# Food Waste in America in 2021: 

Statistics \& Facts


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## Statistics and Facts

Food takes up more space in US landfills than anything else."

With employees working from home, students learning remotely, and people ordering takeout to support their local restaurants, food bills skyrocketed ${ }^{1}$ as families spent more time - and ate more meals - at home. In the United States, the surge in food spending often translates to more food waste. Even pre-pandemic, we wasted massive quantities of food every single day of the year.

## THE FACTS

## Globally, we waste about 1.4 billion tons of food every year. ${ }^{15}$

> More than
> 80 percent of Americans discard perfectly good food because they misunderstand expiration labels. ${ }^{19}$

## How much food is wasted in America?

Just how much food do Americans waste? Here's some "food" for thought: While the world wastes about 1.4 billion tons of food ${ }^{2}$ every year, the United States discards more food than any other country in the world: nearly 40 million tons - 80 billion pounds - every year. ${ }^{3}$ That's estimated to be 30-40 percent of the entire US food supply, ${ }^{4}$ and equates to 219 pounds of waste per person. ${ }^{5}$ That's like every person in America throwing more than 650 averagesized apples right into the garbage - or rather right into landfills, as most discarded food ends up there. In fact, food is the single largest component taking up space inside US landfills, ${ }^{6}$ making up 22 percent of municipal solid waste (MSW). ${ }^{7}$

## Why do we waste so much food?

Before COVID-19, it was estimated 35 million people across America - including 10 million children - suffered from food insecurity. ${ }^{8}$ That number is expected to increase to as much as 50 million people ${ }^{9}$ in 2021 due to the employment drop and financial fallout from the pandemic. With so many people suffering who need basic amounts of food, why do Americans waste so much of their food abundance? Getting to the bottom of what causes food waste in America is a challenge that traverses the complex landscapes of socioeconomic disparities, confusion, and ingrained beliefs, layered with human behaviors and habits.

Food spoilage, whether real or perceived, is one of the biggest reasons people throw out food. More than 80 percent ${ }^{10}$ of Americans discard perfectly good, consumable food simply because they misunderstand expiration labels. Labels like "sell by", "use by", "expires on", "best before" or "best by" are confusing to people and in an effort to not risk the potential of a foodborne illness, they'll toss it in the garbage.



## Americans discard more food than any other country, nearly 40 million tons - or 30-40 percent of the entire US food supply. ${ }^{16}$

1 Chain Store Age
2 United Nations' Food and Agriculture Organization (FAO)
3 Environmental Protection Agency
4 U.S. Department of Agriculture 5-7 EPA
8-10 Feeding America
11 National Council of State Legislatures

Compared to the rest of the world, food in the United States is plentiful and less costly, and often this contributes to a general sentiment of not appreciating or valuing it the way other communities around the globe do.

Americans are often impulsive in their food purchases, unrealistically assessing how much food is required, and as a result buying more food than they need or buying food they won't actually eat.

Our take-out society doesn't use food in its entirety the way our ancestors used to. We underutilize leftovers and toss food scraps that can still be consumed or composted.

Composting isn't part of our food-prep routine, so we continue to add fuel to the fire in increasing the sheer size of US landfills.

## Changing the laws to curb so much waste

The good news is that several states across the country are taking action to curb food waste and gain food recovery. Legislators in California, Connecticut, Massachusetts, New York, Rhode Island, and Vermont have passed laws ${ }^{11}$ that restrict the amount of food waste going to landfills. Vermont's "Universal Recycling Law" went into effect in July 2020, banning food scrap waste entirely. According to the Vermont Foodbank, as a result of the new law, food donations statewide have increased 40 percent.

There is pending legislation in California, Colorado and Massachusetts that would establish programs to fund private-sector composting and organic collection programs. ${ }^{8}$ In addition, several states like Tennessee and Washington, and cities like Los Angeles and Madison, Wisconsin, have created food waste task forces to reduce waste, creating composting education and infrastructure and eliminating food waste from US landfills.

In 2019, the New York City Department of Sanitation expanded upon their organics separation rules, proposing that even more food-related businesses would be required to separate organic waste in an effort to keep nearly 100,000 tons of wasted food out of landfills each year.

The city and state efforts are trickling into US school systems too - both Maine and Rhode Island have introduced legislation to reduce the amount of food waste in schools. On a national level, the US Department of Agriculture (USDA) and the US Environmental Protection Agency (EPA) set a goal in 2015 to reduce food waste by half by 2030.


Wasting food contributes to 11 percent of the world's greenhouse gas emissions. ${ }^{20}$

> Before the pandemic, 35 million people across America had food insecurity. That number is expected to rise to as much as 50 million in 2021. ${ }^{18}$

12 World Wildlife Fund
13 Feeding America
15 Food and agriculture Organization (FAO) of the United Nations (UN) 16 Environmental Protection Agency 17 Environmental Protection Agency 18-19 Feeding America 20 World Wildlife Fund

## Wasting food has environmental repercussions...

While the food waste movement across America is gaining momentum, it needs to pick up speed to help tackle one of the globe's most pressing problems: climate change. Wasting food has irreversible environmental consequences: it wastes the water has irreversible environmental consequences: it wastes the water
and energy it took to produce it, and generates greenhouse gases - 11 percent of the world's emissions- ${ }^{12}$ like methane, carbon dioxide and chlorofluorocarbons, which contribute to global warming. Food that sits decaying in landfills also produces nitrogen pollution, which causes algae blooms and dead zones. According to the World Wildlife Federation, the production of wasted food in to the World Wildlife Federation, the production of wasted food in
the United States is equivalent to the greenhouse emissions of 37 million cars. If Americans continue on the same path of food loss, the environmental impact could be disastrous.

## ...and economic repercussions too

If reducing food insecurity and saving the planet aren't enough to inspire action to reduce food waste, perhaps one more good reason will: money. According to the nonprofit organization Feeding America, Americans waste more than $\$ 218$ billion each year on food, with dairy products being the food item we toss out the most. The average American family of four throws out \$1,600 a year in produce. ${ }^{10}$ Multiply that by the typical 18 years that a child lives at home and you could easily pay for a year's worth of tuition at any number of America's private colleges or universities.

Solving the increasingly growing problem of food waste calls for upstream solutions that dig deep into the root of the problem. The root is complex and multifaceted, with waste coming first from America's homes ( 43 percent) and restaurants, grocery stores and food service companies ( 40 percent), where people throw out food, followed by farms ( 16 percent) and manufacturers ( 2 percent), where too much food is produced. ${ }^{13}$

## Where our waste comes from:


homes

restaurants, grocery stores, food service companies

farms


2\%
manufacturers

# According to the Food and Agriculture Organization (FAO) of the United Nations, one-third of all food produced around the world is wasted. 



# Confronting Waste and Solving the Problem at Home 

So how do we tackle food waste in America? The challenge isn't to produce less food, but to waste less in the process. Here's how we can start:

Don't misinterpret expiration labels on food that's perfectly good to eat.

The Grocery Manufacturers Association, the Food Marketing Institute, and Harvard University have combined efforts to streamline expiration labels about the quality and safety of food. Two phrases simplify how you can tell what's still good to consume:

BEST IF USED BY describes quality "where the product may not taste or perform as expected but is safe to consume";

USE BY applies to "the few products that are highly perishable and/or have food safety concern over time." ${ }^{14}$

Learn how to compost to keep food scraps out of landfills, and the amount of greenhouse gases from rising.

Freeze food that can't be eaten immediately, but could be consumed at a later date.

## Share the wealth.

Donate food to food pantries or deliver leftovers to people who may need it.

## Plan meals and make deliberate grocery store shopping lists.

Fruits and veggies with blemishes and flaws still taste the same and are typically a fraction of the cost.

In addition to saving food, you'll save money in the long run. Embrace imperfect produce.

## Americans waste an

 average of approximately one pound of food, per person, each day.

## Reducing the Waste at America's Restaurants

According to the Bureau of Labor Statistics, the average American household spends more than $\$ 3,000$ a year on eating out. This not only requires an astonishing amount of plastic packaging and utensils, but it also produces a lot of wasted food. The restaurant industry spends an estimated $\$ 162$ billion every year in costs related to wasted food. ${ }^{12}$ Pioneers in the recycling industry are making great strides, but there is still more we can do to make progress.

## Be thoughtful and deliberate when eating out.

Recognize that portion sizes differ and order only what you know will be eaten. If you end up with leftover food - and this happens often with today's enormous American food portions - take it home to share with someone else or to enjoy for another meal the next day.
If you really want to be environmentally conscientious, bring your own containers to take home leftover food. You'll be doing your part in reducing the 150 million tons of single-use plastic that we use and discard - every year. ${ }^{13}$

## Reconsider the "all-you-can-eat" buffet-style restaurant model - and mindset.

It prompts people to take out more food than they can possibly eat, and that food almost always gets mindlessly thrown out after piling a plate full.

## Follow a global model.

Some countries around the world are ahead of America when it comes to managing food waste. France, for example, requires restaurants to donate food that is at risk of being thrown out, but is still safe to eat. Cities in Sweden use food waste to create fuel to power public bus transit. In Denmark, you can use an app to find restaurants and bakeries that are about to close and purchase their remaining food at a fraction of the cost.

# Reducing Food Waste in Commercial Businesses 



Compost

When it comes to food waste, households and restaurants aren't the only contributors; commercial businesses also add to the growing problem.

Fortunately, there are many businesses that are taking notice. Companies are innovating new ways to use food waste as ingredients for other products, setting up food donation plans, or implementing commercial composting programs.

The Real Dill, a Denver-based pickle company, created a Bloody Mary mix out of the cucumber water used in making their popular pickles. Today, the mix is more well-known than the pickles - and the company has an even smaller environmental footprint. Similarly, WtrmIn Wtr is a company that takes watermelons that would normally be thrown out - and eventually end up in landfill - and creates a juice out of the melons. Companies aren't just creating food and beverage products - some are taking businesses' food waste and turning it into new products, like Ambrosia who is turning organic waste into a cleaning spray called Veles.

Transforming food that would otherwise be wasted into an upcycled product is just one way in which commercial businesses can reduce food waste. There are opportunities for commercial businesses to donate unused food like Sodexo has - donating all uneaten food to local communities in need. These are all programs that support the US Environmental Protection Agency's (EPA) Food Recovery Challenge (FRC), which asks organizations and businesses to "pledge to improve their sustainable food management practices and report their results." Finally, companies can also work with their hauler partner to set up programs to make sure their organics are composted rather than sent to landfill.

Similar to how we can prevent food waste at home, it's about making sure too much food isn't purchased, redirection (or donation) of unused food that would otherwise be wasted, and, setting up composting programs for food scraps that would end up in landfill.

# Food is Wasted along the Entire Supply Chain 

## Farming Food Waste

Approximately 30-40 percent of food that farmers around the world produce is never consumed. ${ }^{21}$
Between 21 and 33 percent of water used across US farms is wasted. ${ }^{22}$ Food loss at the farm level depends on many uncontrollable variables, including the type and quality of crop, market price and consumer demand.
If there's no market for a particular crop, it's better for the environment for farms to plow the crops back into the earth and take a loss before harvesting and packing up food to enter the supply chain. If the crop goes back into the earth, it will help produce better soil for future harvests, but if the food isn't consumed, it will most often end up in a landfill releasing greenhouse gases.

## Manufacturing Food Waste

Human error, including lack of standard operating procedures and poor training, is the main cause of food waste at the manufacturing level, accounting for more than 10 percent of food waste.

Food that is associated with a food allergy, such as peanuts or gluten, is often wasted due to manufacturing lines that need to be run several times to produce an allergen-free product.
New product development creates food waste due to the production processes that manufacturers must go through to coordinate correct volumes and product quality.

## Grocery Store Food Waste

About 30 percent of food in American grocery stores is thrown away. ${ }^{23}$ US retail stores generate about 16 billion pounds of food waste every year. ${ }^{24}$ Wasted food from the retail sector is valued at about twice the amount of profit from food sales. ${ }^{25}$


21 Postharvest Education Foundation 22 Natural Resources Defense Council 23 U.S. Department of Agriculture 24-25 ReFED
26 Dept of Agriculture

## American households waste approximately $\$ 1,600$ each year in produce, enough to pay for more than an entire month's worth of groceries for a family of four.



## What is the Food

 Waste Recovery Hierarchy?There are many ways to reduce food waste in the United States and around the world - and thanks to the Food Recovery Hierarchy developed by the US Environmental Protection Agency (EPA), we have a tiered system that prioritizes prevention and then diversion of wasted food. Created as an inverted pyramid, the top levels of the Hierarchy are most favorable, trickling down to the last stage of waste sent to landfills. Here's how the Hierarchy flows:

## 1. Source Reduction

This goes back to the simple lesson of "only take what you need." If we buy and create less food, we'll throw less out. This is about simply reducing waste by not creating it in the first place.

## Most

Preferred 1 Source Reduction
2 Feed Hungry People

## 3 Feed Animals

## 4 Industrial Uses

5 Composting

Least
Preferred
6
Incineration or Landfill

## 2. Feed Hungry People

Much of the food we throw out is perfectly edible. With 50 million people expected to suffer from food insecurity in 2021 alone, this is unacceptable. Food banks and shelters across the country would welcome the food that many Americans throw away.

## 3. Feed Animals

Humans aren't the only ones who need to be fed - our animals need sustenance too. Those food scraps we toss after dinner each night - that will surely end up in a landfill - can be saved for feeding farm animals, diverting more food waste from needlessly being thrown out.

## 4. Industrial Uses

Did you know that some of the food you toss can be used to create biofuel and bio-products that could power your car? The earth has provided alternative energy in the form of sun and wind. Why shouldn't our food be yet another way to source power?

## 5. Composting

Near the bottom of the Food Waste Recovery Hierarchy is something every single person is capable of doing: composting their food waste. Composting not only prevents your food waste from entering a landfill (and creating even more greenhouse gases), but also improves soil and water quality that in turn, help future crops grow.

## 6. Landfill/Incineration

This is the bottom of the Food Waste Hierarchy - and the last, final resort to the waste that we produce. Avoiding this tier starts with each and every one of us, by preventing waste at the top of the tier - right where it's sourced and where we can make different decisions about how much we take, buy and create.
> >> It's about everyone doing their part, from individuals to large corporations - taking responsibility and making small changes to create meaningful sustainable changes for the planet.

## About Recycle Track Systems

Recycle Track Systems, Inc. is pioneering a better way to manage waste and recycling. RTS combines technology with high-touch service to make waste disposal easier, smarter, and more responsible. From on-demand removal to fully integrated waste management solutions, RTS helps companies and municipalities easily track and optimize their pickups. Using data insight, RTS empowers clients with visibility into their waste habits and offers tangible figures on their climate impact to improve their waste and recycling practices. RTS is a certified B-Corporation, reflecting its dedication and commitment to meeting stringent standards of environmental transparency and performance.

