

Outdoor Cooking (Grilling Food) – Teacher’s Guide

Objectives: To provide information on how to safely cook foods outdoors.

Sample statement: ***"Cooking outdoors seems to be popular year round because people enjoy the flavor of grilled foods. There are simple steps you should follow to prevent foodborne illnesses when grilling/barbecuing foods."***

Sample **ANCHOR** questions for participants:

- ***"What kinds of foods do you like to grill outdoors?"***
- ***"Why do you like to grill outdoors?"***
- ***"How do you grill outdoors?"***

Background Information - Choose the appropriate information below to **ADD** to your lesson.

Grilling Food - Cooking food over a direct heat source such as charcoal briquettes or a gas flame. A grill has parallel bars on which food is placed upon and cooked over charcoal, gas or electrical heat.

Grills

There are basically two kinds of grills:

1. The **gas** or **electric grill** turn on instantly and are ready for cooking food in little time.
2. The **charcoal grill** takes much longer to prepare for cooking than the gas or electric grill. Some people prefer this method of grilling over gas or electric because of the smoky flavor added to the foods by the charcoal briquettes.

Lighting Grills

- **Gas** or **electric grill:** Follow manufacturer's directions for igniting, preheating and cleaning gas or electric outdoor grills/cookers.
- **Charcoal grill:** Remove grill lid and cooking rack. Open all vents. Mound 40 to 50 charcoal briquettes in center of bottom rack. Use only CHARCOAL APPROVED FIRE STARTERS--**never** use gasoline, for example. Burn briquettes until they are ashy gray. This takes about 20-30 minutes. Spread the coals evenly over the bottom rack. Position the CLEAN cooking rack on the grill. If the cooking rack has food and grease build-up, use a grill brush to clean the surface.

Cooking Methods

There are two types of cooking on the grill:

1. The **direct-heat** method implies you are cooking food directly over the top of the coals, gas flame or electric element.
2. The **indirect-heat** method implies that food is not cooked directly over the heat source (charcoal or gas). Use indirect method for foods that take longer to cook or foods that tend to dry out or get scorched when cooked with direct heat like large cuts of meats, delicate fish fillets or certain vegetables.

Charcoal Grill: Heat charcoals using directions given for direct-heat method except place the mound of charcoals to one side of the grill. Place a drip pan directly under where the food will cook. When coals are hot, arrange coals to one side of drip pan or for a hotter fire, place coals around the drip pan. Cook with grill covered.

Gas Grill: Must have at least two separately controlled burners. Preheat the grill by lighting all the burners. Then turn off one burner and place the food over the unlit burner. (You may want to place larger cuts of meat in a oven-proof metal cooking pan.) Close grill lid to cook. Adjust cooking temperature by adjusting height of cooking flame of the lit burner so the grill cooks the meat to a safe internal temperature. If there are 3 separate burners, light the outer burners and keep the center burner unlit. Place the food on the center burner to cook.

USE PRECAUTIONS WHENEVER USING FIRE TO COOK

Place the grill in well-lit, well-ventilated areas away from trees, shrubs and buildings. Keep children and pets away from the fire and hot grills.

OTHER GRILLING TIPS

- To reduce flare-ups trim fat off meat before grilling. Have a squirt bottle of water nearby to control flame flare-ups with charcoal grills. **Do not** use water to control flame flare-ups on gas grills. Turn GAS burners off and flames will quit as temperature goes down.
- Cook with the lid on the grill for even cooking. Keep the fire low enough on the gas grill to reduce burning.
- Use long handled utensils and barbecue mitts to protect you from the heat.
- Prevent flare-ups and loss of juices by not piercing meat with a fork or pressing down on meats with a spatula.
- Add barbecue/BBQ sauce at the end of grilling because it burns easily.

Food Safety

Listed below are topics that specifically address food safety issues for cookouts and picnics.

Temperature

Sample statement: ***"Summertime heat can affect the safety of the foods you eat."***

- Perishable foods (ex. dairy products, meats and poultry, dishes containing these ingredients) should be kept cold or hot.
- When the outdoor temperature is less than 90°F, perishable foods should not sit out more than two hours.
- When the outdoor temperature is 90°F or more, perishable foods should not sit out for more than one hour.

Food Preparation

Sample statement: ***“There are some food safety precautions that should be taken when preparing foods to cook on the grill.”***

- Wash hands before and after preparing foods.
- Thaw foods in the refrigerator or in the microwave oven. Note: If the microwave is used for thawing, the meat must be cooked immediately after thawing.
- Do not place cooked food on plates that were used to prepare or carry raw meats.
- Marinate meat in the refrigerator, NOT at room temperature.

Cooking

Sample statement: ***“Meat grilled/barbecued outdoors must reach the same internal temperatures as meat cooked indoors on the stove/range or in the oven for it to be safe to eat.”***

- Meat and poultry cooked on the grill turn brown on the outside very quickly. It is difficult to tell if the meat is thoroughly cooked by looking at it.
- USE A FOOD THERMOMETER to be sure your foods have reached a safe internal temperature.

Whole poultry and pieces should reach 165°F. Beef, veal, and lamb steaks, roasts and chops can be cooked to 145°F but should reach 160°F especially if meat has been rolled, tenderized or pierced with fork or knife. All cuts of pork should reach 160°F. Ground beef and pork should reach 160°F, ground poultry, 165°F. Grill fully cooked meats like hot dogs to 165°F, or until steaming hot. NEVER partially grill meat or poultry and finish grilling later. Food must be cooked completely to destroy harmful bacteria.

Marinating Meats

- **Marinade** - An acidic sauce in which food is soaked to enrich its flavor or tenderize.
- **Marinate** - The act of soaking food in a "marinade".

Marinating meat flavors and tenderizes the meat. Lean cuts of meat, such as "Select" grade, tend to be tougher than other cuts. Tenderize by marinating.

Tips for marinating:

- Always marinate food in the refrigerator.
- Reserve part of your marinade if you need it for a sauce. DO NOT reuse marinade from raw meat or poultry to use on cooked food unless it is boiled first to destroy any bacteria.
- Marinate food in a plastic bag or in a glass, food-grade plastic or stainless steel bowl or container. Cover while marinating.
- Follow directions for marinade for marinating time. Marinating times will depend on the ingredients of the marinade sauce. In general, most meat and poultry need to soak for one to three hours; seafood - 15 to 30 minutes.

Pre-Cooking Meat and Poultry

Share with participants that it is not safe to hold partially cooked food. If you partially cook your food in the microwave or on the stove to reduce grilling time you must **finish**

cooking the meat on the grill **immediately** after microwaving. Grill until it reaches the internal temperature appropriate for that specific cut of meat or poultry.

Grilling Burgers

Sample statement: ***“Ground beef, poultry and pork patties (hamburgers) are popular foods to cook on the grill in the summertime. I would like to share with you some food safety tips that will be helpful in making your burgers delicious and safe to eat.”***

- Uncooked ground meats can be kept two days in the refrigerator in its supermarket wrap. For longer storage, rewrap the meat in freezer wrap and freeze.
- Handle the ground meat gently when preparing the burger patties for grilling. Do not over mix the meat when adding other ingredients to the meat. Do not pat down too hard when shaping the meat into patties. This can cause burgers to be hard and dry.
- Make sure the grill is hot before cooking burgers. This keeps the burgers from sticking to the grill.
- Do not salt meat until after the burgers are cooked. Salt will draw the juices out of the burger.
- While cooking, do not press down on the patties with a spatula. This pushes the juices out of the burger.
- Cook the beef and pork burgers to an internal temperature of 160°F and poultry burgers to 165°F. Check the internal temperature using a food thermometer.

Handouts (AWAY)

"Marinades"

"Outdoor Cooking Recipes"

"Tips for Safe Grilling"

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