

Strategies to Reduce Food Waste

- **Technology Driven Solutions**

- [Second Harvest Food Rescue app](#) allows food service providers to donate food to community partners. The app tracks the type of food donated and its weight. One key informant reported that food services use the platform to measure ingredients donated to the campus free soup initiative.
- [B12Give](#) is an app that coordinates with drivers to collect and deliver surplus food to community partners within 2 hours of pickup. B12Give was founded by a Toronto Metropolitan University alumni, and they are expanding operations outside the Toronto area; they are currently piloting a program in Guelph-Wellington.
- [SnackRadar](#) is a platform that allows event coordinators to post alerts for students about free food on campus.

- **Partnerships with Local Businesses**

- Colleges and universities reported partnering with local bakeries and grocery stores that donate unsellable foods like day-old bread, damaged produce, and pantry items nearing best-before dates.
- One key informant reported a partnership with a local hotel that alerts the foodbank coordinator of leftover food from catered events, which is collected and redistributed to students.

- **Food Waste Reduction Practices in Foodbanks**

- Following FIFO (First In, First Out) inventory management.
- Proactively redistribute food nearing expiry – A key informant described setting up a dedicated table in the foodbank for near-expired or overstocked items and offering these items to students in high-traffic areas on campus.
- Student education – educating students on the difference between expiry and best-before dates and how long specific foods are safe to consume beyond the best-before date. Some key informants also mentioned that students are encouraged to return unwanted items from food hampers.

- **Multi-tiered Food Waste Management Systems**

- Post-secondary institutions with culinary programs integrate sustainability into education, training students to minimize prep waste and repurpose food scraps.
- One key informant described the three-tier food waste management system at their institution:

- Repurposing edible food scraps (e.g., chopped vegetables, unused ingredients) for new meals while preventing cross contamination and maintaining potentially hazardous foods at 4C or below.
- Composting organic waste (e.g., coffee grounds, eggshells) for use in the campus gardens
- Non-compostable waste is disposed of through garburators and greywater systems to divert organic waste from landfills.

Food Safety Considerations

- Foodbank donations
 - [Food Banks Canada Guidelines for Food Shelf Life](#)
Includes:
 - General Guidelines for Distributing Food Past the Best Before Date
 - Fruit & Vegetables
 - Milks, Cream & Other Beverages
 - Grains, Cereals & Legumes
 - Fats, Oils & Dressings
 - Prepared & Deli Foods
 - Eggs, Cheese & Dairy Products
 - Meat, Poultry, Seafood & Alternatives
 - Baby Food & Meal Replacements
 - Miscellaneous
 - [Food Bank of Waterloo Region – Guidelines for Distribution Past Best Before Date](#)
- Learn to cook events
 - Provide funding for multiple team members to complete their food handler certification
- Managing leftovers from catered events
- Grab-and-go food options
 - Community fridges pose food safety risks, particularly when they accept anonymous donations with limited oversight or traceability. One key informant explained that their institution had a community fridge program that had to close due to logistical challenges. To address this concern, institutions can offer grab-and-go food options in monitored spaces, like counselling services.

Student Access to Food Security Resources: Barriers and Solutions

Confidentiality and Stigma

- Given the stigma associated with food insecurity, maintaining student confidentiality is essential. To ensure student confidentiality and comfort:
 - **Minimize data collection** – Some colleges and universities minimize the personal information required to access food banks or food pantries to ensure they do not deter students experiencing food insecurity from accessing their services. Most reported tracking usage through tapping student ID cards, and one informant reported using personalized codes not tied to student names or IDs.
 - **Discrete pick-up options** – [Lockers of Love](#) is an initiative McMaster's Food Collective Centre runs that allows the McMaster's community to discretely collect non-perishable food items from lockers on campus using a unique ID code to access the lockers.
 - **Meal sharing** – [Swipe It Forward](#) is a Queen's University initiative allowing students with meal plans to donate unused meal swipes. Students who sign up for this food security support have meal swipes added to their student cards for confidential use at the campus dining halls.

Navigating External Food Resources

- Students may face challenges identifying and accessing off campus support. To address this, post-secondary institutions are working to simplify the process:
 - **Food security resource map** – the University of Waterloo has a [Food Access Community Resource Map](#) with website links and Google Maps locations for local resources, such as community fridges, vegetarian food options, culturally specific food retailers and farmer's markets.
 - **Screening external resources** – One key informant reported actively contacting local food security programs to determine if they are appropriate to recommend to students. They ask about eligibility to access the service, openness to student referrals, and whether individuals need to be affiliated with a particular organization or religion to access their services.

Unfamiliarity with foodbank items

- Students may not know how to prepare some of the items offered by campus food banks. To support students:
 - Institutions can offer recipes and learn-to-cook events to teach students how to prepare meals using ingredients from the on-campus food bank.

Culturally responsive food security program

- Food security supports are more effective when they reflect the cultural needs and preferences of the populations they support.
 - **Clear labelling for dietary restrictions** – One key informant provided an example of international students from India being confused by ingredient labels on food bank items. These students were familiar with the food packages labelled according to the Food Safety and Standard Authority of India (FSSAI) [Labelling and Display Regulations](#), which require food packages to clearly inform consumers if the product is vegetarian or non-vegetarian with coloured symbols. In response, the institution began separating vegetarian or non-vegetarian foods in the food bank and creating clear labels to make students more confident that they know what is in the foods.
 - **Awareness of cultural food norms** – One key informant explained how reflecting on your biases is important when developing food security resources. Since their food bank had excess canned chickpeas, they prepared a hummus recipe for students, but many students accessing the food bank had never had hummus and were hesitant to try it.