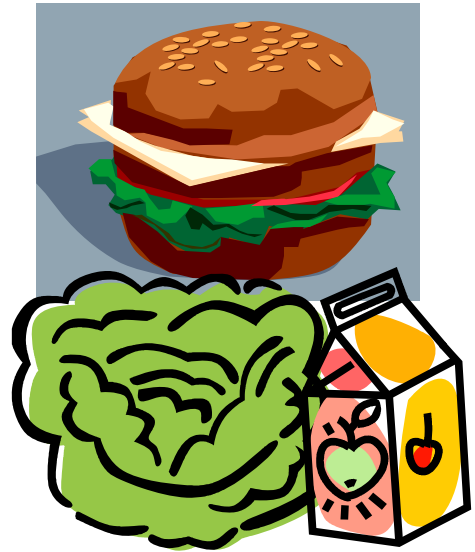




Reducing Risk from *E. coli* O157:H7

Foods in Outbreaks of *E. coli* O157:H7 Bacteria

- Undercooked hamburger
- Raw milk
- Lettuce and spinach
- Sprouts
- Homemade deer jerky
- Unpasteurized juice and cider
- Untreated water



What should *E. coli* O157:H7 mean to me?

- The name of bacteria that can cause serious illness when eaten in small amounts, especially in children and the elderly.
- It takes very few of these bacteria to make us sick.
- The bacteria are found naturally in the intestines of healthy cattle, deer, goats and sheep.
- The bacteria can end up on meat, in raw milk, in raw vegetables, fruits and sprouts exposed to dirty water or contaminated soils from animals.
- Bacteria that can be spread by not washing hands after using the toilet or changing diapers, or swimming in contaminated water.

Beware of Contamination on Produce

- ◆ **Avoid cross-contamination.**
- ◆ **Thoroughly wash under running water just before eating, cutting or cooking. Wash even before peeling as well as after.**
- ◆ **Do not use soap or detergent.**
- ◆ **Scrub firm produce with clean brush.**
- ◆ **Refrigerate most whole produce; always do so if cut or peeled.**



The Basic Rules

- **Practice good personal hygiene. Wash hands with soap and warm water for at least 20 seconds and before handling food. Wash well and dry after handling raw meat and poultry.**
- **Avoid cross-contamination. Clean and sanitize work surfaces and utensils before and immediately after use. Do not let meat juices get onto ready-to-eat foods.**
- **Cook foods thoroughly. Make sure ground meat reaches at least 160°F, ground poultry at least 165°F. Make sure fruit juices, ciders, milk and other dairy foods are pasteurized.**
- **Keep foods at safe temperatures. Foods should never be in the Temperature Danger Zone (40 to 140°F) for more than 2 hours, or 1 hour if the temperature is 90°F or higher.**
- **Avoid foods from unsafe sources. Do not eat food if it is not prepared or served so you know it is safe.**

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Elizabeth L. Andress, Ph.D., Extension Food Safety Specialist

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J. Scott Angle, Dean and Director



A Clean and Safe Kitchen- Staying Healthy

Clean and Sanitize Kitchen Surfaces

1. Wash with hot water and soap and rinse to remove soap.
2. Mix 1 teaspoon chlorine bleach in one quart of clean water and apply liberally to surfaces.
3. Allow the surface to air dry.
4. Use paper towels. If you use cloth towels, change and launder them often. Avoid using sponges in the kitchen.



Wash Hands Often

1. Wet hands with warm, running water and apply soap.
2. Rub hands vigorously and clean between fingers, under nails and around jewelry.
3. Rinse hands with clean, running water.
4. Dry with a paper towel.



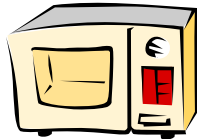
Keep Chemicals Away From Food

1. Store cleaning products in the original containers. Do not remove labels.
2. Keep cleaning products away from food.
3. Never reuse cleaning product containers for other purposes.



Clean Kitchen Appliances

1. Large appliances should be cleaned on a monthly basis.
2. Use soap and water to wash the refrigerator and clean up spills immediately.
3. Don't use abrasive cleaners that can damage the surface of appliance.
4. Dishwashers and ovens are often self-cleaning. Check the appliance manual for cleaning directions.
5. Unplug small appliances before cleaning and never immerse in water.



Prevent Cross-Contamination

1. Keep raw meats away from all other foods and store on bottom shelf of refrigerator.
2. Use separate cutting boards for raw meats and ready-to-eat foods. Use cutting boards made of non-porous material.
3. Wash cutting boards with hot water and soap; sanitize with solution (1tsp bleach and 1 qt. water).
4. Never put cooked food on plate that previously held raw meat or eggs.



Cooking Safety

When using a stove:

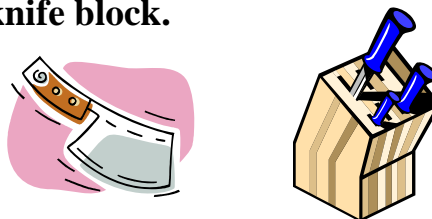
1. Turn handles inward and keep hot cookware out of reach to avoid burns.
2. Use oven mitts or potholders when handling hot dishes.
3. Never leave cooking food unattended.
4. Shield yourself from steam to prevent burns.



Cutting Safety

When using knives:

1. Make sure they are sharp for easy cutting.
2. Always cut with edge away from you.
3. Wash knives separately from other dishes and store in a knife block.



Fire Safety

How to Avoid:

- Check to see if all burners are off after cooking.
- Never use flammable fuels to start fires in a cook stove.
- Keep combustibles away from cooking area.
- Keep electrical cords away from hot surfaces.



If you have a fire:

- Always have an escape plan and fire extinguisher on hand.
- Cover pan fires with a lid and never pour water on a grease fire.
- Use a fire blanket, extinguisher, or baking soda to put out fire.

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Gale A. Buchanan, Dean and Director



Using a Food Thermometer

Your food thermometer deserves a starring role in your kitchen. The only sure way of knowing if meat, poultry, fish, egg dishes and other foods have reached a high enough temperature to kill bacteria in these foods is to use a food thermometer. Check the internal temperature of the food itself before you taste or serve it. The thermometer must be in the right place in the food, placed in the thickest part of the food away from the bone, fat or gristle. And the thermometer must be accurate so you know just what the true temperature is.

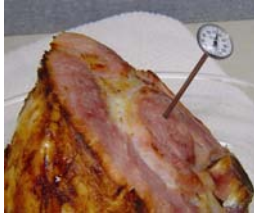
Safe Cooking Temperatures

Raw Food	Internal Temperature
Ground Products	
Hamburger	160°F
Beef, veal, lamb, and pork	160°F
Chicken and turkey	165°F
.....	
Beef, Veal, Lamb – Roasts and Steaks	
<i>medium-rare</i>	145°F
<i>medium</i>	160°F
<i>well-done</i>	170°F
.....	
Pork	
Chops, roasts, ribs	
<i>medium</i>	160°F
<i>well-done</i>	170°F
Ham, fresh (raw)	160°F
Ham, pre-cooked (to reheat)	140°F
Sausage, fresh	160°F
.....	
Poultry	
Chicken & Turkey, whole	180°F
Poultry breasts, roast	170°F
Poultry thighs, wings	180°F
Duck & Goose	180°F
Stuffing (cooked alone or in bird)	165°F
.....	
Eggs	
Fried, poached	<i>Yolk & white are firm</i>
Casseroles	160°F
Sauces, custards	160°F
.....	
Leftovers & Casseroles	165°F
.....	

Adapted from **Fight BAC!**® Four Simple Steps to Food Safety, Partnership For Food Safety Education and **Thermy**™ Use A Food Thermometer, FSIS-USDA.

Taking A Correct Temperature

- **Be clean!**
Make sure the thermometer and its case remain clean.
- **Before and after each use -**
Wash, rinse, sanitize and air dry thermometers to avoid contamination. You can sanitize with 1 teaspoon of bleach diluted in one quart of water.
- **Aim for the center!**
Take food temperatures in the center or thickest part of food, away from bone, fat or gristle.

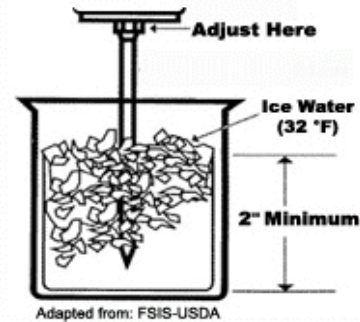


- **Place it far enough into the food.**
Put the tip of the thermometer in the food, making sure you get it in deep enough to be accurate. See what your thermometer says about how far to insert it or look for a "dimple" or "ring" on the stem.
- **Be patient!**
Wait for the needle to stop moving or the numbers on a digital readout to stop changing.
- **Be accurate!**
Check to make sure your thermometer is accurate every now and then, and especially after a lot of use with big temperature changes (from hot food to cold food, back to hot, etc.). Always check again if it has been dropped.

See the temperature chart on the other side for minimum safe temperatures.

Calibrate!

Be sure to check the accuracy of your thermometer before taking food temperatures



- **Make it mostly ice.**
Fill a large glass with ice and cover with water. Make it deep enough to stick the whole sensing area (tip) of the thermometer into the middle of it.
- **Cover the stem.**
Insert the thermometer at least 2 inches into the mixture. Make sure the tip does not touch the side or bottom of the glass.
- **Be patient.**
Wait until the temperature reading stops changing. Once you think it has stopped, make sure it stays the same for at least 30 seconds.
- **Be correct.**
The temperature should read 32 °F.
- **Adjust if needed.**
 - If your *dial thermometer* needs correcting, turn the calibrating nut or adjusting bar under the dial or face until it does read 32. Keep the stem under ice while you do this.
 - If your *digital thermometer* needs correcting, use the buttons provided. If it cannot be adjusted, try a new battery or buy a new one.