## Department of Food Science

Extension

PURDUE

## Food Safety for Outdoor Picnics

Softball games, a day at the beach, late night barbecues and all day picnics—that's what summertime is all about. Don't let food poisoning spoil the fun. Be prepared. Here are some tips to help keep food safe for outdoor picnics.

### **Start Clean !**

henever handling food, it is important that all food contact surfaces are as clean and sanitary as possible. The first step is to wash your hands. Human hands are natural carriers of disease- causing bacteria. Think of all the places a human hand touches in the course of a day. They are used to cover a sneeze, take out the garbage, and to cut raw pieces of chicken. These are just a few examples of the many activities that can contaminate hands. A contaminated hand can easily contaminate foods. Keep your hands clean.

How do I wash my hands? The best way to wash hands is with soap, water, and friction. An antibacterial soap is best if you have some available. Apply enough soap to start a good lather. Rub you hands together for at least 20 seconds (about the time it takes to recite the ABC's). Be sure to scrub in between your fingers and on your forearmsthese are the places that are easily missed. Rinse well with cool water, and use a clean paper towel to dry hands. Don't dry hands on an apron or your blue jeans-they may not be as clean as you think.

When do I wash my hands? You need to wash you hands anytime you contaminate them. Wash hands after going to the bathroom, handling garbage, touching raw animal foods like chicken, after blowing your nose, and playing catch with the family pet. The best rule of thumb is to always



wash your hands before and after handling food.

Try to choose a picnic location that has handwashing facilities. If no facilities are available, disposable antiseptic towelettes are the next best thing.

## Keep Clean !

ontact with human hands is not the only way that foods can be contaminated. *Anything* that touches food can cause contamination. This includes items such as cutting boards, utensils, mixing bowls, meat grinders, and slicers. These types of surfaces must be cleaned (removal of visible dirt) and sanitized (destruction of disease causing bacteria to acceptable levels).

What is the best way to clean a food contact surface? The best way to clean a food contact surface is with an approved detergent and an abrasive cloth or sponge. There are many liquid and solid detergents available in your local supermarket. Be sure that the cleaner is intended to be used for food contact surfaces, and read the directions carefully before using. If possible, use hot water and create a good lather. Use an abrasive cloth and "elbow grease," and be sure to remove all visible food. After cleaning, rinse well under warm running water or in a rinse sink.

#### How do I sanitize a food contact

surface? Cleaning is not enough. You must sanitize a surface to make it safe to use. Sanitizing acts to kill disease causing bacteria that may still be on the surface even after a good cleaning. There are many sanitizing agents available for consumers to use. The most popular choice and perhaps most readily available sanitizing agent is household bleach. Two teaspoons of liquid chlorine bleach per quart of water is an effective concentration for use. Make a sanitizing solution and take it along with all your other picnic items.

After cleaning, disperse the sanitizing solution onto the food contact surface and allow 10-15 minutes for the sanitizer to become effective. After sanitizing, rinse with water and let the food contact surface air dry or pat dry with a clean paper towel. Don't dry with a dirty dish towel because you may recontaminate the food contact surface.

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# Stay Out of the Zone !

emperature can be the best friend or worst enemy for bacteria. Disease causing bacteria can grow between 40° and 140° degrees Fahrenheit (F). This is often referred to as the "Temperature Danger Zone." It is important to keep foods out of this temperature range whenever possible. To achieve this goal, you must thaw food correctly, cook food thoroughly, cool food quickly, reheat correctly and only once, keep cold foods cold, and keep

#### FS-6



#### 2

hot foods hot. Sounds simple enough doesn't it?

How should I thaw foods? When thawing, keep foods out of the zone. Thawing foods at room temperature or outside in the summertime heat are not safe methods of thawing. Why? Foods will be in the temperature danger zone where bacteria can grow. Thawing is best done in the refrigerator set at 36° to 38°F or in a cooler that contains plenty of ice. Thawing can also be done as part of the cooking process, in the microwave oven, or under cool running water (less than 70°F for less than 2 hours). Whenever using a thawing method other than refrigerated thawing, be sure to cook foods immediately.

How do I know when it is cooked properly? Proper cooking of foods makes them palatable and ensures that they are safe to eat. Cooking destroys disease causing bacteria that may be present on food. Depending on the type of food, different final cooking temperatures are recommended. Whenever checking food temperatures, be sure to place the sensing part of the food thermometer in the thickest part or geometric center of the food. This is usually the coldest part of the food during cooking. Be sure to cook the following foods listed below to the recommended internal final-cook temperature. Food thermometers are readily available and only cost a few dollars. Thermometers are a great investment in food safety.

	Internal <u>Temperature</u>
Whole chickens	180ºF
Chicken breasts	170ºF
Ground beef	160ºF
Ground poultry	160ºF
Beef/Lamb steaks, roasts or chops	145ºF
All pork products	160ºF
All reheated foods	165⁰F

All ground meat products and poultry should be cooked until they show no signs of pink. Properly cooked ground meat products should be brown in the middle and poultry

should be white in the middle. During grilling, be sure to check that the middle of the meat is cooked properly and that the juices from the meat are clear and not bloody. If not, keep on cooking.

How should foods be stored after preparation? Always keep raw foods separated from cooked foods to prevent cross-contamination. Be sure not to place cooked meat on the same dish used for raw meat. Serve foods on a clean plate. It is a good idea to bring plenty of disposable plates and utensils to help avoid cross contamination.

Cooling of foods is the number one cause of foodborne illness. It can take a long time to cool foods, especially thick foods like a pot of baked beans. When foods are cooled, they must pass through the temperature danger zone. To keep that time to a minimum, break down foods into smaller pieces. Slice cooked meat into small chunks and distribute the large pot of beans into five or six smaller containers or a shallow pan to cool.

Cooked foods that have been cooled need to be reheated to at least 165°F. Foods may only be reheated once.

An easy rule to remember is to keep hot foods hot and cold foods cold. Hot foods, like chili and baked beans, should be maintained at greater than 140°F until served. Foods can be kept hot in an oven set at least 200°F or on a hot grill. Cold foods, like potato salad or sandwiches, should be kept at less than 40°F. Use a wellinsulated cooler and be sure to replenish ice as it melts. A cooler must contain plenty of ice to keep foods less than 40°F.

If possible, store the cooler in an airconditioned car and keep the cooler in the shade. Avoid opening the cooler repeatedly. Use separate coolers for raw and ready-to-eat foods.

Discard any perishable food that is left out for two hours. In extreme hot weather conditions (above 85°F), food should never sit out for more than an hour.

Is it safe to precook meats? No. Meats and poultry should not be partially cooked in the microwave or grill. This could allow diseasecausing bacteria to survive and grow. Be sure to cook meats completely.

Food Safety for Outdoor Picnics How should meat be marinated? Marinating raw meat is usually done to improve the texture and taste. If foods are marinated, they should be marinated in the refrigerator or in a cooler filled with ice. This helps to prevent growth of bacteria. Be sure to not use the marinade from raw meats to flavor cooked meats.

## Check It Out !

he next time you plan a picnic, check to make sure you are doing everything you can to keep foods safe.

- 6 Wash your hands whenever vou prepare foods.
- Clean and sanitize food 8 contact surfaces.
- 8 Always keep raw perishable foods separated from ready-toeat foods.
- 6 Cook meat thoroughly.
- 0 Cool perishable foods quickly.
- Keep cold foods cold (less 0 than 40°F) and hot foods hot (greater than 140°F).
- When in doubt, throw it out!

Be safe and have fun!

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Additional information may be obtained from the USDA meat and poultry hotline 1-800-535-4555

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