



Stick a Fork in Food Waste!

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EarthWays Center - Who Are We?

As the Missouri Botanical Garden's Sustainability Division, the EarthWays Center enriches lives and protects plants and our environment by educating and connecting people to practical sustainable solutions where they live, learn, work, and play.

- Businesses
- Local Communities
- Individuals and Families
- Homeowners and Renters
 - Professionals
 - Schools
- K-12 Students and Educators
- Universities & Colleges

Green Resources Info Service

The EarthWays Center is at your service with answers to your sustainable living questions. Let the Garden's Green Living experts help you:

Contact us today at: greenresources@mobot.org or (314) 577-0246

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Understanding the Problem

Total MSW Generation (by Material), 2017

- 268 million tons (before recycling)
- 97 million tons (35.2%) diverted for recycling or composting
- Average of 4.5 lbs of waste generated per person per day

Wasted Food

- About 1/3 of food produced for human consumption is never eaten in the United States
 - 40% of that food is wasted in our homes

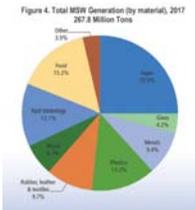


Figure 4. Total MSW Generation (by material), 2017
267.8 Million Tons

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Sustainable Development Goals | 17 Goals



The Sustainable Development Goals (SDGs) were by the United Nations in 2015. The SDGs replace the Millennium Development Goals (MDGs), which started a global effort in 2000 to tackle the indignity of poverty.

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Project Drawdown

Drawdown is the point in time when the concentration of greenhouse gases in the Earth's atmosphere begins to decline on a year-to-year basis.

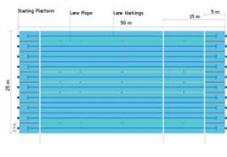
SOLUTION	SECTORS	SCENARIO 1*	SCENARIO 2*
Reduced Food Waste	Food, Agriculture, and Land Use / Land Sinks	87.45	94.56
Health and Education	Health and Education	85.42	85.42
Plant-Rich Diets	Food, Agriculture, and Land Use / Land Sinks	85.01	91.72
Refrigerant Management	Industry / Buildings	57.76	57.76
Tropical Forest Restoration	Land Sinks	54.45	85.34
Onshore Wind Turbines	Electricity	47.21	147.72
Alternative Refrigerants	Industry / Buildings	43.53	50.53
Utility-Scale Solar Photovoltaics	Electricity	42.32	193.3

* Gigatons CO₂ Equivalent Reduced / Sequestered (2020-2050)

If 50-75 percent of food waste is reduced by 2050, avoided emissions could be equal to 10.3-18.8 gigatons of carbon dioxide. Reducing waste also avoids the deforestation for additional farmland, preventing 74.9-76.3 gigatons of additional emissions.

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What is a gigaton?




400,000 Olympic-sized pools is about 1 gigaton of water!

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Why is wasted food a problem?

- People
 - In 2012, 14.5% of the households in the United States were food insecure. Much of the 1.3B pounds of food sent to landfills is edible and can be used to feed the hungry
- Planet
 - Food waste squanders valuable resources throughout the supply chain – including water, land, fuel and electricity.
- Prosperity
 - Landfilled food costs U.S. \$161.6B a year. An average family of four loses \$1,484 annually on wasted food

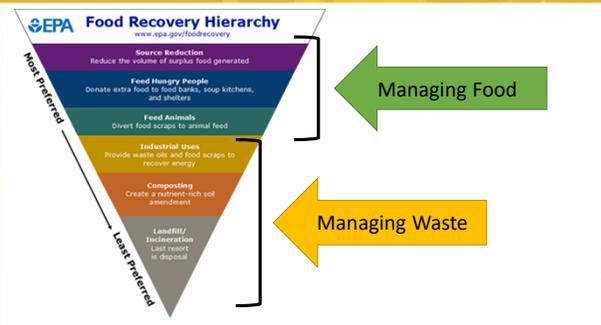


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Courtesy of the Missouri Historical Society, St. Louis

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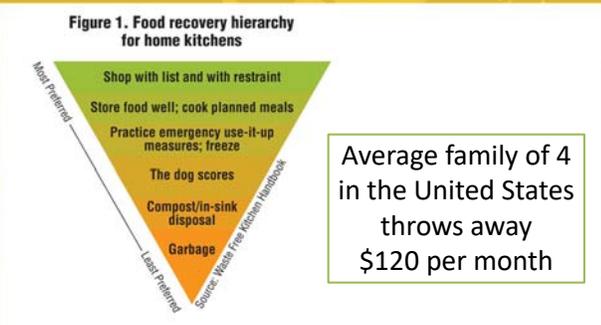
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Feed Hungry People

- Many restaurants donate leftovers to food kitchens
- Organizations are helping to connect restaurants to food kitchens
 - Operation Food Search
 - St. Louis Area Food Bank
 - Feeding Illinois
 - Rescuing Leftover Cuisine
 - Food Donation Connection
 - Food Rescue Locator
 - Meal Connect through Feeding America
 - St. Louis Food Rescue

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Figure 1. Food recovery hierarchy for home kitchens



Average family of 4 in the United States throws away \$120 per month

Source: Waste Free Kitchen Handbook

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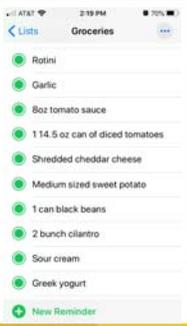
Waste Audit

- Tool to measure and quantify amount of wasted food produced
- Consider only measuring wasted food that could be eaten
 - Don't include egg shells, coffee grounds, etc.
- Track the following things
 - Each item thrown out
 - Quantity (number or weight)
 - Approximate value
 - Reason for throwing away
 - Be specific. Instead of saying "too old" say "didn't cook as much as I thought"

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Buying Food

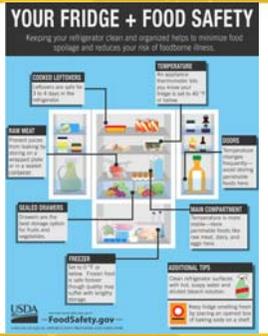
- Make a realistic meal plan for the week
 - Plan an easy night
 - If you know you eat out, make that part of the plan
- Check your fridge/pantry while planning and making a list
 - Are there items that need to be used?
- Stick to your shopping list
- Consider creating a food garden



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Storing and Using Food

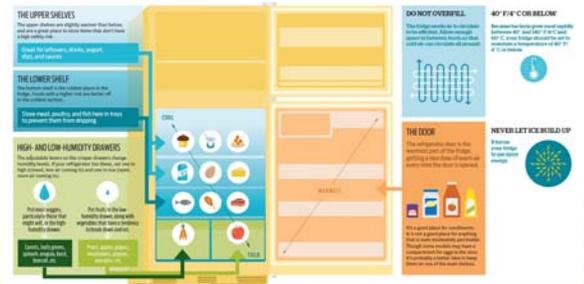
- Storing food properly can extend its life
- Look for ways to use older foods safely
- Think about canning, preserving, and fermenting



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THE REFRIGERATOR DEMYSTIFIED

From [Waste Free Kitchen Handbook](#)



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Food Keeper



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Food Labels

From the USDA:

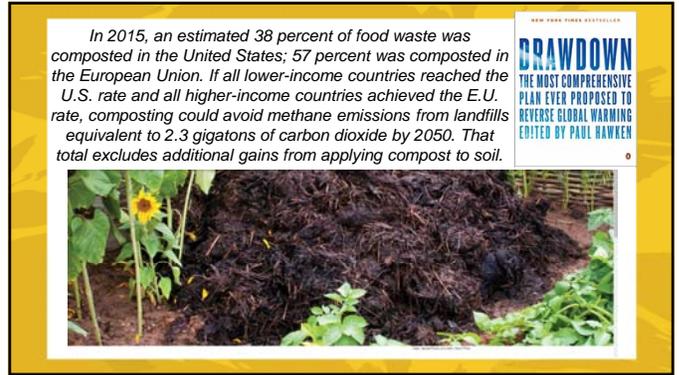
- A **"Best if Used By/Before"** date indicates when a product will be of best flavor or quality. It is not a purchase or safety date.
- A **"Sell-By"** date tells the store how long to display the product for sale for inventory management. It is not a safety date.
- A **"Use-By"** date is the last date recommended for the use of the product while at peak quality. It is not a safety date except for when used on infant formula as described below.
- A **"Freeze-By"** date indicates when a product should be frozen to maintain peak quality. It is not a purchase or safety date.



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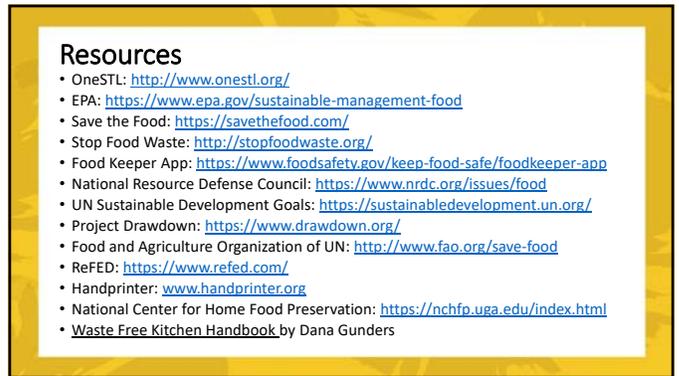
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