



Reducing Food Waste at Home

TEXAS A&M
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EXTENSION

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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”

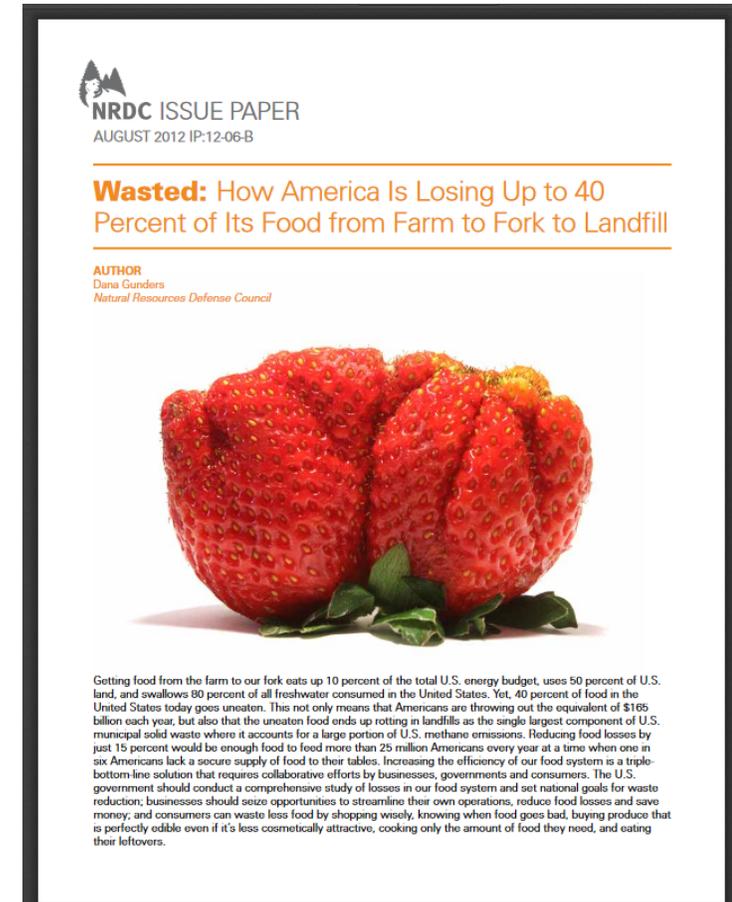
- Edible food that is lost, discarded, or uneaten. (FAO, NRDC and USDA)



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).



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**



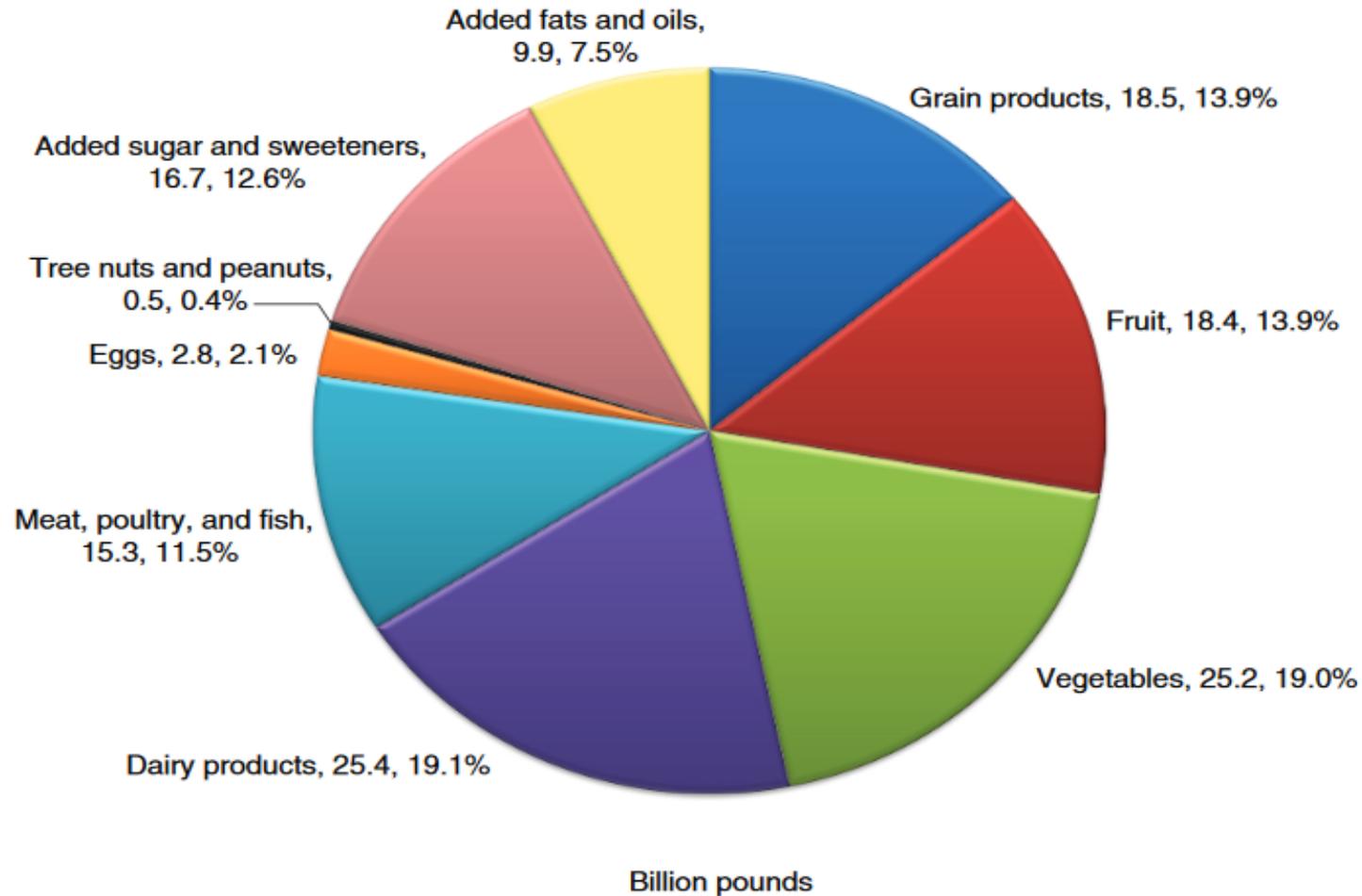
Source: Natural Resources Defense Council, August 2012; Buzby, Wells, and Hyman, USDA ERS; *The Estimated Amount, Value and Calories of Postharvest Food Losses at the Retail and Consumer Levels in the US, 2014*

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
 - Egg shells
 - Rind of a cantaloupe
 - Tea bags



What types of foods/beverages are wasted?



Top Categories

Dairy

Vegetables

Grains & Fruits

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?



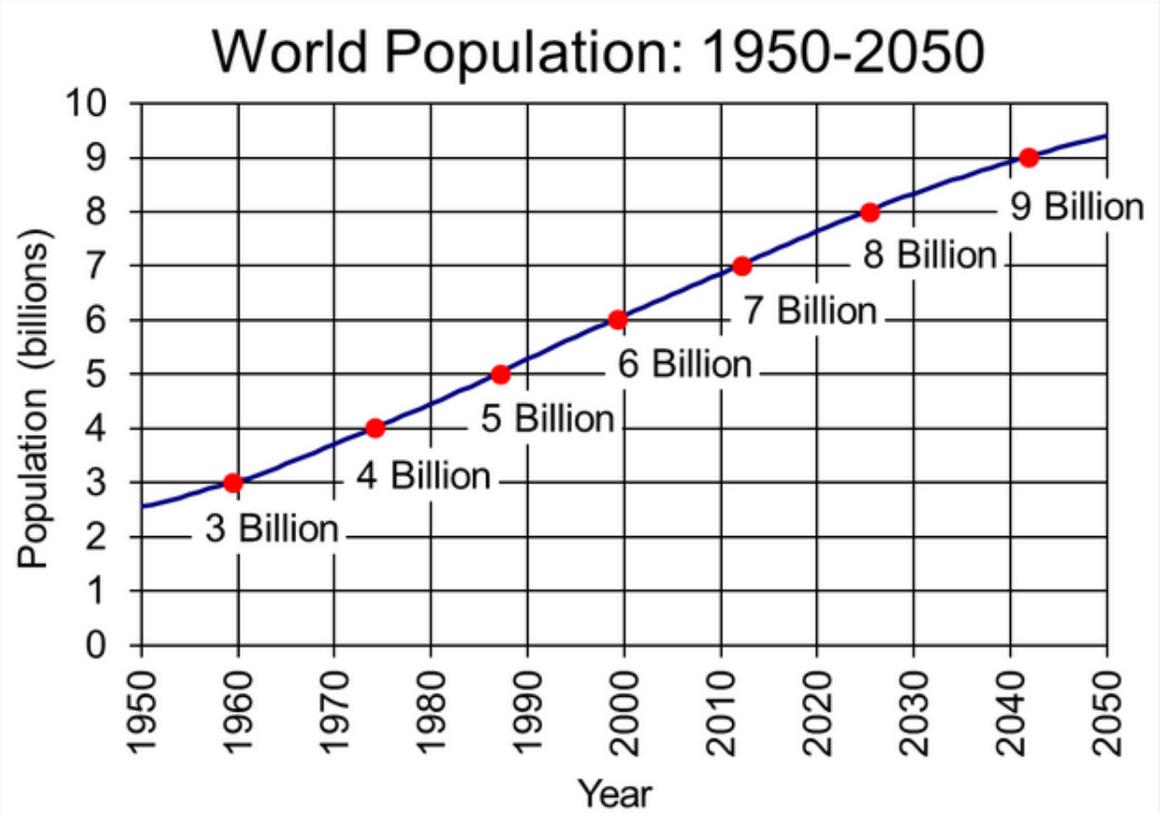
1. Wasted resources

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



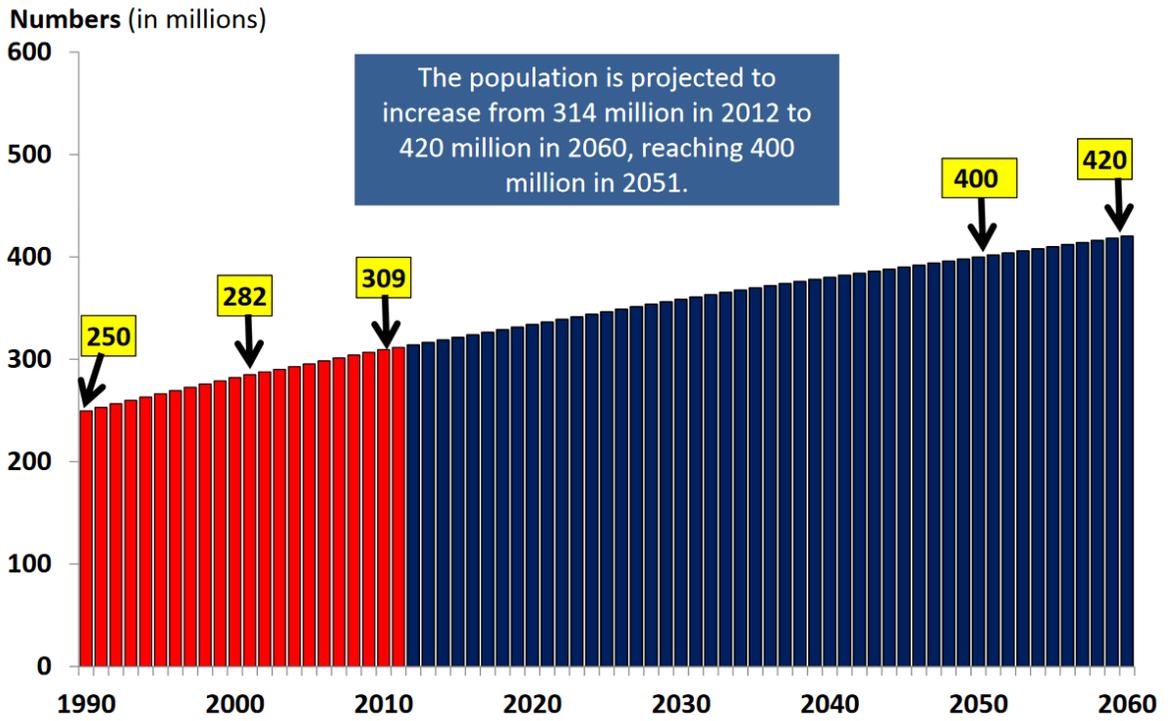
Sources: EPA, 2011; USDA, Natural Resources Defense Council, 2012; Levis et al., *Waste Management*, 2010; Buzby and Hyman, *Food Policy*, 2012.

2. More people to feed.....



Source: U.S. Census Bureau, International Data Base, July 2015 Update.

United States Population: 1990 to 2060

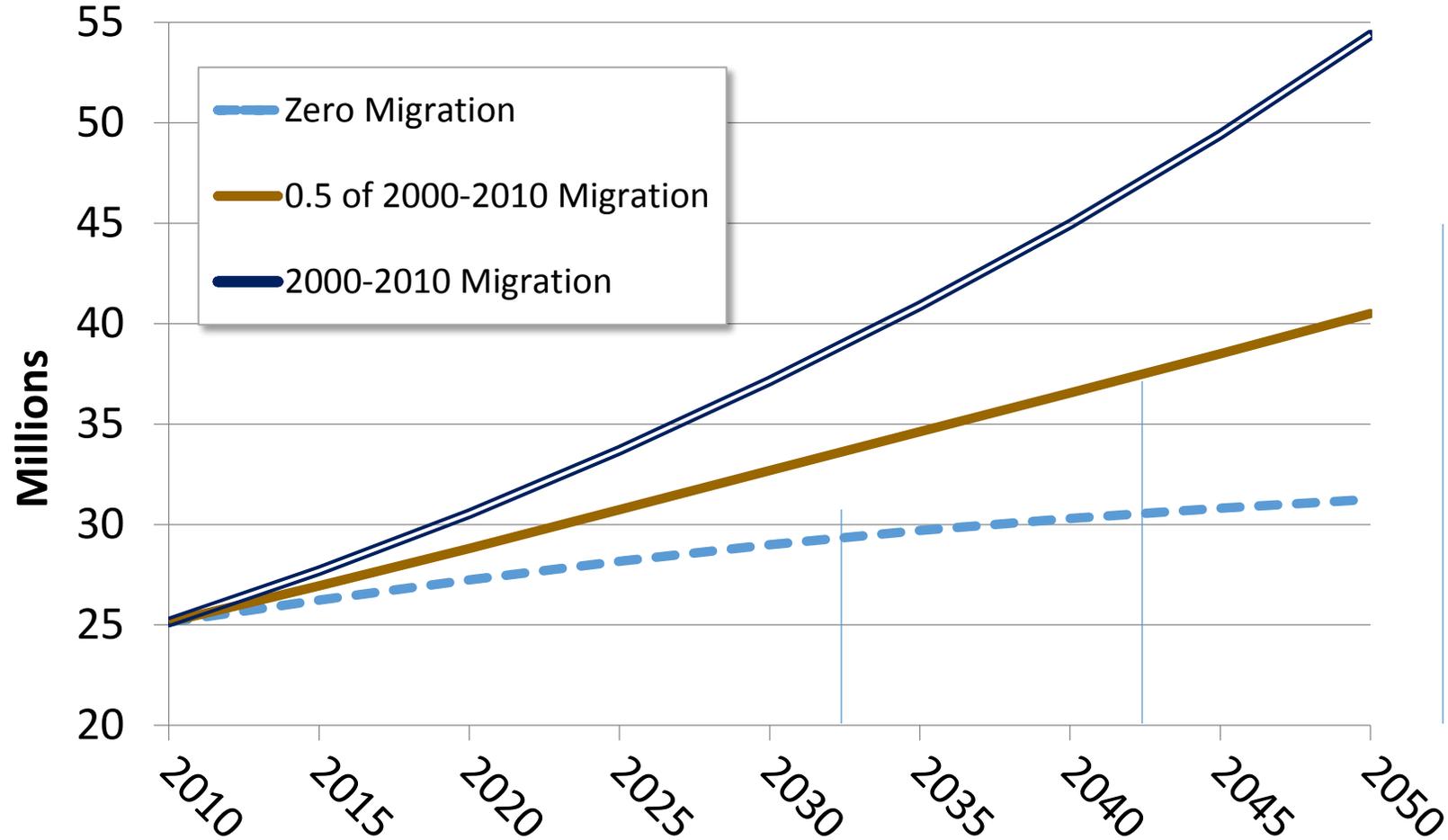


The population is projected to increase from 314 million in 2012 to 420 million in 2060, reaching 400 million in 2051.

United States Census Bureau
U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU

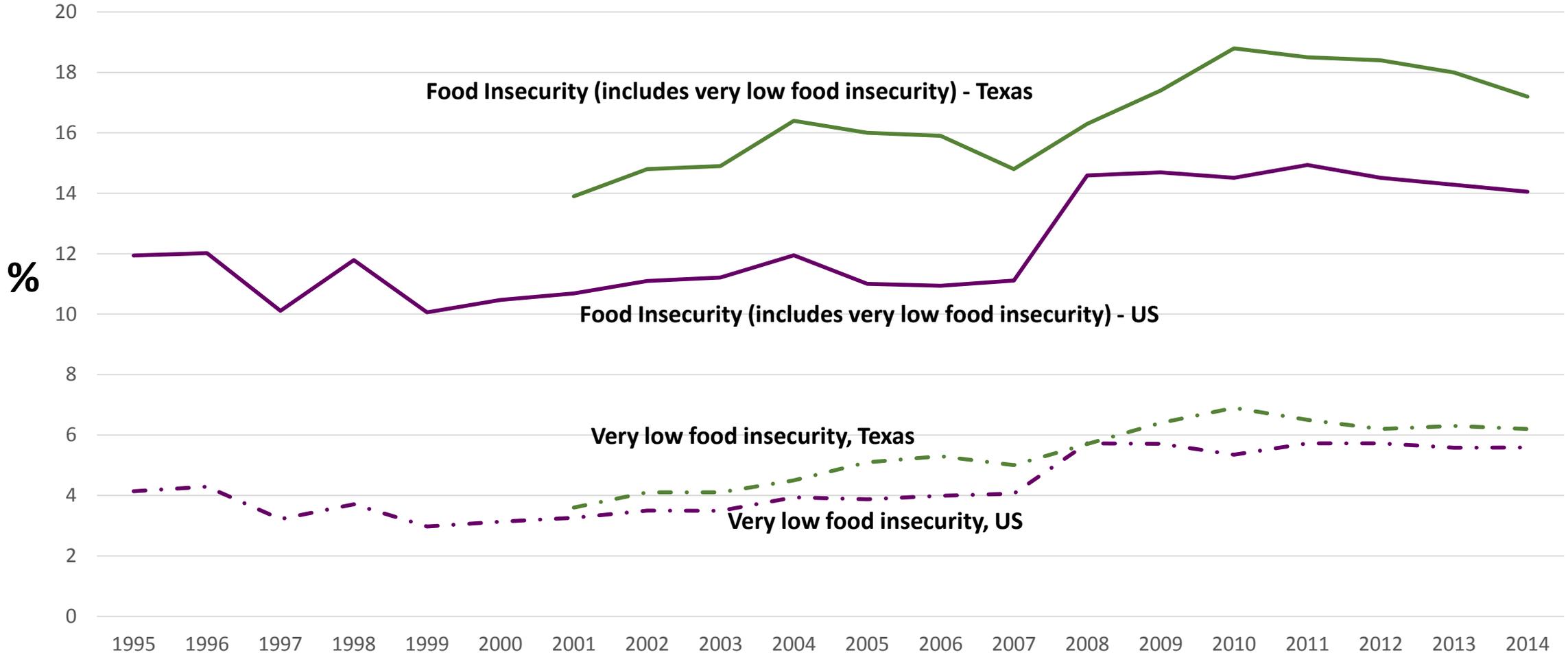
Red columns represent population estimates for 1990-2011.

Projected Population Growth in Texas



Source: Dr. Lloyd Potter, State Demographer, TDC, UTSA, July 2016

3. Food Insecurity Trends, US & Texas



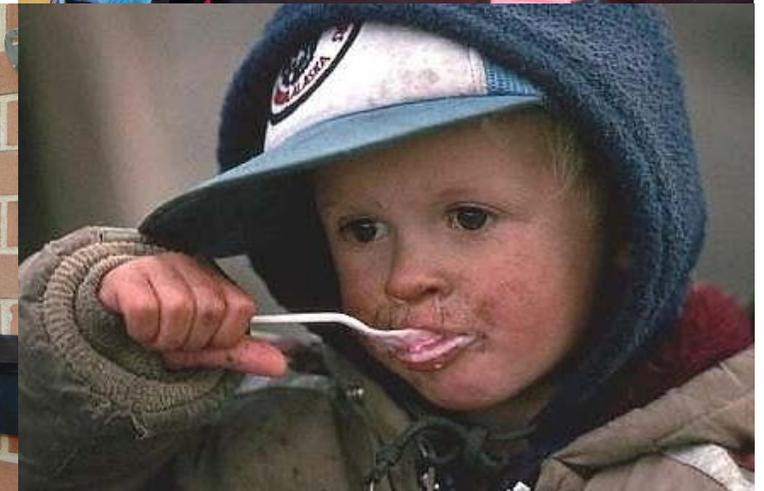
Source: USDA, Economic Research Service

year

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?



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?



Sources: EPA, 2011; USDA, Natural Resources Defense Council, 2012; Levis et al., *Waste Management*, 2010; Buzby and Hyman, *Food Policy*, 2012.

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.



Sources: EPA, 2011; USDA, Natural Resources Defense Council, 2012; Levis et al., *Waste Management*, 2010; Buzby and Hyman, *Food Policy*, 2012.

Let's think about it.....

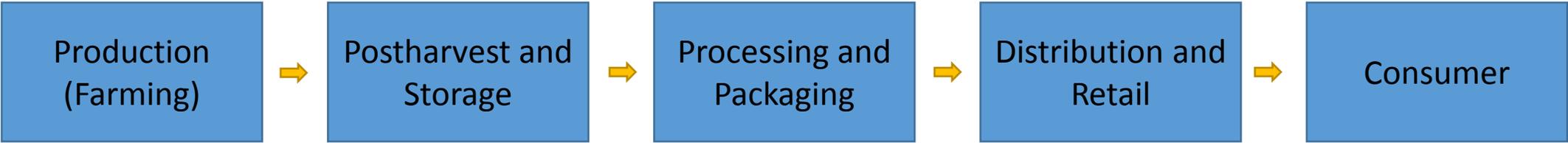
- Have you ever thought about how much money is lost in your home due to food waste?



How did we get here? How/why does food waste happen?



Traditional Food Supply Chain



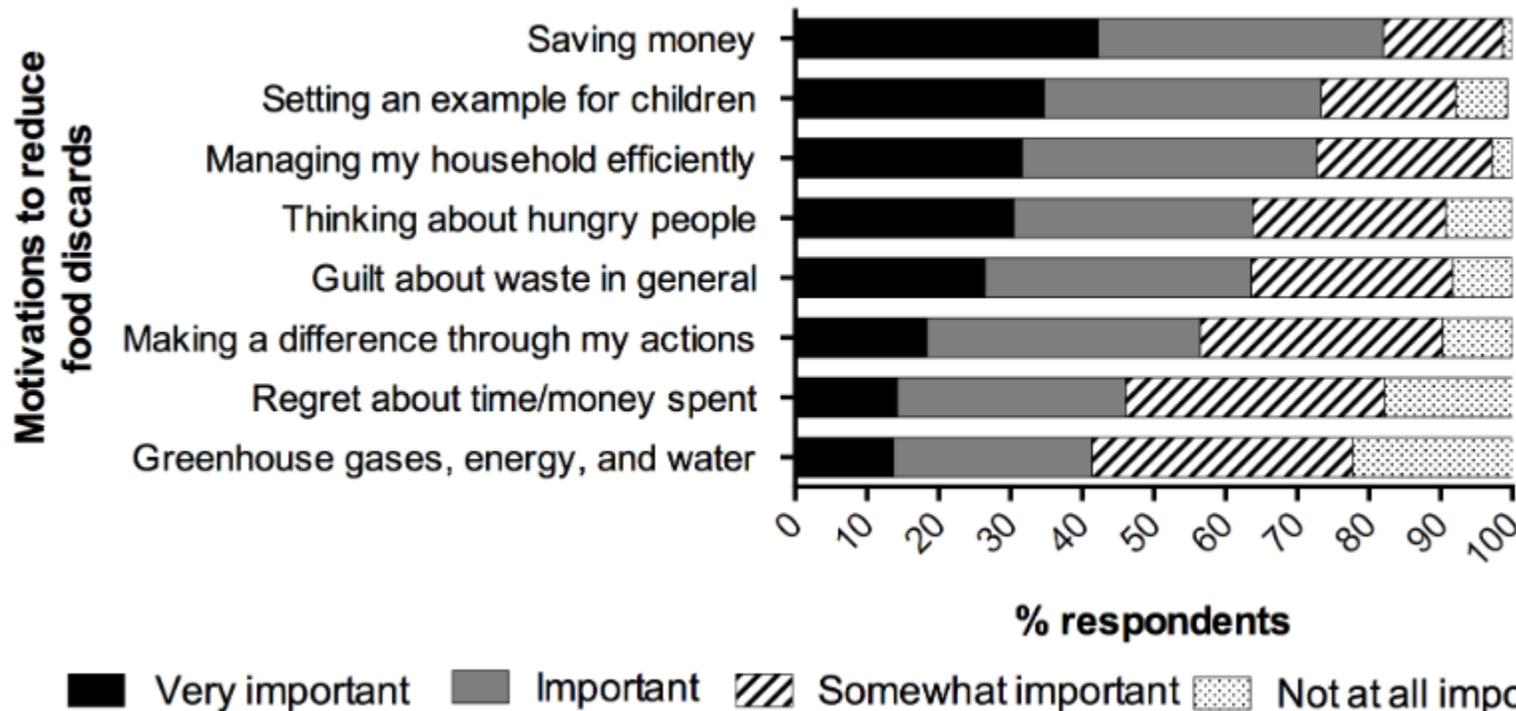
Why are consumers wasting food?

- 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

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

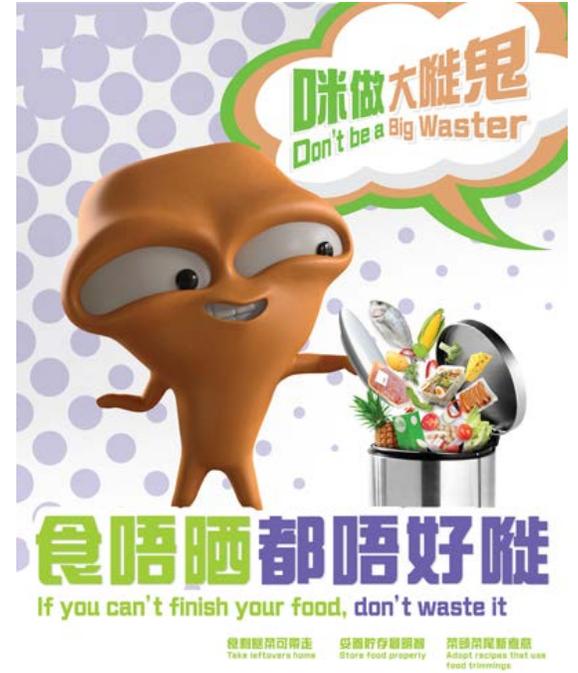
- * Individual tastes, preferences; food habits



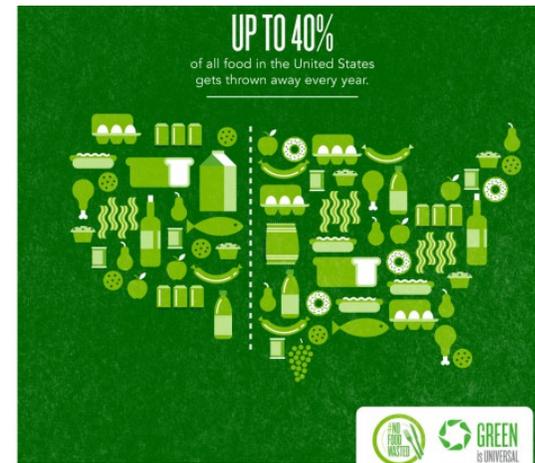
Foodshift.net



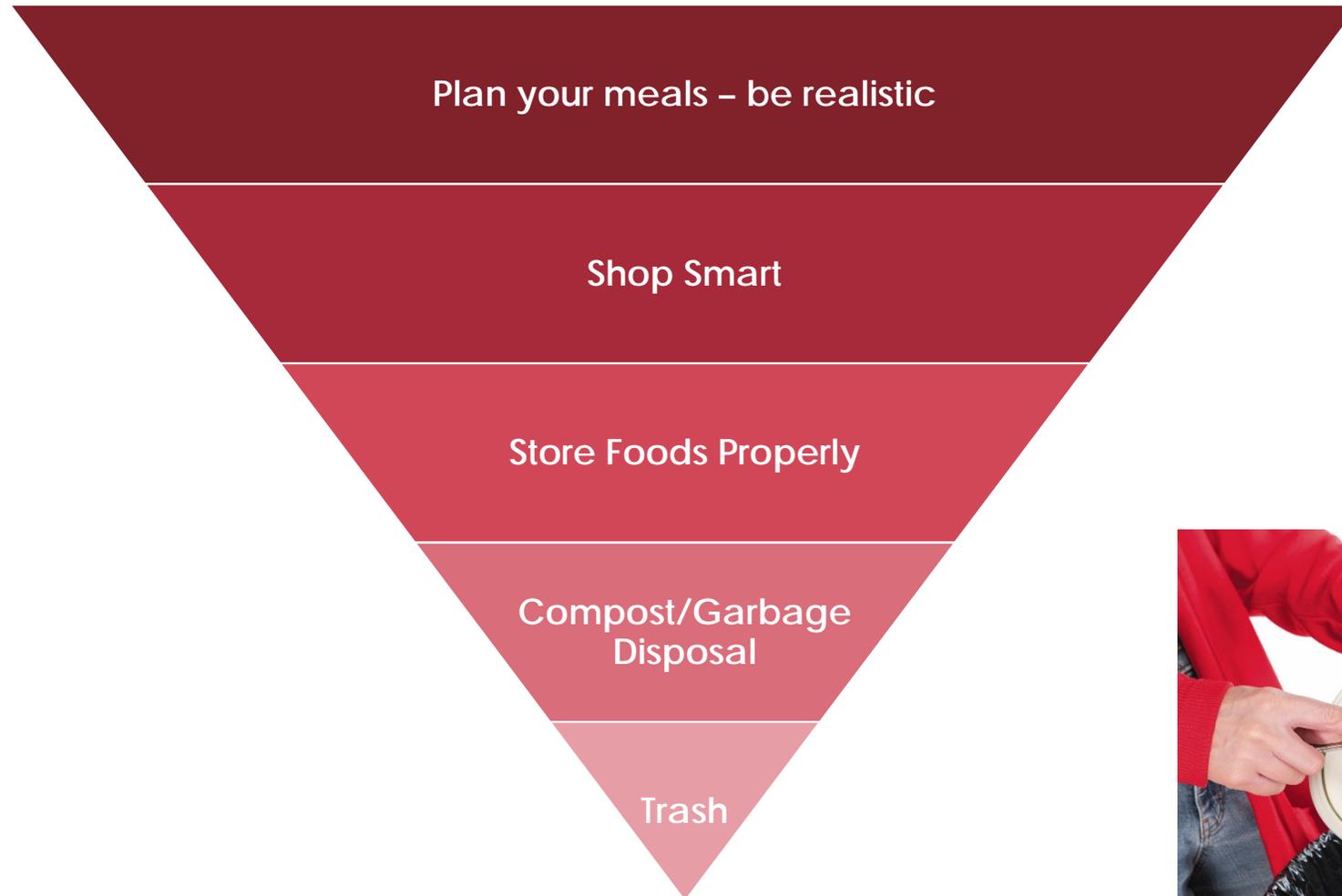
People are Getting the Message About Wasting Less Food



LOVE FOOD hate waste

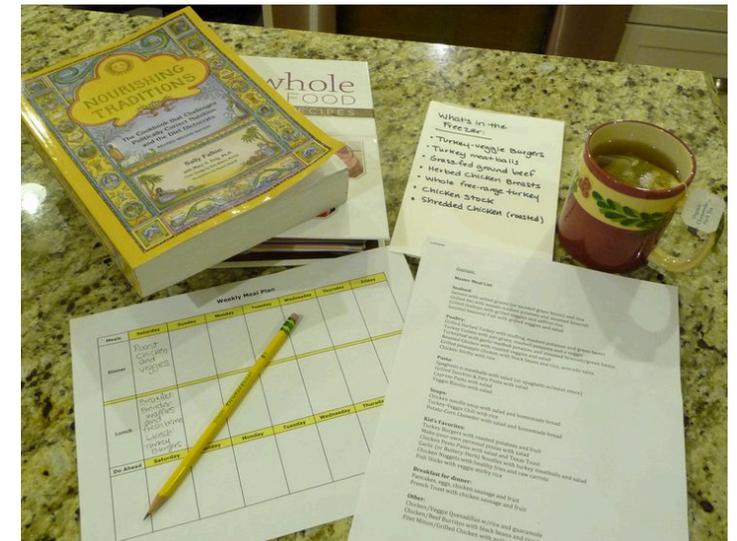


Hierarchy for Reducing Food Waste in the Home



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

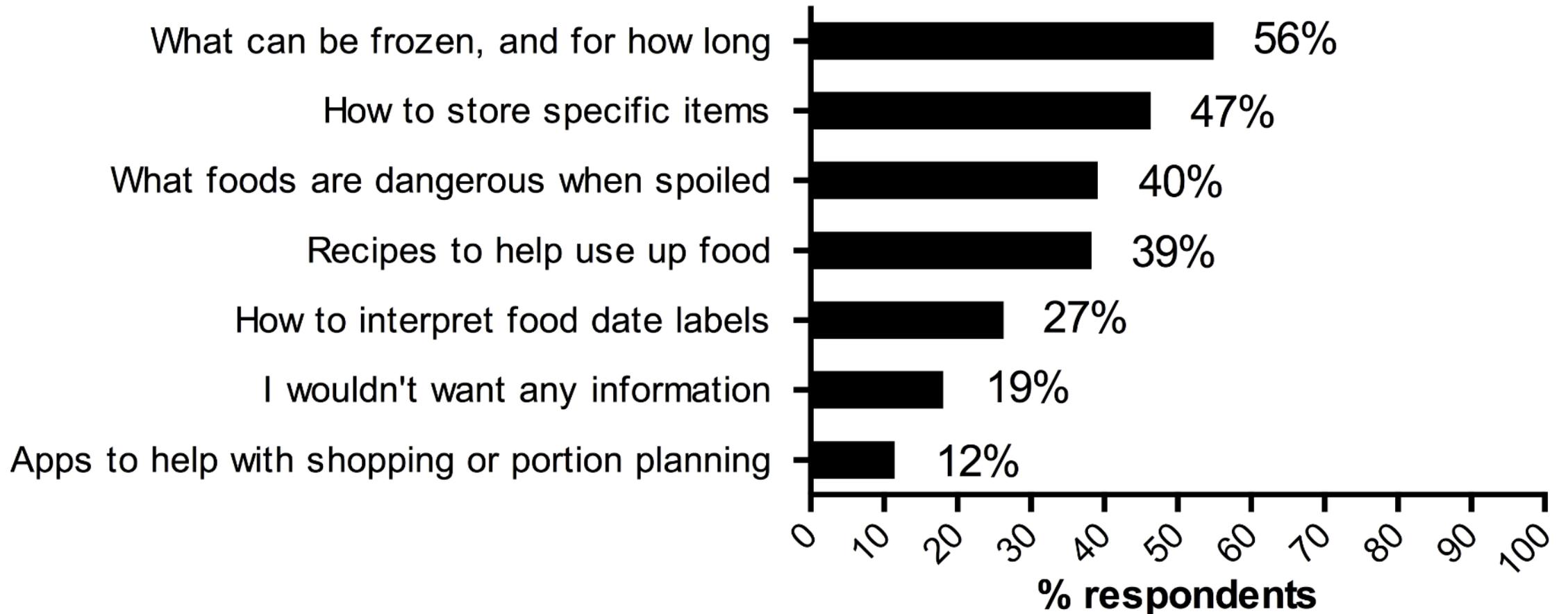


Home Composting

- 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!

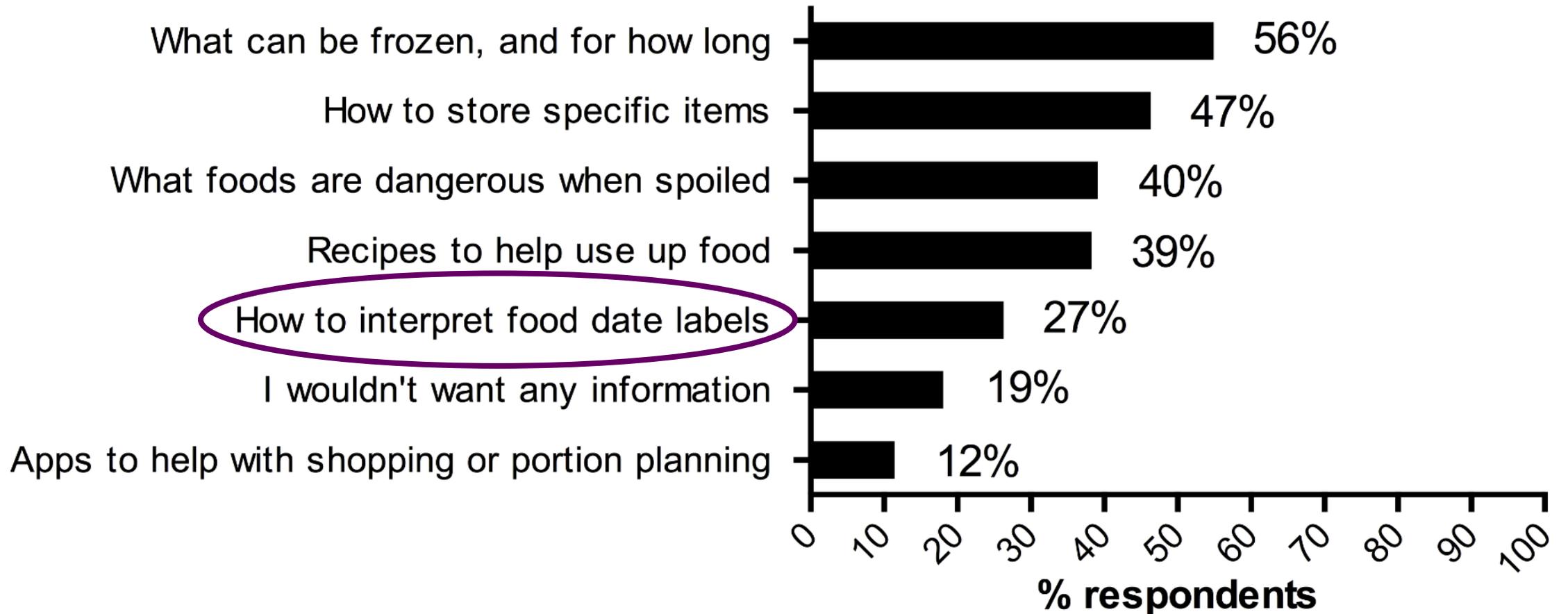


Educational Opportunities for Addressing Food Waste at the Consumer Level



Source: Neff et al. *Wasted Food: U.S. Consumer's Reported Awareness, Attitudes, and Behaviors*, June 2015

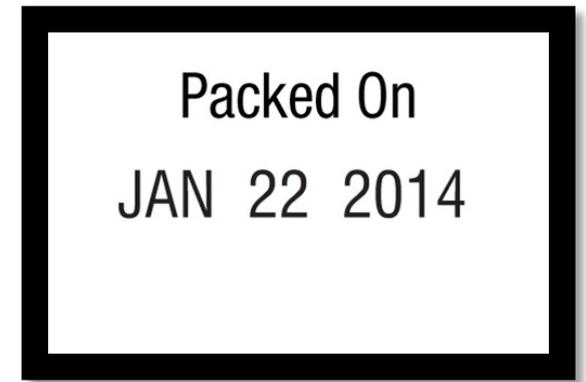
Educational Opportunities for Addressing Food Waste at the Consumer Level



Source: Neff et al. *Wasted Food: U.S. Consumer's Reported Awareness, Attitudes, and Behaviors*, June 2015

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.

NRDC REPORT

SEPTEMBER 2013
R:13-09-A

The Dating Game:

How Confusing Food Date Labels
Lead to Food Waste in America



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....



[Free Account](#) | [Sign In](#)

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Food Nutrition Courses: Food Safety

[« Back to Topic Areas](#)

Cooking up a Cottage Food Business

In Texas, the Cottage Food Law allows residents to prepare and sell specific foods from an unlicensed residential (home) kitchen. This course is designed to help people who want to start a cottage food production operation out of their residence. Through this course individuals will gain knowledge of the Texas Cottage Food Law and general rules and best practices for preparing food safely.

Enroll Now! **Credit Hours:** 1 hr **Course Price:** Pay First **Certificate Fee :** 7.00

Food Safety in the Classroom

There are many things one can do to help prevent foodborne illnesses from occurring, especially in children. This course is targeted towards child caregivers to discuss food safety practices in the preschool environment.

Enroll Now! **Credit Hours:** 1 hr **Course Price:** Free **Certificate Fee :** 7.00

Understanding the Dates on Food Labels

Dates are placed on food labels for a variety of reasons. This course will help you learn the differences between dates often seen on products/packages at your local retail stores.

Enroll Now! **Credit Hours:** 1 hr **Course Price:** Free **Certificate Fee :** Free

[« Back to Topic Areas](#)

<https://extensiononline.tamu.edu>



Communities are Getting On Board



San Francisco – Imperfect Produce

Your Fruit at Whole Foods Is Going to Get a Little Uglier

by Jonathan Chew @sochews MARCH 8, 2016, 12:27 PM EDT



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 address 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.

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