

**Go 40°
or BELOW**

A COLD FRIDGE HELPS KEEP FOOD SAFE

Keep Home Refrigerator
at 40° F or Below



Refrigerate Foods
Within Two Hours



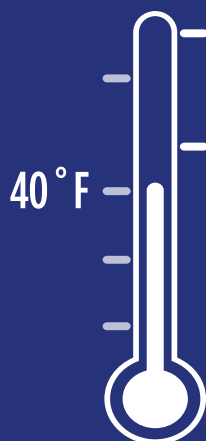
Thaw Foods Properly



Temperatures of 40° F or below will slow the growth of foodborne bacteria, which can grow rapidly at warmer temperatures. It's important to chill foods promptly and properly to prevent the growth of harmful microbes.

Keep Home Refrigerator at 40° F or Below

- A constant home refrigerator temperature of **40° F or below** is one of the most effective ways to reduce the risk of foodborne illness and slow the growth of harmful bacteria.
- Use a **refrigerator thermometer** to ensure the temperature is consistently 40° F or below. Refrigerator thermometers are tools that stay in your refrigerator to display actual temperatures (separate from refrigerator dials).
- **Don't go too low:** As temperatures approach 32° F, ice crystals can form and lower the quality of foods.
- **Keep your refrigerator clean, too:** To prevent the spread of harmful bacteria, wipe spills immediately. Regularly clean the inside of your fridge with hot water and liquid soap, and dry with a clean cloth or paper towels.
- For more information on safe refrigeration temperatures, check out our **Go 40° F or Below fact sheet** and special brochures for **expecting mothers** and **seniors** at fightbac.org.



1. Follow thermometer manufacturer instructions for ideal placement.

2. Make sure the thermometer reads 40° F or below. Some events may cause temporary readings over 40° F, such as:

- Initial placement
- Door open for an extended time
- Hot foods recently placed inside
- Automatic defrost cycles: Check temperature as soon as it turns on, when it's at its highest temp.



Refrigerate Foods Within Two Hours

- Refrigerate or freeze perishables, prepared foods and leftovers within **two hours** of purchase or use. If the temperature is 90 ° F or above, cut this time down to one hour.
- Separate large amounts of leftovers into **shallow containers** for quicker cooling.
- Do not overstuff your refrigerator.** Cold air must circulate to keep food safe.
- Know when to toss:** you can't tell by looking or smelling whether harmful bacteria have started growing in your leftovers or refrigerated foods. Check out the **Safe Storage Times** chart for storage guidelines of different foods.



Hit the Road Cold

- When traveling, be aware that time, temperature and a cold source are key.
- Always use ice or ice packs. A full cooler will maintain cold temperatures longer than a partially filled one.
- For more information, check out our **Food Safety on the Move fact sheet**.

Storage Times for the Refrigerator and Freezer

These short but safe time limits for home-refrigerated foods will keep them from spoiling or becoming dangerous to eat. The guidelines for freezer storage are for quality only. Frozen foods remain safe indefinitely.

CATEGORY	FOOD	REFRIGERATOR (40 ° F OR BELOW)	FREEZER (0 ° F OR BELOW)
Salads	Egg, chicken, ham, tuna and macaroni salads	3-5 days	Does not freeze well
Hot dogs	Opened package	1 week	1-2 months
	Unopened package	2 weeks	1-2 months
Luncheon meat	Open package or deli sliced	3-5 days	1-2 months
	Unopened package	2 weeks	1-2 months
Bacon and sausage	Bacon	7 days	1 month
	Sausage, raw — from chicken, turkey, pork, beef	1-2 days	1-2 months
Hamburger and other ground meats	Hamburger, ground beef, turkey, veal, pork, lamb and mixtures of these	1-2 days	3-4 months
Fresh beef, veal, lamb and pork	Steaks	3-5 days	6-12 months
	Chops	3-5 days	4-6 months
	Roasts	3-5 days	4-12 months
Fresh poultry	Chicken or turkey, whole	1-2 days	1 year
	Chicken or turkey, pieces	1-2 days	9 months
Soups and stews	Vegetable or meat added	3-4 days	2-3 months
Leftovers	Cooked meat or poultry	3-4 days	2-6 months
	Chicken nuggets or patties	3-4 days	1-3 months
	Pizza	3-4 days	1-2 months

[Download and print this chart here.](#)

Thaw Foods Properly

Never thaw food at room temperature – harmful bacteria can multiply rapidly at room temperature. Choose one of these options to thaw food safely:

- Thaw food in a refrigerator.** This is the safest way to thaw meat, poultry and seafood. Place the frozen food on a plate or pan to catch any juices that may leak.
- Thaw in cold water** if food will be cooked immediately. Replace the water every 30 minutes so the food continues to thaw in cool water.
- Thaw in the microwave** if food will be cooked immediately. Follow the instructions in your owner's manual for thawing.
- If you don't have time to thaw food: It is safe to **cook foods from a frozen state**, but the cooking will be approximately **50 percent longer** than fully thawed meat or poultry. Use a food thermometer to ensure food is cooked to safe internal temperature.

THE FOUR WAYS TO FIGHT BAC!





**Wash Hands with Soap
and Water**



Clean Surfaces



Rinse Produce

Wash Hands and Surfaces Often



Foodborne bacteria can't be seen, tasted or smelled. These microorganisms can make you sick if ingested, and they spread through contact with cutting boards, utensils, countertops and food – so ready, set, **CLEAN!**

Wash your hands with warm water and soap for at least 20 seconds!

How?

- Wet your hands with warm running water and apply soap.
- Rub your hands together to make a lather and scrub them well. Be sure to scrub the backs of your hands, between your fingers and under your nails.
- Continue rubbing hands for at least 20 seconds – about the time it takes to sing the “Happy Birthday” song twice.
- Rinse your hands well under running water.
- Dry your hands using a clean cloth or paper towel.

When?

- Before eating food
- Before, during and after preparing food
- Before and after treating a cut or wound
- Before and after caring for someone who is sick
- After handling uncooked eggs or raw meat, poultry or seafood (or their juices)
- After blowing your nose, coughing or sneezing
- After touching an animal or animal waste
- After touching garbage
- After using the toilet



DID YOU KNOW?

In a recent study, 65 percent of consumers did not wash their hands before starting meal preparation.

Bruhn, C. (2014). Chicken Preparation in the Home: An Observational Study. Food Protection Trends, 34, 318-330.

Partnership for Food Safety Education

We develop and promote effective education programs to reduce foodborne illness risk for consumers.

WWW.FIGHTBAC.ORG



facebook.com/FightBAC



twitter.com/FightBAC

Clean Surfaces

Keep Your Scene Clean

Bacteria that can cause illness can survive in many places around your kitchen. **Keep countertops and other kitchen surfaces clean** to prevent cross-contamination.

- **CLEAN SURFACES** with hot water and soap to remove dirt and debris. Do this **after preparing each food item and before going on to the next food item**.
- **Keep your fridge clean, too:** Wipe spills immediately and regularly clean the inside with hot water and liquid soap. Dry with paper towels.
- After cleaning, you may **SANITIZE SURFACES** as an extra precaution to kill germs. Use a solution of 1 tablespoon of unscented liquid chlorine bleach and 1 gallon of water. Apply to surfaces, and allow to stand for several minutes. Air dry or pat dry with fresh paper towels.



Wash your cutting boards, dishes and utensils with hot water and soap after preparing each food item and before you go on to the next food.

Rinse Produce

Rinse fresh fruits and veggies under running water just before eating, even if you plan to cut or peel them, because bacteria can spread from the outside to the inside during cutting or peeling.

- Firm-skinned fruits and veggies should be rubbed by hand or scrubbed with a clean brush while rinsing under running water.
- Packaged fruits and veggies labeled “ready-to-eat,” “washed” or “triple-washed” should not be washed. Doing so may increase the risk for cross-contamination.
- Dry fruits and veggies with a clean cloth or paper towel.
- Do not use soap or bleach to wash produce. These products are not intended for consumption.
- For more information, check out our **ProducePro fact sheet** at fightbac.org.



THE FOUR WAYS TO FIGHT BAC!



Partnership for Food Safety Education

We develop and promote effective education programs to reduce foodborne illness risk for consumers.

WWW.FIGHTBAC.ORG



facebook.com/FightBAC



twitter.com/FightBAC



Color is Not a Reliable Indicator of Safety



Check with a Food Thermometer



Microwave to Safe Temperatures

Cook to Safe Temperatures



Safely cooking food is a matter of temperature. Foods need to reach a high enough internal temperature to kill bacteria that can cause foodborne illness.

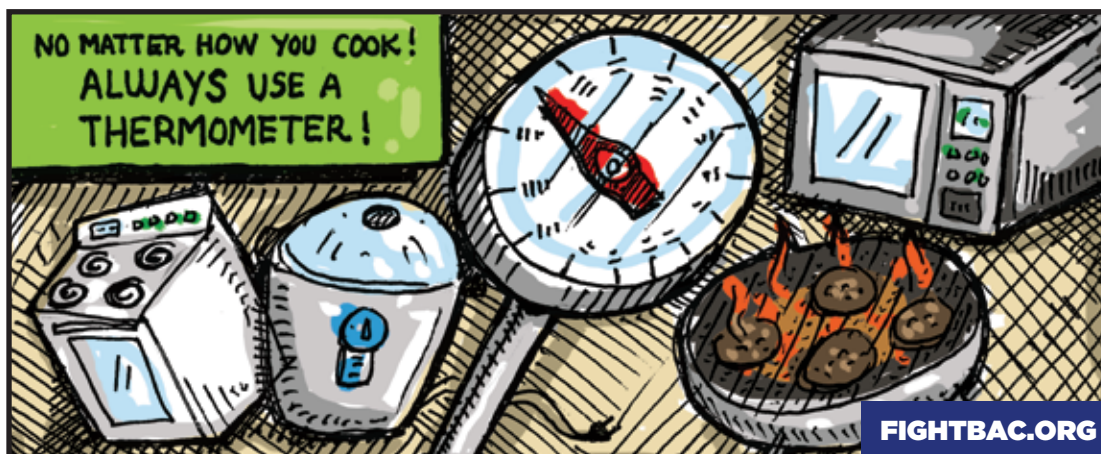


Color is Not a Reliable Indicator of Safety

- Color and texture are not reliable indicators of whether food has reached a high enough internal temperature to destroy pathogens.
- According to USDA research, **1 in 4 hamburgers turns brown before reaching a safe internal temperature.**
- The best way to ensure safety is to use a food thermometer.

Check with a Food Thermometer

- **Use a food thermometer** to ensure that meat, poultry, seafood, egg products, leftovers and casseroles are cooked to safe temperatures to destroy any harmful bacteria.
- Compare your thermometer reading to the chart to make sure food has been cooked to a safe temperature.
- Food thermometers should be placed in the **thickest part of food**, making sure not to touch bone, fat or gristle.
- **Clean your food thermometer** with hot water and soap after each use.
- For information about calibrating your food thermometers, check out the **Thermometers and Food Safety Web page** from the USDA Food Safety and Inspection Service.



Partnership for Food Safety Education

We develop and promote effective education programs to reduce foodborne illness risk for consumers.

WWW.FIGHTBAC.ORG



facebook.com/FightBAC



twitter.com/FightBAC

Microwave to Safe Temperatures

Read and follow package cooking instructions.

- Most prepared convenience foods are not ready to eat right out of the container.

Know when to use a microwave or conventional oven.

- Sometimes proper cooking requires the use of a conventional oven, not a microwave.
- Some convenience foods may be shaped irregularly or are thicker in some areas and may not cook evenly in a microwave oven. It is important to use the appliance and the method recommended on the label.

Know your microwave wattage before microwaving food.

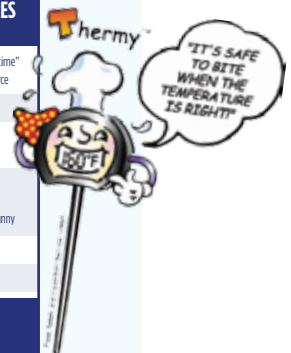
- If your microwave's wattage is lower than the wattage mentioned in the label's instructions, it will take longer than the instructions say to cook the food to a safe internal temperature.

Always use a food thermometer to ensure a safe internal temperature.

- Use a food thermometer to test food in several places to make sure it has reached a safe internal temperature.
- For more information on microwaving foods to safe temperatures, check out the **Cook it Safe! fact sheet** at fightbac.org.



SAFE MINIMUM INTERNAL TEMPERATURES <small>as measured with a food thermometer</small>	
Beef, pork, veal and lamb (roast, steaks and chops)	145°F with a three-minute "rest time" after removal from the heat source
Ground meats	160°F
Poultry (whole, parts or ground)	165°F
Eggs and egg dishes	160°F, but cook eggs until both the yolk and the white are firm; scrambled eggs should not be runny
Leftovers	165°F
Finfish	145°F
GUIDELINES FOR SEAFOOD	
Shrimp, lobster, crabs	Flesh pearly and opaque
Clams, oysters and mussels	Shells open during cooking
Scallops	Milky white, opaque and firm



[Download and print this chart here.](#)

Important Cooking Tips to Remember: Entertaining and On-the-Go Foods

- When entertaining and serving hot food buffet-style, use a chafing dish, warming tray or slow-cooker to keep food hot.
- When bringing hot foods to a party or traveling with hot foods, transport them in insulated thermal containers. Keep containers closed until serving time.

THE FOUR WAYS TO FIGHT BAC!



Partnership for Food Safety Education

We develop and promote effective education programs to reduce foodborne illness risk for consumers.

WWW.FIGHTBAC.ORG

facebook.com/FightBAC

twitter.com/FightBAC

↔ SEPARATE



Separate Raw Meat, Poultry, Seafood and Eggs from Other Foods



Use Separate Cutting Boards, Plates and Utensils



Safely Marinate

Get it Straight – it's Safer to Separate



Cross-contamination is how bacteria can be spread. Improper handling of raw meat, poultry, seafood and eggs can create an inviting environment for cross-contamination. As a result, harmful bacteria can spread to food and throughout the kitchen.

Separate Raw Meat, Poultry, Seafood and Eggs from Other Foods

Harmful bacteria from raw meat, poultry, seafood and eggs can spread to other foods if they are not separated properly. This is especially risky when bacteria are spread to foods that are eaten raw, such as fresh fruits and vegetables. **Separate** and prevent cross-contamination by taking these steps:

In the Grocery Store

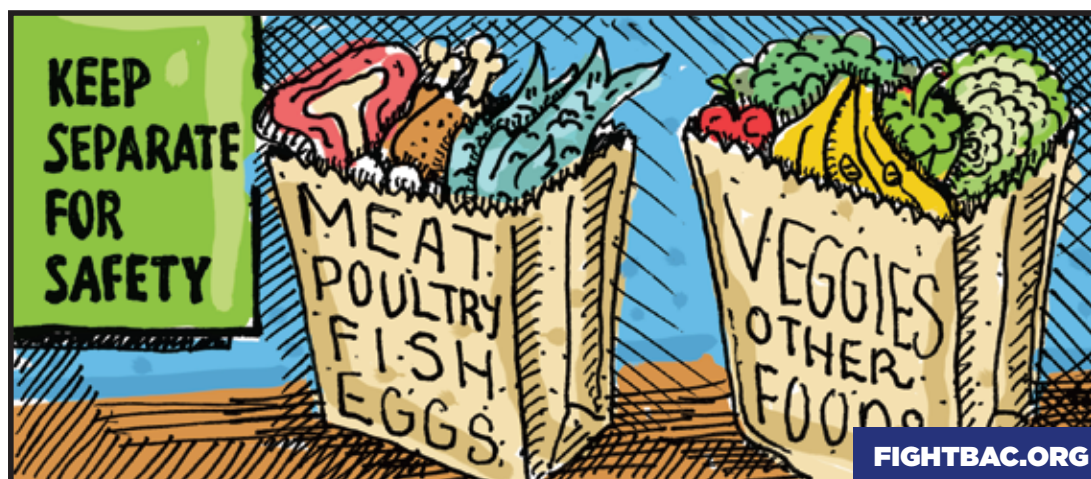
- Separate raw meat, poultry, seafood and eggs from other foods in your **shopping cart**. Place these products in **separate plastic bags** to prevent juices from getting on other foods.
- If you use reusable grocery bags, wash them frequently in the washing machine.

At Home

- Separate raw meat, poultry, seafood and eggs from other foods in the **refrigerator**. Place them in **containers or sealed plastic bags on the bottom shelf** of the refrigerator.
- If you are not planning to use these foods within a few days, freeze them.

Be a ProducePro

- Keep fresh fruits and vegetables separate from raw meat, poultry, seafood and eggs. For more information on safely handling produce, check out our **ProducePro fact sheet** at fightbac.org.



Partnership for Food Safety Education

We develop and promote effective education programs to reduce foodborne illness risk for consumers.

WWW.FIGHTBAC.ORG



facebook.com/FightBAC



twitter.com/FightBAC

Use Separate Cutting Boards, Plates and Utensils

Use separate cutting boards:

- One for fresh produce
- Another one for raw meat, poultry and seafood

Use separate plates and utensils:

- For cooked foods
- For raw foods

Never place cooked food back on a plate that previously held raw meat, poultry, seafood or eggs. **Wash the plate with hot water and soap** before using with other foods.



Safely Marinate

Sauce that is used to marinate raw meat, poultry or seafood should not be used on cooked food unless it is boiled first to destroy any harmful bacteria.



Reminder: Wash Hands!

Washing hands with soap and warm water before and after handling raw food is the best way to reduce the spread of germs that can make you sick.

THE FOUR WAYS TO FIGHT BAC!

CLEAN



SEPARATE



COOK



CHILL



Food Safety – The Core Four Practices

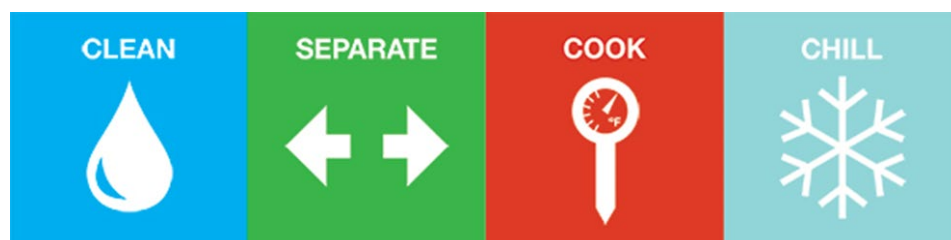
Date of Presentation: _____ Presenter: _____

Attendance Roster

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Objectives

- ✓ Identify the four practices that can reduce the risk of foodborne illness.
- ✓ Identify the ways to avoid cross-contamination of bacteria in food.
- ✓ Identify the final cooking temperatures recommended for meat, fish, poultry, etc.
- ✓ Identify the proper chilling process for food.



FOOD SAFETY
THE CORE FOUR PRACTICES
CERTIFICATE
OF COMPLETION

Name: _____

**Successfully completed the
“Food Safety - The Core Four Practices”
In-service.**



DATE

NAME OF ORGANIZATION

Food Safety – The Core Four Practices – PRE-TEST

Please circle True or False for each statement

1. You must wash your hands for 15 seconds to kill bacteria.

True or False

2. You should never store raw meat and vegetables in the same drawer of the refrigerator?

True or False

3. Once ground beef turns brown it is completely cooked.

True or False

4. As long as food is cold in the refrigerator it is safe.

True or False

5. You should not cut cooked chicken breast on the same cutting board that you cut raw vegetables on.

True or False

Food Safety – The Core Four Practices – PRE-TEST **(MASTER)**

1. You must wash your hands for 15 seconds to kill bacteria.

True or **False**

2. You should never store raw meat and vegetables in the same drawer of the refrigerator?

True or False

3. Once ground beef turns brown it is completely cooked.

True or **False**

4. As long as food is cold in the refrigerator it is safe.

True or **False**

5. You should not cut cooked chicken breast on the same cutting board that you cut raw vegetables on.

True or False

Food Safety – The Core Four Practices – POST-TEST

1. The Core Four Practices are:

2. How long must you wash your hands?

- a. 15 seconds
- b. 20 seconds
- c. 10 seconds
- d. None of the above

3. You can use the same cutting board for vegetables and meat.

True or False

4. Ground beef must be cooked to what temperature?

- a. When it turns brown
- b. 140 degrees F
- c. 155 degrees F
- d. 160 degree F

5. Refrigerators must be kept at a constant temperature of _____?

- a. 32 degrees F
- c. 40 degrees F
- b. 45 degrees F
- d. As long as it is cold it is okay.

Food Safety – The Core Four Practices – POST-TEST

(MASTER)

1. The Core Four Practices are:

CLEAN, SEPARATE, COOK, CHILL

2. How long must you wash your hands?

- a. 15 seconds
- b. 20 seconds**
- c. 10 seconds
- d. None of the above

3. You can use the same cutting board for vegetables and meat.

True or **False**

4. Ground beef must be cooked to what temperature?

- a. When it turns brown
- b. 140 degrees F
- c. 155 degrees F
- d. 160 degree F**

5. Refrigerators must be kept at a constant temperature of _____?

- a. 32 degrees F
- c. 40 degrees F**
- b. 45 degrees F
- d. As long as it is cold it is okay.

Storage Times for the Refrigerator and Freezer

These short but safe time limits for home-refrigerated foods will keep them from spoiling or becoming dangerous to eat. The guidelines for freezer storage are for quality only. Frozen foods remain safe indefinitely.

CATEGORY	FOOD	REFRIGERATOR (40° F OR BELOW)	FREEZER (0° F OR BELOW)
Salads	Egg, chicken, ham, tuna and macaroni salads	3-5 days	Does not freeze well
Hot dogs	Opened package	1 week	1-2 months
	Unopened package	2 weeks	1-2 months
Luncheon meat	Open package or deli sliced	3-5 days	1-2 months
	Unopened package	2 weeks	1-2 months
Bacon and sausage	Bacon	7 days	1 month
	Sausage, raw — from chicken, turkey, pork, beef	1-2 days	1-2 months
Hamburger and other ground meats	Hamburger, ground beef, turkey, veal, pork, lamb and mixtures of these	1-2 days	3-4 months
Fresh beef, veal, lamb and pork	Steaks	3-5 days	6-12 months
	Chops	3-5 days	4-6 months
	Roasts	3-5 days	4-12 months
Fresh poultry	Chicken or turkey, whole	1-2 days	1 year
	Chicken or turkey, pieces	1-2 days	9 months
Soups and stews	Vegetable or meat added	3-4 days	2-3 months
Leftovers	Cooked meat or poultry	3-4 days	2-6 months
	Chicken nuggets or patties	3-4 days	1-3 months
	Pizza	3-4 days	1-2 months

THE FOUR WAYS TO FIGHT BAC!



Partnership for Food Safety Education

We develop and promote effective education programs to reduce foodborne illness risk for consumers.

WWW.FIGHTBAC.ORG

 facebook.com/FightBAC

 twitter.com/FightBAC

Safe Cooking Guidelines

SAFE MINIMUM INTERNAL TEMPERATURES

as measured with a food thermometer

Beef, pork, veal and lamb (roast, steaks and chops)	145 ° F with a three-minute “rest time” after removal from the heat source
Ground meats	160 ° F
Poultry (whole, parts or ground)	165 ° F
Eggs and egg dishes	160 ° F, but cook eggs until both the yolk and the white are firm; scrambled eggs should not be runny
Leftovers	165 ° F
Finfish	145 ° F

GUIDELINES FOR SEAFOOD

Shrimp, lobster, crabs	Flesh pearly and opaque
Clams, oysters and mussels	Shells open during cooking
Scallops	Milky white, opaque and firm

THE FOUR WAYS TO FIGHT BAC!



Partnership for Food Safety Education

We develop and promote effective education programs to reduce foodborne illness risk for consumers.

WWW.FIGHTBAC.ORG

 facebook.com/FightBAC

 twitter.com/FightBAC