

## REDUCE THE RISK OF BACTERIAL CONTAMINATION AND FOODBORNE ILLNESS IN YOUR KITCHEN

### Keep harmful bacteria out by keeping things clean.

- ◆ Always work with clean hands, hair, and fingernails, and wear clean clothes.
- ◆ Any sores or open wounds on your hands need to be properly disinfected and covered with a clean bandage prior to handling foods.
- ◆ Keep hands away from mouth, nose, and hair. Cover coughs and sneezes with disposable tissues.
- ◆ Wash hands frequently, especially after handling raw meat, fish, and poultry.
- ◆ Use utensils whenever possible to mix foods – avoid using your bare hands.
- ◆ Don't use the same spoon for tasting that you use for preparing or serving foods.

### Keep bacteria already present in food from growing and multiplying.

- ◆ Watch food temperatures closely.
- ◆ Control the amount of time a food item is in the danger zone. Do not allow foods to remain at room temperature for longer than one hour.
- ◆ Proper cooking or refrigeration will slow down the growth of disease producing bacteria or can destroy them altogether.

## GOOD RULES OF THUMB

- ◆ Keep foods out of the 41°F to 135°F danger zone.
- ◆ Keep hot foods hot, and cold foods cold.
- ◆ When in doubt, throw it out!

## BE A WISE CONSUMER

- ◆ In a supermarket, pick up your perishable foods last.
- ◆ When running errands, do your grocery shopping last. Allowing foods to remain in your car can easily bring their temperature into the danger zone and allow harmful bacteria to multiply.

**Supermarkets make the effort to provide fresh and wholesome products for their customers. Refrigerated display cases and freezers are designed to maintain proper holding temperatures. Don't lose this advantage between the supermarket and your dinner table – you may want to carry an insulated ice chest or bag in your car to help maintain cold temperatures until you get home.**

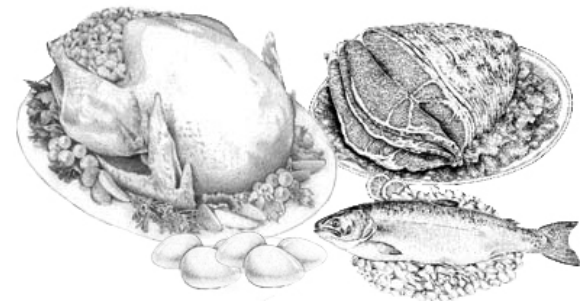
### What about damaged food containers?

- ◆ Do not purchase canned foods with warning signs of spoilage such as bulging ends or sides, or leakage.
- ◆ Badly dented or creased cans may already have dangerous bacterial growth in progress.

### What about doggie bags?

- ◆ Leftover foods must be handled carefully and need to be refrigerated as soon as possible.
- ◆ Allowing "tomorrow's meal" to remain in your car or on the kitchen counter for an extended period of time could lead to excessive bacterial growth and foodborne illness.

# PREVENTING FOODBORNE ILLNESS



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## HOW FOODBORNE ILLNESS OCCURS

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**Foods can cause illness when they contain toxins or disease producing (pathogenic) bacteria or toxin producing molds.**

**Bacteria are so small (1/25,000 of an inch) that they cannot be seen with the naked eye – 10 million bacteria can fit on the head of a pin. When bacteria grow, they multiply every 15 to 30 minutes; under ideal conditions, one bacterium would multiply to over 4,000 in one hour!**

### **Bacteria need 3 things to grow and multiply:**

- ◆ Nutrients
- ◆ Moisture
- ◆ Optimum Temperature.

**Most perishable foods contain enough nutrients and moisture to allow bacteria to grow. However – *YOU* can control the temperature of a perishable food and significantly reduce the chance of foodborne illness.**

**The danger zone for foods is anywhere between 41°F and 135°F.**

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- ◆ Foods that remain in the danger zone longer than one hour can allow enough disease producing bacteria to grow and cause illness.
- ◆ Remember – food poisoning organisms grow especially well at room temperatures between 70°F and 100°F.
- ◆ The smell or appearance of food may not provide any clues that pathogenic bacteria, even in large numbers, are present.
- ◆ Don't make assumptions about food safety! Studies have shown that in certain conditions, even foods previously thought to be safe can be dangerous.

## **Prevent cross contamination – don't let the danger of one item affect another.**

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- ◆ Do not allow dirty dishes or utensils to come in contact with foods or clean dishes and utensils.
- ◆ Keep prepared foods on upper shelves and raw foods on lower shelves so that raw products will not drip onto ready-to-eat foods.
- ◆ Prepare foods that do not require cooking first (such as salads), before handling any raw meat, fish, or poultry.
- ◆ Always place cooked meat, fish, or poultry into a clean serving dish – do not reuse a dish that contained a raw, uncooked food without first washing and sanitizing the dish.
- ◆ Do not reuse marinades leftover from raw meat, fish, or poultry on any cooked food item without first cooking the marinade.
- ◆ Keep all cleaning products and chemicals stored away from or below food items. Do not use chemicals, cleansers, insecticides, or other hazardous products near open food or utensils. Do not reuse empty chemical or cleanser containers for food or beverage storage.

## **Safe food preparation means careful handling of each food item at every step.**

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- ◆ Keep your hands clean.
- ◆ Keep your kitchen, utensils, and all food preparation areas and work surfaces clean.
- ◆ Keep foods covered or wrapped.
- ◆ Potentially hazardous foods must be heated and cooled quickly – do not allow foods to sit at room temperature for longer than one hour.
- ◆ Completely clean and then sanitize all food contact utensils and work surfaces after working with raw meat, fish, or poultry. Use a solution of ½ - 1 tablespoon household bleach (6% sodium hypochlorite) to a gallon of water for sanitizing.

## **Safe food storage means more than keeping hot foods hot and cold foods cold.**

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- ◆ Keep refrigerators, freezers, storage shelves, and storage rooms clean.
- ◆ Do not overload the refrigerator thus preventing air circulation.
- ◆ Refrigerate foods in shallow containers. Deep containers slow the cooling process and can actually insulate food in the center keeping the temperature high and in the danger zone.
- ◆ Keep a visible thermometer in all refrigerators. Be sure food is maintained at or below 41°F. Some items like fresh fish, may require a lower temperature to maintain quality – check with your grocer or supplier.
- ◆ Store food in original containers, or in cleanable plastic or stainless steel containers designed for food storage. Cover all stored food.
- ◆ Do not allow frozen foods to thaw at room temperature – the safe way to thaw food is in the refrigerator, the microwave, under cold running water, or during the process of cooking.

## **Thorough cooking can prevent many types of foodborne illness.**

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- ◆ Use a food thermometer to be sure you cook foods to the following minimum internal temperatures:
  - Chicken - 165°F for 15 seconds
  - Ground Beef - 155°F for 15 seconds
  - Pork - 145°F for 15 seconds
  - Raw shell eggs - 145°F for 15 seconds
- ◆ Reheat leftover potentially hazardous foods to a minimum of 165°F for 15 seconds.
- ◆ Stuffing containing fish, meat, poultry, or ratites should be heated to 165°F for 15 seconds.
- ◆ Improperly home canned meats and low acid foods (such as vegetables) can be a potential source of botulism. Home prepared products are illegal for use in retail food facilities, and must be treated with caution in your own home.