Reducing Food Waste at Home

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Let’s talk about………….

• Food waste:
  • Trends
  • Sources
  • Contributing factors
• Why is food waste happening?
• Tips for reducing food waste in the home
Food Loss and Food Waste

**Food Loss:** The *edible amount of food, postharvest*, that is available for human consumption but is not consumed for any reason.

- Cooking loss, moisture loss
- Loss from mold, pests, poor storage
- Food waste

**Food Waste:**

Reductions in edible food mass anywhere along the food chain (USDA).
Maybe a better term is “wasted food”

- Edible food that is lost, discarded, or uneaten. (FAO, NRDC and USDA)
How much food is going to waste in the US?

Up to 40% of food in the US is lost.

Other published estimates have ranged from 25 to 30% (postharvest).

Source: Natural Resources Defense Council, August 2012
How much food is going to waste in the US?

Enough food to fill the Rose Bowl every day.

Source: Bloom, J. *American Wasteland: How America Throws Away Nearly Half of Its Food (and What we Can Do About It).*
How much food is going to waste in the US?

20 pounds of food per person per month

Source: Natural Resources Defense Council, August 2012; Buzby, Wells, and Hyman, USDA ERS; The Estimated Amount, Value and Calories of Postharvest Food Losses at the Retail and Consumer Levels in the US, 2014
Let’s think about it........
How much food do you think you throw away?

Food Waste Diary

Let’s take a look at the types and amounts of food disposed during a typical week. For a 7-day period (including one weekend), track of foods and beverages (except water) that you or your family members throw away. This includes food/beverages thrown out due to spoilage, not consumed, or food that you bring home (i.e., leftovers from a meal eaten out) but goes uneaten. Include the type of food/beverage, the amount, and how you disposed of the food (i.e., threw away in the trash, placed down garbage disposal, composted). If you feel real ambitious, estimate the value of that food or beverage too.

<table>
<thead>
<tr>
<th>Food</th>
<th>Amount</th>
<th>How it was Disposed</th>
<th>Why it was Disposed</th>
<th>Estimated Value</th>
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Wasted Food and/or Food Waste – 3 types

• **Avoidable**: Edible foods and beverages that are thrown away.
  • Crust cut off of a sandwich

• **Possibly avoidable**: Edible foods and beverages eaten by some but not others.
  • Peel of a carrot; skin of a baked potato

• **Unavoidable**: Waste from foods and beverages that are typically not edible.
  • Chicken bones  Rind of a cantaloupe
  • Egg shells  Tea bags

*Source: Kelleher and Robbins, *BioCycle*, August 2013*
What types of foods/beverages are wasted?

Source: Buzby, Wells, and Hyman, USDA ERS; The Estimated Amount, Value and Calories of Postharvest Food Losses at the Retail and Consumer Levels in the US, 2014 (2010 data)
Let’s think about it.......... 
What types of food do you dispose of most often?

**Avoidable, Possibly Avoidable or Unavoidable?**
Why should we care about food waste?
1. Wasted resources

- Food produced in the US uses
  - 10% energy (3% is estimated lost)
  - 50% of land
  - 80% of freshwater (25% is estimated lost)

2. More people to feed..............
Projected Population Growth in Texas

Source: Dr. Lloyd Potter, State Demographer, TDC, UTSA, July 2016
3. Food Insecurity Trends, **US & Texas**

Source: USDA, Economic Research Service
Wasted food = wasted opportunity to feed people

46.5 million people receive food and other services through food banks every year.

Reducing food losses by 15% alone could feed more than 25 million Americans every year.
Why is this produce going to waste?

These beans are headed for a landfill. What’s wrong with them?

These strawberries are headed for a landfill. What’s wrong with them?

These potatoes are headed for a landfill. What’s wrong with them?

Source: Society of St. Andrew; http://endhunger.org/food-waste-quiz/
Can you believe it?

They were the wrong size

Farm closed down at the end of the season

They were the wrong shape

Source: Society of St. Andrew; http://endhunger.org/food-waste-quiz/
4. Wasted food contributes to landfills

• Largest component of municipal solid waste; more than plastics, metals, wood or yard waste.
  • 97% of wasted food ends up in a landfill
  • Production of methane gas → impact on climate change?

5. Wasted food = money lost

• The value of food lost in the US was estimated at $165 billion
• Per household, this is estimated at $936 a year or $2.56/day.

Let’s think about it……

• Have you ever thought about how much money is lost in your home due to food waste?
How did we get here?
How/why does food waste happen?
Traditional Food Supply Chain

Production (Farming) ➔ Postharvest and Storage ➔ Processing and Packaging ➔ Distribution and Retail ➔ Consumer
Why are consumers wasting food?

• Lack of awareness (food is cheap; don’t realize how much food is wasted)
• Confusion over label dates
• Spoilage
  • Improper storage; forgotten in the refrigerator; partially used ingredients
• Desire for the freshest foods
• Concern about foodborne illness
• Impulse and bulk purchases
• Poor planning
• Over-preparation

Sources: Natural Resources Defense Council, 2012; Neff et al. Wasted Food: U.S. Consumer’s Reported Awareness, Attitudes, and Behaviors, June 2015
What motivates consumers to reduce food waste?

1. Saving money
2. Setting an example for kids

Source: Neff et al. Wasted Food: U.S. Consumer’s Reported Awareness, Attitudes, and Behaviors, June 2015
We Can’t Save All of It…..

1. Technical factors
   * Most foods are perishable; safety and storage considerations

2. Time and space factors
   * United States is a big country; getting unwanted food across the country and to other processing plants/locations is a challenge

3. Economic factors
   * Cost to recovery food; transportation cost (plus factor #2)

4. Consumer factors
   * Individual tastes, preferences; food habits

Source: Buzby, Wells, and Hyman, USDA ERS; The Estimated Amount, Value and Calories of Postharvest Food Losses at the Retail and Consumer Levels in the US, 2014
People are Getting the Message About Wasting Less Food
Hierarchy for Reducing Food Waste in the Home

- Plan your meals - be realistic
- Shop Smart
- Store Foods Properly
- Compost/Garbage Disposal
- Trash
Plan Your Meals – Be Realistic

• What do you have in your refrigerator or freezer that needs to be eaten now?
  • Do you know what you have in your freezer, refrigerator, or pantry?

• Think about how many times you will be eating away from home.
Shop Smart

• Shop your own refrigerator, freezer, and pantry first
• Stick to your list
(OR have a plan for each ingredient you put in the cart)
• Buy only what you need (and will use)
  • Bulk items – do you really save?
  • Sale items – is it a sale if it goes to waste?
  • Bundled items (“buy a rotisserie chicken and get potato salad free!”)
• Don’t shop on an empty stomach
Store Foods Properly

• Produce
  • Know how to store it for maximum shelf life
  • Use fresh, perishable produce within 2-3 days for best quality

• Preserve surplus produce – but only if you will use it!

• Date mark prepared foods
  • Use within 2-3 days for best quality/safety

• Keep an inventory of what is in your freezer

• Use your leftovers within 2-3 days
Home Composting

• Keeps food scraps and wasted food out of landfills
• Helps improve soil
• Not all foods can/should be composted – there is a science to this!
Educational Opportunities for Addressing Food Waste at the Consumer Level

What can be frozen, and for how long: 56%
How to store specific items: 47%
What foods are dangerous when spoiled: 40%
Recipes to help use up food: 39%
How to interpret food date labels: 27%
I wouldn't want any information: 19%
Apps to help with shopping or portion planning: 12%

Source: Neff et al. Wasted Food: U.S. Consumer’s Reported Awareness, Attitudes, and Behaviors, June 2015
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What do these dates mean?

- Best-by
- Pull-by
- Freshness or Best-If-Used-By
- Pack date
- Sell-by
- Use-by
- Best if used by
- Use-by
- Expiration
Did you know?

With the exception of infant formula, the FDA does not require food manufacturers to place “expired by” “use by” or “best before” dates on food products.

Did you know?

91% Americans report they “occasionally” throw away food after the “sell-by” date because they are worried about food safety.

25% of Americans surveyed do this “all the time”

Source: Food Marketing Institute, 2011
Consumers are confused about dates on food labels!

- No federal regulation of sell-by dates.
- State laws exist, vary, and are constantly updated.
- Some cities have laws prohibiting the sale of perishable foods after the expiration date.
- Manufacturers determine the shelf life of their product.
- Consumers falsely believe that date labels are indicators of safety.

How do you know if to keep or toss a food? There is a FREE app for that!

Food Keeper (USDA)

Is My Food Safe? (Academy of Nutrition and Dietetics)
And a free online course....

https://extensiononline.tamu.edu
Communities are Getting On Board

San Francisco – Imperfect Produce

Whole foods selling “ugly fruit”

Recycling food and teaching culinary skills to unemployed adults
DC Central Kitchen
Little Free Pantry

• Spinoff to the Little Free Library program
• Original purpose was to addresses food security at the local level
• Could be a way to reduce food waste (by making excess food available to others)

Source: littlefreepantry.org
littlefreelibrary.org
Necessity is the mother of invention.
Meet Mike Yurosek – father of the “baby carrot”

• Carrot grower; was losing up to 70% of his crop due to their shape
• Some of the culled carrots were fed to animals; others were discarded
Final thoughts......

• A lot of food is being wasted that could be put to better use.
• Food waste has economic, environmental, and food security consequences.
• The desire for “fresh” and “perfect” foods fuel food waste.
• Date stamps on labels and fear of foodborne illness are big contributors to food waste.
• There are things we can do to reduce food waste in the home.
Thank you!

Say NO to ugly vegetable discrimination.

CARROTS HAVE PEELINGS TOO, YOU KNOW.