



POLICY BRIEF 2022

Eating Beyond Labels:

Food Waste reduction, but not as a food security solution

Fernanda Díaz-Osorio

The LEVEL Youth Policy Program takes place on the traditional and unceded territories of the *xʷməθkʷəjəm* (Musqueam), *Sḵwxú7mesh* (Squamish) & *səlilwətaɣ* (Tseil-Waututh) Coast Salish peoples.

GRAPHIC DESIGN

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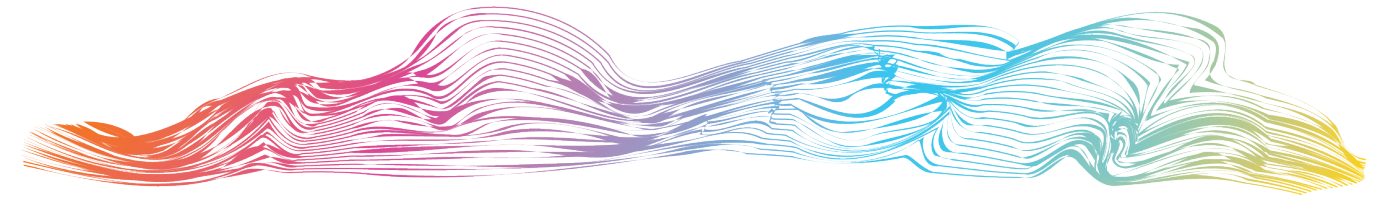
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About the LEVEL Initiative

LEVEL is a youth engagement initiative of Vancouver Foundation that aims to address racial inequity. We do this by investing in the leadership capacity of Indigenous, racialized, immigrant, and refugee youth to create more opportunities throughout the non-profit and charitable sector.

Despite being the fastest-growing youth populations in British Columbia, Indigenous, immigrant, and refugee youth don't have the same opportunities as other young people. Race continues to be a factor that hinders their ability to have a say in decisions that impact their lives.

LEVEL empowers these youth by building their capacity to challenge and change those systems that hinder their ability to build a more just world.

LEVEL consists of three pillars of work to advance racial equity

1. LEVEL Youth Policy Program
2. LEVEL Youth Organizing
3. LEVEL BIPOC Granting

About the LEVEL Youth Policy Program (LEVEL YPP)

The LEVEL Youth Policy Program (LEVEL YPP) brings together young people between the ages of 19 and 29 from across British Columbia who identify as being Indigenous or racialized immigrants or refugees. Indigenous and racialized Newcomer youth are dispropor-

tionately impacted by certain public policies but are rarely included in the development and implementation of public policy process. The LEVEL YPP aims to provide these youth with equitable training and leadership opportunities to better navigate the public policy landscape, and to develop new tools and skills to influence, shape, and advocate for policy changes that are relevant in their own communities. Having young people directly involved in shaping policies that impact their lives is essential to creating systemic, meaningful change. The LEVEL YPP's training is grounded from and within Indigenous peoples' worldviews, which the program acknowledges, could vary from person-to-person or nation-to-nation. Indigenous worldviews place a large emphasis on connections to the land. This perspective views the land as sacred; where everything and everyone is related and connected; where the quality of the relationships formed are key in life; where what matters is the success and well-being of the community, and where there can be many truths as they are based on individual lived experiences.¹ As such, an important premise of this training is to centre and place a particular focus on the fact that the work that has gone into developing this training, as well as the training itself, has taken and will take place on unceded (never given away/stolen) territories of the *həŋq'əmin'əŋ*-speaking Musqueam peoples, of the Halkomelem-speaking Tseil-Waututh peoples, and of the *sníchim*-speaking *Sḵwxú7mesh* (Squamish) peoples.

1. <https://www.ictinc.ca/blog/indigenous-peoples-worldviews-vs-western-worldviews>

Biography

Fernanda Díaz-Osorio



I am an uninvited guest on Coast Salish lands where I moved from my dear city of Oaxaca, Mexico. I graduated from the University of British Columbia (UBC) in the Faculty of Land and Food Systems. I laugh loud and often, especially when surrounded by passionate friends who want to change the world. I dream of increasing educational opportunities for LatinX children and hope never to lose my curiosity. I love complex questions, trying new things, and despite growing up in the city, I have fun getting my hands dirty (with soil)! I enjoy meeting strangers and am a small-talk fan. I start every day with a cup of coffee and write everything on my google calendars. I de-stress by running along False Creek, and I am grateful to the urban planners who decided to build so many tennis courts in Vancouver!

The LEVEL Youth Policy Program (LEVEL YPP) guided me to explore the potential of policy in Canada. My policy brief is the interaction between my experiences growing up in Mexico, moving to Canada, and my hopes for the future.

I hope this report encourages people to reflect on and value their lived experiences. Please get in touch if you agree (or disagree) about the issues mentioned here, or if you just want to chat about common interests.

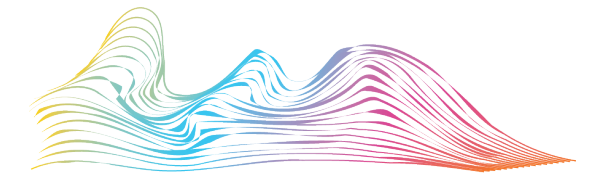
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Objectives

The objectives of this policy brief are:

- To inform the public about food loss and waste in Canada and its impacts.
- To document the relationship between food waste and food insecurity.
- To assess current laws and initiatives tackling food waste.
- To propose ways to decrease food waste in Canada.



Policy regulation can play a key role in reducing food waste.

Executive Summary

Food loss and waste (FLW) has environmental, economic, and social impacts. Valuable resources are wasted every time food is sent to the compost or landfill. Food is wasted across the entire supply chain.

In Canada, most of the FLW happens at the consumer level (retail and household). A big part of food waste at the consumer level can be avoided. In order to mitigate the environmental impact of FLW, we should strive to reduce it, especially at the source level.

Reducing FLW is not a solution to food insecurity. Food insecurity in Canada is an income issue. People are going hungry because they cannot afford food, not because there is not enough food for them to eat.

Canada committed in 2015 to halve food waste by 2030. In its efforts to accomplish its goal, Canada has implemented various strategies. Among the strategies, encouragement to donate food (tax incentives, liability protection, and safety requirements) and a food waste innovation challenge have been implemented. In order to accomplish the goal by 2030, systemic change has to happen. Policy regulation can play a key role in reducing food waste.

Food label regulations in Canada are confusing for consumers. The misleading labels result in unnecessary food waste in Canada, as most consumers do not understand the difference between expiry dates and best before dates. Food is safe to eat beyond its best before date, and it is not illegal to sell it.

To reduce FLW in Canada, a food label regulation change should happen. The regulation should force companies to provide clearer explanations to consumers regarding the meaning of the date included on the package (their relationship with freshness and food safety) as well as proper storage indications for all packaged products.

In conclusion, having regulations that create clear food-date labels will reduce food waste at the household level in Canadian households.

Background



WHAT IS FOOD LOSS AND FOOD WASTE?

We produce more food than we consume, and the food we do not eat gets discarded for different reasons across the entire food chain (United Nations, n.d.).

Let's start with some definitions:²

FOOD LOSS & WASTE	
Food Loss Occurs before the food reaches the consumer as a result of issues in production, storage, processing, and distribution ³	Food Waste Refers to food that is fit for consumption but consciously discarded at the retail or consumption phases ⁴

When I moved to Canada to attend university, I was surprised by how good (in comparison to Mexico) services such as transportation, healthcare, and higher education were the norm. However, I was astonished by the ease at which my Canadian classmates and friends discarded food when they were satisfied or when the food had reached its best before date. They used the argument that it was not being “wasted” but composted.

My experience matches the Food and Agriculture Organization (FAO) data on global food waste estimates. **Canada, a high-income country, wastes around twice as much food per capita (396 kg/person/year) compared to Mexico (249 kg/person/year) and other low-income countries (Commission for Environmental Cooperation, 2017).** Table 1 compares FLW in Canada and Mexico.

2. There are multiple definitions for food loss and waste.
3. (Harvard School of Public Health, 2019)
4. idem
5. The FLW estimates vary greatly over the literature. I decided to use the ones mentioned in the *Characterization and Management of Food Loss and Waste in North America Report (Commission for Environmental Cooperation, 2017)*.

For this project, the term “Food Loss and Waste” (FLW) will be used to refer to the loss and waste across the entire food-supply chain, including the processes by which food is grown or produced, sold, and eventually consumed.

WHY DO I CARE ABOUT FLW, AND WHY SHOULD YOU?

I was born in Oaxaca, one of the states with the lowest average income in Mexico (Secretaria de Economía de México, n.d.), and a place where culture and community revolve around the table. Growing up where food is valued highly, I learned that food tastes better when shared and should not be wasted.

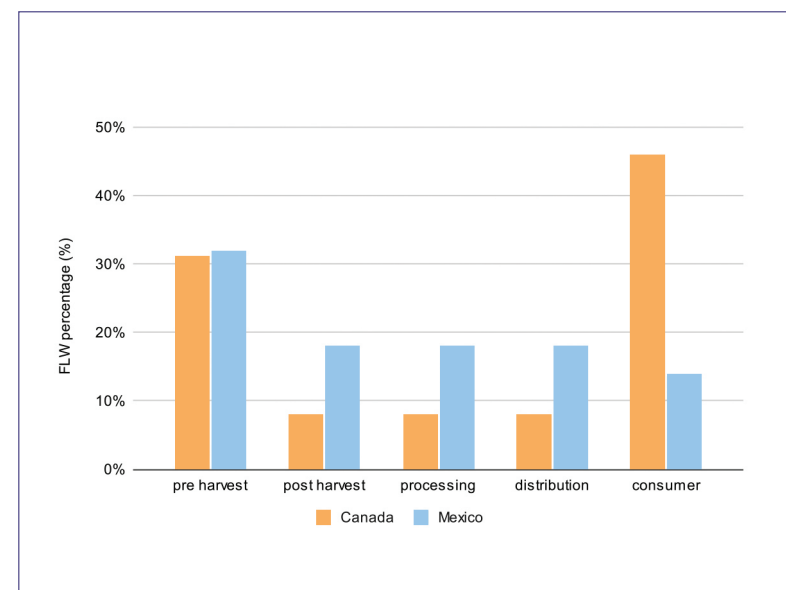


Figure 1. Average Food loss and waste (FLW) percentage in Canada and Mexico

Sector	CANADA			MEXICO			AVERAGE
	Million Tonnes	Kg Per Capita	%	Million Tonnes	Kg Per Capita	%	
Total (Million Tonnes)	13	396	100%	28	249	100%	
Consumer	6	170	46%	4	37	14%	30%
Distribution	1	29	8%	5	40	18%	13%
Processing	1	43	8%	5	45	18%	13%
Post Harvest	1	38	8%	5	44	18%	13%
Pre Harvest	4	116	31%	9	83	32%	32%

Table 1. Food loss and waste (FLW) in Canada and Mexico⁵

WHY IS COMPOSTING FLW NOT ENOUGH?

Every time we choose to compost food instead of eating it, we waste valuable resources, such as water, land, energy, and labour, which are embedded in food production (Reinesch et al., 2022; Scialabba et al., 2013). The loss of these valuable resources by food waste means that they are diverted from other needs. As Figure 2 illustrates, FLW has economic, ecological, and social impacts.

Figure 3 shows the greenhouse gas emission equivalents of sending food to the landfill, composting, and source reduction. Data shows that while composting has a lower GHG emission compared to sending food to landfill, a better alternative to **reduce** GHG emissions from food is to reduce the overproduction of food at the source.

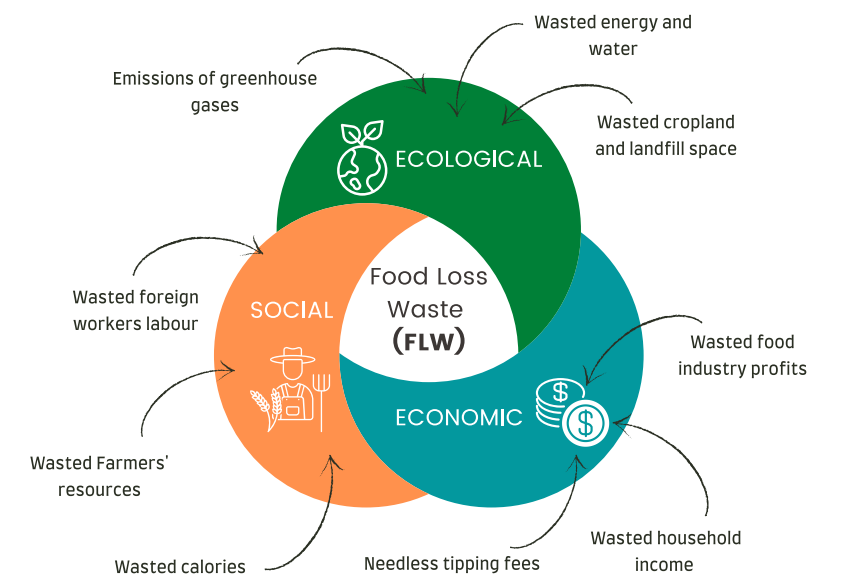


Figure 2. Impacts of Food loss and waste (FLW)

There are different ways to reduce food waste, and, based on their environmental impact, some are preferred over others. The food recovery hierarchy (Figure 4) shows solutions to FLW that maximize environmental, economic, and social benefits by prioritizing waste reduction and recovery of food over composting and disposal (landfill).

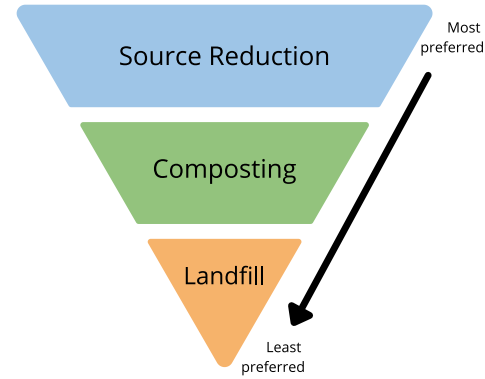


Figure 4. The Food Recovery Hierarchy⁷

6. Adapted from the *Characterization and Management of Food Loss and Waste in North America* (Commission for Environmental Cooperation, 2017).

7. Adapted from the *Characterization and Management of Food Loss and Waste in North America* (Commission for Environmental Cooperation, 2017).

of food. It's about a lack of income. **People are food insecure because they can't afford to eat.**"

Thus, food waste reduction is not the solution to food insecurity. Food security is defined by the UN as "existing when all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food to meet dietary needs for a productive and healthy life" (United Nations, n.d.). And, unless you think people that are going hungry today only deserve your leftovers, food-waste reduction is not the solution to food insecurity. Once again, in case it was not yet clear, food-waste reduction is not the solution to food insecurity. **Food insecurity in Canada is an income issue.** People are going hungry in Canada, not because there is not enough food on the supermarket shelves, but because they cannot afford sufficient, safe, and nutritious food.

This report focuses on food waste, not food insecurity. The policy recommendations focus on reducing food waste, but not as a solution to food insecurity. However, as stated earlier, food waste reduction would help preserve valuable resources such as water, land, energy, and labour. **Food Waste is an environmental issue** (Van Bommel & Parizeau, 2020).



Link to "Stop Trying To Solve Hunger With Corporate Food Waste"

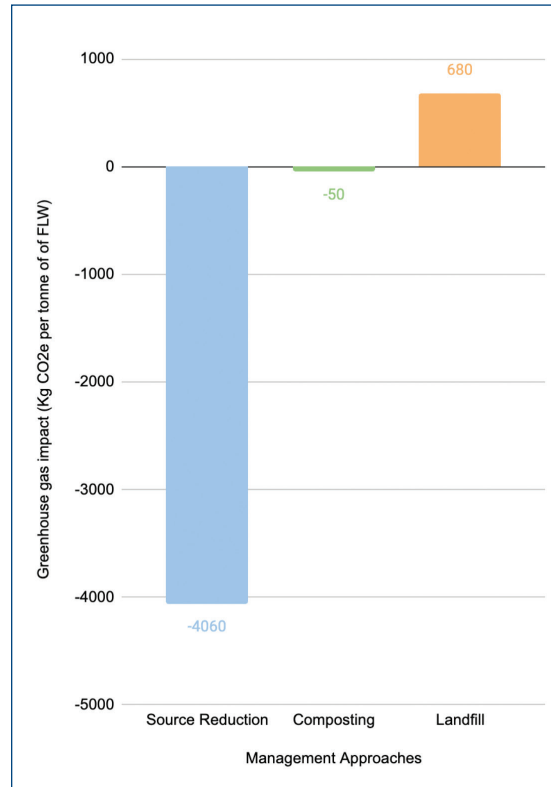


Figure 3. Greenhouse emissions differences between source reduction, composting, and landfill⁶

FOOD LOSS AND WASTE VS. FOOD INSECURITY

Nick Saul's "Stop Trying To Solve Hunger With Corporate Food Waste" (2017) brilliantly explains the misconception that food waste is the solution to food insecurity. I highly recommend you to read it! Scan the QR code to read the article.

"...Simply put, food waste will never be able to address hunger because hunger isn't about a lack

Policy Review

According to the United Nations' 2030 Agenda for Sustainable Development Target 12.3:

8. (Government of Canada, 2019).

The goal is that "by 2030, [we will] **halve per capita global food waste** at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses."

In 2015, Canada and many other countries committed to the United Nations' 2030 Agenda for Sustainable Development (Government of Canada, n.d.).

To reduce FLW, Canada has implemented various actions at the provincial and federal levels. Although reducing food waste across the entire food chain is important, in Canada, 46% of the food waste happens at the consumer level (Table 1). Therefore, for this project, I will focus on exploring reasons and initiatives related to FLW at the retail and household levels (Tables 2 and 3).

RETAIL SALES	HOUSEHOLD LEVEL
<ul style="list-style-type: none"> Rejection of produce that does not meet visual quality standards Inadequate storage on-site Goods damaged upon receipt Inaccurate forecasting and poor inventory management leading to oversupply Lack of protocols or networks to enable food rescue and redistribution Withdrawal of products approaching or exceeding date labels 	<ul style="list-style-type: none"> Over-purchasing, lack of meal planning, and limited use of grocery lists Spoilage due to improper storage Concern for food safety and freshness - poor understanding of shelf life; confusing "sell by," "use by," "best before," and "expiration" date labels Eating preferences - willingness to store and eat leftovers, and the acceptability of eating food past peak freshness Uninformed decisions - limited awareness of the costs and impacts of food waste

Table 2. Reasons for Food Loss⁸

STAGE(S)	SELECTED INITIATIVES ⁹
<p>Consumer level (Retail & Household)</p>	<p>Encouragement to donate food: The Canadian government has implemented policies supporting surplus food recovery and redistribution, such as tax incentives, liability protection,¹⁰ and safety requirements of donated food. Food donation, although preferred over composting and landfills, does not address the root cause of oversupplying due to poor forecasting and inventory.</p> <p>Standardization and education on date labels: According to the Food Waste page of the Government of Canada’s website (last updated in 2019), there have been initiatives to standardize food date labels such as</p> <ul style="list-style-type: none"> • Multinationals such as Kellogg’s, Walmart, Campbell Soup, Nestlé, Unilever signed a Call to Action to standardize food date labels worldwide by 2020 (Government of Canada, 2019). • The Canadian Food Inspection Agency (CFIA) is reviewing national “best before” and “expiry” date labelling requirements and will introduce education programs to improve consumer understanding (Government of Canada, 2019). <p>In 2022, despite government and industry efforts, there are still no standardized food date labels.</p> <p>Food waste innovation challenge:¹¹ The Canadian government launched in November 2020, the \$20M challenge to fund the most innovative food-waste reduction proposals in food processing, grocery retail, and food service. The challenge attracted 238 participants, and 18 were selected as semi-finalists across the country. Proposals ranged from creating textiles, pads, and tampons from food waste, to stabilizing carbon to reduce methane emissions. The innovative solutions are currently going through the prototyping phase. Check the appendix to learn more about the proposals.</p>

9. For a more extensive list of current initiatives across the supply chain, please visit: <https://www.canada.ca/en/environment-climate-change/services/managing-reducing-waste/food-loss-waste/taking-stock.html>

10. To read the liability protection act visit: https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/00_97008_01

11. Check the appendix to learn more about the food innovation challenge, or visit: <https://impact.canada.ca/en/challenges/food-waste-reduction-challenge-novel-tech/semi-finalists>

Table 3. Initiatives to Reduce Food Waste

Policy Recommendations

1 Change Canadian food label regulation.

12. (Government of Canada, 2019)

Quick facts about current Food Labels in Canada:¹²

- a) *Best-before dates* do not guarantee product safety.
- b) *Best-before dates* give you information about the freshness and potential shelf-life of the unopened foods you are buying.
- c) The *best-before date* is not the same as an expiration date.
- d) Expiration dates are required only on certain foods. In Canada, only five foods are required to be labelled with an expiration date (Figure 6).
- e) It is not illegal to sell products after their best before date has passed.

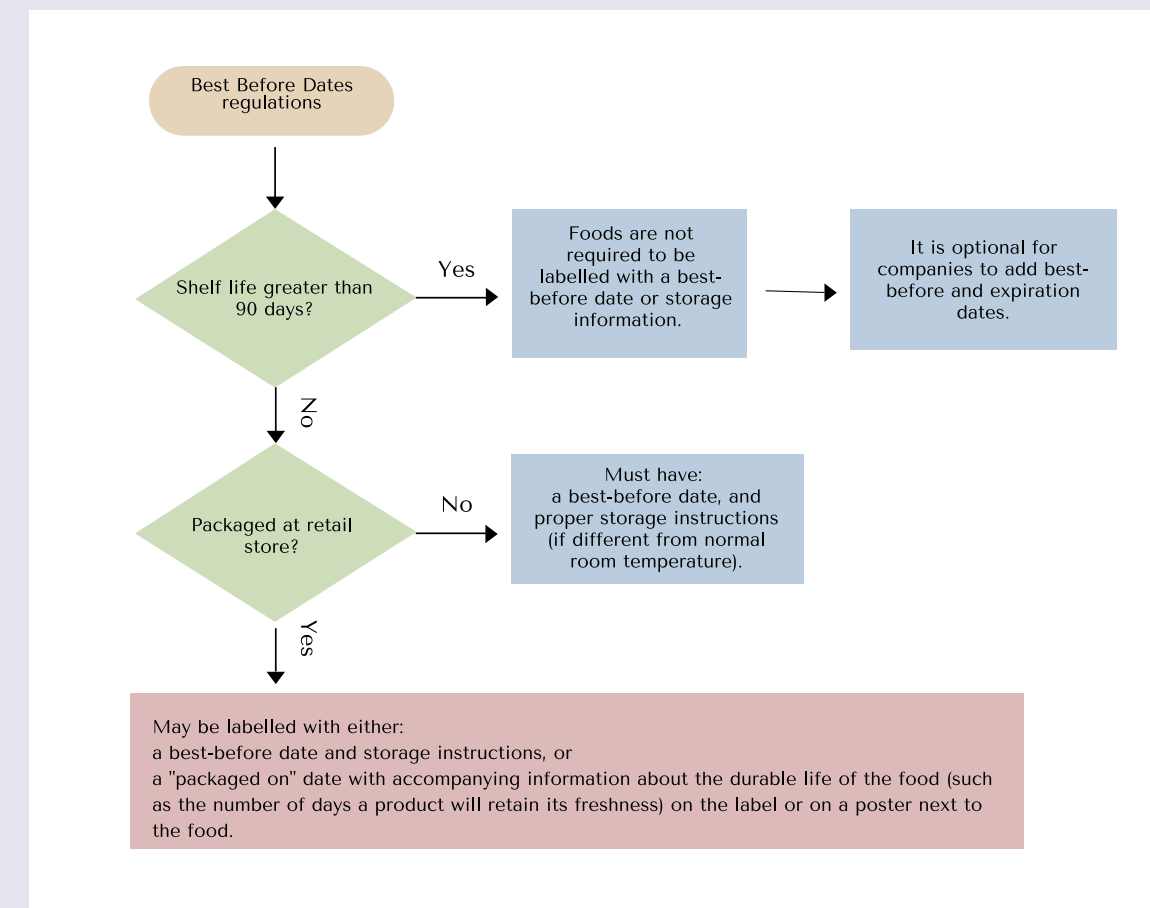


Figure 5. Best-before date regulations in Canada

Expiration dates **must** be used on the following products:

- formulated liquid diets (nutritionally complete diets for people using oral or tube feeding methods)
- foods represented for use in a very low-energy diet (foods sold only by a pharmacist and only with a written order from a physician)
- meal replacements (formulated food that, by itself, can replace one or more daily meals)
- nutritional supplements (food sold or represented as a supplement to a diet that may be inadequate in energy and essential nutrients)
- human milk substitutes (infant formula)

Figure 6. Expiration date regulations in Canada.

Food labels are misleading to consumers (Temple & Fraser, 2014). Most people confuse “expiry date” and “best-before date,” and this confusion is a major source of avoidable food waste in Canada (Second Harvest, n.d.). **In order to reduce food waste caused by unclear best-before dates labels, I propose to change the Canadian food label regulation by:**

- Requiring producers to include information explaining best-before dates in all packaged food, not only the ones with shelf-life of less than 90 days.
- Adding best-before date explanation to products. For example, dairy products such as yogurt include: “It is safe to eat it two weeks past best before, and if frozen 2–3 months past best before.”¹³ Alternatively, include the expiration date for all products in addition to the best-before date, to show consumers the difference between freshness and safety.
 - Best before: for freshness
 - Expiration date: for food safety issues
- Requiring producers to add proper storage information in all packaged food, not only the ones with shelf-life less than 90 days. The information should be detailed. For example, including information beyond “keep refrigerated” and the area of the fridge that extends shelf-life of that product.
- For more inclusive labelling, include storage information in different languages. If space is an issue, information can be added in the form of QR codes. These climate induced natural disasters can have detrimental impacts on communities for years and can impact people’s basic human rights.

13. These estimates are based on data provided by the organization Second Harvest. For more information about it please check the Appendix (Best-before timetable) or visit <https://www.secondharvest.ca/getmedia/653c774a-f05b-44ee-a806-bf5ef0957d84/SH-BBD-Timetable.pdf>

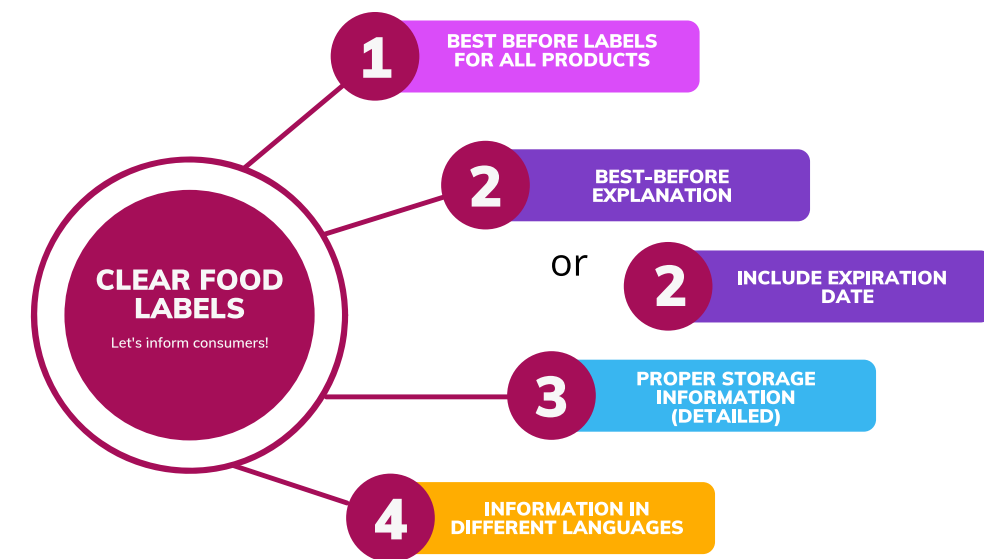


Figure 7. Policy recommendations summary.

Appendix

Red QR code: <https://impact.canada.ca/en/challenges/food-waste-reduction-challenge/finalists>

Green QR code: https://lovefoodhatewaste.ca/keep-it-fresh/fridge-guide/?utm_source=IG&utm_medium=Paid+EN&utm_campaign=Fridge+Guide

Orange QR code: <https://www.secondharvest.ca/getmedia/653c774a-f05b-44ee-a806-bf5ef0957d84/SH-BBD-Timetable.pdf>



Food Waste Reduction Challenge



Where you store food in your fridge matters



Best Before Timetable

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*Having regulations that create
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Vancouver Foundation is Community Inspired. We are a community foundation that connects the generosity of donors with the energy, ideas, and time of people in the community. Together, we've been making meaningful and lasting impacts in neighborhoods and communities since 1943. We work with individuals, corporations, and charitable agencies to create permanent endowment funds and then use the income to support thousands of charities. We recognize that communities are complex and that collaboration between multiple stakeholders is needed to help everyone thrive and evolve. Vancouver Foundation brings together donors, non-profits and charities, government, media and academic institutions, local leaders, and passionate individuals to build meaningful and lasting change in the province of British Columbia. We see young people, their voices and experiences as part of that vision to building meaningful change.

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