

CHAPTER 14 FOOD

INTRODUCTION

From the grocery store to the White House, America is in the midst of a food revolution. People are eagerly seeking out new foods and demanding to know both how and where their food is grown. They are asking tough question about the modern food industry's adverse impacts on our personal health, on workers and on the planet as a whole. Former First Lady Michelle Obama even made it her personal mission "to change the way a generation of kids thinks about food and nutrition."



As interest in food grows, so too do concerns about food waste. The United Nations estimates that 30 to 40 percent of food in the United States is wasted and they established a World Food Day to address food waste and other pressing food issues. The United Kingdom, Environmental Protection Agency, Natural Resources Defense Council and other organizations are making headway in identifying the underlying causes of food waste and creating programs and policies to address these causes.

What they are finding is it's not just farmers, grocery stores, or other pre-consumer steps in the food-supply chain that are causing food waste. In fact, it's estimated that twice as much food is wasted at the consumer stage than at the retail stage. According to the U.S. Department of Agriculture, an American family of four throws out close to \$1,882 worth of food every year.

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People who lived through a major war or the Great Depression waste less than half as much food as younger generations. Families in Southeast Asia waste about one-tenth of what an American family does.

Our modern food industry, so focused on efficiency and output, has radically changed how we relate to what we put on our plate (and how much of it we ultimately scrape back off, uneaten). That the modern food industry has made food so affordable and convenient has made it easier than ever for people in advanced nations to fill their stomachs. However, this cheapening of food stresses calories over nutrition, quantity over quality, and makes it easier for us to waste food.

Meanwhile, most of us are greatly disconnected from the production of our food. From 1950 to 2008, the percentage of people in the U.S. living on farms fell from 25 percent to just 2 percent, and those living in urban areas grew from 29 percent to 82 percent.

Solving the problem of food waste will require systemic change involving people, businesses and governments. But the good news is that there are easy steps we can take on a personal level that benefit our wallets, our families, our communities and the planet. The biggest environmental impacts we make as consumers have to do with our food choices and how much food waste we generate.

This chapter will focus on specific tools, resources and techniques that will help reduce food waste at home. These strategies have three goals:

- 1. Buy the right amount.**
- 2. Keep what is bought at its best.**
- 3. Use what is bought.**

Even those with the best habits sometimes forget about the leftovers at the back of the fridge. But by focusing on simple, practical ways to reduce food waste, we can take note of how easy it is to make a big difference!



THE FOOD WASTE PROBLEM

The amount of food we waste is alarming. A recent study by the ReFED, a national nonprofit dedicated to ending food loss and waste, estimates that in the U.S. approximately 80 million tons of food, about 40 percent of all food produced, is wasted every year. In 2021, wasted food cost the country \$310 billion. This also represents roughly a quarter of the average food budget, which is like purchasing four bags full of groceries and then leaving one at the store every time!

Of course, when food goes uneaten, the resources used to produce it go to waste as well. Four percent of all processed petroleum goes toward food that is ultimately wasted, as does a whopping 25 percent of the fresh water we use. Wasted food also leads to negative environmental impacts. When food decomposes in a landfill, it releases methane, a greenhouse gas 28 times more damaging to the atmosphere than carbon dioxide. Landfills are the U.S.'s largest single source of methane emissions, with 25 percent of our total methane emissions coming from food rotting in landfills. These methane emissions represent 56 percent of our non-CO₂ emissions. If our uneaten food were considered a country, it would rank third in greenhouse gas emissions, behind the U.S. and China.

Meanwhile, Americans waste 1,250 calories per person per day. With one in six people in our country unsure where their next meal will come from, our current level of food waste is both a tragedy and an opportunity.



Happily there are many simple actions that you can take to prevent food waste and people are showing a keen interest in taking the following no-nonsense actions.

Grocery lists can, of course, simply be written on the back of an envelope. You can also go online to find several premade grocery lists. Or try mobile APPs like Out of Milk or Grocery IQ for your meal planning and shopping lists.



BUY THE RIGHT AMOUNT

Plan ahead

With a little planning, you can purchase exactly what you need for the week. In preparation for your shopping trip:

- **Look over your calendar for the week.** About how many meals do you plan to eat at home? How many meals will you be preparing for work or the kids' school lunches? Do you have plans to eat out?
- **Go shopping in your own cupboards and fridge first.** Is there anything that needs to be used soon, before it goes bad? Did you accidentally buy too much the last time you went shopping? Take note of what you already have in stock to ensure that you buy only what you need.
- **Make a list.** Identify the meals that you will be eating in the coming days. Incorporate items that you already have at home and need to use. Which ingredients do you need to pick up that you do not already have?
- **Have a snack before you go shopping.** We've all heard the saying, "Your eyes are bigger than your stomach," and there is some truth to this. We're hardwired to worry about having enough food, and everything looks good when we're hungry! Minimize temptation by shopping on a full stomach — or at least not on a growling one.
- **Plan to get your food home promptly.** Food will stay fresh longer when it is stored immediately after getting home.

As you shop:

- **Stick to the list!** Remind yourself that this list was made for a reason (ahem, many reasons!) and resist spontaneous purchases. After all, you can't waste what you don't buy in the first place.
- **Consider these in-store strategies.** If you are in a grocery store, there are a few easy ways to help keep your shopping trip focused and save you money:
 - **Shop the perimeter.** There, you'll find the freshest items with the highest nutrient-density.
 - **Shop for produce last.** This action will prevent the food from being crushed in your shopping cart.
 - **Consider purchasing ugly produce.** Cosmetically-challenged produce is often discounted and can help shift the way our society views food waste. Purchasing ugly produce can help save money and prevent an enormous amount of food waste. If your grocery store does not yet have an official area for ugly produce, speak to the produce manager about the benefits and ask them to consider creating one.

Shopping in season

Eating seasonally is an often overlooked strategy to reduce food waste. Seasonal foods have a longer shelf life in your home, because they do not suffer the temperature fluctuations inherent in transport from a different climate. Some foods are stored in warehouses so that they can be distributed year round, which also reduces the time they stay fresh once they get to your home. The personal benefit is that eating locally, seasonal food provides more flavor and nutrients. You can find perfect examples of seasonal produce at your local farmer's market or produce section of your grocery store.

Bulk shopping

It is easy to get exactly the number of apples you need for the week in the produce department. But why do hotdogs come in a six-pack while their buns come in an eight-pack? It is worth a second look in your grocery store to see if you have options to purchase products that are not prepackaged.

Ask your grocer if you can purchase just one stalk of celery for the soup you are making. You can also go to the bakery and butcher to order exactly the amount of bread and meats that you need. Most of the time these options cost about the same or a little bit more per item. But if you end up throwing away a quarter of what you purchase because the package was larger than you needed, the cost savings becomes clear.

At many stores, you can enjoy the benefits of the bulk bins for pastas, beans, nuts and seeds, nut butters, flour, sweeteners, chocolate, spices, teas, and more. The cost of items in this section is up to 89 percent less than if you were to buy them prepackaged. Purchasing from this section also enables you to try out new foods without getting stuck with a large amount if you don't like it.

Start or join a food-buying club

A food-buying club is a way for a group of people to join together and purchase bulk foods directly from vendors. Some benefits of being a part of or starting a food buying club include access to quality, organic products at significantly lower prices; connecting with fellow community members, small businesses, and farmers; and reducing carbon emissions by receiving one order as a group rather than everyone purchasing individually. Another option is to share food with family and friends.

The Oregon Farmers Markets Association lists some of the benefits of buying food at farmers markets, including:

- Food is freshly harvested and at its peak in flavor and nutrition.
- Your purchases support your local farmers and the local economy.
- You get to see a variety of food items that are special to your region and ask the farmers questions about their growing methods, favorite recipes, and more.
- Many farmers markets may offer lesser known fruits and vegetables that are not typically available at grocery stores. You may find a new favorite food that you never knew existed!

Farmers who sell at markets generally operate smaller-scale farms that employ practices that generate less food waste.

RESOURCE

Find out what is in season during any time of year by using Sustainable Table's seasonal food guide (available online).

RESOURCE

*You can learn more about food buying clubs by consulting Small Footprint Family's **Why You Should Start a Food Buying Club This Year** (available online).*

KEEP FOOD AT ITS BEST



Getting the right amount of food home is one big step in stopping food waste. Ensuring that food doesn't go bad before we eat it is another. Perishable food is particularly at risk of being wasted. Proper food storage is essential to ensure that your food stays fresh and lasts as long as possible. Here are some tools to help you better understand your perishables.

Expiration dates

Approximately nine out of ten of Americans throw food away because its label says it is at or past its expiration date, even when the food itself is perfectly fine. Research done in the United Kingdom by the Waste and Resources Action Programme (WRAP) shows that 45 to 49 percent of consumers misunderstand the meaning of date labels, resulting in an enormous amount of prematurely discarded food. In fact, WRAP estimates that up to 20 percent of household food waste is directly linked to expiration date confusion.

The Food and Drug Administration (FDA) does not regulate expiration dates, with the exception of baby formula. The dates we see on food packaging are set by the companies that produce our food, and many manufacturers display short time periods that denote when their products are at their peak. Many foods will stay good for days, or even weeks, after the date on the package.

Common date definitions (USDA)

- **Sell-By date.** This date tells the retailer how long to display the product for sale.
- **Best if Used By date.** This date is recommended to enjoy the best flavor or quality of the food. This date does not indicate safety of the food's consumption.
- **Use-By date.** Determined by the manufacturer, this is the last recommended date for the use of the product while at its peak quality.

The particular phrase used on the container ("use by," "best before," "sell by," or "enjoy by") is up to the manufacturer. Some containers include a date but no phrase, leaving consumers to wonder what it references.

However, there are several foods where it does make sense to heed expiration dates due to a high risk of *Listeria monocytogenes*, a dangerous pathogen that can lead to food poisoning. These foods include deli meats, unpasteurized cheeses, smoked seafood, and any pre-made sandwiches with these ingredients.

Alternatives to expiration dates

Happily, since expiration dates are not the best tool to identify safe food, there are some good sources of information to help you decide if your food can still be eaten. The website **StillTasty** calls itself the *ultimate shelf life guide*. Its easy search navigation allows you to enter the type of food and conditions under which it has been stored to determine if it is safe to eat. The USDA also provides a simple chart for refrigerator home storage of fresh and processed sealed products.

It is helpful to let everyone in the household know about StillTasty or print the USDA Cold Storage Chart and put it on the fridge.

Food storage

Whether you know it or not, the shelves and sections in your refrigerator were designed with certain foods in mind. In this section, we will review the areas of the fridge that are ideal for specific foods, the food that works best on the counter or in a dark and cool cabinet, and when you should rely on your freezer.

General food storage best practices include:

- Take perishable food home and refrigerate it immediately. Freeze the food if you can't use it within the times recommended by the resources mentioned above.
- Check labels for storage information. If the food is best stored in a dark place, store it in a dark container, or place a clear container in a dark cabinet or drawer.
- When storing food, use clear containers that allow you to identify the contents or label them.
- Separate very ripe or moldy fruit, as it emits ethylene gas that will quickly spoil other produce.
- Wash produce just before preparation or eating. This will prevent premature spoilage due to moisture.



Below are best practices for storing food in specific areas of your refrigerator and kitchen.

The refrigerator

- Use an *Eat This First* or *Eat Soon* sign to indicate what needs to be used up.
- Look at your refrigerator's temperature indicator (or purchase a thermometer for placement inside). The best temperature for your refrigerator is 40° F. When the refrigerator is too cold, delicate food like salads can freeze. If the temperature is too warm, food can spoil more quickly or pose a health risk.
- The temperature varies throughout your refrigerator. A refrigerator is generally coldest at the bottom and gets warmer at the top, with the warmest area being the door.
- Arrange your food items so that you can easily see everything and keep like foods together. How many times have you opened a new jar of salsa only to find a half-eaten one hidden at the back of the fridge?

The upper shelves

- This is a good space for leftovers, drinks, yogurt, and healthy snacks that you want to keep in plain view.
- Keep a container or basket to hold small tidbits that may get lost and forgotten.



Bacterial growth and enzyme activity are the two things that cause food to spoil. Foods last longer when dried or placed in the freezer because one or more of the following conditions are removed: moisture, warmth and, for some foods, oxygen.

Most refrigerators have produce drawers with humidity settings. Get to know your settings and improve the lifespan of your fruits and vegetables. Information available at eatSMARTwasteless.com.



The bottom shelf

- Foods like meat, poultry and fish have a higher safety risk and do best in the coldest area of the fridge. Storing them on a low shelf also reduces the risk of contamination if they leak

Crisper drawers

- This area creates a separate humidity zone from the rest of the refrigerator.
- Adjust the drawers so that you have one high-humidity drawer and one low-humidity drawer.
- High-humidity is best for vegetables, especially those likely to wilt. Foods that depend on water to keep their structure (for example, greens, cucumbers, and carrots) do best here and will stay perky longer.
- Shelf life is lengthened by cold temperatures that slow food's respiration, or *breathing process*. But don't stop the breathing altogether by sealing fruits and vegetables in an airtight bag, as they will rot faster.
- Low humidity is best for fruits and vegetables that rot easily (berries, grapes, mushrooms, peppers and avocados). Since apples, pears and bananas give off ethylene gas as they ripen, it's best to keep them in an area with better air circulation so that the gas isn't trapped. Trapped ethylene speeds up the ripening process of other foods.

Cheese drawer

- Fatty foods, like cheese, often absorb the odors of other foods in the refrigerator. Isolating cheese prevents waste and odor absorption.

The refrigerator door

- The door is the warmest part of the refrigerator and is exposed to the room's temperature every time it is opened.
- Condiments can store well here.
- Do not store anything perishable in the door, including eggs (even if there is a compartment for them).

The freezer

- Freeze food that you won't be able to eat before its expiration date.
- Perishable products kept frozen continuously are safe indefinitely.

The counter, cabinet or drawer







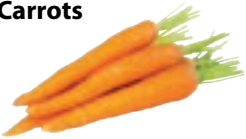
- Store onions, garlic, potatoes, mangos, papayas and pineapples in a cool, dark place.






Tips for individual foods






Now that you have a general understanding of how each area in the refrigerator serves a purpose, here is a list of common foods and the locations where they store best. This list will be helpful to have with you when you are tabling and helping people troubleshoot food that goes bad in their house.

RESOURCE

Waste-Free Kitchen Handbook by Dana Gunders lists more foods and their detailed storage instructions.

Food	Refrigerator	At freshest	Storage tips	Freezer
Apple 	Yes, low-humidity drawer.	Up to 6 weeks in refrigerator.	Wash only before using.	Raw or cooked.
Asparagus	Yes.	3-5 days.	Upright in bowl with 1" of water on top refrigerator shelf. Or, wrap ends in moist towel in high-humidity drawer.	Blanch, immerse in ice water, dry, place on baking sheet and freeze. When frozen, move to a container.
Avocado 	Yes, after it's ripe.	Whole, after ripe, 2-5 days in refrigerator.	Counter until ripe, then in refrigerator.	Peel and puree.
Banana 	Optional after ripe.	Less ripe: 5-7 days. Ripe: 1-2 days.	Counter at room temperature.	Peel and store in airtight container.
Beans, Canned or Cooked	Yes, after opened or cooked.	Can in pantry: several years. Cooked in refrigerator: 3-5 days. Freezer: up to 3 months.	Cooked: in their cooking liquid or water in airtight container.	Sealed container with their cooking liquid or water.
Berries 	Yes.	Rasp-, straw- and blackberries: 2-3 days. Blueberries: 10 days.	Wash only before using.	Remove any stems, rinse, and dry.
Bread 	No.	Counter: a few days. Freezer: 6 months.	Room temperature in bread box or paper bag.	Wrap tight in airtight wrapping. Sprinkle stale bread with a little water and place in oven to warm.
Broccoli 	Yes.	5-7 days.	Wash only before using. Breathable bag in high-humidity drawer.	Wash, separate into florets, blanch, immerse in ice water, and drain until dry. Freeze on baking sheet and then transfer to a container.
Butter	Yes.	Opened: 3 weeks. Unopened: 2 months.	Refrigerator in original packaging and in cooler area (near back).	In original carton in zip top freezer bag.
Carrots 	Yes.	2 weeks.	Wash only before using. Breathable bag in high-humidity drawer. Cut carrots in 1" of water.	Wash, blanch, cool, chop, and pack in airtight container.

Food	Refrigerator	At freshest	Storage tips	Freezer
Celery 	Yes.	2 weeks.	Standing in jar of water or in open plastic bag in high-humidity drawer.	Slice, blanch, immerse in ice water, drain until dry, place in container.
Citrus 	Yes.	Counter: 4-5 days. Refrigerator: 3-8 weeks.	Loose in low-humidity drawer.	Some can become bitter when frozen.
Cheese 	Yes.	Hard cheese: 1-10 months. Soft cheese: 1-4 weeks.	Store in refrigerator drawer. Loosely wrap in wax or parchment paper to allow it to breathe.	Hard: grate or cube before freezing. Soft: cube before freezing
Corn on the cob	Yes.	In husk: 2-3 days. Dehusked: 1-2 days.	Eat as soon as possible. Store in husks in middle or upper shelf, wrapped in damp cloth in container.	Remove husks. On the cob, blanch 7 minutes. If freezing kernels, blanch on cob for 4 minutes then cut off kernels. Place in container.
Cucumber	Yes.	1 week.	Wrap in a damp cloth in high-humidity drawer.	Not recommended.
Garlic, Shallots	Unpeeled: no. Peeled: yes.	Unpeeled: several weeks to several months. Peeled: several weeks.	Unpeeled in cool, dark, dry place.	Peel or chop and store in container.
Eggs	Yes.	Unopened: 10 days. Opened: 3 days. Frozen: 1 year. Thawed: 7 days.	Lower shelves in original container. Transfer to airtight container to extend life.	Do not freeze in shells. Lightly beaten eggs can be frozen in airtight containers with 1" headspace.
Grapes	Yes.	2 weeks.	Wash only before using. Keep in breathable bag on refrigerator shelf.	Wash, dry, place on baking sheet and freeze. When frozen, move to a container.
Herbs: Basil, Parsley, and Cilantro 	No, leaves will turn black if refrigerated.	2-7 days.	Trim ends and place in glass of 1" of water. Keep on counter at room temperature.	Fill ice cube trays with herbs and water or olive oil (for cooking later). Transfer frozen cubes to container.
Herbs: Chives, Thyme, and Rosemary	Yes.	10-14 days.	Wash only before using. Wrap loosely in plastic/paper towel and place in refrigerator door.	Fill ice cube trays with herbs and water or olive oil (for cooking later). Transfer frozen cubes to container.
Melons 	Yes, after ripe.	Whole: 5-15 days. Cut: 3-5 days.	Whole: in a cool, dark, dry place. Ripe: on shelf in refrigerator. Cut: in airtight container.	Remove rind, cube, place on baking sheet and freeze. When frozen, move to a container.

Food	Refrigerator	At freshest	Storage tips	Freezer
Milk	Yes.	Pasteurized: 1 week beyond sell-by date. Freezer: 3 months. Open carton: 7-10 days.	Not in the door but in the coldest part of the refrigerator.	It may separate if left frozen for long periods. Store in airtight containers leaving 1" headspace.
Onions 	No.	Whole: several months. Cut: 7 days.	Whole: cool, dark, dry place, hanging sacks ideal. Away from potatoes. If cut, store in refrigerator with peel on.	Remove skins and root. Chop and freeze raw.
Pears 	Yes, after ripe.	After ripe: 5 days in the refrigerator.	Wash only before using. Will ripen at room temperature.	Pears freeze best when cooked in sugar syrup.
Potatoes 	No.	New: 2-3 days. Mature: 2-3 weeks.	Wash only before using. Cool, dark, dry place with ventilation.	Not recommended.
Apricots, Peaches, Nectarines, Cherries, Plums, Pluots 	Yes, after ripe.	After ripe: 3-7 days in the refrigerator.	Wash only before using. Unripe: store at room temperature in dark. Ripe: low-humidity drawer in open paper bag.	Freeze raw (whole or in slices) or cooked.
Pineapple, Papaya, Mango	Yes, after ripe.	Whole: 2-3 days past ripe on counter; 5-7 days in refrigerator.	Unripe: store whole on counter at room temperature. Ripe: loose on refrigerator shelf or in low-humidity drawer.	Peel and cut into chunks, place on baking sheet and freeze. When frozen, move to a container.
Tofu	Yes.	10 days.	Original package until opened, then submerged in water in container. Change water daily.	In original container then thaw in refrigerator and squeeze out moisture.
Tomatoes 	No, unless cut.	Whole/Ripe: up to 3 days at room temperature. Cut: 2-3 days in refrigerator.	Wash only before using. Whole: on counter, away from sun, stem up. Cut: in refrigerator.	Freeze raw or cooked in freezer bags.



If you wind up throwing away food at home because you went out to eat instead, the cost of that restaurant meal just became higher than you originally thought.

EAT WHAT YOU ALREADY HAVE

Efficient food preparation



How many times have you felt too tired or busy to prepare a meal and then resorted to ordering food for delivery or takeout? When this happens, the food you may already have at home can wind up pushed to the back of your refrigerator and be forgotten. Over time, the small amounts of food that are bypassed for a quicker, more convenient option can add up to big waste.

To help save you time in the long run, consider the following:

- **Cook once and eat twice.** Make a larger quantity and portion off some to be eaten for the next day's lunch.
- **Measure food before cooking.** Rice, pasta and beans are among the many dry foods that are hard to judge proper portions, because they expand when they cook. Use portion guides and measure food to avoid cooking more than you need. Once cooked, storage options are dramatically reduced with these foods.
- **Create one-pot meals.** Use only one pot to create a meal. This method results in fewer dirty dishes, and the food created with this method generally freezes and reheats well. Recipes can be easily found online.
- **Prepare ahead of time.** Chop large amounts of produce ahead of time. If you have salads regularly, you can have pre-diced ingredients like onions, carrots, and peppers on hand, ready to toss into a salad at any time. You'll also reduce the time spent cleaning your cutting board and knives since you only need to chop once.
- **Make friends with the peels.** Don't bother peeling all of your produce. Carrots, beets, and potatoes roast great with the skin on and provide nutrients that would otherwise be lost if removed.

Stretching your food out

You're already on your way to thinking more mindfully about what you bring into your kitchen, but what about dealing with food that is on its way out? Instead of letting your vegetables further wilt, try out some of the following suggestions to keep your food from going into the compost bin:

- **Unused vegetables** can be steamed, blended, and then frozen in an ice cube tray to use in sauces and soups at a later date. Fruits can be made into pies and smoothies.
- **Freeze bits of meals.** Saving small amounts of excess gravy, a rub, marinade, herb blend, stuffing, or vegetables can provide a savory mix to purée for a sauce, a little flavor jolt, or even a starter to your next meal. Experiment with mixing flavors, or recreate a dish from flavors that you already love.
- **Create your own vegetable stock.** If you cook with a lot of fresh produce, save your carrot tops, chard spines, and celery stubs in a designated container for a weekly soup stock pot.

Having the following staples on hand will assist you in using up other foods so they don't go to waste. Customize this list to your own taste, and you can transform your use-it-up meals into masterpieces!

- Grains like rice, pasta, quinoa, couscous
- Oils like olive, sesame, canola, safflower
- Vinegars like cider, balsamic, rice
- Soy sauce, mayonnaise, mustard
- Eggs
- Beans
- Onions, garlic, canned diced tomatoes
- Hero condiments that can improve flavor in a pinch: soup bouillon, dried onions, sundried tomatoes, hot sauce, BBQ sauce, lemon juice, Parmesan cheese, maple syrup, raisins, almonds and pickles.



RESOURCE

*Finding creative recipes online or in cookbooks that utilize foods that are past their prime is easy. You can take a look at The Huffington Post's **Over 30 Recipes to Reduce Kitchen Waste** (available online) and Dana Gunders' book, **Waste Free Kitchen Handbook**.*

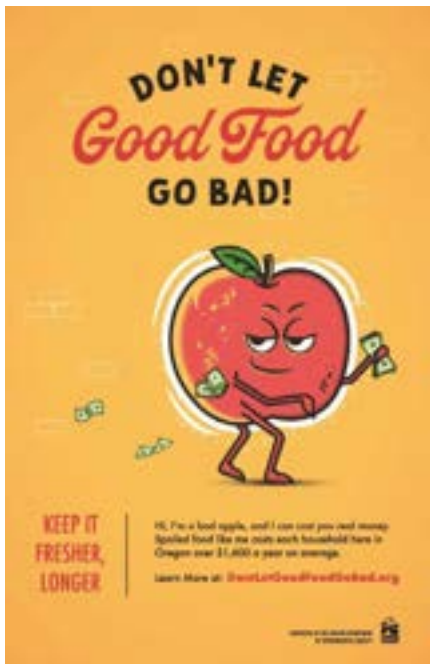
DEEP DIVE

See fellow Master Recyclers using Eat Smart, Waste Less talking points on the Master Recycler YouTube Channel.



Liz Start at
Tigard Farmers' Market

Learn more about the Eat Smart, Waste Less Challenge [online](#).



Visit dontletgoodfoodgobad.org

THE EAT SMART, WASTE LESS CHALLENGE

Master Recyclers can share food waste prevention tips with neighbors, friends and members of the community through the Eat Smart, Waste Less Challenge, an online website compiled by local governments with tools and resources to support wasting less food. The goal is to encourage people to take one small step, like storing fruits and vegetables in ways to keep them fresh longer.

As a Master Recycler, you can help people prevent food waste at home by assisting with a presentation or staffing an information booth for the Eat Smart, Waste Less Challenge. Share your personal connection to food waste, give out tools, co-present or just observe and learn how to give the presentation yourself.

Master Recyclers have the option of checking out the kit from your local jurisdiction to offer a presentation or staff an event in your own community.

DON'T LET GOOD FOOD GO BAD

In 2018, the Oregon Department of Environmental Quality (DEQ) Materials Management Section set out to create a research-driven campaign with messaging and materials to inspire Oregonians to waste less food. As part of this project, DEQ sponsored qualitative and quantitative research focused on consumer attitudes and practices related to food waste, and an in-depth analysis to assess how much and what types of food Oregonians waste and why.

The study found that 50 percent of Oregonians believe taking steps to reduce food waste is important, but are not currently taking steps themselves. The study also found Oregonians are complacent about wasting food, but motivated by saving money. Thus, talking about ways people can save money by wasting less food is more likely to inspire change than talking about how food waste is a problem.

To support this education, DEQ launched the Don't Let Good Food Go Bad campaign, which uses the study's findings to inspire Oregonians to save money by saving food. The campaign includes videos and resources you can share on social media and at events.



MORE WAYS TO MAKE FOOD LAST

Considering the growing interest in reducing food waste and saving money, it's no wonder that sales of home canning supplies increased by 35 percent between 2008 and 2011. The COVID-19 Pandemic saw books on canning increase by 175 percent. People are becoming more aware of the health and cost benefits to stocking their pantries with nutritious foods, that were purchased and preserved at their peak.

Home preservation techniques may seem like a thing of the past to some, but they are a popular topic for classes and workshops at continuing-education organizations and stores. Some of the most common food preservation techniques today include canning and pickling, dehydrating, and root cellars.

Canning and pickling. Involves sterilizing a jar and lid, cooking something, putting it in the jar, and then boiling the jar. Foods can be canned in water, juice, syrup, or their own liquids, depending on the food. Some foods do not need to be cooked at all and can simply be added to a sugar syrup, juice, or vinegar brine. Refer to the Existing Resources list (below) to learn about some local organizations offering food preservation classes.

Dehydrating. Also called drying, this method includes an electrical appliance with heat, a fan, and vents for air circulation. Moisture is removed from the food in order to make it last longer. While some foods can be eaten in their water-less state (such as fruit and vegetable leathers and dried fruits), others should be rehydrated before use (such as mushrooms).

Root cellars. Many gardeners take advantage of this method when they are looking to store relatively large quantities of food to last throughout the winter. Some fruits and veggies store best at 50° F, above the temperature of your refrigerator, but colder than room temperature. Foods that do well in root cellars include root vegetables like potatoes, carrots, and onions, as well as squash, apples and pears.

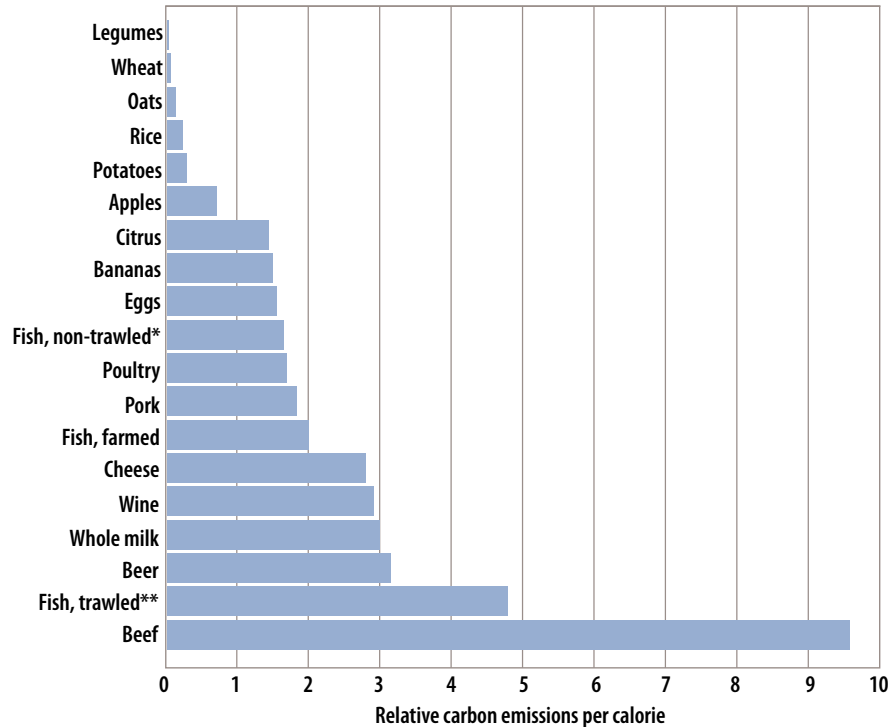
DEEP DIVE

Want to know how your diet adds up? Visit *Bon Appétit's Eat Low Carbon website*.

FOOD CHOICE

When it comes to carbon emissions, what we eat is more important than where it is grown. Buying locally can reduce the environmental impacts of transportation, but they are generally small when compared to the energy and resources that went into raising or growing our food. In the case of meat, buying locally reduces the related energy costs of that food by 1 to 2 percent; for produce, it's about 11 percent.

FOOD CHOICE IS A KEY FACTOR IN CARBON EMISSIONS



Carbon emissions from food choice, by calorie. Prepared by: Accuardi, Zachary (2016, forthcoming).
 *e.g., wild salmon **e.g., red snapper

Moving toward a diet rich in fruits, vegetables and grains is one of the most environmentally impactful things we can do because of all the resources and carbon emissions that are associated with raising animals. Yes, talk of dietary choices can be sensitive, but as mentioned before, the biggest environmental impacts we make as consumers have to do with our food choices and how much food waste we generate. Substituting some meat-based meals with plant-based meals every week has major environmental benefits. When combined with our efforts to use up everything we have and to make our food last longer, we can drastically reduce our personal carbon footprint.

EXISTING RESOURCES

All of the resources listed below have websites that you can consult for more information about particular food topics.

Grocery Shopping and Meal Planning

- **Seasonal Food Guide** – through The Sustainable Table.
- **Food.com** – Find recipes. Plan Meals. Score Deals. Features: Free web-based tool, sales/discounts by store location, recipes, meal planner and shopping lists.
- **Cozi** – Great for family meal planning. Features: Free web-based tool, shopping list, meal planner and recipe storage.
- **Love Food, Hate Waste** – Great for meal planning and making the most of leftovers. Features: portion planner, a recipe ‘blender’ hints and tips, meal planner and shopping list.
- **Out of Milk** – Create shopping lists and share with others in real-time. Features: Free web-based tool, shopping list, to-do list, pantry list and barcode scanner.
- **Shopping List** – Simply google shopping list and find a wide range of options.

Farmer's Market Locators

- **Oregon Farmer’s Market Association**

Food Storage

- **Still Tasty** – Your Ultimate Shelf Life Guide.

Food Preservation Classes

- **OSU Extension**

Food donation

- **Oregon Food Bank**
- **Portland Food Pantries**
- **Urban Gleaners**

Online Tools

- **Meatless Monday**
- **Wasted Food** – A blog by Jonathan Bloom.
- **Environmental Working Group Food Scores** – Find food scores for nutritional value, ingredients of concern, and degree of processing. Features a searchable database with more than 80,000 products, 5,000 ingredients and 1,500 brands.
- **SavetheFood.com**

Movies, Videos, and Documentaries

- **Just Eat It: A Food Waste Story**
- **Wasted! The Story of Food Waste**
- **The Extraordinary Life and Times of Strawberry**



CONCLUSION

Household food waste is not inevitable. Much of it happens because of habits we have learned. So by learning better habits — specifically, how to store food smarter at home and how to prioritize quality, healthy food when we shop — we can make positive impacts without sacrificing convenience.

Despite changes in how most of our food is grown or raised, the food we eat remains one of our most immediate, direct connections to the Earth. Food also connects us to other people: we gather around the dinner table with our family and friends, and we prepare special meals for celebrations and holidays. On a larger level, we cannot understand a culture without knowing the food that the people eat. It is as defining a cultural characteristic as language, art and history, and it undoubtedly plays a part in our personal identities. Indeed, what we eat says a lot about who we are and how we live. And so does how we take care of the food we bring home.

The ideas here for reducing food waste are plainly positive, building off the new food movement. We do not need to give up anything when we become proactive about food waste. We want to eat great food, celebrate it, grow some of it ourselves, bring back the family dinner table, provide great school lunches, recognize the labor of farmers and farmworkers, and create a system where food is treasured, not wasted. Being mindful about our food allows us to rediscover its link to our environmental and personal health and its capacity to strengthen our connections to one another and to our world.