of Canadians are concerned with misleading food labels/descriptions, and 50% are concerned about greenwashing or misleading information about products (CCFI, 2022, p.19).

8.4 Industry responses to the trend

While environmental sustainability is often seen as a broad topic, social sustainability is even less well defined, broader and more nebulous for industry to respond to, particularly in the Canadian context. For example, while the consumer trends noted above consider elements like animal welfare, in the context of investor-led ESG pressures, the global dialogue on the social component tends to focus on human rights (Thomas, 2021) which may be less relevant in Canada where stronger human rights protections are enshrined in law. This may create a different expectation between consumers and investors on how the industry responds to social sustainability.

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 or more 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 (Bimbo Canada, 2023). 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 (Maple Leaf Foods, 2023).

A few companies are trying to set themselves apart through their commitment to improved labour practices using consumer-facing label claims or logos. 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 (Agricultural Justice Project, 2023). It remains to be seen if this movement or something similar gathers steam in Canada.

When it comes to animal welfare, which is a more long-standing trend, several Canadian companies do try to set themselves apart in the consumer marketplace 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. Nestle Canada announced in 2016 that it would move to using only cage-free eggs in all of its Canadian food products by 2025 (Nestlé Canada, 2016).

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" (National Farmers Union, 2023).

8.5 Expected future of the trend

As the trend is in its beginning stages, it remains to be seen how it will ultimately shape Canadian consumer demand for food. The relatively greater concern shown by young people for social sustainability may be an indication that its influence will grow with time. Some industry experts expect that DEI and labour considerations will be an increasingly crucial 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.

8.6 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 BIPOC leadership/ownership or better treatment of workers. To effectively differentiate one's business on the basis of social sustainability, much more effective communication to consumers regarding social factors is needed. At the present time, it is not usually possible to differentiate between companies or products based on social sustainability. Other than the Fair-Trade logo that applies only to certain imported products, and the free-range claim that applies to certain animal products, there are no easily understood metrics or symbols that communicate social sustainability attributes to consumers. Development of clear and simple messages, claims, and metrics that directly address the social issues of greatest concern to consumers will be a necessary first step toward creating a marketable advantage. As with environmental sustainability claims, social sustainability claims would also ideally be harmonized across the food system and backed by credible verification.

Governments, for their part, 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 like AAFC's AgriDiversity program, to encourage diversity in the farm and food sector.

9 Conclusion

The four trends discussed in this report present opportunities and challenges for the agri-food sector. While the domestic market may represent only one of many markets served by Canadian food producers and manufacturers, it is an important market for most.

Canadians are a diverse bunch. We are not all seeking the same outcomes from our food choices but we do share some priorities. Canadians have elevated expectations from the food system. We want affordable, healthy food that supports environmental and social sustainability. Furthermore, our research has revealed that a sizeable subset of the Canadian population, the “concerned consumers,” are relatively much more interested in food system issues and likely to make food choices based on a set of food-related values and strongly held beliefs. Interested Canadians seek information about food from a wide variety of sources, including their peers and social media. There is a great deal of food-related information available to the Canadian consumer and some of it is confusing or contradictory.

Canadians demonstrate a preference for locally produced food and express confidence in Canadian farmers. This represents a source of goodwill that should be tapped by Canadian food producers and manufacturers; it suggests that claims of improved performance by local producers may be more believable than those made by non-Canadian competitors. On the other hand, consumers are both confused by and somewhat sceptical of certain claims by food manufacturers and retailers. Consumers demonstrate relatively low reliance on logos or label claims and are concerned about “greenwashing.”

Effective communication with the Canadian consumer about issues that matter to them will be critical. In a crowded informational environment characterized by misinformation and confusion, getting one’s message across is not easy. This is especially the case for complex issues such as environmental and social impact. However, messaging may be targeted toward demographic slices which are more likely to be concerned with certain topics.

Efforts to improve transparency through increased measurement and reporting will help to improve consumer sentiment as well as satisfy investors. Concrete changes to production or business processes will also be needed. The pressure to make costly changes while at the same time keeping food affordable is a source of tension throughout the food system. How to best distribute the risks and costs between different value chain participants, and between the private and public sector, is expected to become an increasingly prominent question. It will not likely be possible to pass all the costs on to consumers, especially given heightened concern about food security.

10 References

Agricultural Justice Project. (2023). *Food Justice Certification*. https://www.agriculturaljusticeproject.org/en/

Agri-Food Analytics Lab. (2020a). *Keto dieting*. Dalhousie University. https://www.dal.ca/sites/agri-food/research/keto-dieting.html

Agri-Food Analytics Lab. (2020b, October 7). *Home Food Gardening during COVID-19*. Dalhousie University. https://www.dal.ca/sites/agri-food/research/home-food-gardening-during-covid-19.html

Agri-Food Analytics Lab. (2021a). *Report on Produce*. Dalhousie University. https://www.dal.ca/sites/agri-food/research/report-on-produce.html

Agri-Food Analytics Lab. (2021b, April 21). *COVID-19 Well Being*. Dalhousie University. https://www.dal.ca/sites/agri-food/research/covid-19-well-being.html

Agri-Food Analytics Lab. (2022a, April 26). *Post-pandemic household food gardening*. Dalhousie University. https://www.dal.ca/sites/agri-food/research/post-pandemic-household-food-gardening.html

Agri-Food Analytics Lab. (2022b, June 28). *Local Food*. Dalhousie University. https://www.dal.ca/sites/agri-food/research/local-food.html

Agri-Food Analytics Lab. (2023a, April 4). *New Survey Suggests Majority of Canadians Distrust Grocers But Do Blame Other Factors For Higher Food Prices*. Dalhousie University. https://www.dal.ca/sites/agri-food/research/grocer-distrust.html

Agri-Food Analytics Lab. (2023b, April 27). *Plant-based products*. Dalhousie University. https://www.dal.ca/sites/agri-food/research/plant-based-products.html

Agri-food Innovation Council. (2019). *Plant-based protein market global and Canadian market analysis*. https://nrc.canada.ca/sites/default/files/2019-10/Plant_protein_industry_market_analysis_summary.pdf

Aguiar, L. K., Martinez, D. C., & Caleman, S. M. Q. (2018). Consumer Awareness of Palm Oil as an Ingredient in Food and Non-Food Products. *Journal of Food Products Marketing*, *24*(3), 297–310. https://doi.org/10.1080/10454446.2017.1266559

Allison, C. (2023, February 7). Americans and Canadians are shopping like the recession is here. *NIQ*. https://nielseniq.com/global/en/insights/analysis/2023/americans-and-canadians-are-shopping-like-the-recession-is-here/

Beardsworth, A., & Keil, T. (2002). *Sociology on the Menu: An Invitation to the Study of Food and Society*. Routledge.

Bimbo Canada. (2023). *Nourishing a Better World* [Sustainability]. Bimbo Canada. https://bimbocanada.com/sustainability

Canadian Centre for Food Integrity. (2018). *2018 consumer trust report*.

Canadian Centre for Food Integrity. (2019). *2019 consumer trust report*.

Canadian Centre for Food Integrity. (2021). *2020 consumer trust report*. https://www.foodintegrity.ca/research/consumer-trust-research/

Canadian Centre for Food Integrity. (2022). *CCFI 2022 survey* [Data tables].

Chandler, A. (2016, December 22). *How the Great Depression Still Shapes the Way Americans Eat*. The Atlantic. https://www.theatlantic.com/business/archive/2016/12/great-depression-eat/511355/

Charlebois, S. (2014). *Canada's Food Guide: Awareness, Understanding, Affordability, and Barriers to Adoption*. https://cdn.dal.ca/content/dam/dalhousie/pdf/management/News/Canada%20Food%20Guide%20March%2014%20EN.pdf

Coletto, D. (2023, July 26). Conservatives lead by 10 before federal cabinet shuffle. *Abacus Data*. https://abacusdata.ca/conservatives-lead-by-10-on-the-heels-of-the-federal-cabinet-shuffle/

CRSB. (2017). *Sustainable Beef Production Standard*. Canadian Roundtable for Sustainable Beef. https://www.crsbcertified.ca/assets/Uploads/Framework-Documents/CRSB-Sustainable-Beef-Production-Standard-v1.1.pdf

CRSB. (2022, March). *Consumer Percepions of Beef Sustainability* [Slide deck].

Deloitte. (2021). *Future of food: A Canadian perspective*. Deloitte Canada. https://www2.deloitte.com/ca/en/pages/consumer-business/articles/future-of-food-a-canadian-perspective.html

Earnscliffe Strategy Group. (2022). *2022 Qualitative Research on Consumer and Producer Views Towards Sustainability in Agriculture Final Report*. https://epe.lac-bac.gc.ca/100/200/301/pwgsc-tpsgc/por-ef/agriculture_agri-food/2022/065-21-e/POR065-21-Report-EN.pdf

Ernst & Young Global Limitied. (2021, August 5). *69% of Canadian Consumers expect companies to solve sustainability issues*. https://www.ey.com/en_ca/news/2021/08/sixty-nine-percent-of-canadian-consumers-expect-companies-to-solve-sustainability-issues

Euromonitor International. (2021). *Sustainable Food: Will Consumers Pay a Premium?* Euromonitor. https://www.euromonitor.com/article/sustainable-food-will-consumers-pay-a-premium

Fair Trade Canada. (2023). *Consumer Trends*. Fairtrade Canada. https://fairtrade.ca/consumer-trends/

Fortune Business Insights. (2020). *Flax Seed Market Size, Industry Share | Forecast 2030*. Food and Beverages. https://www.fortunebusinessinsights.com/industry-reports/flax-seed-market-100547

Fradella, A. (2022, November 16). *Behind the Numbers: What's Causing Growth in Food Prices*. Statistics Canada. https://www150.statcan.gc.ca/n1/pub/62f0014m/62f0014m2022014-eng.htm

Gad Mohsen, M., & Dacko, S. (2013). An extension of the benefit segmentation base for the consumption of organic foods: A time perspective. *Journal of Marketing Management*, *29*(15–16), 1701–1728. https://doi.org/10.1080/0267257X.2013.800896

Gott, J., MacKenzie, M., & Halliday, K. (2023, July 11). *No Longer Niche: Climate-Conscious Purchasing in Canada*. Canada - EN. https://www.bcg.com/en-ca/publications/2023/climate-and-the-canadian-consumer

Innovation, Science and Economic Development Canada. (2023, February 13). *Canada's Protein Industries Cluster*. Global Innovation Clusters; Innovation, Science and Economic Development Canada. https://ised-isde.canada.ca/site/global-innovation-clusters/en/canadas-protein-industries-cluster

Ipsos. (2023). *A New World Disorder?* https://www.ipsos.com/en/global-trends

Jones, J. F. (2023, February 14). *12 Foods to Improve Your Gut Health Overnight* [Healthy Eating 101]. EatingWell. https://www.eatingwell.com/article/8021156/foods-to-improve-gut-health-overnight/

Li, A. (2022, December 1). Mental Health and Nutrition. *Canadian Digestive Health Foundation*. https://cdhf.ca/en/mental-health-and-nutrition/

Li, S., & Kallas, Z. (2021). Meta-analysis of consumers' willingness to pay for sustainable food products. *Appetite*, *163*, 105239. https://doi.org/10.1016/j.appet.2021.105239

Maple Leaf Foods. (2022). *Raise the Good in Food*. Maple Leaf Integrated Report 2022. https://www.mapleleaffoods.com/wp-content/uploads/sites/6/2023/06/MLF-2022-Integrated-Report_Final.pdf

Maple Leaf Foods. (2023). Purpose and passion, our company culture. *Maple Leaf Foods*. https://www.mapleleaffoods.com/careers/company-culture/

Mbow, C., Rosenzweig, C., Barioni, L. G., Benton, T. G., Herrero, M., Krishnapillai, M., Liwenga, E., Pradhan, P., Rivera-Ferre, M. G., Sapkota, T., Tubiello, F. N., & Xu, Y. (2019). Food Security. In P. R. Shukla, J. Skea, E. C. Buendia, V. Masson-Delmotte, H.-O. Pörtner, D. C. Roberts, P. Zhai, R. Slade, S. Connors, R. van Diemen, M. Ferrat, E. Haughey, S. Luz, S. Neogi, M. Pathak, J. Petzold, J. Portugal Pereira, P. Vyas, E. Huntley, … J. Malley (Eds.), *Climate Change and Land: An IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse has fluxes in terrestrial ecosystems*. https://www.ipcc.ch/srccl/chapter/chapter-5/

National Farmers Union. (2023). *BIPOC Caucus*. National Farmers Union. https://www.nfu.ca/about/bipoc-caucus/

Nestlé Canada. (2016, December 8). *Nestlé Canada commits to using 100% cage-free eggs*. Nestlé. https://www.corporate.nestle.ca/en/media/newsandfeatures/cage-free

Nourish Food Marketing. (2023). *2023 Trend Report*. https://www.nourish.marketing/trend-report

Powell, C. (2016, May 30). *Canadians are craving ethnic foods*. Canadian Grocer. https://canadiangrocer.com/canadians-are-craving-ethnic-foods

Principles of Marketing. (2022). 3.2 Low-Involvement Versus High-Involvement Buying Decisions and the Consumer's Decision-Making Process. In *Consumer Behavior: How People Make Buying Decisions*. BCcampus. https://opentextbc.ca/principlesofmarketingh5p/chapter/low-involvement-versus-high-involvement-buying-decisions-and-the-consumers-decision-making-process/

Rana, J., & Paul, J. (2017). Consumer behavior and purchase intention for organic food: A review and research agenda. *Journal of Retailing and Consumer Services*, *38*, 157–165. https://doi.org/10.1016/j.jretconser.2017.06.004

Sands, G. (2022, June 18). *How consumers are being milked by Canada's opaque dairy supply management system*. Toronto Star. https://www.thestar.com/business/how-consumers-are-being-milked-by-canada-s-opaque-dairy-supply-management-system/article_785ca67a-c944-57bd-a888-f32df00838b3.html

Skerritt, J. (2022, July 27). Canada wants to cut fertilizer emissions, but farmers say it could result in less food. *Financial Post*. https://financialpost.com/commodities/agriculture/trudeau-spars-with-farmers-on-climate-plan-risking-grain-output

Statistics Canada. (2022, October 26). *Immigrants make up the largest share of the population in over 150 years and continue to shape who we are as Canadians*. https://www150.statcan.gc.ca/n1/daily-quotidien/221026/dq221026a-eng.htm

Thomas, R. (2021, June 8). *Tackling social challenges in the agriculture sector for a sustainable food system*. World Business Council for Sustainable Development (WBCSD). https://www.wbcsd.org/pb5bd

United Food and Commercial Workers Union. (2023). *Food Justice*. UFCW Canada - Canada's Private Sector Union. http://ufcw.ca/index.php?option=com_content&view=article&id=32010:food-justice&catid=9978:food-justice&Itemid=2383&lang=en

Webber, C. B., & Dollahite, J. S. (2008). Attitudes and Behaviors of Low-Income Food Heads of Households Toward Sustainable Food Systems Concepts. *Journal of Hunger & Environmental Nutrition*, *3*(2–3), 186–205. https://doi.org/10.1080/19320240802243266

11 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

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
highinc	>$100,000	>$100,000	>$100,000	>$120,000	>$100,000
lowinc	<$40,000				
youngconsumer	[age 18 through 35]				

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.