

WHAT IS FOOD SECURITY?



1

PRODUCTION

Most people do not grow or raise their own food, which means they rely on farmers to produce the food they find on their retail shelves. With the high demand of a growing population, the development of crops that are more resilient to weather, disease, and pests are important to keeping food available to the population. New innovations, such as temperature-controlled grain silos, global positioning systems, and drip irrigation, help preserve environmental resources like water and land. They also reserve food stores for longer periods of time. The developments of more accurate farming techniques keep food available and sustainable, allowing an increase in crop growth and a decrease in land, water, and nutrient usage.



2

MANUFACTURING

Food needs to be processed and packaged for transportation to retailers. This step of the food cycle has the highest level of waste in the developed world at 43 per cent.³ Evolving to reduce this percentage while keeping food from degradation during the process is an ongoing challenge. This requires new, more efficient processing technologies and the recovery of food by-products. The use of recycled, edible, or biodegradable packaging also helps to protect the environment and create a more sustainable food-processing system.

3

DISTRIBUTION

Transportation ensures that food makes it from farms and manufacturers to retailers, such as grocery stores. Shortening the distance food needs to travel by supporting local production reduces emissions and creates a more sustainable system. However, to ensure the availability of food in all circumstances, it is essential to have transportation plans in place for instances when local food production faces challenges. Access to produce from foreign climates also provides a greater variety of nutritious and culturally diverse food.



4

RETAIL

Supermarkets, convenience stores, independent grocers, and farmers' markets are all examples of retailers that sell food. People rely on these businesses to provide them access to the food they need, and having diverse, affordable options within reach is a vital aspect of food security. Sustainable practices can also be implemented at a retail level, by reducing amounts of plastic and food waste. Encouraging the use of reusable grocery bags, donating near-expired products, and even composting at a store level can help achieve this.⁴



5

CONSUMPTION

Food is a requirement of life, but the type of food consumed matters. Proper nourishment means having strong bodies and sharp minds. Nutrition education and access to healthy choices is vital to supplying us with the daily needs necessary to support a healthy lifestyle. Religious, medical, and ethical factors are also important. Enough options need to be available for those with dietary restrictions. Likewise, for quality of life, people should have choice and access to food they enjoy. What's common to eat in one country might not be common in another. For instance, insects are not as widely consumed in Canada as they are in other countries.



6

WASTE MANAGEMENT

Food that isn't consumed is disposed of through waste management systems. Compost is one way that organic waste can be managed in a sustainable way, using old food to fertilize new production. However, food security aims to limit food waste in areas of abundance and distribute surpluses to areas where hunger is still a concern.



IN CANADA, it's common to find a grocery store, convenience store, or even a farmers' market in your area. How often have you visited, pushed a cart around, and seen the variety of available food on the shelves? Maybe you've selected the best fruits and vegetables from the stacks or picked your favourite meat and dairy products from the refrigerated displays. But have you ever stopped to think about how it got there?

Food goes through a cycle from production to waste management, and every step along the way we must

be thinking of ways to ensure that food is available, accessible, affordable, nutritious, and stable for all people. When these five basic elements are not met, food insecurity can occur. In Canada, one in eight households and one in six children were food insecure between 2017 and 2018.¹ Globally, the situation is even more critical, with nearly 690 million people who are hungry and 750 million who are exposed to severe levels of food insecurity.² Achieving the five elements of food security, in all stages of the food cycle, is vital to the goal of eliminating hunger and malnutrition worldwide.