Memorial Day begins the summer grilling season, and in order to keep your cookouts safe there are some important tips to remember.

First, choose meat, poultry, or seafood that is fresh and of high quality. Once bought, take the meat home and refrigerate it right away. If the trip home takes more than 30 minutes, using a cooler is recommended.

Secondly, when it comes to marinade, the key is to add flavor not germs. A marinade is a type of sauce used to tenderize or add flavor to foods. The amount of marinade needed depends on the amount of food being prepared. In general, 1/3 cup of marinade is used per pound of meat or poultry. If more flavor is wanted, it is best to marinate for up to 2 hours. For tenderizing, marinate for up to 24 hours. And because of food safety issues, marinate food in the refrigerator only – never on the countertop. If marinate is to be used as a sauce, make an extra batch and set it aside. Used marinate should not be used again on cooked meat, poultry, or seafood.

Thirdly, to kill harmful germs, cook the foods to a safe internal temperature. Meat and poultry cooked on a grill can brown quickly, making it look as if it is done. However, the only way to know whether a food is cooked enough is to measure its internal temperature with a food thermometer. The following are the minimum internal temperatures that specific foods need to be in order to be eaten safely: beef, veal, lamb steaks, roast at minimum internal temperature of 145 degrees F for medium rare and 160 degrees F for medium; hamburgers made of ground beef at minimum internal temperature of 160 degrees F; poultry (whole, ground, parts) minimum internal temperature of 165 degrees F; all cuts of pork at minimum internal temperature of 160 degrees F, hot dogs (already cooked) at minimum internal temperature of 165 degrees F.

To check the temperature, place the thermometer in the center most part of the food – away from any bone. Be sure to wash the thermometer before reusing. Flip meat, poultry, and fish at least once to ensure that it cooks evenly. It is not necessary to turn fish that is less than $\frac{1}{2}$ inch thick.

To reduce grilling time, foods can partially be cooked in a microwave, oven, or stove. Just be sure that those foods are placed on a preheated grill immediately to finish cooking.

Next, keep cooked meat, poultry, fish, and seafood at 140 degrees F or warmer until it is served. Once the meats are cooked, keep them warm by moving them to the side of the grill, not directly over the coals where they could overcook. At home, place them in an oven set at 200 degrees F. Once cooked, these food items should be eaten or refrigerated right away. Never let them sit out for more than 2 hours. When the weather is warm (90 degrees F or above), eat or store cooked foods within 1 hour. Throw away any foods left out for more than 2 hours. If the outside temperature is over 90 degrees, then food left out for 1 hour needs to be thrown away.

And finally to the issue of grilling being hazardous to health. Foods cooked over a grill can become charred by the flames and high heat. Fat from the meat, fish, or poultry drips down on the coals, causing flames that char the food.

Some research suggests that eating large amounts of charred foods can increase a person's risk for developing some forms of cancer. However, studies have found that eating moderate amounts of foods cooked to a safe internal temperature without charring does not appear to increase the risk of cancer.

The following are tips to prevent charring of grilled foods: remove as much of the visible fat as possible before placing the food on the grill; clean the grill completely before cooking to remove any charred foods left over from past uses; if using starter fluid on charcoal, let any excess fluid burn off before placing the food on the grill; never add extra starter fluid while the food is on the grill; avoid using marinades that contain large amounts of fat, such as butter, margarine, or vegetable oil; cover the grill with aluminum foil, and punch holes in the foil between the grids to let the juices drip out; use tongs instead of a fork when cooking because prongs of a fork can pierce the meat or poultry, releasing juices that cause flames; if grilling fish or vegetables, wrap them in aluminum foil before placing them on the grill; microwave food just before grilling since this releases some of the juices that can drip on the coals and cause flames; cut off and throw away the charred portions of cooked foods.

Outdoor grilling is a fun way to cook food for family and friends. By remembering the safety issues involved, these cookouts can be result in fun times, good food, and memories to last a lifetime.

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