The annual impact of food waste in the United States is like...

- x1 million semi-trucks driving across the United States
- Wasting an area of agricultural land large enough to cover California and New York
- Every household tossing $1,500 into the wind
- Dumping the water filling 9 million Olympic swimming pools into an empty field

Takeout the Trash

Food waste from each American household could fill nearly 360 takeout containers every year

= 10 8oz takeout containers
How Much Is Almost 40 Billion Cups?

If stacked in a tower of one foot blocks of waste, annual American food waste across all households would stretch to the upper limits of our atmosphere: about 6,200 miles high.
each year, food waste across American households is enough to fill over 1 million dump trucks
Food Waste by Food Type

Average cups wasted per household over one week

- Scraps
- Vegetables
- Fruit
- Grains
- Mixed
- Dairy
- Protein
- Oils, Fats & Sugars
Food Waste by Food Type

Average cups wasted per household over one week

- Vegetables
- Fruit
- Grains
- Mixed
- Dairy
- Protein
- Oils, Fats & Sugars

0 0.5 1 1.5
7/8 households report wasting edible food in the last week.
Not All Waste is Equal

Wasting some foods impacts the environment more than others when evaluated at each stage of the supply chain, from farm to fork. Take for example, the vast difference in greenhouse gas emissions per kilogram of beef compared to bananas.

Not to mention, some foods take significantly more resources--water, land, fertilizer, feed--to produce than others.

This makes the categorization of wasted food a key step in research efforts.

Where Does our Food Come From?

Percent of households who obtain food using the following places at least once a week

- In-person grocery: 75%
- Out at restaurant: 50%
- In-person market: 25%
- Take-out restaurant
- Online grocery-delivery
- Online grocery-pick up
- Restaurant delivery
- Food bank/pantry
Food Waste by Household Size

Average cups wasted per household over one week

<table>
<thead>
<tr>
<th>Household Size</th>
<th>Food Waste (cups)</th>
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<tbody>
<tr>
<td>1</td>
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</table>
Food Waste by Household Income

Average cups wasted per household over one week

- Less than $12,000
- $12,000 to $23,999
- $24,000 to $35,999
- $36,000 to $47,999
- $48,000 to $59,999
- $60,000 to $89,999
- $90,000 to $119,999
- $120,000 to $179,999
- $180,000 to $239,999
- $240,000 and over

Food Waste (cups)
Food Waste by Highest Education

Average cups wasted per household over one week

- Less than high school
- High school
- Technical, trade, vocational, or business program
- Some college
- Two-year associate degree
- Four-year bachelor’s degree
- Some postgraduate or professional schooling
- Postgraduate or professional degree
Is “Best By” the Best Measure?

Did you know date labels can indicate the safety OR quality of food, and are only federally regulated on infant formula? The language on date labels is unstandardized and misinterpreted by many, resulting in prematurely discarded food. For your safety, follow package date recommendations on high risk foods such as ready-to-eat deli meats that are typically consumed without being cooked; however, for most food, trust your senses when deciding if something is safe to buy or eat!

31% of Americans dispose of food that has passed its date label

59% of Americans are frequently influenced by date labels when deciding to purchase a food item

18% of Americans worry about eating food past its “use by” date, and 15% past its “best if used by date” even with no signs of spoilage

Instead...

Look for discoloration, mold, or signs of spoilage

Smell anything unusual? Check for rancid or unexpected odors

Feel for bruising, sliminess, or staleness

Taste a bite if it seems safe, to make sure the flavor is as expected
76% use a shopping list
... but only
16% always stick to the shopping list
81% Food prices
56% The healthiness of food in my diet
34% Food waste
31% Hormones, steroids, or antibiotics in food
29% Being able to afford to buy enough food for myself/my family
28% The use of pesticides to grow food
26% Food poisoning (e.g., Salmonella and E. Coli)
23% Genetically modified food
19% Availability of food in stores
17% How food producers and farmers are treated
16% The amount of food packaging
15% The impact of food production and waste on climate change
14% Animal welfare
12% Difficulty recycling food packaging
12% The impact of food production on the environment
Top Food-Saving Motivators

Percentage of respondents who indicate the issue motivates them “a fair amount” or “a great deal” to reduce their food waste

- 82% saving money
- 76% managing home more efficiently
- 60% feeling guilty when throwing away food
- 44% considering global or national food shortages
- 40% reducing impact on the environment
When Abundance Becomes Excess

For many households, holidays are a time for enjoying good food in good company. Serving platters are heaped with a variety of options, and we pile our plates with the plentiful spread. While there’s nothing wrong with enjoying an indulgent meal as part of your holiday celebration, keep these things in mind as you host or attend food-filled festivities:

1. **Pare Down Portions**
   - **While eating:** Don’t let your eyes be bigger than your stomach. Be realistic with the serving you take, and remember it’s easier to go back for more than to un-cut that extra slice of turkey!
   - 59% of Americans prepare portion sizes they know will be eaten

2. **Optimize Options**
   - **While cooking:** Is that 5th variety of pie going to make or break the dessert spread? Offer a mix of dishes without overwhelming your guests with options so more food is enjoyed fresh!

3. **Lunch on Leftovers**
   - **While eating:** Just because the holiday is over doesn’t mean the good food has to end! Pack up tasty extras and enjoy them for days to come. Make them last by freezing them, or mix things up by incorporating them into new dishes!

4. **Integrate Ingredients**
   - **While cooking:** Does your menu play nice together? Rather than having a shopping list a mile long and tossing out half-finished ingredients, choose dishes which use similar ingredients, or ingredients you already have on hand. Consider how excess ingredients can be used in your next recipe!

- 49% of Americans eat leftovers as a meal by themselves more than once a week

Only 26% of Americans regularly use leftovers or partially used food as ingredients in future meals
36% of Americans strongly agree more food is wasted in the U.S. than in most countries.

55% of Americans believe that climate change is a consequence of food waste.

78% of Americans believe the waste of water, energy, or natural resources is a consequence of food waste.

33% of Americans know a typical household could save $101 - $300 each month, which equates to about $1,500 of savings each year.
Cups of Food Waste:
All (not incl. Scraps)

Cups Wasted
Arkansas: 10.2
Maryland: 9.8
Illinois: 8.8
...
Idaho: 6.4
Maine: 6.3
Wyoming: 6.1
Cups of Food Waste:
Scraps

Cups Wasted
Maryland: 3.7
California: 3.7
Hawaii: 3.5

... New Mexico: 2.5
Alabama: 2.5
Louisiana: 2.1
Cups of Food Waste:
Oils, Fats, and Sugars

Cups Wasted
Arkansas: 1.4
Alabama: 1.1
New Mexico: 1.0
...
Oregon: 0.6
Idaho: 0.6
Vermont: 0.4
# State Rankings: Reported Edible Food Waste

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<th>Rank</th>
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<td>Arkansas</td>
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Preferred Policies

MOST PREFERRED

- surplus **donation** requirement
- in-school food waste **education**
- **tax incentives** for food donation
- public food waste **outreach**

LEAST PREFERRED

- liability **protection** for donations
- food waste reduction **targets**
- drop-off for **organic waste**
- **pick-up** for organic waste
- mandatory food composting
- ban food waste from **landfills**
- pay-as-you-throw food waste pricing
Household Food Waste
NATIONALLY REPRESENTATIVE SURVEY
9,259 respondents
measure household food waste behaviors, knowledge, amount, and demographics

FOOD WASTE TRACKER APP
257 participants
measure objective waste over one week

VOLUME ESTIMATION
114 participants
track waste using volume estimations only, as measured in cups and tablespoons

BLUETOOTH SCALE
143 participants
track waste using volume estimations AND scale weights measured in grams
Food Footprint = Flight Footprint

The climate footprint of American food waste is equivalent to that of the United States aviation industry—passenger, commercial, and military combined.

Source: ReFED. Food Waste Solutions - Reduce food waste, food recycling & recovery. https://refed.org/
One year of food waste costs the United States an estimated $310 billion.

That’s equivalent to nearly 6 million years of tuition at Harvard.
Why One Week?

Memories of specific details, like waste amount, reduce in accuracy over time
Where’s the Waste?

Food is lost at all levels of the food supply chain, from going unharvested on farms, being rejected by grocery stores for imperfections, spoiling on buffet lines, and shriveling in the fridge. Nearly half of waste occurs in the home, making household waste a crucial facet to better understand and reduce.
- Fruits: Berries, Melons, Fruit Juice, Other Fruits
- Protein: Meats, Poultry, Seafood, Eggs, Nuts and Seeds, Soy Products
- Dairy: Milk, Non-Dairy, Yogurt, Cheese
- Scraps: Mixed Dish
- Oils, Fats & Sugars: Whole Grains, Refined Grains