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Food Safety Tips for large gatherings

Bacteria grow most rapidly in the range of temperatures between 40°F and 140°F, doubling in number in as little as 20 minutes. This range of temperatures is often called the **DANGER ZONE**. Food should never be left out of refrigeration over two hours. If the temperature is above 90°F, food should not be left out more than one hour.

- Make sure foods are handled safely during transport to the event.
 - Check temperatures at initial receipt of food and again at site arrival*
 - Use clean and sanitized coolers to transport foods*
 - Do **not** let food sit in the temperature danger zone between 40°F and 140°F*
- Make sure there are adequate handwashing facilities and encourage all volunteers to wash hands often.
 - Safe food can become contaminated as a result of cross-contamination with bacteria from dirty hands or other foods or food contact surfaces*
 - Use clean gloves or a clean utensil instead of hands when possible*
- Follow safe food handling practices during all phases of transportation, preparation and serving to avoid cross contamination or other food safety problems.
 - Use clean and separate cutting boards, clean utensils, have a sanitized work area*
 - Keep cold foods COLD!** Hold and serve cold foods at 40°F or below*
- Make sure foods are kept at safe holding temperatures for serving and monitor this frequently with thermometers and log this on a record sheet for each product.
 - Keep hot foods HOT!** Hold and serve hot foods at 140°F or greater*
- Remember, most people have never prepared and served food for large numbers of people or do it very seldom and may have little concept of the food safety problems that are involved in handling this quantity.
 - Watch your volunteers and encourage them to follow safe practices*

Tips for Using a Food Thermometer

Use a clean food thermometer to ensure that food is cooked to the proper internal temperature. To prevent cross-contamination, wash the thermometer probe (the part inserted into the food) with hot water and soap after each use.

Cook Food Completely at One Time - Do NOT partially cook food and then finish it later. Harmful bacteria will grow between the time you start and finish cooking, even if you refrigerate the food in between.

Place Thermometer Correctly - As a general rule, insert the thermometer into the center of the thickest portion of the food. If a food is irregularly shaped, you may need to check the temperature in several places. Here are some examples of where to check temperatures: Whole Poultry: insert into the inner thigh near the breast, but not touching the bone. Thin Food: insert an instant-read thermometer sideways, or at an angle for thin food such as patties. Large Roasts, Steaks, Chops: insert in the center of the thickest part, away from bone and fat. Casseroles and Egg Dishes: insert in the center or thickest area.

When Is Food "Done?"

Here are some temperatures to help you know when a food is "done." Remember: "Doneness" helps ensure quality as well as safety. The summary of temperatures below are based on recommendations from the United States Department of Agriculture (USDA) and the Food and Drug Administration (FDA).

*The best way to determine a safe temperature has been reached is by using a **thermometer!***

Combination Dishes

Cook casseroles and other combination dishes to 160°F the first time. When re-heating or when cooking casseroles containing previously cooked foods, cook to 165°F. At this temperature, the food will be hot and steamy throughout. Use a food thermometer to take the guesswork out of whether your food has reached this safe temperature. Thoroughly cook meat and poultry **BEFORE** combining it with other ingredients in casseroles.

Fish and Seafood

Cook **FISH** (whole fish, steaks and fillets) until they're opaque and flake easily with a fork.

Ground Meat

Cook ground beef, veal, lamb and pork to an internal temperature of 160°F and ground poultry to 165°F. When you cut into thoroughly cooked **GROUND** meat, the color is no longer considered a reliable indicator of ground beef safety. Research indicates that a brown middle doesn't always signal doneness. Some ground meat may turn brown before it has reached a temperature at which bacteria are destroyed. Using a thermometer helps assure a safe product.

Large Cuts of Beef, Veal, Lamb

Large cuts of beef, veal or lamb -- like roasts and steaks -- can stay slightly pink in the center if they have reached at least 145°F. Steaks and roasts cooked to an internal temperature of 145°F are medium rare, 160°F are medium, and 170°F are well done.

Pork

For safety and taste, cook pork to 160°F. At this temperature, the center of pork roasts may be somewhat pink and pork chops may have just a trace of pink color. Again, using a thermometer is the only way to know if the center has reached 160°F.

Poultry

Cook whole poultry, thighs and wings to 180°F; poultry breasts and roasts to 170°F. Cook ground poultry to 165°F. When poultry is pierced with a fork, the juices should be clear, not pink.

If raw foods have been handled safely, using the above preparation recommendations will make them safe to eat. If raw foods have been mishandled (left in the **Danger Zone** too long), bacteria may grow and produce toxins, which can cause foodborne illness. Those toxins that are heat resistant are not destroyed by cooking. Therefore, even thoroughly cooked, foods mishandled in the raw state may not be safe to eat even after proper preparation.

This information is part of the For Safety's Sake Series and can be found on the Internet in PDF format at

<http://www.ces.ncsu.edu/depts/foodsci/agentinfo/projects/fss11.pdf>

Food Safety Resource Agents in NC indicated a need for this type of literature for non-catered events. Extension Specialists in the Departments of Food Science and Family and Consumer Sciences, plan to update and expand this series in the future.

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