The Center for Health and Hygiene in the Home and Community serves as a national and international resource for information and education, applied research, professional training and conferences. The Center focuses on issues relating to hygiene and infection control in areas such as:

- Consumer food safety
- Home hygiene
- Daycare
- Preschool
- Homecare
- Sports and leisure activity
- Travel and hospitality

Some studies suggest there may be a cancer risk related to eating meat cooked by high-heat grilling. Reduce this risk by avoiding charring: marinate meats, cook in the center of a charcoal grill and move coals to the side to prevent juices from dripping on them. Cut any charred parts off.

**Temperature Taking Tips**

**Golden rule: Cook food thoroughly to make it safe**

It is important to cook meats to hot enough temperatures, to kill any bacteria or pathogens present and decrease the risk of food borne illness. Bacteria such as E. coli and salmonella can still be present in undercooked meats such as hamburger and chicken. These microbes can cause severe illness, and even death.

To properly check the internal temperature of the meat, insert a food thermometer into the thickest part of the meat, which is the least cooked. Do not pass it through the meat and touch the cooking surface or you will get a false high temperature reading.

**SAFE MINIMUM INTERNAL TEMPERATURES**

- All Poultry (whole, breasts, ground, legs, wings, thighs): 165 °F
- Hamburgers, Ground meats (beef, veal, pork, lamb): 160 °F
- Steaks, roasts, chops: 145 °F
- Fish, shellfish, crustaceans: 145 °F

**RESOURCES**

- BBQ and Food Safety

- Summer Trip Tips
  [http://www.eatright.org/Public/content.aspx?id=6442477104](http://www.eatright.org/Public/content.aspx?id=6442477104)

- Safe Minimum Internal Temperature Chart
Cooking outdoors has become a year round practice in America, and barbecuing is even more popular during the summertime. However, warm summer temperatures are ideal for bacteria and other pathogens to grow, multiply, and cause foodborne illness. There are three important areas to consider regarding food safety when planning a BBQ or just grilling in the back yard.

- Personal hygiene
- Transportation and storage of food
- Food Preparation

Follow these three simple Golden Rule guidelines, for safely barbecuing food:

**Personal Hygiene**

**Golden Rule 1: Wash or sanitize your hands frequently**

Always wash your hands before handling raw food. Use warm water and soap for at least 20 seconds. For more information see our Food Safety Myths informational handout online at:

http://www.simmons.edu/hygieneandhealth/tips/

If planning a BBQ away from home, pack paper towels, alcohol-based hand sanitizer, hand soap, moist towelettes, and kitchen sanitizer, for cleaning surfaces and hands. It is best if you can choose a cooking spot with hand washing facilities nearby. However, if you cannot access a sink, a bucket with clean hot water and soap will do.

Never prepare food if you have experienced diarrhea or vomiting in the past 48 hours, or suffering from an infectious enteric disease such as salmonellosis and hepatitis. Always make sure that any wounds on your hands are protected by a waterproof covering.

Wear protective clothing such as aprons and oven mitts when working around the grill. Tie long hair back, or wear a hat or bandana to keep it from falling into food or onto your face.

**Transportation & Storage**

**Golden Rule 2: Keep food cool**

Avoid long delays when traveling to picnic areas, instead travel straight to the venue. Keep all food covered, and perishable food chilled. When transporting food to the barbecue site, keep it cold or on ice, to minimize the bacterial growth. If you pick up foods at the supermarket deli or from a restaurant, eat these foods within two hours of purchasing them. Otherwise, use an insulated cooler with sufficient ice or ice packs to keep the food chilled at 40 °F. While traveling in the car it is best to keep the cooler in the air-conditioned passenger compartment, and then place it in the shade at the picnic site.

Avoid opening the cooler’s lid, which lets cold air out and warm air in. When you do open the cooler, only remove the amount of food that you will place immediately on the grill.

Keep flies and other insects away from the food storage, grilling, and serving areas. Cover trash containers, and do not store meat wrappers and other trash in open cardboard boxes, or uncovered containers.

**Food Preparation**

**Golden Rule 3: Prevent cross-contamination**

The grill and immediate environment should be kept clean and tidy at all times. Wipe down all surfaces with a kitchen sanitizer. Be sure to have plenty of clean utensils, containers, and platters. Use these for separately handling the raw food, and the food after cooking. Never use the same platter and utensils for raw and cooked meat. Any bacteria present in raw meat and their juices can contaminate the safely cooked meat. Cross contamination is a main cause of summer foodborne illness. Cross contamination is the transfer of bacteria from raw meat to other foods via hands, chopping boards, utensils, containers etc., and commonly causes food poisoning. Be cautious of cross contamination from raw meat to cooked and ready-to-eat food. Keep raw meat well separated in different containers and wash hands ( or use a hand sanitizer) and utensils immediately after coming into contact with raw meat. Never put cooked food on a plate that has been used for raw meat and do not place the cooked meat back in the marinade used for the raw meat.

Completely thaw meat and poultry before grilling so it cooks more evenly. Use the refrigerator for slow, safe thawing. Microwave on defrost if the food will be placed immediately on the grill; or thaw sealed packages in cold water. Before your start cooking, light the barbecue well in advance and make sure it is very hot before you begin to put food on the grill. Use an instant-read meat thermometer to ensure that the meat is properly cooked. While the juice color will usually change from red to clear or gray when the meat is fully cooked, it is not wise to assume it is safe to eat. Always check the temperature with a food thermometer. Occasions meat and chicken becomes charred on the outside and appears fully cooked, but it is undercooked inside. To remedy this, avoid extreme heat and do not cook food too close to the heat source. If using pre-cooked meats, be sure to heat food thoroughly so it is piping hot all the way through, and then serve it right away.

**Marinating:** Many recipes call for marinating meat and poultry for several hours or days before cooking, either to tenderize or add flavor. Always place marinated food immediately in the refrigerator, do not leave on the counter.

**Pre-Cooking:** You can shorten the grilling time for your food by partially cooking it in the microwave or oven. Grill the pre-cooked food immediately afterwards.

These tips can help ensure safe, enjoyable barbeque and picnic experiences.