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**SAFE HANDLING  
OF  
RAW RETAIL MEATS**

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### ***What Is Food Safety?***

Food safety is the handling, preparation, and storage of food in ways that prevent foodborne illness.

### ***What Is Foodborne Illness?***

Foodborne illness is a sickness caused by harmful bacteria or organisms in or on food a consumer eats. Bacteria are a part of our environment and can contaminate food anywhere along the supply chain.

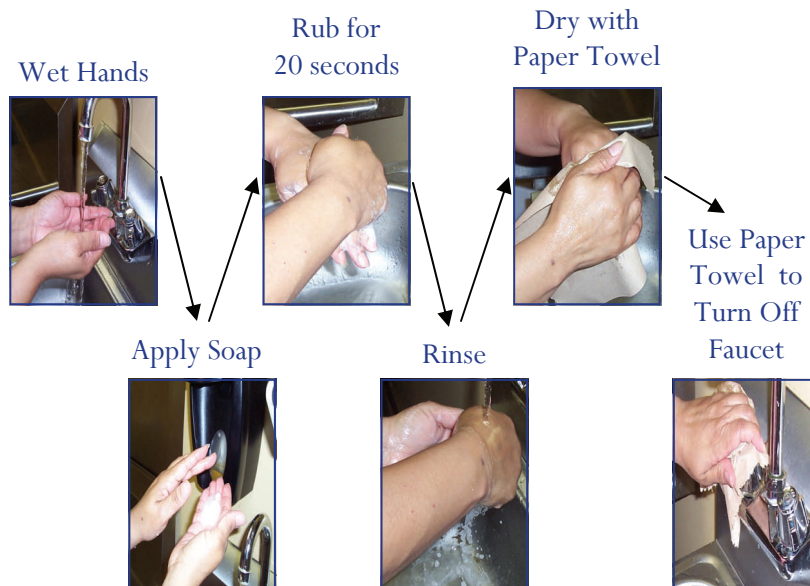
Foodborne illnesses are a substantial health burden and commonly associated with foods of animal origin. Through unsafe food handling practices and preparation, foodborne pathogens might be transferred from raw contaminated meats to ready to eat foods. Some of the pathogens are antibiotic-resistant. This becomes a major risk to the public health, and can potentially compromise the treatment of severe bacterial infections. Since the spread of foodborne pathogens from retail meats is anticipated, consumers should always remember that they are the final line of defense against food contamination.

According the Centers for Disease Control and Prevention (CDC), 325,000 people are hospitalized and 5,200 die each year due to foodborne illnesses. As a consumer you are key in the effort to prevent these foodborne illnesses. This publication provides some simple guidelines for safe handling of meats from point of purchase to serving.

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### Proper Hand Washing Is Essential





## FOOD SAFETY BEGINS AT THE GROCERY STORE

### SAFE SHOPPING

#### Meats and Poultry

- Make your meat and poultry selections last.
- Always check the sell by date, do not buy meats with expired dates.
- Always look for the Safe Food Handling Label on the package. This label provides information for safe storage and proper cooking temperature.
- Make certain the package is tightly wrapped, no leaking or rips in packaging.
- Choose meats and poultry packages that are cold to the touch. Frozen products should be frozen solid.
- Fresh ground beef should be bright red in color.
- Bag meats and poultry in plastic bags before placing them in the cart. Have meats and poultry bagged separately from your other groceries at check out.



#### *Getting Food Home Safely*

Keep perishables inside the car - not in the trunk. If it will take you more than 45 minutes to get home pack them in a cooler on ice.

## Seafood

- Make your selection of fresh and/or frozen seafood last.
- Buy seafood from reliable sources that keep their fresh products on ice or refrigerated.
- Frozen products should be frozen solid. Check the package for sell by date.
- If raw and cooked seafood are displayed together make sure the raw seafood is not in contact with the cooked seafood.
- When purchasing fresh fish choose the ones that look firm, have shiny flesh, and bounces' back when touched. Fillets and steaks should be moist.
- Gills should be bright pink with no slime; scales should be shiny and cling to the skin.
- If the head is on, the eyes should be clear with a slight bulge.
- The fish should not smell “fishy”.
- The vendor should be wearing gloves when handling the fish. After you have made your selection have the vendor place the fish in a plastic bag before wrapping it in paper.



### *Environmentally Conscious?*

Food safety counts for those reusable grocery bags too. Take some large freezer bags with you to put your raw meats in before you put them in your grocery bag. Wash the reusable grocery bag in the washer to keep it fresh and bacteria free.



## PUT IT AWAY THE SAFE WAY

### *STORAGE*

- Unload perishables from the car first and store them immediately.
- Place well wrapped raw meat, poultry, or fish in the meat drawer or the coldest section of your refrigerator. If freezing, place the meats in a freezer bag. Press as much air out of the package as possible.
- If you have purchased “family” or large quantity packages you may want to divide them into more convenient portion sizes.
- Make sure your refrigerator temperature is 40°F; Freezer 0°F.
- Lean fish such as cod, haddock are safe for 6 months. Salmon, mackerel, and fatty fish freeze well for 2-3 months. Most precooked breaded fish are safe for 6 months.
- Keep meat, poultry, and seafood in its original packages until just before using.
- Wash your hands thoroughly after handling raw meats and poultry or before handling produce and other food items. Clean any surface raw meat and poultry packages may have come in contact with.



## Refrigerator and Freezer Storage Chart

		Refrigerator (40 °F, 4° C or below)	Freezer (0 °F, -18°C or below)
<b>Hot Dogs</b>	<b>Opened Package</b>	1 week	1 to 2 months
	<b>Unopened Package</b>	2 weeks	1 to 2 months
<b>Luncheon Meat</b>	<b>Opened Package or Deli Sliced</b>	3 to 5 days	1 to 2 months
	<b>Unopened Package</b>	2 weeks	1 to 2 months
<b>Bacon &amp; Sausage</b>	<b>Bacon</b>	7 days	1 month
	<b>Sausage, Raw - from Chicken, Turkey, Pork, Beef</b>	1 to 2 days	1 to 2 months
<b>Ham- burger &amp; Other Ground Meats</b>	<b>Hamburger, Ground Beef, Turkey, Veal, Pork, Lamb, &amp; Mixtures of them</b>	1 to 2 days	3 to 4 months
<b>Fresh Beef, Veal, Lamb &amp; Pork</b>	<b>Steaks</b>	3 to 5 days	6 to 12 months
	<b>Chops</b>	3 to 5 days	4 to 6 months
	<b>Roasts</b>	3 to 5 days	4 to 12 months
<b>Fresh Poultry</b>	<b>Chicken or turkey, whole</b>	1 to 2 days	1 year
	<b>Chicken or turkey, pieces</b>	1 to 2 days	9 months
<a href="http://www.foodsafety.gov/keep/charts/storagetimes.html">http://www.foodsafety.gov/keep/charts/storagetimes.html</a>			

## TIME TO DEFROST

### DEFROSTING/THAWING

The Food Safety Inspection Service recommends 3 WAYS TO THAW MEATS.

1. The **REFRIGERATOR** is the safest method to thaw frozen meats, poultry, and fish. However, this is a slow process so plan ahead. Place the item in a container so that thawing juices will not drip on other foods. Place them on the lowest shelf. The amount of time required for meat or fish to thaw varies with the size and cut of the product.

NO



YES

Chicken thawed in the refrigerator can be kept there for one or two days longer before cooking. *Beef, chicken and pork thawed in the refrigerator can be refrozen before or after cooking. They must be cooked before refreezing if thawed by any other method.*

Ground beef is safe in the refrigerator for up to 2 days after defrosting. Stew meat, steaks roast and other bone-in parts can be held in the refrigerator up to 5 days before cooking or refreezing.



## Approximate Time Needed To Thaw In The Refrigerator

**Chicken:** Boneless breast and ground overnight  
Bone in parts up to 24 hours  
Whole birds 24 to 48 hours

**Turkey:** Allow 1 day for every 5 pounds of turkey.  
Cook within 2 days.

**Beef:** Ground beef, steaks and stew meat 1 day  
Whole roasts and bone-in parts 2 or more  
days

**Pork:** 1" Thick Chops 12-14 hours  
Ground pork - Estimate by package thickness  
Small roast 3-5 hours per pound  
Large roast 4-7 hours per pound

[www. Theotherwhitemeat.com](http://www.Theotherwhitemeat.com)

**Seafood:** Fish 6-8 hours per pound in the refrigerator  
Shellfish thaw it until it is pliable with a few  
ice crystals in the flesh when you start to  
cook.

Do not let seafood thaw completely. Fish can be cooked frozen if you are not going to broil, stuff or bread it. Fish that is already breaded does not need to be thawed.

2. **COLD WATER** is a faster method of thawing outside the refrigerator. Place the item in a leak-proof container/bag and submerge in cold tap water. Change the water every 30 minutes. Cook it immediately. Do not refreeze.

3. Using a **MICROWAVE** is another method of thawing outside the refrigerator. Cook immediately after thawing, because microwaving may start cooking the meat. Fish can be thawed in the microwave but it is not recommended because it easily begins to cook. Be sure to clean any thawing juices from the microwave afterwards.

### **Important**

Be sure to thoroughly wash your hands immediately after handling raw meat, poultry and fish. Clean and disinfect surfaces or utensils raw meat, poultry and fish or juices have come in contact with.

#### **Quick Tip:**

*In a hurry and that roast isn't completely thawed? It is safe to cook partially frozen meat in the oven or on the stove. Cooking time will increase and you will need to use a meat thermometer to insure the correct internal temperature is reached.*

## GET READY TO COOK

### *PREPARATION*

- Always wash your hands before and after handling raw meat, poultry, and fish and before handling any other foods while cooking.



- Marinate meats, poultry or seafood in the refrigerator. Discard the used marinate, do not use it for cooking or holding cooked foods. Clean the container with hot soap water before using it again.
- Use separate cutting boards and knives for raw meats and produce.
- Clean cutting boards often with hot soapy water (if possible use a solution of 1 teaspoon chlorine bleach in 1 qt of water).

- Keep raw meat, poultry, fish and their juices away from fresh fruits, vegetables, and other foods that will be consumed without cooking. This also includes canned fruits and vegetables.



- Don't cross contaminate! **Keep cooked foods of all types separate from raw meats, poultry, fish and their juices.**
- Wash your hands, cutting board, knife, and counter tops with hot soapy water after handling raw meats. Wash kitchen towels and cloths often on the hot water cycle in the washing machine.



- When preparing ground meats wash your hands more frequently, checking under your nails. Always clean your hands before touching faucets, knobs, or refrigerator handles.

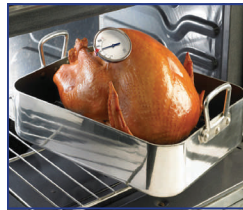
USDA/FSIS : Food Safety Education-Posters Be Safe The Four Messages: Clean, Separate, Cook, Chill

## COOK IT UNTIL IT IS DONE ALL THE WAY THROUGH

### COOKING

Most vendors provide cooking instructions or suggestions on the package of their product. These are some of the recommendations from the FSIS.

- If baking, the oven should be at least 325° F ( 163°C) for ground meats, 350° ( 177°C) for most others.
- Cook all meats and poultry to the proper internal temperature. Check the temperature by using a meat thermometer.
  - 145°F/63°C - beef, veal and lamb steaks, roasts, chops
  - 160°F/71°C - all cuts of fresh pork, ground meats (until the center is no longer pink)
  - 165°F/74°C - ground poultry, cut-up or whole poultry.



- Cook fish 10 minutes per inch measured at its thickest point (internal temperature of 145°F). Add 5 minutes if the fish is cooked in foil or sauce. This does not apply to deep frying or microwaving. Fish should flake easily with a fork and be opaque. Shrimp should turn pink outside, the flesh white and firm.

<b>Recommended Cooking Times</b>		
<b>Chicken - Temperatures 350°F/177°C</b>		
Whole Birds	3 - 4 lbs.	1 - 1.5 Hours
	5 - 7 lbs.	2 - 2.5 Hours
Bone - in Breast halves	6 - 8 oz.	30 - 40 minutes
Boneless Breast Halves	4 oz.	20 - 30 minutes
Legs and Thighs	4 - 5 oz.	40 - 50 minutes
Wings / Wingettes	2 - 3 oz.	30 - 40 minutes
<b>Turkey - Temperatures 325°F/163°C</b>		
Breast	4 - 8 lbs.	1½ - 3½ hours
Whole (Unstuffed)		15 - 20 min/lb
Whole (Stuffed)		17 - 20 min/lb
<b>Beef</b>		
Bone-in Rib, Top Round Roast		25 min/lb @ 325° F/163°C
Boneless Rolled Rib		5-8 min/lb @325°F/163°C
Roast, Brisket		20 min/lb @325°F/163°C
Whole Tenderloin		10min/lb @425°F/218°C
Short Ribs		1½-2½ hours@325°F/163°C
<b>Pork</b>		
Boston Butt		45min/lb @ 350°F/177°C
Tenderloin Roast	½ -1½ lb	20-30 min @ 425-450°F/218-232°C
Loin Roast		20-30min/lb @ 350°F/177°C
Ribs (All Styles)	2-4 lb	1½ -2 hours @350°F/177°C

## SAFE GRILLING TIPS

### *COOKOUTS*

During the summer when the weather is hot more people cook outside and picnic. As a result the incidence of foodborne illness increases dramatically in the summer months. Here are some practices to protect yourself while cooking outdoors.

- Make sure the grill grate is clean. Scrape and clean away any debris or rust on the grate. For gas grills follow the manufacturer's instruction for cleaning the grease catch pan, inside the grill, burners, lava rocks and briquettes.
- Only take as much food out of the refrigerator/cooler as you are going to cook right then.
- If you are going to another location (30 minutes or more away from home) to grill keep the meat cold in a cooler of ice. Do not partially cook with the intention to finish at your destination. Bacteria grow faster in partially cooked food.



- Cook meat thoroughly. Check the internal temperature with a thermometer.
- If the meat has been marinated do not put marinate left from raw meat on the cooked meat.
- Don't cross-contaminate! Use separate utensils, platters, pans etc. for raw and cooked foods. Wash your hands after handling raw meats.
- Place completely cooked foods removed from the grill on clean plates or in aluminum pans and cover to keep them at 140° F.
- The same indoor serving rules apply for outdoor serving: Food should not sit out more than 2 hours. If the temperature is 90°F or above not more than 1 hour. Throw away any food that exceeds this.

## **SAFE GRILLING TEMPERATURES**

Hamburgers and Sausages (Precooked and Uncooked)	160° F/ 71° C
Steaks (Beef, Veal, or Lamb), Roast	145°F /63°C (rare) 160° F 71°C (medium)
Chicken or Turkey Breast	170° F/77°C
Turkey, Whole Chicken, Chicken Legs	180° F/82°C
Ground Poultry	165° F/74°C
Ground Beef (Burgers), Pork Chops Tenderloins, Ribs	160° F/ 71° C
Hot Dogs	165° F/74°C
Fish	145° F/63°C



## **KEEP HOT FOODS HOT AND COLD FOODS COLD**

### ***SERVING SAFETY***

- Wash your hands before handling any foods.
- Keep cooked foods that contain ground meats at a temperature of 140°F/60°C or above until serving time.
- For buffet serving use warming trays, slow cooker, or chafing dishes to keep hot foods at a temperature of 140° F or above.
- Keep cold foods on ice at a temperature of 40°F/4°C or below.
- Use separate serving utensils for each food.
- Food should not sit at room temperature (72 - 77°F/22-25°C) for more than 2 hours; 1 hour if the air temperature is above 90°F/32°C. If it has been above these temperatures for too long, throw it away.
- Seafood, hot or cold, that has been sitting out in temperatures between 40° F/4°C and 140° F/60°C for more than 2 hours should be thrown away.



### ***SAFETY WITH THE LEFTOVERS***

- Separate or slice leftovers into small portions for rapid cooling, cover, and put in the refrigerator or freezer. If freezing wrap in airtight wrap or place in a shallow container.
- Turkey stores best when removed from the bone. Legs and wings may be left whole.
- Use refrigerated foods within 4 days. Frozen meat and poultry have a longer storage life.
- Eat leftover seafood within 1-2 days.
- When reheating leftovers, cover and heat until hot and steaming all the way through, about 165° F/ 74°C internal temperature.



Be sure to always cover your leftovers when storing in the refrigerator or freezer.

When storing raw meats always cover them tightly. Store them in the meat drawer or on the bottom shelf away from prepared foods and fresh produce.

### ***Helpful Hints***

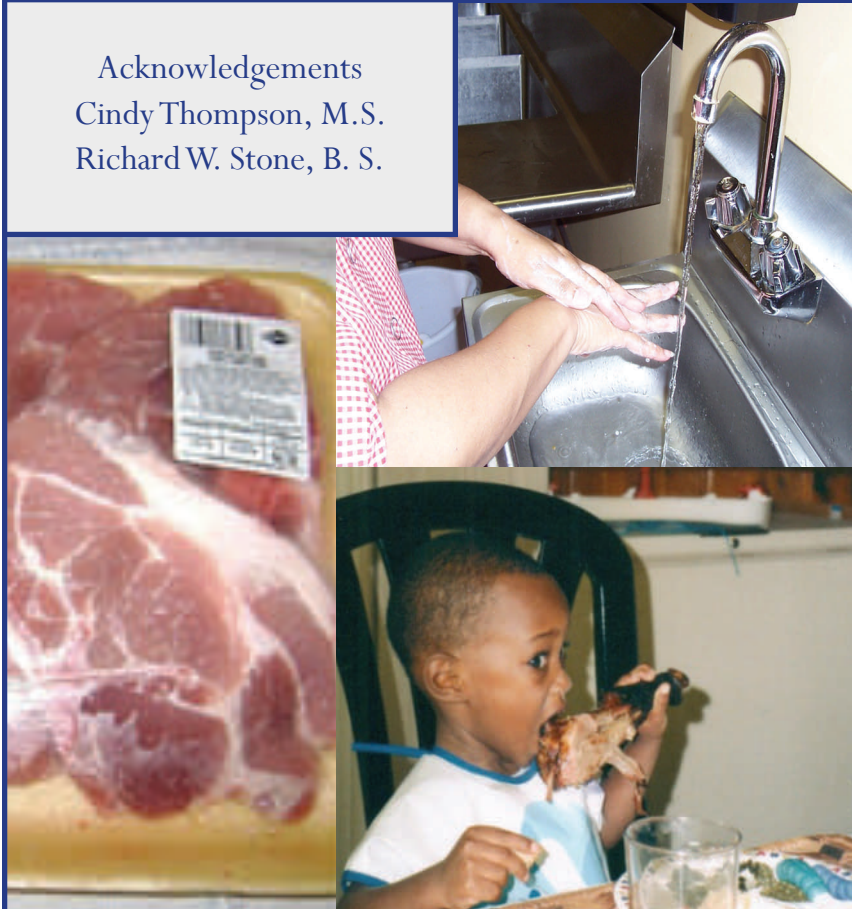
- ◇ Slicing meats like ham and roast before refrigerating or freezing will make it easier to reheat them later.
- ◇ Label the leftovers you are freezing with the date and what it is. This lets you know how long it has been in the freezer.

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