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# Glossary

## ***Acidity***

A substance with a pH below 7.0.

## ***Biological Hazard***

Contamination of food or water from harmful microorganisms including bacteria, viruses, parasites, and fungi.

## ***Chemical Hazard***

Contamination of food or water from chemical substances such as pesticides, food additives, preservatives, cleaning supplies, and toxic metals that leach from cookware or equipment.

## ***Clean***

No visible sign of soil.

## ***Cross-contamination***

The transfer of harmful microorganisms from a surface (hand or food-contact) to food or from one food to another food.

## ***Facultative Microorganisms***

Microorganisms that can grow with or without oxygen. Most bacteria that cause foodborne illness are in this group.

## ***Food-contact Surface***

A surface of equipment or a utensil with which food normally comes into contact or a surface from which food may drain, drip, or splash into a food or onto a surface normally in contact with a food.

## ***Foodborne Illness***

A disease carried to people by food or water.

## ***Foodborne Outbreak***

An incidence in which two or more people experience the same illness after eating the same food. It must be confirmed by a laboratory analysis showing the source of the foodborne illness to be a specific food.

## ***Hazard Analysis and Critical Control Point (HACCP)***

A written procedure that describes a process to reduce the risk of foodborne illness.

**Hot-holding Equipment**

Foodservice equipment designed to hold hot foods at a temperature of 135 °F or above. Examples include steam tables, heated cabinets, and *bains maries*. Hot-holding equipment should never be used to heat or reheat foods.

**Ice-water Bath**

A cooling method where food is placed in pans, and the pans are placed in ice water in a sink or another pan or pot.

**Pathogen**

Disease-causing microorganisms, including bacteria.

**Personal Hygiene**

Health habits that include clean hair, body, and teeth; clean clothes and shoes; correct handwashing; and maintaining good health.

**pH**

The expression of the degree of acidity. On a scale from 1 to 14, 7 is neutral, 1 is most acid, and 14 is most alkaline or least acid.

**Physical Hazard**

Contamination of food or water from foreign objects that accidentally get into food, such as bone fragments, dirt, nail polish, plastic fragments, or broken glass.

**Potentially Hazardous Food**

A food that is natural or synthetic and requires temperature control because it is in a form capable of supporting: (1) the rapid and progressive growth of harmful microorganisms; (2) the growth of toxin production of *Clostridium botulinum*; or (3) in raw shell eggs, the growth of *Salmonella enteritidis*. Foods included are raw or cooked foods from animals; cooked plant foods; raw seed sprouts; cut melons; and garlic-in-oil mixtures that have not been treated so they do not support growth of harmful microorganisms. Examples are milk and milk products; meat—beef, pork, lamb; poultry; fish; shell eggs; shellfish and crustaceans; tofu or other soy-protein foods; sprouts and raw seeds; baked and boiled potatoes; cooked rice, beans, and other heat-treated products; cut melons; and garlic-and-oil mixtures.

**Ready-to-eat Food**

Food that is in an edible form without washing, cooking, or additional preparation by the foodservice and is generally consumed in that form. Some examples include raw, washed, cut fruits and vegetables; deli meats and hot dogs; and cheeses.

**Sanitize**

To use either a chemical or heat on a clean surface to reduce the number of microorganisms or other contaminants to a level that is not harmful.



***Single-use Items***

Items that are designed to be used and then disposed. Examples include paper towels and napkins; disposable gloves; plastic eating utensils; paper or Styrofoam plates and trays; aluminum foil; and plastic wrap.

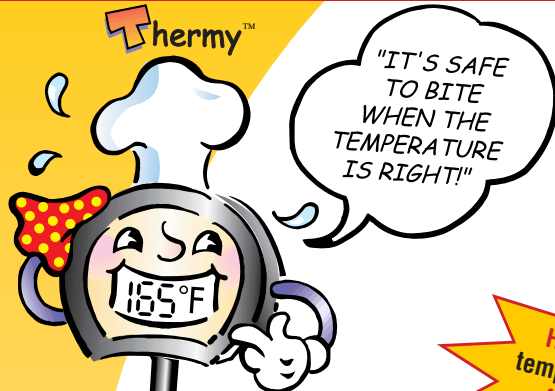
***Smallware***

Dishes, trays, flatware, glasses, and small utensils.

***Temperature Danger Zone***

The temperature danger zone is between 41°F and 135 °F and refers to the required, safe internal temperature of food. Whenever food is in the temperature danger zone too long, it can become unsafe. For best practice, a foodservice operation should document temperatures and maintain written procedures. Follow State and local public health department recommendations to control time and temperature at each stage of food production.

## Temperature Rules! Cooking for Food Service



**Hold at specified temperature or above for 15 seconds unless otherwise stated**

**Hold all hot food at 135 °F or above after cooking**

**USDA Meat and Poultry Hotline  
1-800-535-4555**

**FDA Food Information Line  
1-888-SAFE FOOD**



Food Safety and Inspection Service

U.S. Department of Agriculture

[www.fsis.usda.gov/thermy](http://www.fsis.usda.gov/thermy)

USDA is an equal opportunity employer and provider.

Fall 2002

Food Safety and Inspection Service, USDA

### Minimum Temperatures and Holding Times

#### **165 °F** (15 seconds)

- Poultry—chicken, turkey, duck, goose—whole, parts or ground
- Soups, stews, stuffing, casseroles, mixed dishes
- Stuffed meat, poultry, fish and pasta
- Leftovers (to reheat)
- Food, covered, cooked in microwave oven (hold covered **2 minutes** after removal)

#### **155 °F** (15 seconds)

- Hamburger, meatloaf and other ground meats; ground fish\*
- Fresh shell eggs—cooked and held for service (such as, scrambled)\*

#### **145 °F** (15 seconds)

- Beef, corned beef, pork, ham—roasts (hold **4 minutes**)\*
- Beef, lamb, veal, pork—steaks or chops
- Fish, shellfish
- Fresh shell eggs—broken, cooked and served immediately

#### **135 °F** (15 seconds)

- Ham, other roasts—processed, fully cooked (to reheat)
- Fruits and vegetables that are cooked

\*For alternative times and temperatures, see the **FDA Food Code 2001** <http://vm.cfsan.fda.gov/~dms/foodcode.html>



# Appendixes

**Appendix 1**  
**Resources for  
Food Safety  
Information**  
(pages 110-115)

**Appendix 2**  
**Tips for  
Customers—  
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Food Safe**  
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**Appendix 3**  
**Daily Temperature  
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**Appendix 4**  
**Storage  
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## Resources for Food Safety Information

*Following are some resources you will find helpful when developing a food safety program for your foodservice. All Web sites were retrieved on March 7, 2002.*

- Title:** 2001 *Food Code*  
**Source:** Food and Drug Administration  
**Description:** The *Food Code* is a reference document for regulatory agencies responsible for overseeing food safety in retail outlets such as restaurants and grocery stores and institutions such as nursing homes and child care centers. The *Code* is updated every two years and State, local, and some tribal jurisdictions may use the *Food Code* as a model for their sanitation codes. The most recent *Food Code* is available from the Web site below which also includes a synopsis of changes from the 1999 *Food Code*.  
**Web Site:** [www.cfsan.fda.gov/~dms/fc01-toc.html](http://www.cfsan.fda.gov/~dms/fc01-toc.html)
- Title:** *ServSafe Coursebook* and *ServSafe Essentials* (1999)  
**Source:** Chicago: National Restaurant Association Educational Foundation  
**Phone:** 800-765-2122  
**Description:** References and course books for the *ServSafe* training course.  
**Web Site:** [www.edfound.org](http://www.edfound.org)
- Title:** Thermometer Education Campaign as *Thermy™ Art and Educational Materials*  
**Source:** U.S. Department of Agriculture, Food Safety and Inspection Service, Washington, D.C.  
**Phone:** 301-504-9605  
**Description:** Consumer art and educational materials featuring *Thermy™*, a messenger for food safety. The materials can be reproduced for use with consumer education. Note that because these materials were designed for the public, some temperatures may not be consistent with State and local public health department regulations for institutional foodservice. Always refer to State and local public health department regulations.  
**Web Site:** [www.fsis.usda.gov/thermy/index.htm](http://www.fsis.usda.gov/thermy/index.htm)



4. **Title:** *Using Partnerships to Fight BAC!—A Workbook for Local Food Safety Educators*  
**Source:** Partnership for Food Safety Education, New York, NY  
**FAX:** 212-924-3052  
**USDA Meat and Poultry Hotline:** 800-535-4555  
**Description:** A *Workbook for Local Food Safety Educators* describes how to partner in a community to promote food safety. The workbook includes examples of community programs, reproducible worksheets, and other information to use at State and local partner meetings.  
**Web Site:** [www.fightbac.org](http://www.fightbac.org)
5. **Titles:** Food safety resources from the National Food Service Management Institute are listed below:
- *Food Safety Mini Poster Kit*
  - *Child Care Tips Poster*
  - *Child Care Mini Posters*
  - *Food Safety: It's in Your Hands*
  - *Ten Minute Lessons for School Food Service: Food Safety and Sanitation*
- Source:** National Food Service Management Institute, University, MS  
**Phone:** 800-321-3054  
**FAX:** 800-321-3061  
**Description:** NFSMI disseminates quality publications at an affordable cost in media appropriate to the needs of Child Nutrition Program personnel. All published materials are available for purchase on a cost-recovery basis and may be ordered from NFSMI. Call for a *Resource Guide* or visit the Web site for more information.  
**Web Site:** [www.nfsmi.org](http://www.nfsmi.org)

## Food Safety Web Sites

### <http://schoolmeals.nal.usda.gov>

The Healthy School Meals Resource System (HSMRS) is a searchable Web site, providing information to persons working in USDA's Child Nutrition Programs. This Web site includes a Food Safety button that links to resources, current food safety information, and activities.

### [www.foodsafety.gov](http://www.foodsafety.gov)

This website is the Gateway to Government Food Safety Information. Links to the food safety pages of government Web sites are included. There are many links to other Web sites providing food safety information and resources.

There are many other Web sites that provide food safety information.

## Additional Resources for Food Safety Materials

*The following Federal agencies and private organizations offer food safety materials. Contact State and local agriculture and public health agencies for State-specific resources.*

### American Dietetic Association

216 W. Jackson Blvd.  
Chicago, IL 60606-6995  
Phone: 800-877-1600  
Web Site: [www.eatright.org](http://www.eatright.org)

### American School Food Service Association

1600 Duke Street, 7<sup>th</sup> Floor  
Alexandria, VA 22314-3436  
Phone: 703-739-3900 or 800-877-8822  
(ASFSA's Emporium)  
Web Site: [www.asfsa.org](http://www.asfsa.org)

### (The) Agricultural Databases for Decision Support (The ADDS Center)

415 Venture Court  
P.O. Box 93069  
Verona, WI 54593  
Phone: 608-848-9055  
Web Site: [www.adds.org](http://www.adds.org)

### American Egg Board

1460 Renaissance Drive  
Park Ridge, IL 60068  
Phone: 847-296-7043  
Web Site: [www.aeb.org](http://www.aeb.org)

### American Meat Institute

1700 North Moore Street  
Suite 1600  
Arlington, VA 22209  
Phone: 703-841-2400  
Web Site: [www.meatami.com](http://www.meatami.com)

### American Public Health Association (APHA)

800 I Street NW  
Washington, DC 20001  
Phone: 202-777-2742  
Web Site: [www.apha.org](http://www.apha.org)

### American Society for Microbiology

1752 N Street NW  
Washington, DC 20036  
Phone: 202-737-3600  
Web Site: [www.asmusa.org](http://www.asmusa.org)

### Centers for Disease Control and Prevention (CDC)

1600 Clifton Road  
Atlanta, GA 30333  
Phone: 404-639-3311 and 404-639-3534  
(Public Inquiries)  
Web Site: [www.cdc.gov](http://www.cdc.gov)

### National Center for Infectious Diseases

Web Site: [www.cdc.gov/ncidod](http://www.cdc.gov/ncidod)

### Council of Hotel and Restaurant Trainers

P.O. Box 2835  
Westfield, NJ 07091  
Phone: 800-463-5918  
Web Site: [www.chart.org](http://www.chart.org)

### Food Allergy & Anaphylaxis Network

10400 Eaton Place, Suite 107  
Fairfax, VA 22030  
Phone: 800-929-4040  
Web Site: [www.foodallergy.org](http://www.foodallergy.org)

**Food Marketing Institute**

655 15<sup>th</sup> Street NW  
 Washington, DC 20005  
**Phone:** 202-452-8444  
**Web Site:** [www.fmi.org](http://www.fmi.org)

**Food Safety Training and Education Alliance (FSTEA)**

**Web Site:** [www.fstea.org](http://www.fstea.org)

**Gateway to Government Food Safety Information**

**Web Site:** [www.FoodSafety.gov](http://www.FoodSafety.gov)

**Institute of Food Technologists (IFT)**

525 West Van Buren, Suite 1000  
 Chicago, IL 60607  
**Phone:** 312-782-8424  
**Web Site:** [www.ift.org](http://www.ift.org)

**International Dairy Foods Association (IDFA)**

1250 H Street NW  
 Suite 900  
 Washington, DC 20005  
**Phone:** 202-737-4332  
**Web Site:** [www.idfa.org](http://www.idfa.org)

**International Fresh-Cut Produce Association (IFPA)**

1600 Duke Street  
 Suite 440  
 Alexandria, VA 22314-3400  
**Phone:** 703-299-6282  
**Web Site:** [www.fresh-cuts.org](http://www.fresh-cuts.org)

**National Cattlemen's Beef Association**

1301 Pennsylvania Avenue NW  
 Suite 300  
 Washington, DC 20004  
**Phone:** 202-347-0228  
**Web Site:** [www.beef.org](http://www.beef.org)

**National Environmental Health Association (NEHA)**

720 South Colorado Boulevard  
 Suite 970-S  
 Denver, CO 80246-1925  
**Phone:** 303-756-9090  
**Web Site:** <http://www.neha.org>

**National Fisheries Institute, Inc.**

1901 N. Fort Myers Drive  
 Suite 700  
 Arlington, VA 22209  
**Phone:** 703-524-8880  
**Web Site:** [www.aaboutseafood.com/health/index.html](http://www.aaboutseafood.com/health/index.html) or [www.nfi.org](http://www.nfi.org)

**National Frozen & Refrigerated Food Association (NFFA)**

4755 Linglestown Road  
 Suite 300  
 P.O. Box 6069  
 Harrisburg, PA 17112  
**Phone:** 717-657-8601  
**Web Site:** [www.nffa.org](http://www.nffa.org)

**National Pest Management Association**

8100 Oak Street  
 Dunn Loring, VA 22027  
**Phone:** 703-573-8330  
**Web Site:** [www.pestworld.org](http://www.pestworld.org)

**National Restaurant Association**

1200 17<sup>th</sup> Street NW  
 Washington, DC 20036  
**Phone:** 202-331-5900  
**Web Site:** [www.restaurant.org](http://www.restaurant.org)

**National Restaurant Association Educational Foundation**

175 West Jackson Boulevard  
 Suite 1500  
 Chicago, IL 60604-2702  
**Phone:** 800-765-2122  
**Web Site:** [www.edfound.org](http://www.edfound.org)  
**Web Site:** [www.nraef.org/ifsc](http://www.nraef.org/ifsc)  
 (International Food Safety Council)



**National Turkey Federation**

1225 New York Avenue NW, Suite 400  
 Washington, D.C. 20005  
**Phone:** 202-898-0203  
**Web Site:** [www.turkeyfed.org](http://www.turkeyfed.org)

**North American Association of Food Equipment Manufacturers (NAFEM)**

401 North Michigan Avenue  
 Chicago, IL 60611  
**Phone:** 312-245-1054  
**Web Site:** [www.nafem.org](http://www.nafem.org)

**NSF International (National Sanitation Foundation International)**

P.O. Box 130140  
 789 North Dixboro Road  
 Ann Arbor, MI 48113-0140  
**Phone:** 734-765-8010  
**Web Site:** [www.nsf.org](http://www.nsf.org)

**Occupational Safety and Health Administration (OSHA)**

U.S. Department of Labor  
 200 Constitution Avenue  
 Washington, DC 20210  
**Phone:** 800-321-6742  
**Web Site:** [www.osha.gov](http://www.osha.gov)

**Partnership for Food Safety Education**

**FightBac!**  
**Web Site:** [www.fightbac.org](http://www.fightbac.org)

**Produce Marketing Association**

1500 Casho Mill Road  
 P.O. Box 6036  
 Newark, DE 19714-6036  
**Phone:** 302-738-7100  
**Web Site:** [www.pma.com](http://www.pma.com)

**United States Department of Agriculture (USDA)**

**Web Site:** [www.usda.gov](http://www.usda.gov)

**United States Department of Agriculture Food and Nutrition Information Center (FNIC)**

National Agricultural Library, Room 304  
 USDA/ARS  
 10301 Baltimore Avenue  
 Baltimore, MD 20705-2351  
**Phone:** 301-504-5719  
**Web Site:** [www.nal.usda.gov/fnic/foodborne/index.html](http://www.nal.usda.gov/fnic/foodborne/index.html)  
 (USDA/FDA Foodborne Illness Education Information Center)

**United States Department of Agriculture Food and Nutrition Service (FNS)**

Child Nutrition Division  
 3101 Park Center Drive—Room 638  
 Alexandria, VA 22302  
**Phone:** 703-305-2590  
**Web Site:** [www.fns.usda.gov/cnd](http://www.fns.usda.gov/cnd)

**Web Site:** <http://schoolmeals.nal.usda.gov>  
 Healthy School Meals Resource System is a searchable Web site providing information to persons working in USDA's Child Nutrition Programs. The site includes a Food Safety button that links to current food safety resources, information, and activities.

**United States Department of Agriculture Food Safety and Inspection Service (FSIS)**

Washington, DC 20250-3700  
**Phone:** 800-535-4555  
**Web Site:** [www.fsis.usda.gov/index.htm](http://www.fsis.usda.gov/index.htm)

**United States Food and Drug Administration (FDA)**

5600 Fishers Lane  
 Rockville, MD 20857-0001  
**Phone:** 888-463-6332  
**Web Site:** [www.fda.gov](http://www.fda.gov)





**United States Food Drug Administration**

The Bad Bug Book

**Web Site:** [www.cfsan.fda.gov/~mow/intro.html](http://www.cfsan.fda.gov/~mow/intro.html)

**Food and Drug Administration Center for Food Safety &**

Applied Nutrition (CFSAN)

5100 Paint Branch Parkway  
College Park, MD 20740-3835

**Phone:** 888-SAFEFOOD

**Web Site:** [www.cfsan.fda.gov](http://www.cfsan.fda.gov)

**Food and Drug Administration Office of Regulatory Affairs**

**Phone:** 301-827-3101

**Web Site:** [www.fda.gov/ora/inspect\\_ref/ion](http://www.fda.gov/ora/inspect_ref/ion)

**Food and Drug Administration Seafood Information and Resources**

<http://vm.cfsan.fda.gov/seafood1.html>

**United States Department of Health and Human Services**

Public Health Service

Food and Drug Administration

200 Independence Avenue

Washington, D.C. 20201

**Phone:** 877-696-6775

**Web Site:** [www.hhs.gov/phs](http://www.hhs.gov/phs)

## ***Tips for Customers Keep Your Food Safe***

### ***To the foodservice manager:***

*Copy the facing page on colored paper to make a display sign to post near self-service areas of the cafeteria. Laminate the sign before posting.*



# TIPS FOR CUSTOMERS

## KEEP YOUR FOOD SAFE

**Follow the tips below  
to help keep your food safe.**

- 1** Never re-use the same plate or tray.
- 2** Do not touch food with your hands.
- 3** Step away from the service line and cover your mouth and nose if you have to sneeze or cough.
- 4** Use the serving utensils that are provided for each menu item.
- 5** Do not eat near the service line.
- 6** Never dip your fingers into a container of food to taste it.
- 7** Never put your head under the sneeze guard to reach items in the back.
- 8** If you choose not to eat a food you have placed on your tray or plate, please discard it in the appropriate place.





