



NUTRITION AND FOOD SAFETY

Training for Care Providers

Nutrition and Food Safety Training

Read the following
and take the quiz to
complete your
training.





HEALTHY EATING



Start *simple*
with **MyPlate**



Healthy Eating for Adults

Healthy eating is important at every age. Eat a variety of fruits, vegetables, grains, protein foods, and dairy or fortified soy alternatives. When deciding what to eat or drink, choose options that are full of nutrients and limited in added sugars, saturated fat, and sodium. Start with these tips:



Eat a healthy diet

Fruits, vegetables, whole grains, protein foods, and fat-free or low-fat dairy or fortified soy alternatives are healthy choices. Include a variety of protein foods such as seafood, lean meats, poultry, beans, peas, lentils, nuts, and eggs.



Enjoy fruits and vegetables

No matter your age, fruits and veggies provide key nutrients and dietary fiber. Their colors, flavors, and textures make meals more enjoyable.



Be mindful of your nutrient needs

Focus on dietary changes that increase your dietary fiber, calcium, and vitamin D, and decrease added sugars, saturated fat, and sodium. Make the best choice for your needs by comparing nutrition and ingredients information by reading the [Nutrition Facts label](#).



Go easy on the salt

Choose fresh foods when possible or low-sodium packaged foods. Add flavor to foods with spices and herbs and skip the salt shaker at the table.



Shift your sweet tooth

Choose foods with little or no added sugars and drink water or unsweetened sparkling water in place of soda or juice. Fruits are naturally sweet and packed with nutrients.



Strive for a healthy weight

Make food and beverage choices from all five food groups to achieve or maintain a healthy weight. Get the [MyPlate Plan](#) to find out what is right just for you.



Go to [MyPlate.gov](https://www.MyPlate.gov) for more information.
USDA is an equal opportunity provider,
employer, and lender.

**The benefits of healthy eating
add up over time, bite by bite.**

FNS-905-20
March 2022



Small Changes Matter.

Start Simple
With MyPlate Today.

Healthy eating is important at every stage of life.

Make half your plate fruits & vegetables.

Focus on whole fruits.



Vary your veggies.



Make half your grains whole grains.



Vary your protein routine.

Move to low-fat or fat-free dairy milk or yogurt (or lactose-free dairy or fortified soy versions).



Choose foods and beverages with less added sugars, saturated fat, and sodium.

The benefits add up over time, bite by bite.

Make every bite count



Take a look at your current eating routine. Pick one or two ways that you can switch to choices today that are rich in nutrition.

A healthy eating routine can help boost your health now and in the years to come. Think about how your food choices come together over the course of your day or week to help you create a healthy eating routine.

It's important to eat a variety of fruits, vegetables, grains, protein foods, and dairy or fortified soy alternatives. Choose options for meals, beverages, and snacks that have limited added sugars, saturated fat, and sodium.



Choose from these simple tips to help you...

Fruits



Focus on whole fruits

- Start your day with **fruit at breakfast**. Top cereal with your favorite seasonal fruit, add bananas or chopped apples to pancakes, or mix a spoonful or two of raisins into hot oatmeal.
- Keep **ready-to-eat fruits** in the refrigerator for a quick snack.
- For dinner, chop up a combination of seasonal, frozen, or canned fruits to make a **quick fruit salsa** to top fish or chicken. Add fruit such as orange sections, apple wedges, or grapes to a **salad**.



Vegetables



Vary your veggies

- Add shredded carrots to the lettuce and tomato **in your sandwich**, make **soup** from the veggies in your vegetable drawer, and **snack on raw vegetables**.
- Try a **stir-fry** with fresh or frozen vegetables for a quick meal or easy side dish.
- Pick out a vegetable that the family has not tried and **get a new recipe** from a cookbook, website, supermarket, or friend.



Grains



Make half your grains whole grains

- For breakfast, enjoy a whole-grain-based **hot or cold cereal**. Consider trying whole-grain puffs or flakes that are new to you—you might discover a new favorite!
- Instead of sandwich bread, try a **whole-grain pita, tortillas, naan or other whole-grain flatbread, sliced breads, or rolls**.
- Create your own trail mix with whole-grain cereal or enjoy whole-grain crackers with turkey, hummus, or avocado for a **healthy whole-grain snack**.



Dairy



Move to low-fat or fat-free dairy milk or yogurt (or lactose-free dairy or fortified soy versions)

- Add **low-fat or fat-free dairy** to oatmeal or pureed vegetable soups instead of water, and to smoothies or scrambled eggs.
- The nutrients in dairy are **important at every stage of life**. Include foods like low-fat or fat-free dairy milk or yogurt. Need an alternative? Try lactose-free dairy milk or yogurt that's low-fat or fat-free or fortified soy versions.
- Looking for a beverage? Grab a **glass of low-fat or fat-free milk or fortified soy milk** (soy beverage). Choose the unsweetened option.



Protein



Vary your protein routine

- **Broil lean beef cuts** like sirloin, top round, or flank steak. **Roast lean types of pork tenderloin or loin chops** and slice into strips for dinner, salads, and sandwiches.
- **Have fish or seafood twice a week**. Make a lunchtime sandwich or salad with canned tuna, grill fresh or frozen tilapia or salmon for dinner, or enjoy fish tacos.
- **Meatless meals** are tasty and budget friendly. Try bean-based vegetarian chili or lentil soup, grilled or braised tofu with vegetables, or adding nuts to salads.



Source: U.S. Department of Agriculture

[Start Simple With MyPlate Today \(azureedge.us\)](https://www.azureedge.us)

Shopping and Meal Planning



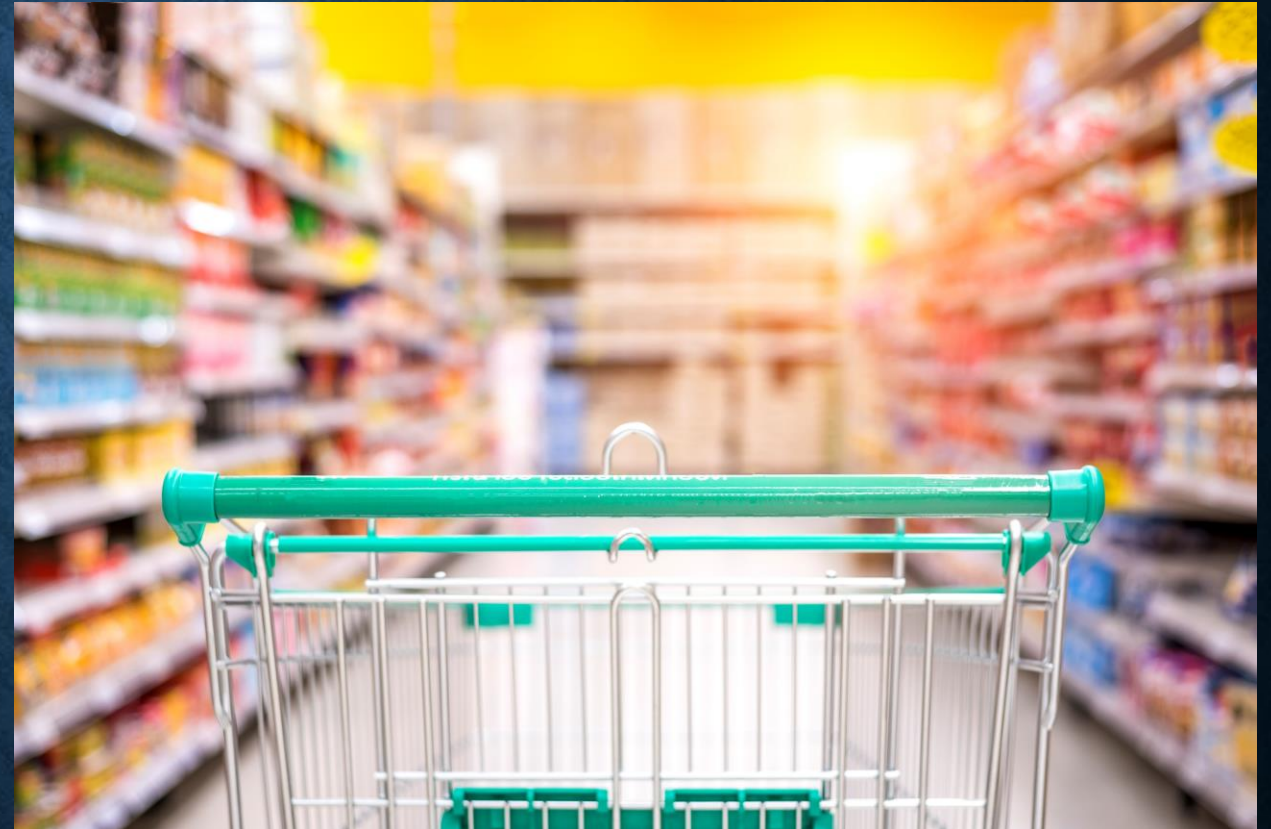
Menus translate nutrition information into meals. It is important to understand how nutritious meals are planned. There may be times when a substitution must be made for part of a planned meal. Being familiar with the guidelines will help you make the best substitutions.

Prepare a shopping list:

- review the menu for the week and all the recipes
- list all foods and ingredients needed to prepare all the meals
- think about individual likes and dislikes, and make substitutions, if necessary
- confirm the amount of food to purchase by checking whether some foods are already present
- organize your list by similar foods and adapt the list to the layout of the store

Helpful hints to make shopping easier and less costly

- Shop from the planned list to avoid buying items on impulse
- Use coupons for needed items
- Select store brands and generic products when available if they are cost-effective
- Buy food in quantity if adequate storage space is available, and if it can be used within a reasonable amount of time
- Use the unit pricing information on the shelves to help make price comparisons on similar products
- Choose the quality or grade of food according to how the food will be used



A still life photograph featuring a woven basket filled with fresh, bright orange citrus fruits, likely tangerines or mandarins, some with green leaves still attached. The basket is positioned on the left side of the frame. Several more oranges are scattered on a dark, textured surface to the right of the basket. The background is a dark, solid color, creating a high-contrast scene. The text "IMPLEMENTING SPECIAL DIETS" is overlaid in the center in a bold, white, sans-serif font.

IMPLEMENTING SPECIAL DIETS

Modified diets may be ordered to treat medical or chronic health conditions. A physician will write the appropriate diet order. There must be a written diet order before making a change or alteration in food intake.

A modified diet is part of the individual plan of service.



Some examples of individualizing food intake and meals include:

- some individuals with physical limitations may need adaptive eating equipment
- some people need their food chopped, ground, or pureed because of chewing/swallowing disorders
- Some people need a special diet for weight reduction, diabetes, heart disease, or other health reasons
- some people may need their fluids thickened due to a swallowing disorder
- some people with physical disabilities need to be positioned properly to help them eat



A change in food intake or weight may be one of the first signs of illness or of a change in health status. Food acceptance and weight can also be altered due to changes in mental or emotional health, medication side effects, changes in environment, limited access to foods, or over-indulgence.

Occasional fluctuations in appetite, or refusal of a meal or particular food may be normal.

A significant change in weight should be reported to the appropriate health care providers.

Factors that may influence food intake include:

- Limited motivation
- Poor judgment
- Low income
- Inadequate living environment
- Lack of independent living skills
- Unusual eating habits and behaviors
- Medication side effects
- Substance abuse

Swallowing problems

Persons with chewing or swallowing difficulties (dysphagia) may be or may become poorly nourished if they are unable to take in adequate food or liquids. They may be at risk for choking or aspiration—that is, food, liquid or other materials entering the airway or lungs, instead of the stomach.

Some signs of dysphagia or chewing and swallowing difficulty are:

- gagging or coughing during or after eating or drinking
- swallowing one bite many times
- a gurgly or “wet” sounding voice
- drooling
- food pocketing, or food remaining in the mouth or throat after eating
- breathing difficulties during eating or drinking
- unexplained weight loss; low body weight
- unable to gain weight
- persistent unexplained fever or temperature
- frequent respiratory infections or pneumonia
- excessive movement of tongue, mouth or head while eating or drinking

If a person shows signs of chewing or swallowing problems, an evaluation by a medical professional is needed. Recommendations will be made after the evaluation for specific ways the individual needs to eat and drink. If a person with a chewing or swallowing difficulty has a specific eating plan, it is important to follow that plan. Modifications in eating, positioning, or consistency of foods or liquids should not be made unless specifically recommended by the professional team.

MEDICATIONS AND FOOD

Medications may affect the way food is used by the body; food can affect the action of the medication; or the medication may interfere with one's ability to eat. It is important to know whether the medication should be given with or without food. Follow the physician's and pharmacist's instructions and observe for any possible side effects. Report any unusual symptoms to the appropriate health professional and ask questions if you need more information.



Consult with the person's physician before implementing any of the following suggestions:

Medication side effects

--Loss of appetite

--dry mouth

--constipation

--increased appetite

--nausea and vomiting

Suggestions to minimize side effects

--eat smaller, more frequent meals

--eat high calorie/protein snacks

--drink plenty of fluids, both with and between meals

--moisten food by adding gravy, sauces, or margarine

--avoid dry or salty foods or snacks

--eat plenty of high fiber foods such as vegetables, fruits, whole grain breads and cereals, dried peas and beans

--drink plenty of water and fluids

--eat many high fiber, low calorie foods such as vegetables and fruits

--drink plenty of water and low calorie fluids

--avoid fats and sweets

--take medications with meals or right after meals (with approval of the health professional)

--try eating dry meals, and taking liquids between meals

--avoid high fat and spicy meals

--eat smaller, more frequent meals

Food Allergies



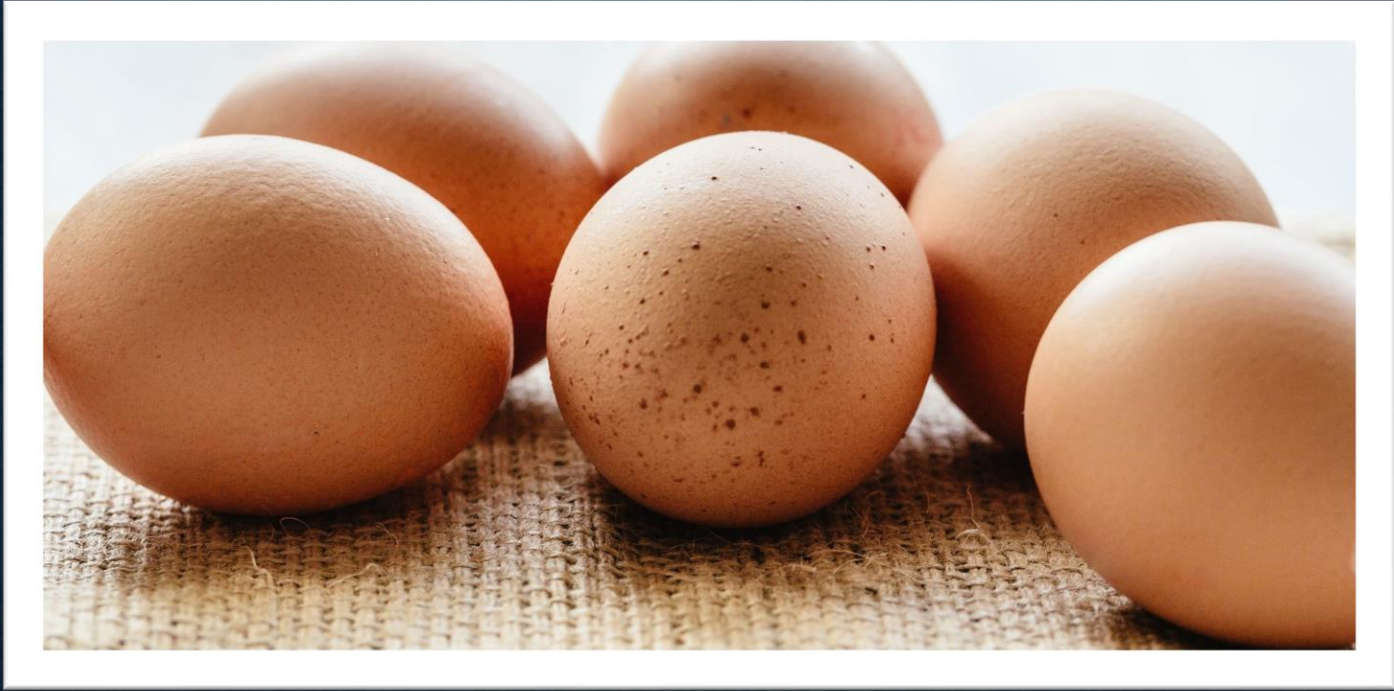
What to Do If Symptoms of an Allergic Reaction Occur

Symptoms of food allergies typically appear from within a few minutes to a few hours after a person has eaten the food to which he or she is allergic. A severe, life-threatening allergic reaction is called anaphylaxis.

Symptoms of allergic reactions can include:

- Hives
- Flushed skin or rash
- Tingling or itchy sensation in the mouth
- Face, tongue, or lip swelling
- Vomiting and/or diarrhea
- Abdominal cramps
- Coughing or wheezing
- Dizziness and/or lightheadedness
- Swelling of the throat and vocal cords
- Difficulty breathing
- Loss of consciousness

People with a known food allergy who begin experiencing any of these symptoms should stop eating the food immediately, evaluate the need to use emergency medication (such as epinephrine) and seek medical attention. Some of these symptoms are not always due to a food allergen. So, it is important to seek proper care and diagnosis from a healthcare provider to determine if the symptoms or reaction experienced was due to a food allergen.



FOOD SAFETY

foodborne bacteria

There are two kinds of foodborne bacteria: one that spoils your food and one that makes you sick. It's good to be familiar with both, but it's critical that you follow safe food handling practices to keep the second one at bay.

Spoilage Bacteria

Spoilage bacteria cause food to go bad — in other words, to “spoil.” With spoilage bacteria, the food looks or smells funny or bad, so you know to throw it out. These bacteria can grow at lower temperatures — even in the refrigerator. But while they can make food unappealing and inedible, they do **not** usually cause illness.

Pathogenic Bacteria

These are the ones you need to watch out for; in fact, it's pathogenic bacteria and the toxins or poisons they produce that the food safety precautions

Foodborne Illness

Often called “food poisoning,” foodborne illness comes from a food you eat. It's caused by ingesting **pathogenic bacteria** or the poisons they produce.

throughout this handbook are intended to prevent. You can't see, smell, or taste these pathogens, and this makes them difficult to detect. What's more, they cause a variety of foodborne illnesses and can make you really, really sick.

Pathogenic Bacteria: The Cause of Foodborne Illness

Pathogenic bacteria cause illness, and they can get in food in a number of ways. Sometimes these bacteria occur naturally and are destroyed by cooking food to safe temperatures. Pathogenic bacteria can also end up contaminating food when proper guidelines for cleaning hands, surfaces, and utensils and for avoiding cross-contamination are not followed.

- Different bacteria are present in different foods, and some are more common in certain situations.



For example, *Salmonella* is most often found in poultry or eggs, whereas *E. coli* is more typically found in or on meats and vegetables. Meanwhile, *Staphylococcus aureus* and *Clostridium perfringens* are frequently present on people's hands and even in buffet lines.

Foodborne Illness in the United States

The food supply in the United States is safe, but it can still be a source of infection for everyone. When certain disease-causing bacteria or pathogens contaminate food, they can cause foodborne illness.

According to the Centers for Disease Control and Prevention, 48 million persons get sick, 128,000 are hospitalized, and 3,000 die from foodborne infection and illness in the United States each year. Many of these people are children or older adults or have weakened immune systems and may not be able to fight infection normally.

Since foodborne illness can be serious — or even fatal, it is important for you to know and practice safe food handling behaviors to help reduce your risk of accidentally getting sick from contaminated food.



Foodborne Illness: Know the Signs and Symptoms . . . and Take Action

The signs and symptoms of foodborne illness range from upset stomach, diarrhea, fever, vomiting, abdominal cramps, and dehydration to more severe illness—even death. If you become ill and believe your illness is due to a food product:

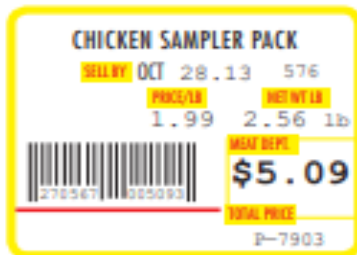
- **Seek treatment as necessary.**
Contact your doctor—especially if symptoms persist or become severe (bloody diarrhea, excessive nausea and vomiting, or high fever). For victims in an at-risk group (pregnant women and their unborn babies, newborns, young children, older adults, and people with weakened immune systems), seek medical care immediately.
- **Preserve the evidence** if a portion of the suspect food is available.
- **Call your local health department** if the suspect food was served at a large gathering, or at a restaurant or other food service facility.
- **Call the USDA Meat and Poultry Hotline** at 1-888-MPHotline (1-888-674-6854) if the suspect food is a USDA-inspected product and you have all the packaging.
- **Report complaints online** to USDA's Consumer Complaint Monitoring System (CCMS). Go to "[Report a Problem with Food](https://www.fsis.usda.gov)" at www.fsis.usda.gov

About Food Labels

Product Dating

Except for infant formula, food product dating is not generally required by Federal regulations. However, dating of some foods is required by more than 20 states. Here's what the dates mean.

"Sell By" date: Tells the store how long to display the product for sale. You should buy the product before the date expires.



"Best If Used By" (or Before) date: Recommended for best flavor or quality. It is *not* a purchase or safety date.

BEST IF USED BY

28 OCT 13

"Use-By" date: The last recommended date for the use of the product while at peak quality. The date has been determined by the product's manufacturer.

Closed or Coded dates: Packing numbers for use by the manufacturer. If a product is not "dated," consume perishable food by the times on page 13.

Ready to Eat—or Not?

Check labels carefully. Some products may appear to be precooked or browned but are raw and not ready to eat. Cook these foods to the safe minimum internal temperature of 165 °F (73.9 °C). Unless a product is labeled as "fully cooked," the food should be handled and prepared no differently than raw products.



Safe Handling Instructions

These guidelines on raw meat and poultry provide specific information for handling and preparation. Following these instructions is particularly important for consumers in at-risk groups.



All containers of meat, poultry, and egg products must be labeled with the USDA mark of inspection and the plant's establishment (EST) number. The numbers following EST (or P for poultry) tell where the product was made.



storing food

The food you store falls into three basic “storage categories.”

- **Perishable food:** in the refrigerator (read the label if you’re not sure)
- **Frozen food:** in the freezer
- **Shelf-stable food:** in a clean, dry place

Refrigerated Perishable Food

Food safety is the best reason ever to “chill out”! Follow these basic guidelines to protect your perishables — and yourself and your family. And remember: always refrigerate perishable food within 2 hours—1 hour when the temperature is above 90 °F (32.2 °C).

- **Raw Meat, Poultry, and Seafood:** Place in containers or sealed plastic bags to prevent their juices from dripping onto other food in the refrigerator. This could cause cross-contamination (see inset box, page 8). If you’re not planning to use the food within a day or two, freeze it.
- **Cooked, Whole Stuffed Poultry:** Remove stuffing and refrigerate it in a separate covered container.
- **Eggs:** Store in the original carton and place in the main compartment of the refrigerator — not in the door. When ready to use, do not wash them. (Read more about *Eggs* on page 28.)
- **Produce:** Store perishable produce in the refrigerator. Throw away fresh fruits and vegetables that have not been refrigerated within 2 hours of cutting, peeling, or cooking.

It’s a Date!

- As you store your food, **check dates** on the labels.
- If a product does not have a date on it, **write the purchase date on it** before you refrigerate or freeze it.
- Place newer items in the back of the refrigerator or freezer. That way, you’ll **use the older ones first**.
- **Leftovers:** Refrigerate (or freeze) leftovers within 2 hours after cooking in clean, shallow, covered containers to prevent harmful bacteria from multiplying. (See more on *Leftovers* on page 30.)



Frozen Food

For long-term storage of many perishable foods, rely on the freezer. Food stored constantly at 0 °F (-17.8 °C) or below will always be safe. Only the quality suffers with lengthy freezer storage.

Freezer Facts

- **Preventing Freezer Burn:** Freezer burn — white, dried-out patches on the surface of meat — won’t make you sick, but it *does* make meat tough and tasteless. Here’s how to avoid it:
 - Wrap freezer items in heavy freezer paper, plastic wrap, or foil.
 - Date all freezer packages. Use the oldest food first.
 - Place new items toward the back of the freezer; that way, older items are easier to access and you’ll use them first.
- **Refreezing Thawed Food:** If food is thawed in the refrigerator, it is safe to refreeze it without cooking.



(See *Thawing* section on page 16.)

However, there may be a loss of **quality** because of the moisture lost through defrosting.

- **Freezing Cooked Food:** After cooking raw food that was previously frozen, it is safe to freeze the cooked food. In addition, if previously cooked food was frozen and then thawed in the refrigerator, you may refreeze the unused portion.
- **Prevent Moisture Loss:** To maintain quality when freezing meat and poultry in its original packaging, overwrap the package with foil or plastic wrap that is recommended for use in the freezer.

Your Refrigerator and Freezer: Take Their Temperatures!

It’s common to assume that your refrigerator’s temperature control dial keeps food cold enough, but this isn’t necessarily true. “Built-in” temperature control dials may not be effective, and if your refrigerator isn’t cooling to 40 °F (4.4 °C) or below, you’re providing a haven for bacteria to grow.

- Instead, use a separate appliance thermometer to check the internal refrigerator temperature and help keep food safe. They are available in grocery, hardware, and kitchen specialty stores.
- If the refrigerator thermometer shows a temperature that’s too high (above 40 °F/4.4 °C), adjust the refrigerator’s control dial.
- Use the thermometer to check the freezer, too. It should read 0 °F (-17.8 °C) or below. If not, adjust the dial.



Food Safe Shopping & Storage

March 2018

Following these tips when buying and storing food can help prevent foodborne illness

DO

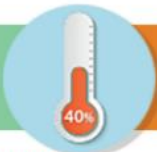


DON'T

Refrigerate food within 2 hours of grocery shopping, or 1 hour if kept in air temperatures above 90 °F

Place raw meat, poultry, or seafood on upper shelves of the refrigerator where they can drip onto other foods

DO



DON'T

Set refrigerator temperature to 40 °F or below and freezer at 0 °F or below (as indicated by an appliance thermometer)

Overfill the refrigerator or freezer

DO



DON'T

Defrost food in the refrigerator, in cold water, or in the microwave – and cook immediately

Thaw meat, poultry, or seafood on the counter

DO



DON'T

Keep produce separate from meat, poultry, seafood, and eggs in shopping carts and bags

Choose meat, poultry, or seafood in damaged or leaking packaging

DO



DON'T

Place meat, poultry, seafood, and eggs in plastic bags at checkout

Buy eggs with cracked shells or damaged cartons

DO



DON'T

Keep produce and other ready-to-eat foods in a separate area of the refrigerator from meat, poultry, seafood, and eggs

Remove eggs from carton or keep them in the refrigerator door



food preparation

Food safety doesn't end with buying, transporting, and storing food safely. In fact, once you have food home, the safety of your food is, literally, in your hands. Follow these basic guidelines — and remember, safe food preparation always begins with “clean.”

Keeping It Clean

Handwashing

- Always wash hands with soap and warm water for 20 seconds before beginning food preparation, after handling food, and after using the bathroom, changing diapers, or touching pets.
- Use disposable gloves to handle food if you have a cut or infection. Do not sneeze or cough into food.

Surfaces and Utensils

- Harmful bacteria can spread throughout the kitchen and get onto cutting boards, utensils, and countertops causing “cross-contamination.” (See inset box on page 8.) Keep raw meat, poultry, fish, and their juices away from other food — especially ready-to-eat food.
- Wash cutting boards, dishes, and countertops with hot, soapy water **after** preparing each food item and **before** you go on to the next item.
 - After cutting raw meat, poultry, and seafood, wash cutting boards, knives, and countertops with hot, soapy water.

Cutting Boards

Proper cutting board care is a key component of preventing cross-contamination. Here's how:

- Always use a clean cutting board for food preparation.
- Try to use one cutting board for fresh produce and a separate one for raw meat, poultry, and seafood.
- Sanitize cutting boards by rinsing with a solution of 1 tablespoon of unscented, liquid chlorine bleach in 1 gallon of water.
- Once cutting boards become excessively worn or develop hard-to-clean grooves, replace them.

Kitchen Cleanup

- Use hot, soapy water and a clean dishcloth (or paper towels) to clean kitchen surfaces and wipe up spills.
- Wash dishcloths often in the hot cycle of your washing machine.



Preparation Tips for Produce

Fresh fruits and veggies are nutritional mainstays. Here's how to make sure they're safe.

- Before eating or preparing, wash fresh produce under cold running tap water to remove any lingering dirt. This also reduces bacteria that may be present. Firm produce (like apples or potatoes) can be scrubbed with a brush.
- Don't wash fruits and vegetables with detergent or soap. These products are **not approved** for use on food. You could ingest residues from soap or detergent absorbed by the produce.
- Remove and throw away bruised or damaged portions of fruits and vegetables when preparing to cook them or before eating them raw.



Thawing

Going from "frozen to thawed" needs to be accomplished safely! There are three ways to thaw — and because bacteria can multiply rapidly at room temperature, **none** of these methods involve the kitchen counter.

In the Refrigerator: This is the safest way to thaw meat and poultry. Take the food out of the freezer and thaw it in the fridge. Place it on a plate or in a pan to catch any juices that may leak. Normally, it will be thawed in a day or two, depending on its size.

In Cold Water: For faster thawing, put the frozen package in a watertight plastic bag and submerge it in cold water; change the water every 30 minutes. The cold water slows bacterial growth in the thawed portions of the meat while the inner areas are still thawing. Once thawed, cook it immediately.

In the Microwave: Follow instructions from the oven's manufacturer or owner's manual. Cook immediately after thawing in the microwave.

NOTE: Frozen meat and poultry can be cooked without thawing. Just add 50% to the cooking time.

Refreezing Tips:

- Meat and poultry that have been fully defrosted in the refrigerator may be refrozen **before or after** cooking.
- If thawed in cold water or in the microwave, always fully cook before refreezing.



cooking food safely

Cooking food to a safe temperature is the best way to ensure safety. That's because when food reaches a **safe minimum internal temperature**, bacteria that may be lurking are destroyed. Sound complicated? It's not. It's as easy as using a **food thermometer**.

About Food Thermometers

Food safety experts agree: food is safe to eat when it is cooked or reheated to a high enough temperature to kill the harmful bacteria that cause foodborne illness.

The only accurate way to know if food is cooked safely is to measure the internal temperature of cooked meat, poultry, and egg products with a food thermometer. You can't tell by looking — use a food thermometer to be sure. Color and texture are not reliable indicators of safely cooked food.



How to Use a Food Thermometer

1. Place the food thermometer in the **thickest part of the food**.
 - Make sure it's not touching bone, fat, or gristle.
 - For whole poultry, check the internal temperature in the innermost part of the thigh and wing and the thickest part of the breast.
 - For combination dishes, place the thermometer in the center or thickest portion of the food. Egg dishes and dishes containing ground meat or poultry should be checked in several places.
2. Wait the amount of time recommended for your particular type of thermometer (See **Food Thermometers and Temperature Indicators** on page 18).
3. Compare your thermometer reading to the Safe Minimum Internal Temperature Chart (see page 19) to determine if your food has reached at least a safe internal temperature.
4. Clean your food thermometer with hot, soapy water before and after each use!

Tasting Tips

- Don't taste food while it's cooking. To ensure safety, food should not be tasted until it reaches a safe minimum internal temperature.
- No double dipping. Use a clean utensil each time you taste food; otherwise, you may contaminate the batch.



serving food safely

"Dinner is served!" More than ever, this happens in a wide variety of places, both indoors and out. But no matter where your meal is taking place . . . safety must still be the first item on the menu.

General Guidelines: Whatever or Wherever You're Serving!

- **Keep Hot Food Hot & Cold Food Cold.** Whether you are in your kitchen or enjoying the great outdoors, there are some food safety principles that remain constant. The first is "Keep hot food hot and cold food cold" to keep foods out of the "Danger Zone."
(See **Focus on: The "Danger Zone"** on page 9.)
- **Keep Everything Clean.** It's a fact that bacteria from raw meat and poultry products can easily spread to other foods by hands, utensils, or by juices dripping from packages.

- When **transporting raw meat or poultry**, double-wrap or place the packages in plastic bags to prevent juices from the raw product from dripping on other foods.
- Always **wash your hands** before and after handling food, and **don't use the same platter and utensils** for raw and cooked meat and poultry unless you wash them first.
- **Soap and water are essential** to cleanliness, so if you are going somewhere that will not have running water, bring it with you or have disposable wipes on hand.

(See **Cross-Contamination** on page 8.)

- **Remember the 2-Hour Rule:** Perishable food should never be left in the "Danger Zone" — **between 40 and 140 °F (4.4 and 60 °C)** — for more than 2 hours. This includes both hot food and cold food. If it's been more than 2 hours (or 1 hour in temperatures above 90 °F/32.2 °C), discard the food.
- **Be Cool:** If you are traveling with cold food, bring a cooler with a cold source. It is difficult to keep food hot without a heat source when traveling, so it's best to cook food before leaving home and refrigerate and transport cold.
(See **Transporting Food** on page 38.)



DO		DON'T	
 <p>Cook meat, poultry, and seafood to a safe minimum internal temperature</p>		<p>Serve cooked meat, poultry, or seafood without checking the temperature with a food thermometer</p>	
 <p>Beef, pork, veal, & lamb (chops, roasts, steaks): 145 °F with a 3-minute rest time</p>	 <p>Poultry: 165 °F</p>	 <p>Ground meats: 160 °F</p>	 <p>Fish & seafood: 145 °F</p>
DO		DON'T	
 <p>Keep meat, poultry, and seafood warm (140 °F or above) between cooking and serving</p>		<p>Allow food to cool before refrigerating</p>	
DO		DON'T	
 <p>Use the USDA FoodKeeper App to check how long foods can be safely stored</p>		<p>Let food sit out for more than 2 hours, or 1 hour in air temperatures above 90 °F</p>	



DO		DON'T	
 <p>Wash hands with soap and water for at least 20 seconds before preparing food</p>		<p>Wash meat, poultry, seafood, or eggs</p>	
DO		DON'T	
 <p>Rinse whole fruits and vegetables under running water and dry with a clean cloth, paper towel, or salad spinner</p>		<p>Use soap or detergent on foods</p>	
DO		DON'T	
 <p>Wash utensils that have touched uncooked meat, poultry, seafood, eggs, or flour before using them with any food that will be eaten raw</p>		<p>Allow raw meat, poultry, seafood, eggs, or flour to touch any food that will be eaten raw</p>	
DO		DON'T	
 <p>Clean cooking surfaces and utensils with hot, soapy water after every use</p>		<p>Reuse plates or cutting boards that have touched uncooked meat, poultry, seafood, eggs, or flour unless you wash them first with hot, soapy water</p>	

FDA U.S. FOOD & DRUG ADMINISTRATION

Food Safe Meal Prep

March 2018



Following these tips when cooking and chilling leftovers can help prevent foodborne illness

■ ■ ■ transporting food: coolers, picnics, and bag lunches

When it comes to food, you can take it with you, but you need to do it safely, too. Whether you're tailgating, picnicking, or just packing your lunch, start with a clean cooler or lunch pack and begin by preparing food using standard "clean" practices. (See *Food Preparation* beginning on page 15.) In addition, follow these special guidelines to keep your packed food safe wherever your travels take you.

Bag Lunches

Bag lunches aren't just for school kids. Wherever you're going, pack only the amount of perishable food that can be eaten at lunch to avoid worrying about the storage or safety of leftovers.

Cold Food:

- Prepare cooked food, such as turkey, ham, chicken, and vegetable or pasta salad, ahead of time to allow for thorough chilling in the refrigerator. Try preparing it the night before.
- Freezing sandwiches helps them stay cold. For best quality, don't freeze sandwiches containing mayonnaise, lettuce, or tomatoes; add these ingredients later.
- Keep cooked food refrigerated until time to leave home. To keep lunches cold away from home, include at least two cold sources: two frozen gel packs (not smaller than 5x3-inches each) or a frozen gel pack with a frozen juice box or frozen bottle of water. Place them on top and bottom of the perishable food items to keep them cold. If a refrigerator is available, store perishable items there upon arrival. If you place your insulated bag in the refrigerator, leave the lid or bag open so that cold air can keep the food cold.

Hot Food:

- Use an insulated container to keep food like soup, chili, and stew hot. Fill the container with boiling water, let it stand for a few minutes, empty the water out, and then put in piping hot food. Keep the insulated container closed until lunchtime to keep the food hot. For safety, it needs to stay at 140 °F (60 °C) or above.
- When using the microwave oven to reheat lunches, cover food to hold in moisture and promote safe, even heating. Reheat leftovers to at least 165 °F (73.9 °C), making sure to use a food thermometer to be sure a safe temperature has been reached before consuming the food. Cook frozen convenience meals according to package instructions.



Coolers

The cooler is the key to keeping cold food out of the "Danger Zone." Use an insulated cooler with sufficient ice or ice packs to keep the food at 40 °F (4.44 °C) or below.

Packing:

- As you prepare, **divide large amounts of food** into shallow containers for fast chilling and easier use. Keep cooked food refrigerated until it's time to leave home.
- **Pack food right from the refrigerator** into the cooler immediately before leaving home.
 - For your cold source: use **frozen gel packs or ice**. A block of ice keeps longer than ice cubes. Or, in advance, freeze clean, empty milk cartons filled with water to make **blocks of ice**. Add the ice first, then the food.
- Pack smart! **Pack usable quantities in reverse order:**
 - The **first** foods packed should be the **last** foods to be used. (There is one exception: **Pack raw meat or poultry below ready-to-eat foods** to prevent raw meat or poultry juices from dripping on the other foods.)
 - Take foods in the smallest quantity needed (e.g., a small jar of mayonnaise).
- Consider **packing drinks in a separate cooler** so the food cooler is not opened frequently.

- It is important to pack an **appliance thermometer** in your cooler. Since the food in the cooler should be kept at 40 °F (4.44 °C) or below, you need to be able to monitor it.
- Before you leave home, find out if there's a **source of clean water** at your destination. If not, bring water for preparation and cleaning. Or, pack clean cloths and moist towelettes for cleaning surfaces and hands.

Placement:

- At your destination, keep the cooler **in the shade**, and try to **insulate it** with a blanket, tarp, or poncho. Keep the lid closed and avoid repeated openings. Replenish the ice if it melts.
- Remember that the rule for keeping food safe changes during warmer weather. While food can be kept out of the cooler for 2 hours at normal temperatures, if the weather is **above 90 °F (32.2 °C) outside**, food should be returned to a cooler or refrigerated after only 1 hour.

(See *Focus On: The Danger Zone*, page 9.)

Party's Over?

- Discard all **used food packaging** and bags — they could contaminate other food and cause foodborne illness, so don't reuse them.
 - Discard all perishable foods if there is no longer ice in the cooler, or if the **gel packs** are no longer frozen.
- (See also: *Serving Food Safely*, page 35, and *Grilling and Barbecuing*, page 32.)

Handwashing: A Healthy Habit in the Kitchen

[Español \(Spanish\)](#)

Handwashing is one of the most important things you can do to [prevent food poisoning](#) when preparing food for yourself or loved ones. Your hands can spread germs in the kitchen. Some of these germs, like *Salmonella*, can make you very sick. Washing your hands frequently with soap and water is an easy way to prevent germs from spreading around your kitchen while handling and preparing foods.

Why, When, and How to Wash Hands

Wash your hands often while cooking to keep germs off your food and help you and loved ones stay healthy. Washing your hands often and correctly while you're cooking can help prevent cross-contamination. Your hands carry germs you can't see, and these germs can be introduced to your food while you are preparing it.



Handwashing is especially important during some [key times](#) when germs can spread easily:

- **Before, during, and after** preparing any food.
- **After** handling uncooked meat, chicken or other poultry, seafood, flour, or eggs.
- **Before** and **after** using gloves to prevent germs from spreading to your food and your hands.
- **Before** eating.
- **After** touching garbage.
- **After** wiping counters or cleaning other surfaces with chemicals.
- **After** touching pets, pet food, or pet treats.
- **After** coughing, sneezing, or blowing your nose.

In a recent [observational study by USDA](#) [↗](#), participants failed to wash their hands correctly 97 percent of the time. Nearly half of the participants cross-contaminated spice containers because they didn't wash their hands adequately.

Five Steps to Handwashing

Handwashing is one of the most effective ways to prevent the spread of germs when done correctly. Use your preferred water temperature—cold or warm—to wash your hands. Warm and cold water remove the same number of germs from your hands.

To get the full benefit of handwashing, follow these five steps every time.

1. **Wet** your hands with clean, running water (warm or cold), turn off the tap, and apply soap.
2. **Lather** your hands by rubbing them together with the soap. Lather the backs of your hands, between your fingers, and under your nails.
3. **Scrub** your hands for at least 20 seconds. Need a timer? Hum the “Happy Birthday” song from beginning to end twice.
4. **Rinse** your hands well under clean, running water.
5. **Dry** your hands using a clean towel or air dry them.

Don't let germs ruin your food plans. Make handwashing a healthy habit while preparing food for yourself and your loved ones!

Source: Centers for Disease Control and Prevention

[Handwashing: A Healthy Habit in the Kitchen](#) | [Handwashing](#) | [CDC](#)



FOOD RECALLS

A food recall occurs when a food producer takes a product off the market because there is reason to believe that it may cause consumers to become ill. In some situations, government agencies may request or require a food recall. Food recalls may happen for many reasons, including but not limited to:

- Discovery of organisms, including bacteria such as *Salmonella* or parasites such as *Cyclospora*.
- Discovery of foreign objects such as broken glass or metal.
- Discovery of a major allergen that does not appear on the product label.

It is important that consumers be aware of recalls because recalled foods may cause injury or illness, especially for people who are pregnant or have weakened immune systems because of age, chronic illness, or medical treatment.



What to Do with a Recalled Product

If the product details in the recall notice match the details on the food product you have at home, do not open or consume the product. Instead, do one of the following:

- **Return the product** to the place of purchase for a refund.
- **Dispose of the product** following the instructions provided in the recall notice to make sure no one will consume it.

A food product that has been recalled due to a possible germ contamination or illness can leave germs around your kitchen and contaminate surfaces, including the drawers and shelves in your refrigerator.

If you've already prepared a recalled food item in your kitchen or still have it in your refrigerator, it's important to throw out the food and clean your kitchen.

Source: US Department of Health and Human Services

[Recalls and Outbreaks | FoodSafety.gov](https://www.foodsafety.gov)

food product recalls

When meat and poultry products are recalled, USDA's Food Safety and Inspection Service notifies the public through a press release. The recall is posted on the FSIS Recall Website: www.fsis.usda.gov/fsis_recalls.

Recalls

These recall announcements include:

- Description of the food
- Identifying codes, including the plant number (found in the USDA Inspection Mark on the label)
- Reason for the recall
- Name of the producer
- Distribution information
- Health risk
- Contacts at FSIS and the company

Recall Rules of Thumb:

- If you discover that you have a recalled product in your home, **do not consume it**. Instead, return it to the place of purchase or discard.
- If you become ill from a recalled product, contact a physician.

For more information, read the fact sheet **"How to Find the USDA Establishment (EST) Number on Food Packaging"** at www.fsis.usda.gov.

food safety contacts

Food Safety Contacts

USDA Meat and Poultry Hotline:

1-888-MPHOTLINE (1-888-674-6854)

E-mail: mph hotline.fsis@usda.gov

- Monday – Friday, 10 a.m. to 4 p.m. ET, year round
- Live Chat in English and Spanish
- Recorded food safety messages available 24 hours a day

USDA Food Safety and Inspection Service Websites:

- "www.Ask Karen," FSIS's Web-based automated response system — available 24/7 at www.askkaren.gov
- m.AskKaren.gov — scan QR code into your Android or iPhone
- www.fsis.usda.gov — online 24 hours, 7 days a week

U.S. Government Food Safety Website:

- www.foodsafety.gov

¡Hablamos Español!

www.Pregunteleakaren.gov

Hay disponible información en español sobre Inocuidad Alimentaria de ambas maneras, electrónicamente y por teléfono.

Llame al teléfono:

1-888-674-6854

Visite la página principal electrónica:

www.fsis.usda.gov/en_espanol/index.asp

For Help With . . .

Meat, Poultry, or Processed Egg Products: 1-888-MPHOTLINE (1-888-674-6854)

Non-Meat Food Products (Cereals, Fish, Produce, Fruit Juice, Pastas, Cheeses, etc.): www.fda.gov/food or 1-888-SAFEFOOD (1-888-723-3366)

Restaurant Food Problems: Call the Health Department in your city, county, or state. Visit www.foodsafety.gov/about/state/index.html to locate your health department.

Material excerpted from:

https://www.fsis.usda.gov/sites/default/files/media_file/2020-12/Kitchen-Companion.pdf

MOVEMENT FOR BETTER HEALTH





What's your move?

You know you need physical activity to stay healthy.
But did you know it can help you feel better right away?



Boost your mood



Sharpen your focus



Reduce your stress



Improve your sleep

So get more active – and start feeling better today.

How much activity do I need?

Moderate-intensity aerobic activity

Anything that gets your heart beating faster counts.



AND



Muscle-strengthening activity

Do activities that make your muscles work harder than usual.



Tight on time this week? **Start with just 5 minutes.** It all adds up!

intensity activity

What counts?

Whatever gets you moving!



Even things you have to do anyway



Even things that don't feel like exercise

You can get more active.

No matter who you are, where you live, on your own, or together.
You can find a way that works for you.



And over time, physical activity can help you live a longer, healthier life.

✓ Lower your risk of diseases like type 2 diabetes and some cancers

✓ Control your blood pressure

✓ Stay at a healthy weight

So take the first step. Get a little more active each day. **Move your way.**

Find tips to get moving and build a weekly activity plan.
health.gov/MoveYourWay/Activity-Planner





Key Guidelines for Safe Physical Activity

To do physical activity safely and reduce risk of injuries and other adverse events, people should:

- Understand the risks, yet be confident that physical activity can be safe for almost everyone.
- Choose types of physical activity that are appropriate for their current fitness level and health goals, because some activities are safer than others.
- Increase physical activity gradually over time to meet key guidelines or health goals. Inactive people should “start low and go slow” by starting with lower intensity activities and gradually increasing how often and how long activities are done.
- Protect themselves by using appropriate gear and sports equipment, choosing safe environments, following rules and policies, and making sensible choices about when, where, and how to be active.
- Be under the care of a health care provider if they have chronic conditions or symptoms. People with chronic conditions and symptoms can consult a health care professional or physical activity specialist about the types and amounts of activity appropriate for them.

Key Guidelines for Adults With Chronic Health Conditions and Adults With Disabilities

- Adults with chronic conditions or disabilities, who are able, should do at least 150 minutes (2 hours and 30 minutes) to 300 minutes (5 hours) a week of moderate-intensity, or 75 minutes (1 hour and 15 minutes) to 150 minutes (2 hours and 30 minutes) a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic activity. Preferably, aerobic activity should be spread throughout the week.
- Adults with chronic conditions or disabilities, who are able, should also do muscle-strengthening activities of moderate or greater intensity and that involve all major muscle groups on 2 or more days a week, as these activities provide additional health benefits.
- When adults with chronic conditions or disabilities are not able to meet the above key guidelines, they should engage in regular physical activity according to their abilities and should avoid inactivity.

U.S. Department of Health and Human Services. Physical Activity Guidelines for Americans, 2nd edition. Washington, DC: U.S. Department of Health and Human Services; 2018. [Physical Activity Guidelines for Americans, 2nd edition \(health.gov\)](https://www.health.gov/physical-activity-guidelines-for-americans)



After you have read the training material, take the Nutrition and Food Safety quiz to complete your training.