



Let's Talk Trash: Reducing Food Waste at Home Leader's Guide

Introduction

Food waste is a growing problem that affects all consumers. In this lesson we will be learning about food waste, and how it impacts hunger, food insecurity, food costs and the environment. We will explore ways you can reduce food waste in your own home. By learning to reduce food waste not only will you save money, but you will also help conserve natural resources like air, soil and water quality, and make a positive impact on food insecurity & hunger.

Lesson Objectives

After this lesson, participants will be able to:

- Identify the amount of food wasted in the U.S. and the relationship to hunger.
- Describe at least two ways that wasted food impacts the environment.
- Identify how to reduce food waste at home.

Materials for the lesson

- Leader Guide and copy of *Let's Talk Trash* infographic
- Participant handouts: *America Wastes 40% of Food*, *Storing Fresh Fruits and Vegetables*, *Keep It Cool*
- Optional: *Tossed Treasures Quiz*, *Mix and Match Smoothie recipe*

Understanding the Problem of Food Waste

(for this section use the Let's Talk Trash infographic to help illustrate these facts)

It is estimated that 40% of food grown on farms in the United States will never make it to our table. Food is wasted everywhere from farm to table, but in the U.S. most of our food is wasted later in the food supply chain with retailers, restaurants, food service, and in households like yours and mine. Consumers are the biggest offender –wasting approximately 15-20% of our food. Food waste is defined as **edible food that is discarded and goes uneaten**. This includes the half-eaten meal left on the plate at a restaurant, food scraps from preparing a meal at home and the spoiled milk a family pours down the drain.

Question/discussion: Raise your hand if you threw anything out from your refrigerator in the last year? Month? Week? Yesterday?

Question/discussion: How many pounds of food would you guess that you throw out every month? *(Allow time for responses)*

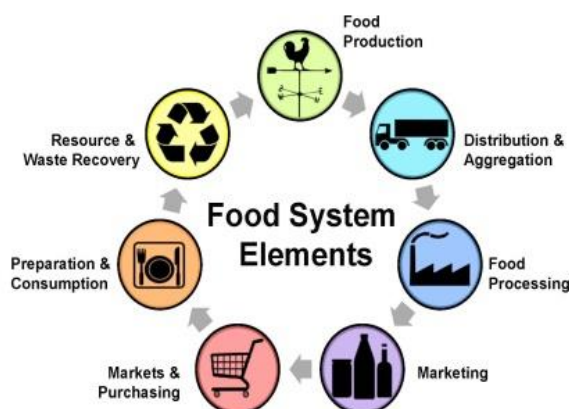
On average, Americans throw out **23 lbs. of potentially edible food** per person each month. Not only is it wasteful, but it's expensive. This waste costs the average **family of four as much as \$190 per month** (estimated range for a family is \$1,365 to \$2,275 per year). The 90 billion pounds of edible food that is wasted each year in our country costs consumers at least \$370 per/person. Pound for pound, fruits and vegetables are the most likely foods to be wasted due

to spoilage. We toss out 19% of vegetables and 15% of fruit in the typical home. This does not include the inedible portions of fruit and vegetables like banana peels or onion skins. However, tossing out protein foods such as meat, fish, poultry & eggs adds up to more food dollars down the drain.

While we are wasting 40% of our food, 1 in 6 Americans (1:5 children) are food insecure. That means they don't have regular access to enough food for a healthy, active life. For the more than 48 million people in the United States who face hunger, putting food on the table every day is a struggle and often means making impossible choices.

Food that's thrown away is a missed opportunity to put safe, healthy food on the table for the millions of Americans who don't have enough food to eat. Feeding America, a hunger relief organization estimates if food waste was cut as little as 15% it would be enough to put food on the table for 25 million who are food insecure.

To better understand the impact of food waste on the environment and how this interacts with food insecurity in America it is useful to look at our food supply as part of a food system (refer to the *Food System Elements* graphic below and in participant's handout).



Adapted by Christy Shi, Center for Environmental Farming Systems.
From: Wilkins, J. and Eames-Sheavly, M. *Discovering the Food System: An experiential learning program for young and inquiring minds.*
Cornell University, Departments of Nutritional Science and Horticulture. <http://www.discoverfoods.cornell.edu/>

Getting food from the farm to our fork uses 10% of the total U.S. energy budget, 50% of U.S. land, and 80% of all freshwater consumed in the United States. Therefore, wasting food is also wasting our limited natural resources. And much of that wasted food ends up in a landfill – which contributes to the production of methane gas - a greenhouse gas with 20-25 times the global warming potential of carbon dioxide (methane gas is produced in a landfill because municipal solid waste that is buried does not receive oxygen).

Question/discussion: Ask participants to talk about ways that waste may occur at each step of the Food System and how that might impact food security, availability and cost of food to the consumer. Some things to bring up include: overabundance of produce in grocery stores (much of which gets wasted), consumers desire for “perfect produce” (much of produce grown is “culled” based on looks), large portion sizes in restaurants, transportation & packaging costs.

The good news is there are steps we can take to reduce food waste.

What Can YOU do? Food loss happens before, during and after preparation. Ask participants to use the ***America Wastes 40% of Food*** handout and think about the steps they plan to take to reduce food waste as you discuss the following:

Shop your refrigerator first

- Begin planning meals with foods you already have before that food goes bad. Label your leftover containers with the date on a removable label. You can even mark it, “eat me first” or “don’t eat, this is for dinner.”

Plan your grocery trip – resist the urge to “over buy” by:

- Using a grocery list is a tried and true habit that will save you money and result in less waste.
- Resist sales on unusual items and promotions that encourage impulse purchases – these often lead us to purchase foods that don’t fit into our regular meal plan or lifestyle and spoil before they can be used.
- Purchasing in smaller quantities may be more cost effective and decrease wasted food especially if you live in a small household.
- Balance your purchase of fresh fruits and veggies that ripen or spoil more quickly (bananas, berries, cucumbers, summer squash, tomatoes, lettuce) with produce that has a longer storage time (apples, cabbage, carrots, potatoes, winter squash).
- Create a weekly menu incorporating the highly perishable produce early in the week.
- Stock frozen, canned and dried fruit at home as these provide good nutrition benefits are less expensive during the winter months and have longer shelf life than fresh produce.

Be Food Safe

- Refrigerate perishable food within 2 hours this includes meat, poultry, fish, eggs, dairy products, cut fruits and vegetables and all cooked leftovers.
- Use a refrigerator thermometer to make sure the temperature is always set at or below 40°F.
- Set your freezer at 0° F or lower. If stored consistently frozen food will stay good indefinitely.
- Reheat leftover food to 165° F and check using a food thermometer.

Use the Label for Best Quality

- An estimated 90 percent of Americans prematurely discard food due to confusion over the meaning of date labels. In reality, “sell by” and “use by” dates **are not federally regulated and only serve as manufacturer suggestions for peak quality**. Even if the “best if used by” or “sell by” date has passed on a food you have at home, it should be safe if stored and handled properly. (see ***Keep it Cool*** handout for storage times & tips). For example; if unopened and properly stored in the refrigerator a carton of yogurt will remain safe long after the “best by” date. Product date labeling is currently under revision to reduce confusion & consumer waste.

Smart Food Storage

Question/discussion: Refer to the *Storing Fresh Fruits and Vegetables for Best Flavor* handout and ask participant what surprises them about how to best store certain produce. Allow time for responses and bring up these talking points:

- Some fruits and veggies should be stored in the refrigerator while others are cold sensitive and should be stored at room temperature
- Produce that has a short life span once ripened like apricots, blackberries, raspberries and strawberries and herbs, sprouts, corn, cucumbers, eggplant, green beans, leafy greens, lima beans, mushrooms, peas and summer squash should be used within a couple of days of purchase, when possible.
- Fresh produce that has a long life, includes fruits like apples, blueberries, grapes and pears and vegetables like beets without top greens, artichokes, cabbage, carrots, celery, garlic, leeks, onions, parsnips, potatoes and winter squash.
- Food spoils due to improper storage and poor visibility in refrigerators. Foods are less likely to go bad if you use the oldest food items first. Organize your refrigerator and pantry so that new foods are behind the old foods, that way those food items are the first to be seen and the first to be used.

Food Preparation & Kitchen Tips (Allow time for discussion as participants will likely have many great tips to share with each other)

- Avoid Over-Preparing - One-third of household food waste is the result of people cooking or serving too much food. Recipe portions in cookbooks have increased over time. Use recipes scaled to work for your size of household. If you do have leftover food divide into serving size portions and freeze for later use.
- Trim fruits and veggies to get as much edible portion as possible. Small leftover pieces can be frozen or dehydrated and used later in soups, stews or casseroles.
- Repurpose leftovers by creatively using them in soups or toss small amounts of leftover veggies, meat, chicken or fish and cheese into a salad. Grate small amounts of leftover cheese and mix in olives, nuts or fruit for a tasty spread for bread or crackers. Toast and crumble old bread for use in recipes or as croutons for salad. The ideas are endless.
- Use your freezer wisely keeping the temperature set to 0° F or below. Milk, butter, yogurt and hard cheese can all be frozen. Some vegetables need blanching before freezing to preserve the quality but most fruit needs little preparation. For example; over-ripe bananas can be frozen whole and make wonderful smoothies or banana bread. For more information on how to freeze foods go to the National Center for Home Food preservation web site at: <http://nchfp.uga.edu/how/freeze.html>
- Create a home composting system, which can be as simple as collecting scraps from fruit, vegetables and leftover coffee grounds/ tea bags and egg shells in a paper bag then putting in an open air bin outside. Because home compost is exposed to oxygen -- either by turning it or through the use of worms and other living organisms- it produces CO₂ (carbon dioxide) instead of methane gas and recycles nutrients which can be added back to the home garden. Check out this link for more information: <https://choosemyplate-prod.azureedge.net/sites/default/files/misc/CompostGuide.pdf>

- Donate excess packaged food and fruits and vegetables from your home garden or orchard. Contact your local food bank, food pantry, church or charitable meals site to determine what type of donations they will accept. Remember however, that it is more cost effective and less labor intensive to donate money to these organizations so they can purchase the specific foods most in need.

Final Thought: “Buy what you need and eat what you buy”

Optional Activities

- Have participants complete and review the *Tossed Treasures: How We Can Waste Less Food Quiz*
- Make and taste a smoothie made using the *Mix and Match Smoothie* recipe to reinforce how easy it is to use overripe banana or other fresh fruit rather than toss it out.

For more information and in-depth look at food waste you can view this video “Tossed Out: Food Waste in America” Available at: <http://harvestpublicmedia.org/content/tossed-out>

*Developed by Cheryl Kirk, OSU Extension Family and Community Health Educator
(Based on the Center for Nutrition Policy & Promotion USDA campaign to reduce household food waste)*

References:

Academy of Nutrition and Dietetics. Keep It Cool: Refrigerator/Freezer Food Storage Chart. <http://www.eatright.org/~media/homefoodsafety/multimedia/downloads/keepitcool%20refrigerator%20storage%20chart.ashx> accessed February 3, 2016

Academy of Nutrition and Dietetics. *Tossed Treasures: How We Can All Waste Less Food*. 2016. Retrieved from: <http://eatrightfoundation.org/wp-content/uploads/2016/10/TossedTreasuresEnglishHandout.pdf>. November 10, 2016.

Academy of Nutrition and Dietetics. *Tossed Treasures Presentation*. Retrieved from: <http://eatrightfoundation.org/toolkits-webinars/>. November 9, 2016.

Feeding America. Food Waste in America. Retrieved from: <http://www.feedingamerica.org/about-us/how-we-work/securing-meals/reducing-food-waste.html>. November 9, 2016.

US Environmental Protection Agency. *Composting At Home*. August 24, 2016. Retrieved from: <https://www.epa.gov/recycle/composting-home>. November 9, 2016.

US Department of Agriculture. *Let’s Talk Trash*. 2015. Retrieved from: <https://www.choosemyplate.gov/lets-talk-trash> November 2016.

Wasted: How America Is Losing Up to 40% of Its Food from Farm to Fork to Landfill. August 2012. Retrieved from: <https://www.nrdc.org/sites/default/files/wasted-food-IP.pdf>. November 9, 2016.

Let's talk trash.

Cut back on **food waste and loss** to save money, improve access to food, and protect natural resources.



About **90 billion** pounds of edible food goes uneaten each year.*

That weighs **123x** the Empire State Building.

This cost **\$370** per person consumers each year.

\$ amount of each food group wasted

KEY:

- = \$1
- = \$5
- = \$20



Grains
\$22

Fruits
\$45

Protein Foods**
\$140

Vegetables
\$66

Dairy
\$60

Added Fat & Sugar
\$37



Reduce **wasted food** in your home with simple shopping, storage, & cooking practices.

WHAT YOU CAN DO



Plan & Save

Plan your weekly menu and make a grocery list. Does the list include food that you already have at home? Buy only what you need and stay within your budget.



Be Food Safe

Shop refrigerated or frozen foods just before checking out. Transport items that spoil easily in a cooler or thermal bag and refrigerate or freeze within two hours of shopping.



Check for Quality

The date on a food package helps the store determine how long to display the product for sale. It can also help you to choose a product at its best quality.



Set Storage Reminders

Track storage times for different foods using The FoodKeeper Application. This tool will remind you when foods are near to the end of their storage date.



Be Organized

Foods are less likely to go bad when you use the older items first. Keep your pantry and refrigerator clean and organized so you can see what needs to be eaten first.



Re-purpose

Give leftovers a makeover when you reuse them in recipes. Add broccoli stems to a salad or blend overripe fruit into a low-fat smoothie. Freeze extra food.



Donate

Many shelters, food banks, and faith-based organizations will accept food donations to feed others who need a meal.



Recycle & Compost

Instead of throwing out food, create a compost bin. Don't have a yard? Your city may help you find composting or recycling options that are right for you.



*In homes and away-from home eating places.

**Protein foods includes meat, poultry, fish, eggs, and nuts.

Sources:

All sources are available at ChooseMyPlate.gov/lets-talk-trash.

Center for Nutrition Policy and Promotion
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