



The (Re)Purpose of Food: Reducing Wasted Food at Home

Brought to you by:
Produce for Better Health Foundation
in Partnership with
Monsanto Vegetable Seeds

#FoodWasteMatters



The (re)purpose of food

Deliciousness

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registered dietitian



@JudyBarbe

#FoodWasteMatters



www.LiveBest.info



Tom Ballard, Flickr, Creative Commons



400

pounds
annually
per person

(US)

19%
vegetables

1/2#
per day

40%
waste

52
million
tons

Talkin' *TRASH*

+ Not me!

- ≡ 7-minute life of a fry
- ≡ Ready-to-eat variety/quantity
- ≡ Imperfect vegetables
- ≡ Missed harvest
- ≡ Transportation glitch
- ≡ Food buffets/catered events

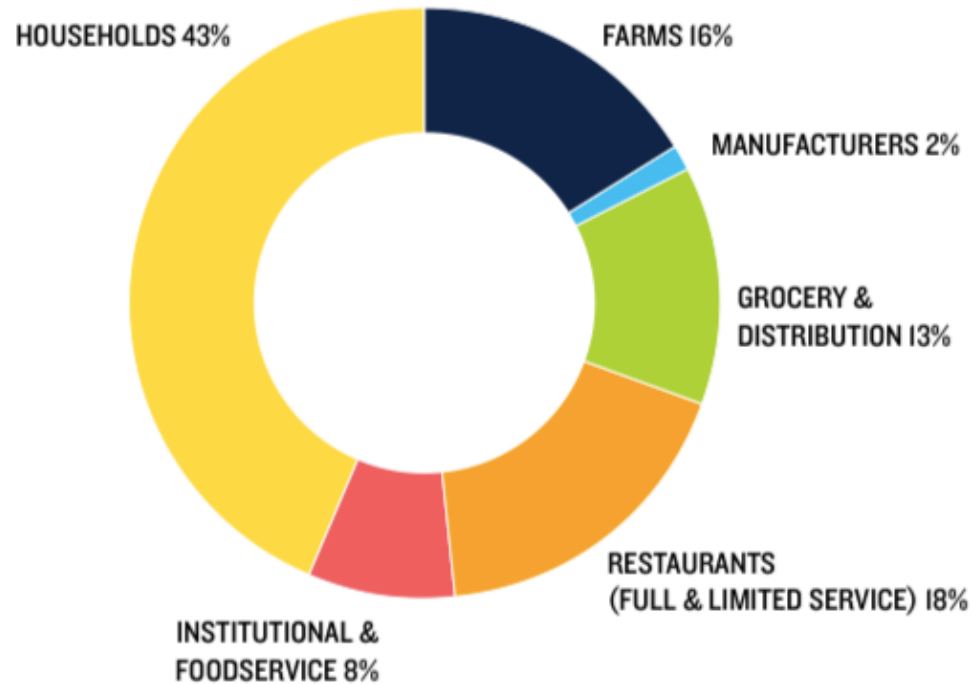


- ≡ School lunch
- ≡ “I ordered scrambled”
- ≡ Excessive portions
- ≡ Uneaten leftovers

+ Home is where the...trash is



FIGURE I: BREAKDOWN OF FOOD WASTE GENERATION BY SUPPLY CHAIN STAGE, AS ESTIMATED BY REFD FOR 2015⁴³



Note that by-products used for animal feed are not included.

<https://www.nrdc.org/sites/default/files/wasted-2017-report.pdf>



Motivation?

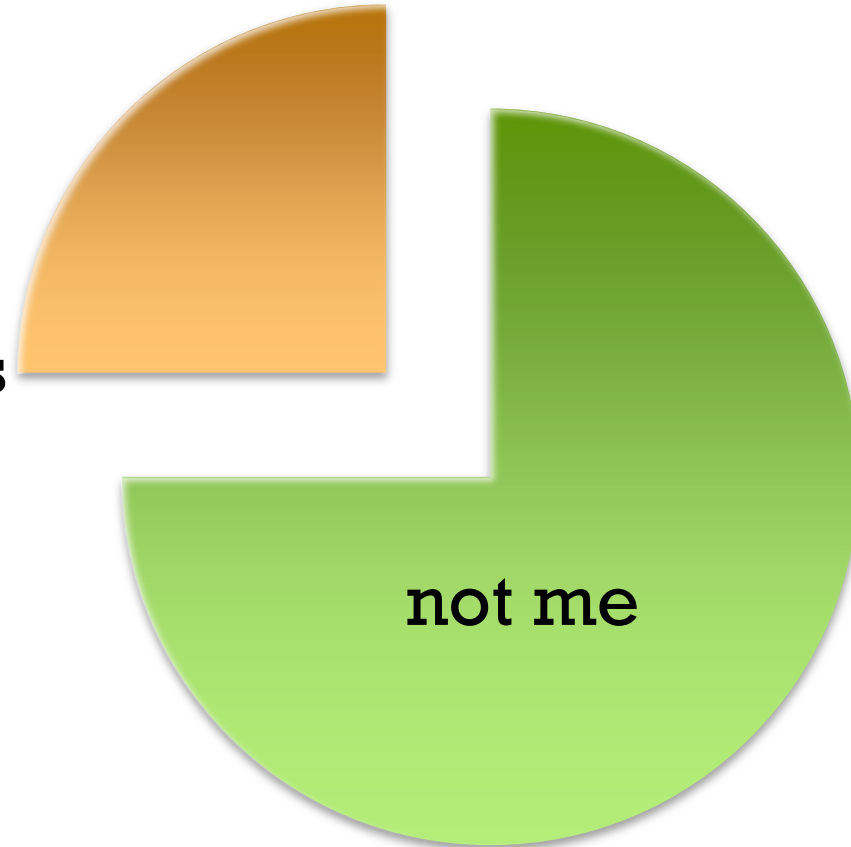
TO REDUCE WASTE

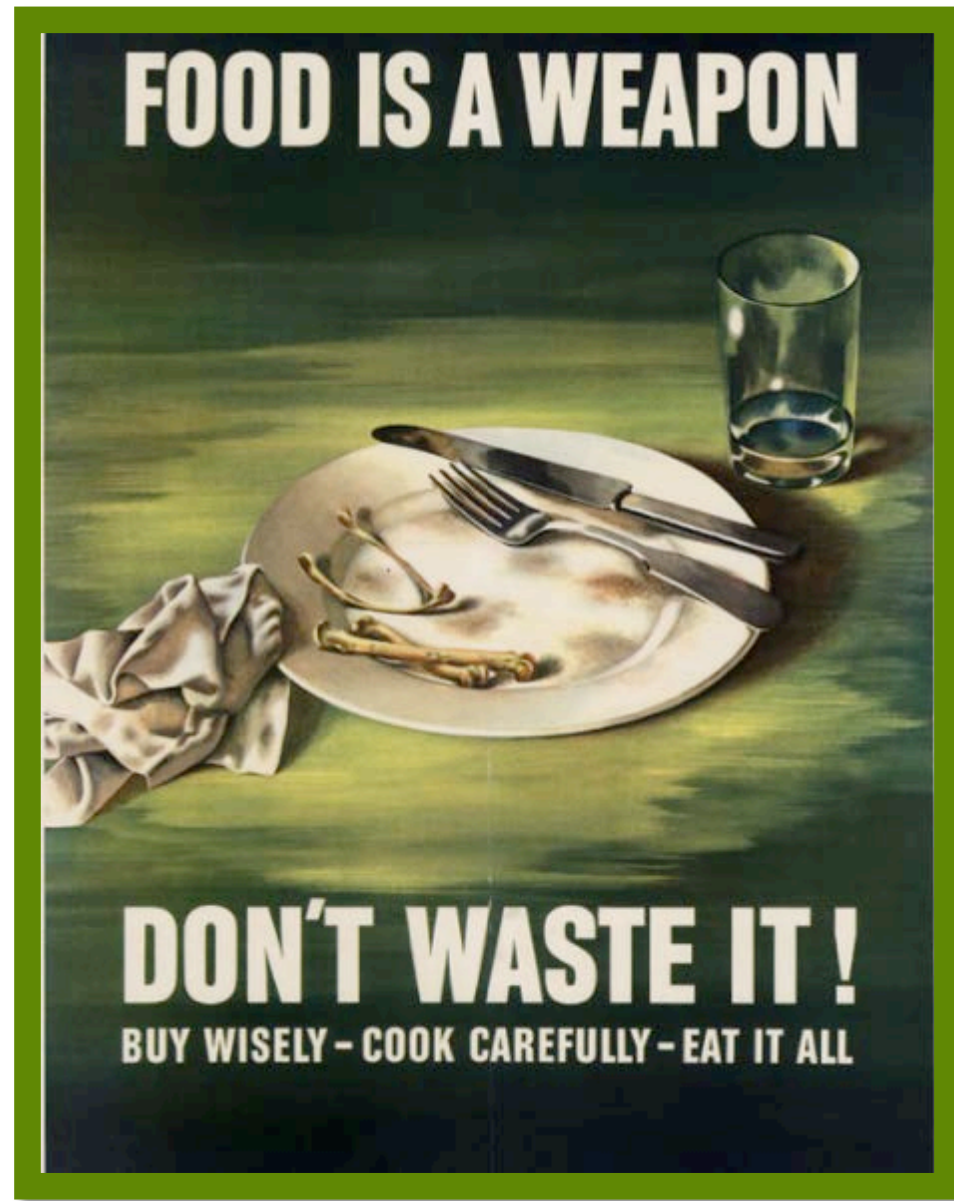
1. Save money
 2. Set example for children
- Last... Environmental concerns

TO TOSS

1. Food safety concerns
2. Want to eat fresh food

$\frac{3}{4}$ believe they aren't the problem





United States Office of War Information

[www.LiveBest.info http://history.ncsu.edu/projects/ncsuhistory/nceats/items/show/3](http://history.ncsu.edu/projects/ncsuhistory/nceats/items/show/3)

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The most important to win



Buy Wisely

need
vs.
want

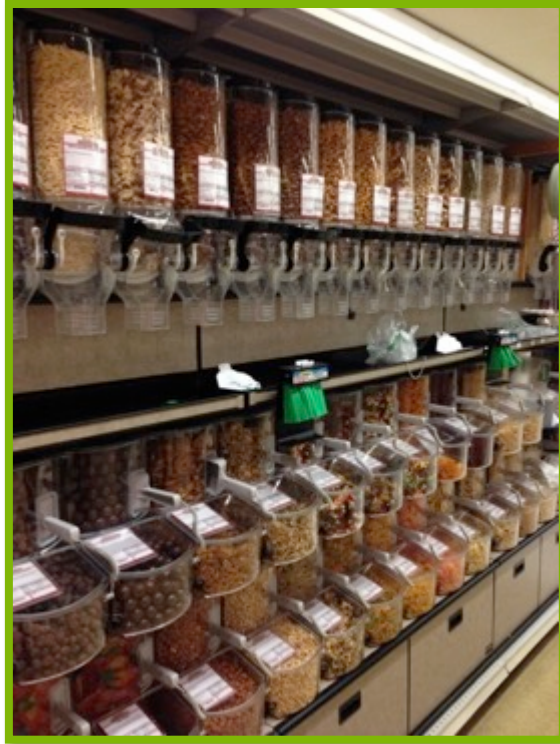
storage

seasonal

how much



Buy wisely





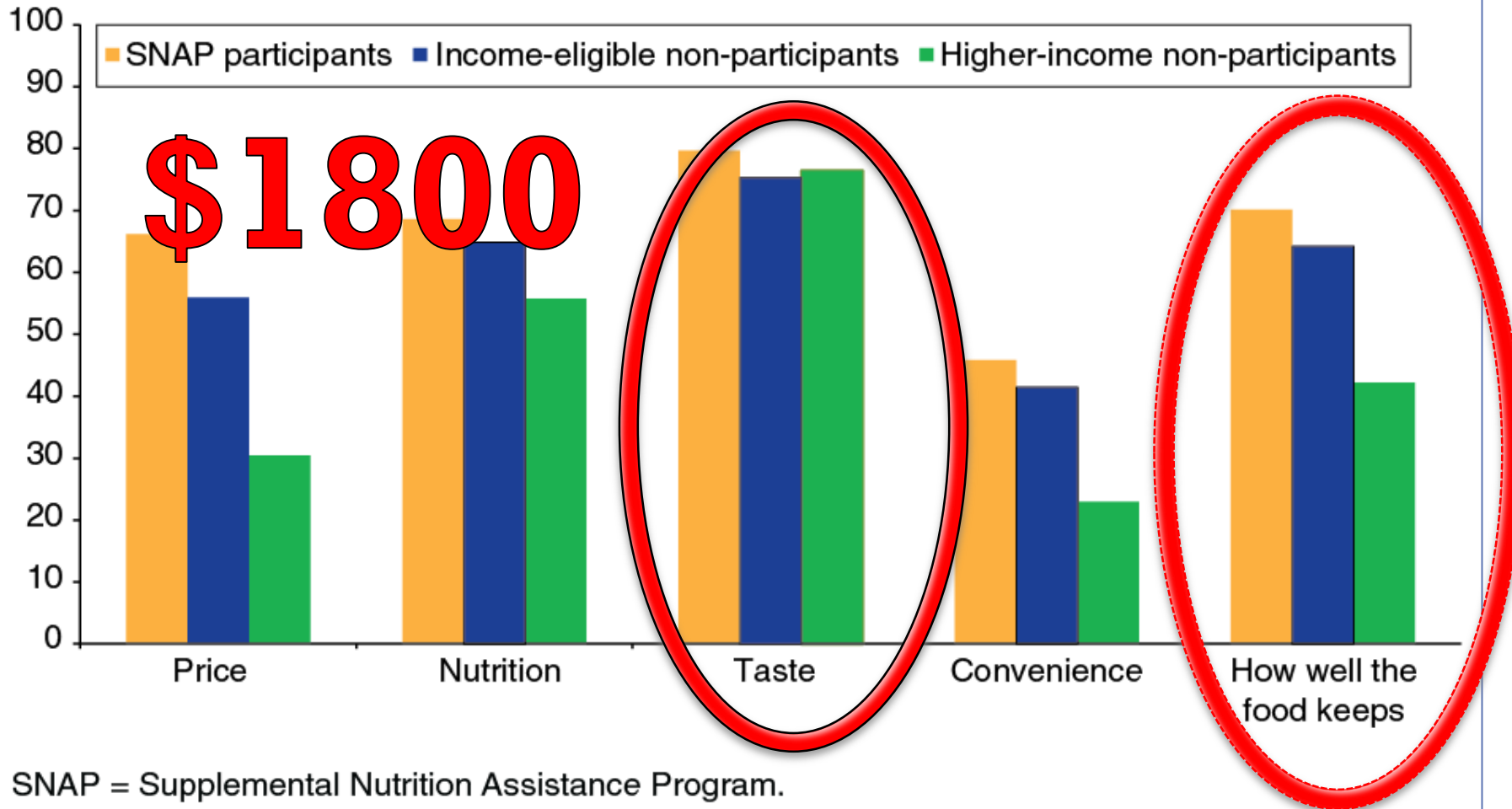
Buy wisely

- * Grocery list
- * Calendar Chaos
- * BOGO
- * Club store portions



Food attributes as ranked by NHANES respondents, 2007-10

Share of respondents who believe _____ to be very important when buying food from a grocery store.



SNAP = Supplemental Nutrition Assistance Program.

Note: Higher income non-participants have household incomes above 185 percent of the Federal poverty threshold.

Source: USDA, Economic Research Service analysis of 2007-10 National Health and Nutrition Examination Survey (NHANES) data.



Buy Wisely

Sell-by, use-by, or “confuse-by”

— not standardized —

≡ **Sell-by** — *suggestion* for display in store

≡ Still reasonable time

≡ **Best-by** — *recommendation* for best flavor/quality

≡ **Use-by** — *estimate* of quality

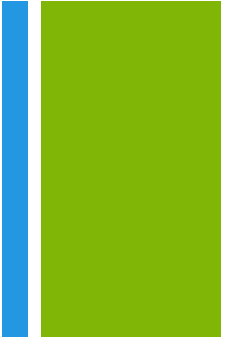
≡ Rarely a safety concern

≡ *Note: Do not use infant formula and baby food after date.*





Buy Wisely



- ≡ Congress H.R.5298 - Food Date Labeling Act of 2016
- ≡ Food Marketing Institute and Grocery Manufacturers Association: Voluntary initiative, summer 2018.
 - ≡ “BEST If Used By” describes product quality. Food may not taste or perform as expected but is safe to use or consume.
 - ≡ “USE By” foods that are highly perishable and/or have a food safety concern over time; these products should be consumed by the date listed on the package.



Store Wisely <40°



Warmest part of refrigerator: DOOR

- ≡ **Milk:** Store where it's **coldest: back bottom shelf**
- ≡ **Eggs:** Original carton, center of the fridge
- ≡ **Packaged raw meat:** Store on tray, bottom shelf
- ≡ **Produce:** *Higher* humidity for greens, cucumbers, broccoli and *lower* humidity for apples, pears, stone fruit
 - ≡ **Think frozen, canned, dried**



Store Wisely

- **Room temperature:** banana, pineapple, ginger, winter squash, eggplant, basil
- **Cool, dark pantry:** potato, sweet potato, garlic, onion
- **Refrigerate:** lemons, strawberries, cut watermelon

- **Ripen at room temp then refrigerate:** avocado, kiwifruit, melon, peach, pear, plum, mango





Storing Fresh Fruits and Vegetables for Best Flavor

Store in the refrigerator

FRUIT	VEGETABLES	FRUIT	VEGETABLES	FRUIT	VEGETABLES	FRUIT	VEGETABLES
Berries	Belgian Endive	Caulif ower	Leafy Vegetables	Radishes			
Apples	Broccoli	Celery	Leeks	Spinach			
(more than 7 days)	Brussel Sprouts	Cut Vegetables	Lettuce	Sprouts			
Apricots	Cabbage	Green Onions	Mushrooms	Summer Squashes			
Asian pears	Carrots	Herbs (not basil)	Peas	Sweet Corn			

1. Place fruits and vegetables in separate, perforated plastic bags.
2. Use within 1-3 days for maximum flavor and freshness.
3. Store each group in different produce drawers in the refrigerator to minimize the detrimental effects of ethylene produced by the fruits on the vegetables.

Ripen on the counter first, then refrigerate

Avocados Kiwi Nectarines Peaches Pears Plums Plumcots

1. To prevent moisture loss, store fruits and vegetables separately in a paper bag, perforated plastic bag, or ripening bowl on the counter away from sunlight. Ripening fruit in a bowl or paper bag can be enhanced by placing an apple with the fruit to be ripened.
2. After ripening, store in refrigerator and use within 1-3 days.

Store only at room temperature

FRUIT	VEGETABLES	FRUIT	VEGETABLES	FRUIT	VEGETABLES	FRUIT	VEGETABLES
Citrus fruits	Garlic*	Peppers†	Tomatoes				
Persimmons	Ginger	Potatoes*	Winter Squashes				
Pineapple	Jicama	Pumpkins					
Basil (in water)	Onions*	Sweet Potatoes*					
Melons							
Plantain							
Papayas							
Pomegranates							

1. Many fruits and vegetables should only be stored at room temperatures. Refrigeration can cause cold damage or prevent them from ripening to good flavor and texture. For example, pink tomatoes ripen to a better taste and red color if they are left at room temperature. In the refrigerator, they do not turn red, and even red tomatoes kept in the refrigerator lose their flavor.
2. Keep away from direct sunlight.
 - * Store garlic, onions, potatoes, and sweet potatoes in a well-ventilated area in the pantry.
 - † Cucumbers, eggplant, and peppers can be refrigerated for 1-3 days if they are used soon after removing from the refrigerator.

Cleaning Your Produce

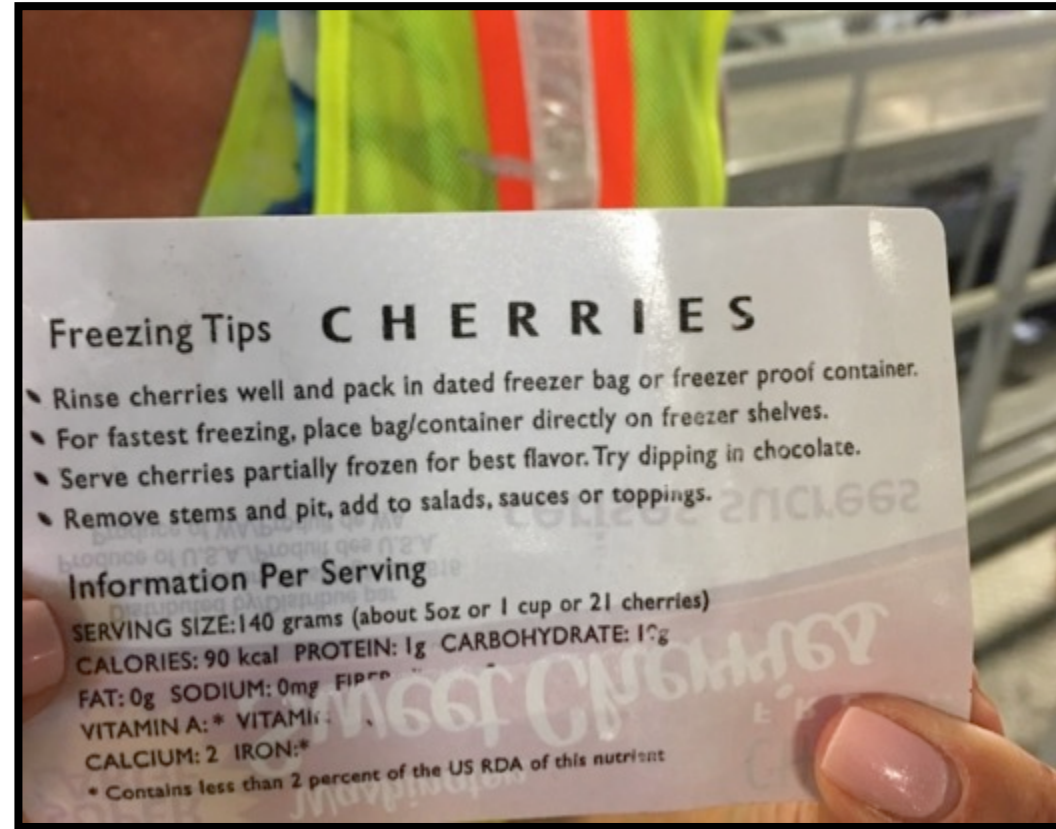
Always keep produce separate from raw meat, poultry, and seafood. Never use detergent or bleach to wash produce. Instead, rinse produce under running tap water immediately prior to use, including those with skins and rinds that are not eaten. Washing too far in advance removes some of nature's natural preservatives. However, head lettuce or leafy greens remain crisper when washed right away and then refrigerated. Packaged fruits and vegetables labeled "ready-to-eat," "washed," or "triple washed" need not be washed. Refrigerate all cut, peeled, or cooked fruits and vegetables within 2 hours.

For information on how to store other fruits and vegetables go to FruitsAndVeggiesMoreMatters.org

Source: UC Davis Postharvest Technology



Keep 



FOOD STORAGE SAVVY: YOUR GUIDE TO WHAT GOES WHERE

Buy Wisely

First comes shopping, then comes putting food away – but where? You may be surprised to learn the best places to store your groceries! Here's a helpful guide from the Academy of Nutrition and Dietetics.



REFRIGERATOR CALCULATOR

MEATS

- Cooked ground beef/turkey = 3-4 days
- Deli meat = 3-5 days
- Cooked pork = 3-4 days
- Cooked poultry = 3-4 days
- Cooked beef, bison, lamb = 3-4 days

SOUPS AND CHILI

- Chili = 3-4 days
- Soup/Stew = 3-4 days

DESSERT

- Cream Pie = 1-2 days
- Fruit Pie = 2-3 days
- Pastries = 2-3 days
- Cake = 1-2 days

SEAFOOD

- Raw (e.g. sushi or sashimi) = 1-2 days
- Cooked = 3-4 days

SIDE DISHES

- Fresh salad = 1-2 days
- Pasta or potato salad = 3-5 days
- Deviled egg = 3-4 days
- Potato (any style) = 3-5 days
- Cooked vegetables = 2-3 days
- Hard-boiled egg = 7 days

OTHER ENTREES

- Pizza = 3-4 days
- Pasta/rice = 1-2 days
- Casserole = 3-4 days

A simple equation for Home Food Safety always includes these four constants:

- Wash hands often
- Keep raw meats and ready-to-eat foods separate
- Cook to proper internal temperature (leftovers) = 165°F
- Refrigerate foods promptly below 40°F

**WHEN IN DOUBT,
THROW IT OUT!**

*Avoid a cleaner,
colder trash bin!*

HomeFoodSafety.org
Academy of Nutrition and
Dietetics and ConAgra Foods



Cook Carefully



serve just
enough

cook just
enough

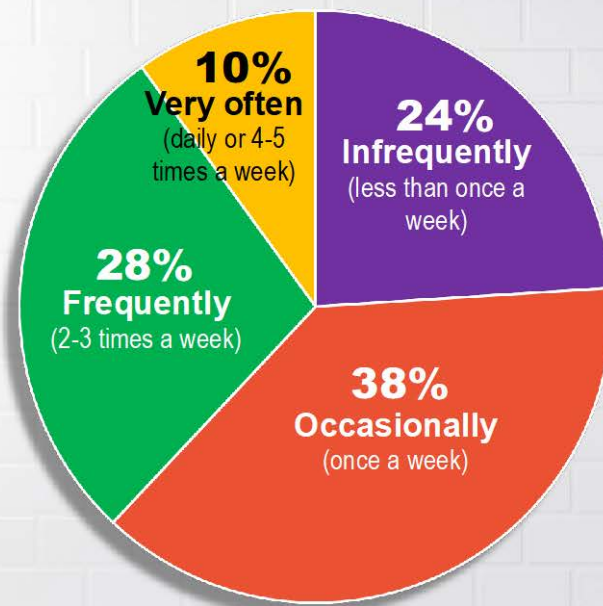




Kitchen Dilemma: What to Make?

Finding an answer to “what’s for dinner?” can be a real challenge for many of America’s households.

How Often Do Consumers Struggle for Meal Ideas?



Cooking for a family must accommodate everyone’s schedule and food preferences ranging from avoidances to culinary variety and healthfulness.

Source: Culture of Food 2015 report, The Hartman Group



Alone Eating Occasions: By the Numbers



47% OF ALL EATING OCCASIONS ARE *ALONE*



43% ENJOY EATING *ALONE* SO THEY CAN CATCH UP ON TV, READING, ETC.



MODERN LIVES HAVE BUSY SCHEDULES THAT KEEP FAMILY MEMBERS GOING IN DIFFERENT DIRECTIONS, HOWEVER,

28% OF HOUSEHOLDS

WILL EAT THE SAME THING FOR A PARTICULAR OCCASION, SUCH AS DINNER, EVEN IF THEY ARE EACH EATING THEM ALONE AND AT DIFFERENT TIMES

Source: *Modern Eating* report 2013

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hartman-group.com

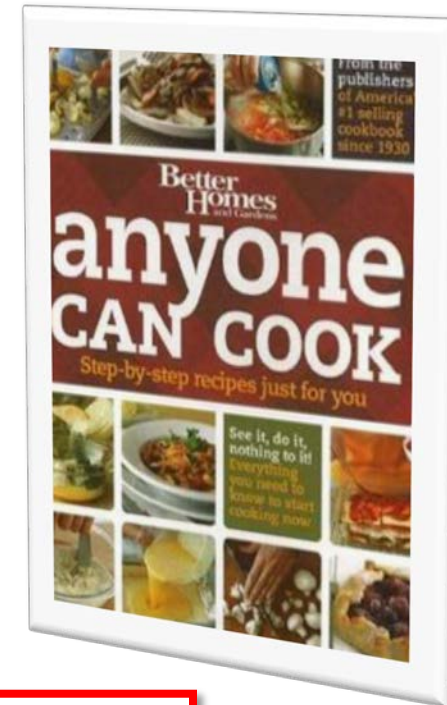
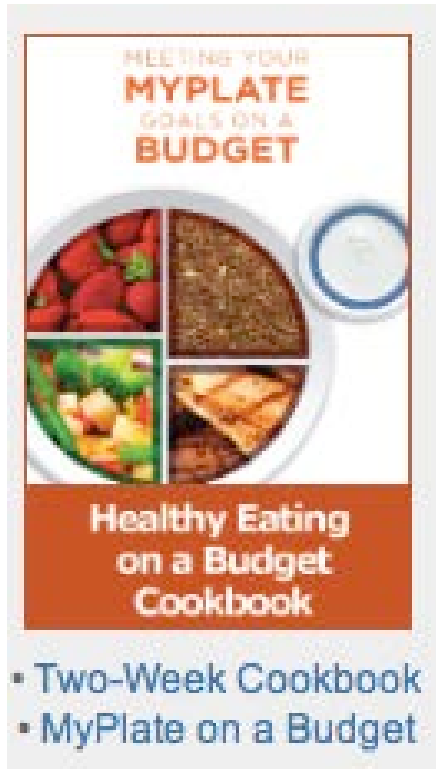


Best
THINKING TO WIN



Cook Carefully tools...

Supercook



FOOD52

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The Splendid Table®

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The most segment to win



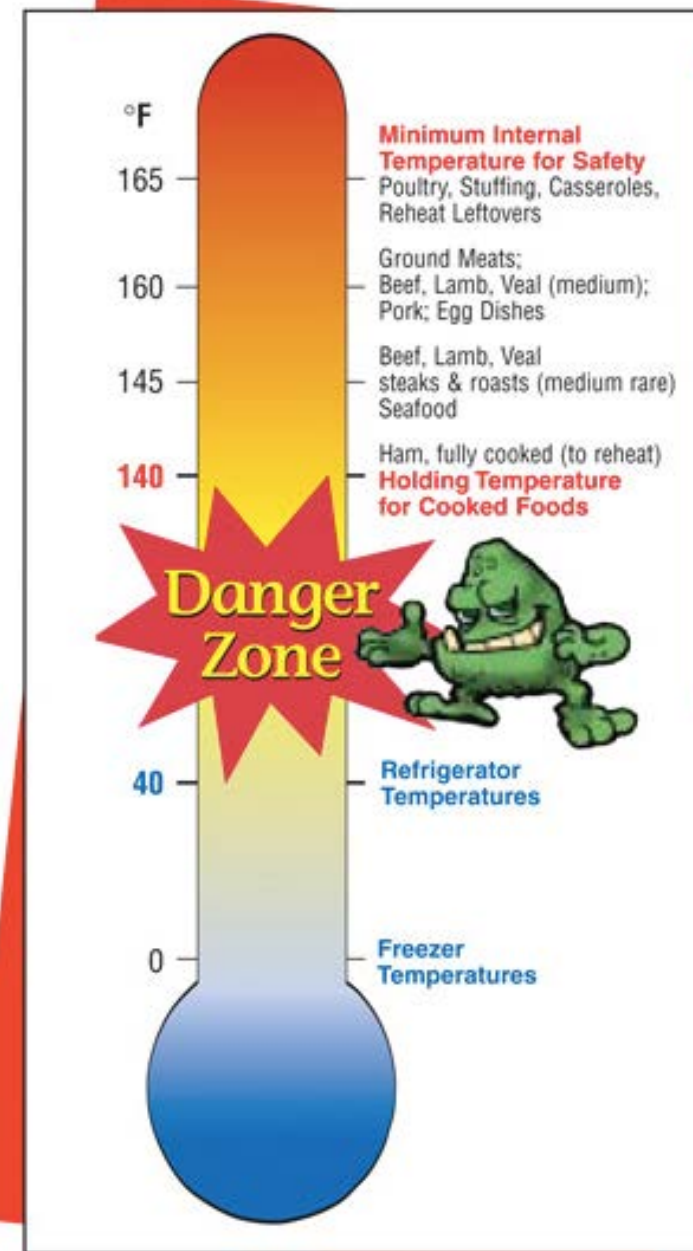
Cook Carefully

Time

- Refrigerate within 2 hours.
- Reheat to 165°F, covered, rolling boil to heat throughout.

Temperature

- Bacteria **double every 20 minutes** under the right conditions.
- A single bacterium can multiply to **trillions** in just 24 hours between 40°F and 140°F.



Cook Carefully



Insert at least 2-3 inches

muscle 145°
ground 160°

frozen entrees
165°



@JudyBarbe

Photo courtesy of Beef Council

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The most important to win



Cook Carefully tools...

≡ **“Is My Food Safe?”** app, free iTunes

≡ USDA Ask Karen, food safety hotline
FoodSafety.gov

Food Safety and Inspection Service

≡ **TeamFoodSafety.org**, (FightBac)
Partnership for Food Safety

≡ Food recall alerts: STOP Foodborne Illness
info@StopFoodBorneIllness.org

* USDA’s **FoodKeeper** app, free iTunes





Eat it All

something
out of
nothing

use what
you have

bestovers

eat what
will spoil

The Goldilocks' version
Just right

“We have a team
of anthropologists
in there now
looking for
the original meal.”

+

Calvin Trillin



Eat it All

vegetables

Hummus, pickle, mac and cheese, rice bowl

Roasted carrots & parsnips

Carrot, ginger, coconut soup





Eat it all

Preheat oven and baking sheet to 400°
Brussels sprouts, onions, sweet potatoes,
peppers, squash, carrots, cauliflower,
broccoli.

Toss with oil before cooking.



Butternut squash pear salad



Vegetable bulgur



Eat it All

salsa

tacos, grilled meats/fish, salads

Watermelon salsa

Plum salsa





Eat it All

Eggs

Omelet, bowl, fried rice

Mushroom, potato frittata



Asparagus and feta



Eat it All

Beef, caramelized onion taco



Fig, caramelized onion pizza



Eat it All

tired peppers

Tabbouli-stuffed peppers



+

Eat it All
Leaf to root



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Quinoa beet salad



GREENS:
pesto
soup
dip



Eat it All

grapes
sandwiches, salads, focaccia

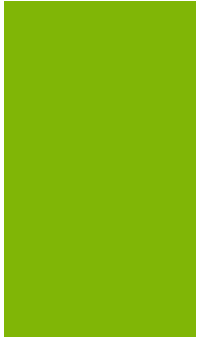


freeze!



Eat it All

ripe fruit



- ⇒ Layer on quesadillas with blue cheese
- ⇒ Bake or stew apples, berries, peaches
 - ⇒ fish, poultry, pancakes, yogurt, toast
- ⇒ Add to butternut squash soup
- ⇒ Simmer for pear ginger butter
- ⇒ Freeze



Eat it All

*last-leg bananas
sorbet, add to muffins, smoothie bags*



Spiced banana oatmeal

www.LiveBest.info





Eat it All

*system in place
flavor enhancer, soup base, compost*



tomato paste

www.LiveBest.info



chipotle peppers



What will you do?

+

(re)purpose 3 +1

1. Make a grocery list.
 1. Shop your kitchen first.
 2. Ask: What do I have *not* what do I want to eat today?
 2. Bring older food to front to avoid cabinet castaways.
 3. Right-sized portions... *Goldilocks'*
- * Donate to the local food bank.



EPA.gov
too good
to waste

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The most important to win



Feed Others

food pantries

shelters

schools

back pack



Feed Others: preferred donations

- ⇒ **Fruit:** canned, water-packed. Dried fruit, no-added sugar.
Fruit/vegetable juice
- ⇒ **Vegetables:** canned vegetables. Beans/legumes (both dry and canned). Canned pasta sauce, soup
- ⇒ **Protein:** Peanut butter, nuts, seeds, canned chicken, tuna or salmon, beef stew, jerky, chili, ravioli
- ⇒ **Whole Grains:** Breads, cereals, brown rice, pasta, flour, oats, barley, wild rice, pancake mix
- ⇒ **Dairy:** milk, cheese, yogurt
 - ⇒ **Great American Milk Drive** [MilkLife.com/give](https://www.MilkLife.com/give)

+ (re)purpose on stage



@JudyBarbe



MILANO 2015

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Solutions and Resources

* FAO.org

* USDA.gov

* FNS and CNPP

* FoodWasteAlliance.org

* FurtherWithFood.org

* EPA.gov (food too good to waste)

* ReFED.com

* SaveTheFood.com

FruitsAndVeggiesMoreMatters.org

⇒ *American Wasteland*, Jonathan Bloom

⇒ *Waste-Free Kitchen Handbook*, Dana Gunders

⇒ Lipinski, B. et al, 2013.
WorldResourcesReport.org

⇒ NRFC.org

⇒ Academy of Nutrition and Dietetics Foundation white paper, July 2016



webinar

free leader
guide

equipment
list

shopping
list

Recipes

www.LiveBest.info

Questions?



Register for our Upcoming Webinar!

**California Prunes:
Good for Tummies & Tibias, Too**

Thursday, May 10, 2018
12pm EST

Featured Speakers:

Michelle Dudash, RDN

Chef and Best-Selling Author of *Clean Eating for Busy Families*

Dr. Shirin Hooshmand, MS, BS

School of Exercise and Nutritional Sciences

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