

S Q U A S H I N G  
**FOOD WASTE**

consumer & category insights





CONSUMER & CATEGORY INSIGHTS

# Squashing Food Waste

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## ? What is food waste?

Food waste, broadly defined as **food that spoils or is discarded before it is consumed**, has become a mainstream topic in recent years. Food waste results in **substantial social, economical and environmental costs**.

In the United States,  
**60 MILLION** ▶  
metric tons of food<sup>1</sup>

Which is the equivalent of  
**\$162 BILLION**<sup>1</sup>  
is wasted annually

Most food waste ends up in landfills, where it emits methane as it decomposes. Globally, this creates  
**3.3 BILLION** METRIC TONS  
of greenhouse gases each year<sup>1</sup>

## Global awareness

As awareness of and concern about food waste has evolved, **more organizations**—from government agencies to mainstream media groups—**are working to create solutions that help reduce the waste** that occurs during the harvesting, packaging, transport, retailing, and pre-consumption of fresh foods.

The United Nations (UN) General Assembly declared 2016 to 2025 as the UN Decade of Action on Nutrition.<sup>2</sup>

This initiative addresses the paradox of excessive food waste in a world that continues to face widespread hunger and food insecurity.

**France takes action:** France recently prohibited supermarkets from throwing away unsold food, asking them to instead donate it to charities or food banks.<sup>4</sup>

**JOINT GOAL:**  
**FDA + USDA**  
reduce food waste by **50%**  
by the year **2030**<sup>3</sup>

<sup>1</sup>[http://www.nytimes.com/2015/02/26/us/food-waste-is-becoming-serious-economic-and-environmental-issue-report-says.html?\\_r=0](http://www.nytimes.com/2015/02/26/us/food-waste-is-becoming-serious-economic-and-environmental-issue-report-says.html?_r=0)

<sup>2</sup>[http://www.who.int/nutrition/GA\\_decade\\_action/en/](http://www.who.int/nutrition/GA_decade_action/en/)

<sup>3</sup><https://www.usda.gov/oce/foodwaste/faqs.htm>

<sup>4</sup><https://www.theguardian.com/world/2016/feb/04/french-law-forbids-food-waste-by-supermarkets>

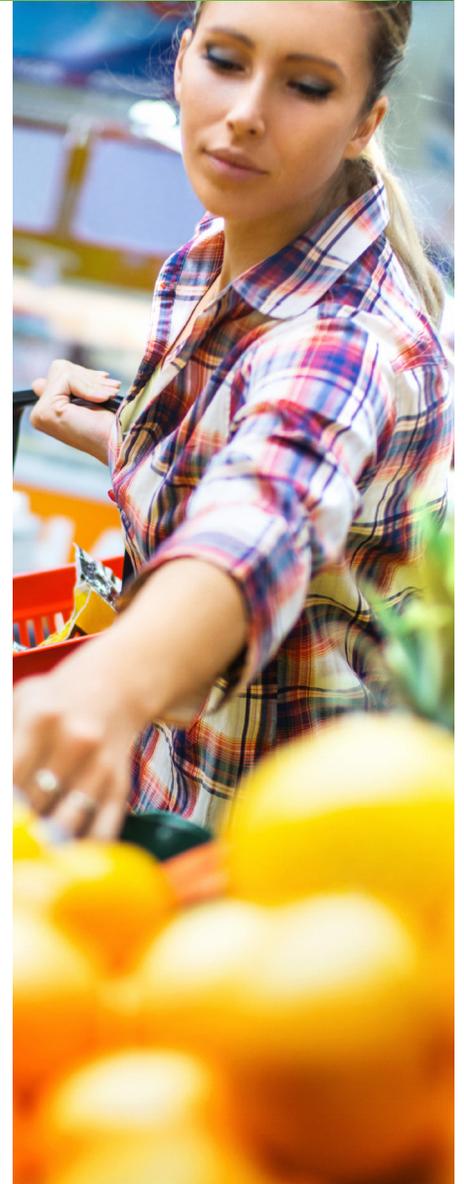




## What do consumers think about food waste?

To gain insight on topics related to food waste, **Robinson Fresh conducted two consumer surveys in 2016.**

- The first examined sentiment around fresh fruit and vegetable food waste.
- The second examined consumers' thoughts around programs designed to sell off-sized or blemished produce items that are traditionally thrown out.



of **FRESH PRODUCE** will either not be harvested or will be discarded in the field because it does not meet store standards<sup>5</sup>

Growers harvest and pack the produce that consumers want. If consumers are not showing demand for imperfect produce, growers will not bring it to market.



**The top wasted vegetable items** identified were greens, cabbage, and lettuce; bananas were the top wasted fruit item.

**Food waste bothered surveyed consumers primarily because it:**

**Wastes money – 82%**

**Wastes good food – 76%**

<sup>5</sup><https://www.nrdc.org/sites/default/files/wasted-food-IP.pdf>



## Embrace, don't waste, imperfect produce

There is a shift in thinking among consumers to embrace **imperfect or irregular-looking produce**. Slight discoloration or blemishes and off-sized or unusually shaped fruits and vegetables are typically discarded in the field, but they are just as nutritious and flavorful as other produce.

**69%** of consumers found the concept of purchasing imperfect produce at reduced prices appealing

Today, programs are being developed in which produce can be sold that would otherwise be wasted for aesthetic reasons. Imperfect and irregular-looking fruits and vegetables are sold to retailers at a reduced price; retailers then sell those items to consumers at substantially lower price points than conventional produce. These programs aim to help reduce food waste by offering consumers another option in purchasing nutritious fruits and vegetables.

According to our research, 69% of consumers said the concept was "appealing to very appealing," primarily for the purposes of helping farmers reduce food waste and adding to their bottom lines. The secondary reasons indicated were the concepts' benefits of helping the consumer save money and helping the environment.

A United States Department of Agriculture (USDA) study found that:

Total fresh fruit and vegetable retail shrink ranges from

**8.4% to 10.7%,**  
equating to **264 lbs.**

per capita of wasted fresh produce in the U.S.<sup>6</sup>

Shrink also occurs in consumers' homes for a multitude of reasons. **85% of surveyed consumers indicated that they discarded fresh produce** because they saw physical spoilage, followed by expiration dates and labeling and purchasing more than needed.

<sup>6</sup><https://www.ers.usda.gov/publications/pub-details/?pubid=44103>





## ✔ Trends in reducing food waste

Consumers will continue to grow **more conscious of food waste** as public and private companies emphasize the economic, environmental, and social benefits of waste reduction.

### Apps

Web and mobile developers around the world are **creating apps** to bridge the gap between surplus produce and consumers who are willing to pay less for imperfect produce,<sup>7</sup> apps that help consumers make the most of the food they purchase, and apps that match food donors (farms, restaurants, cafeterias, and grocery stores) with recipients (food pantries, homeless shelters, and other charities).<sup>8</sup> For example, Love Food Hate Waste provides tips, tools, and inspiration to help consumers make the food they love go further. Waste No Food and Zero Percent works with businesses and nonprofits to put good surplus food to the best use.



Celebrity chef and restaurateur Spike Mendelsohn, along with dozens of other volunteers, peels carrots on Tuesday to be used for Wednesday's feast. Morgan McCloy/NPR



### Consumers

A growing trend among consumers is repurposing food that would typically be wasted. For example, they're blending marginal fruit and vegetables into shakes or smoothies,

or they are using overripe bananas to bake banana bread. When surveyed, **consumers estimated that they throw away or compost 11% of their produce purchases.** About half of respondents said they repurposed food "most of the time or always." This demonstrates ample opportunities to continue reducing food waste through less traditional methods.

About **50%** of consumers repurpose food most of the time

### Celebrity chefs

**Celebrity chefs** are demonstrating the ways food can be **repurposed**<sup>9</sup> in head-to-head culinary competitions, preparing gourmet meals using food that would typically be discarded.

### What can retailers do?

As consumer awareness of the impact of food waste rises, it becomes increasingly important for retailers to demonstrate actionable solutions. These could include educating consumers on the proper ways to store produce or helping shift their thinking about irregular or blemished, but still nutritious, fruits and vegetables; forecasting and planning as accurately as possible; or donating irregular or unsold produce to food banks.

<sup>7</sup><http://www.theguardian.com/sustainable-business/2016/may/31/food-waste-american-tech-cerplus-agriculture>  
<sup>8</sup><http://fortune.com/2015/04/16/could-these-apps-solve-americas-huge-food-waste-problem/?iid=srlink1>  
<sup>9</sup><http://www.npr.org/sections/thesalt/2016/05/19/478410252/this-is-what-a-feast-for-5-000-made-from-food-waste-looks-like>





## Vision Statement

Our people lead the fresh food industry in providing exceptional products and service.

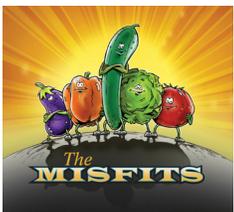
## About Us

Robinson Fresh® brings you fresh produce and smart logistics solutions. As a division of C.H. Robinson, a top global third party logistics provider, Robinson Fresh provides year round supply with global to local cold chain expertise as well as world-class solution providers and impactful category insights. This all fuels our innovative supply chain solutions, from seed to shelf.

**Talk with us—we speak fresh. [www.robinsfresh.com](http://www.robinsfresh.com)**



## About Misfits®



Misfits®, a program provided by Robinson Fresh, helps connect consumers to tasty but misshapen fruits and vegetables at a reduced price. In an effort to curb produce waste due to size and shape restrictions from industry standards, Misfits works with retailers to broaden the size and shapes of produce allowed for sale. Each week, four to six Misfit produce items are delivered to participating retailers, based on what is seasonally available. Misfits produce is sold on average at a variable discount depending on the item and time of year. All products are of the same taste of typical produce, but may have a little more visual character than other produce. Robinson Fresh is collaborating with a handful of select retailers who align with the goals of the program.