AgriLIFE EXTENSION
Texas A&M System

Consumer's Guide:
Preventing Food-borne Illness

Extension Nutrition and Food Science Program

You can help prevent illness that is caused by consuming food that has been contaminated with bacteria or other germs. Use the Fight-BAC™ steps of safe food handling to buy, store, prepare, and serve foods properly:

• **Clean** your hands, utensils, and food-preparation surfaces often with hot, soapy water.

• **Separate** cooked food from raw foods to avoid cross-contamination. Cross-contamination occurs when bacteria and other germs are transferred to a food from your hands, utensils, cutting boards, and other foods, especially raw meat and poultry.

After handling raw meat and poultry, wash your hands, utensils, and cutting boards to help prevent cross-contamination with bacteria and other germs.

• **Cook** foods to safe internal temperatures, which will kill the bacteria that cause food-borne illness.

• **Chill** perishable foods and leftovers as soon as possible to 40 degrees F or below.

Shopping for safety

When shopping for food, add perishable foods —meats, poultry, fish, eggs, milk products, and refrigerator and freezer items—to the cart last. Get these foods home and stored in the refrigerator or freezer quickly. If you cannot get from the store to your home within 30 minutes, place the perishable foods in a cooler located in the back of the vehicle (not the trunk).

Choose packaged foods without holes, tears, or rips. For frozen or refrigerated products, buy products that are in good shape and in the proper display case. Canned foods should not be dented, rusty, or bulging.

Keep raw meat, fish, and poultry away from other foods, especially foods that will be eaten without further cooking. Place raw meat in plastic bags to keep the juices from dripping onto fresh produce and other foods.

Check the "use by," "sell by," and "expiration" dates on food packages. Choose products with dates that have not expired and that can be used within the recommended time.

Safe storage

Keep an appliance thermometer in your refrigerator and freezer to help you make sure that the foods are being kept at the proper temperature. Refrigerator temperatures should be 40 degrees F or below; freezers should be 0 degrees F or below.

Store the most perishable items—fish, meats, and

eggs—in the coldest part of the refrigerator. Do not store eggs or milk in the refrigerator door because their temperatures will fluctuate as the door is opened and closed.

Wipe up spills right away and clean the refrigerator each week to kill the germs that can spoil food or cause food-borne illness. Clean the inside refrigerator surfaces with hot, soapy water. Do not use bleach because it can damage seals, gaskets, and linings inside the refrigerator. After cleaning, rinse the surfaces with a damp cloth and dry them.

To avoid cross-contamination, refrigerate raw meat, poultry, or seafood away from other foods, especially those that will not be further cooked. Place them on the lowest shelf of the refrigerator in sealed plastic bags or covered containers to keep the juices from dripping on other foods.

Store dry and canned foods off the floor in a pantry or other cool, dry place. Keep the area clean and free of pests. Do not store food under a sink or near a heat source such as a dishwasher or hot water heater.

Freeze foods in moisture- and vapor-proof wrap or materials. Store the most perishable items in the coldest part of the freezer. Use them within the recommended storage times.

Safe food preparation

Wash your hands with soap and warm water for 20 seconds before beginning to prepare food and after handling raw meat or poultry, touching animals, using the bathroom, taking out the trash, or changing diapers.

Do not let any juices or other materials from raw meat, poultry, seafood, or eggs come into contact with food that is already prepared or does not need to be
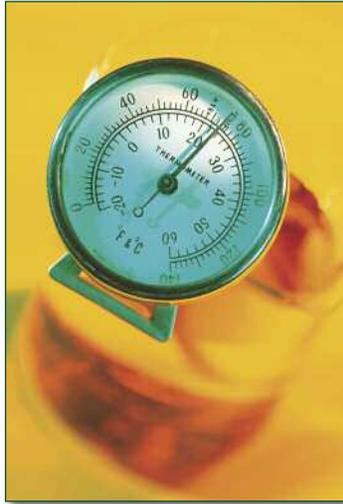
Using a food thermometer is the only way to determine if food has been cooked to a safe internal temperature.

cooked. Wash your hands, countertops, equipment, and utensils with soap and water immediately after using them. After washing cutting boards and countertops, sanitize them with a solution of 1 teaspoon of bleach per quart of water.

The safest place to thaw foods is in the refrigerator. Although you can thaw foods in the microwave, it will partially cook the food. If foods are thawed in the microwave, cook them immediately.

Always cook meats, poultry, fish, seafood, and eggs to a safe internal temperature. The only way to determine whether a food is cooked enough is to check it with a food thermometer. The recommended minimum temperatures are listed below:

- Beef, veal, and lamb steaks, roasts, and chops: 145 degrees F
- Pork (all cuts): 160 degrees F
- Ground beef, veal and lamb: 160 degrees F
- Poultry (whole, ground, or parts): 165 degrees F
- Egg dishes: 160 degrees F
- Fish: 145 degrees F

Avoid interruptions when cooking. Never refrigerate partially cooked foods and finish cooking them later.

An excellent way to prepare foods that have high water content, such as soups, stews, and chili, is with a slow cooker. Do not cook a whole chicken or large, frozen pieces of meat in a slow cooker because it can take several hours for them to reach a temperature high enough to kill bacteria. Instead, cut them into smaller pieces so they will cook thoroughly and evenly.

When cooking vegetables with meat or poultry, place the vegetables on the bottom of the slow cooker so they cook completely. Fill the slow cooker between one-half and two-thirds full.

If you microwave food, cover and rotate it to cook it evenly and to avoid cold spots. Use only microwave-safe containers. Observe the standing (waiting) time recommendations because this is considered part of the cooking time for doneness.

Because microwave ovens can vary in power or wattage, always use a food thermometer to check food for doneness.

Safe serving

Bacteria grow very quickly in temperatures between 40 and 140 degrees F, which is often called the "danger zone." Never leave perishable foods in this temperature range for more than 2 hours, or 1 hour of the outside temperature is 90 degrees or warmer. Plan your cooking and serving times so as to follow this guideline.

If the serving time is delayed, remember to keep hot foods hot, or above 140 degrees F, and cold foods cold, or below 40 degrees F.

Handling leftovers

Store leftovers quickly. Refrigerate or freeze them in shallow, covered containers to cool quickly. Improper cooling often leads to food-borne illness.

Any foods thawed in a microwave oven should be cooked immediately.

Leftovers stored in the refrigerator should be eaten within 2 to 3 days. Reheat them until they reach 165 degrees F. Heat sauces, soups, and gravies to a rolling boil before serving them.

For more information

Foodborne Illness: What Consumers Need to Know. USDA Food Safety and Inspection Service. April 2006. **http://www.fsis.usda.gov/Fact_Sheets/Foodborne Illness_What_Consumers_Need_to_Know/index. asp**

Spring Clean Your Way to a Safer Kitchen. Partnership for Food Safety Education. 2006. **http://www.fightbac.org/content/view/85/2/**

Duyff, Roberta Larson. *American Dietetic Association Complete Food and Nutrition Guide,* 3rd edition. 2006.

Slow Cookers and Food Safety. USDA Food Safety and Inspection Service. February 2008. **http://www.fsis.usda.gov/Fact_Sheets/Focus_On_ Slow_Cooker_Safety/index.asp**