

The Unwelcome Dinner Guest

Prevent Foodborne Illness

“It must be something I ate,” is often the explanation people give for a bout of homegrown “Montezuma’s Revenge” (acute diarrhea) or some other unwelcome gastrointestinal upset.

Despite the fact that America’s food supply is the safest in the world, the unappetizing truth is that what we eat can very well be the vehicle for foodborne illnesses that can cause a variety of unpleasant symptoms and may be life-threatening to the less healthy among us. Tens of millions of cases of foodborne diarrhea disease occur in the United States every year, at a cost to the economy of an estimated \$1 billion to \$10 billion. It is estimated that in developing countries the cases of foodborne illness is 10 times that of the U.S.

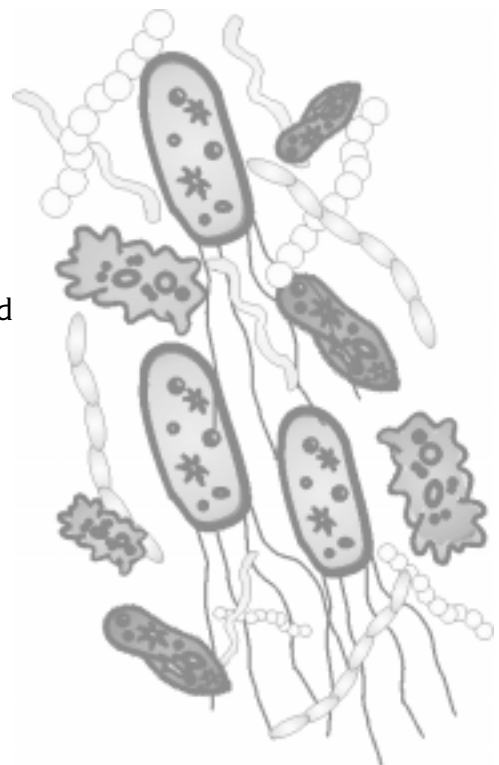
The Food and Drug Administration has given high priority to combating microbial contamination of the food supply. But the agency can’t do the job alone. Part of the responsibility for preventing foodborne illness lies with consumers. More than 30 percent of all such illnesses result from unsafe handling of food at home.

The prime causes of foodborne illness are a collection of bacteria with tongue-twisting names: see the following table. These organisms can become unwelcome guests at the dinner table. They’re in a wide range of foods, including meat, milk and other dairy products, coconut, fresh pasta, spices, chocolate, seafood, and even water.

Egg products, tuna, potato and macaroni salads, and cream-filled pastries harboring these pathogens also are implicated in foodborne illnesses, as are vegetables grown in soil fertilized with contaminated manure. Poultry is the food most often contaminated with disease-causing organisms.

Careless food handling sets the stage for the growth of disease-causing “bugs.” For example, hot or cold foods left standing too long at room temperature provide an ideal climate for bacteria to grow. Improper cooking also plays a role in foodborne illness.

Foods may be cross-contaminated when cutting



boards and kitchen tools that have been used to prepare a contaminated food, such as raw chicken, are not cleaned before being used for another food such as vegetables.

Symptoms of foodborne illness

Common symptoms of foodborne illness include diarrhea, abdominal cramping, fever, sometimes blood or pus in the stools, headache, vomiting, and severe exhaustion. However, symptoms will vary according to the type of bacteria and by the amount of contaminants eaten. Symptoms may come on as early as a half-hour after eating the contaminated food or they may not develop for several days or weeks. They usually last only a day or two, but in some cases can persist a week to 10 days. For most healthy people, food-borne illnesses are neither long-lasting nor life-threatening. However, they can be severe in the very young, the very old, and those who are already ill or whose immune systems are suppressed.

Prevention Tips

The idea that the food on the dinner table can make someone sick may be disturbing, but there are many steps you can take to protect your families and dinner guests. It's just a matter of following basic rules of food safety. Prevention of food poisoning starts with your trip to the supermarket.

1. Don't buy food in cans that are bulged or dented or in jars that are cracked or have loose or bulging lids.
2. Look for expiration dates on the labels and never buy outdated food. Likewise, check "use by" or "sell by" date on dairy products such as cottage cheese, cream cheese, yogurt, and sour cream and pick the ones that will stay fresh longest in your refrigerator.
3. If you have a health problem, especially one that may have impaired your immune system, don't eat raw shellfish and use only pasteurized milk and cheese.



4. Choose eggs that are Grade A or better and that are refrigerated in the store. Before putting them in your cart, open the carton and make sure that none are cracked or leaking.
5. Save to the last to pick up frozen foods and perishables such as meat, poultry or fish. Always put these products in separate plastic bags so that drippings don't contaminate other foods in your shopping cart.
6. Check for cleanliness at the meat or fish counter and the salad bar. For instance, cooked shrimp lying on the same bed of ice as raw fish could become contaminated.
7. Take an ice chest along to keep frozen and perishable foods cold if it will take more than an hour to get your groceries home.

Safe Storage

The first rule of food storage in the home is to refrigerate or freeze perishables right away. Refrigerator temperature should be 40 to 45 degrees Fahrenheit, and the freezer should be zero degrees F. Check both "fridge" and freezer periodically with a good thermometer.

Poultry and meat heading for the refrigerator may be stored as purchased in the plastic wrap for a day or two. If only part of the meat or poultry is going to be used right away, it can be wrapped loosely for refrigerator storage, just make sure juices can't escape to contaminate other foods. Wrap tightly foods destined for the freezer. Leftovers should be stored in tight containers. Store eggs in their carton in the refrigerator itself rather than on the door, where the temperature is warmer.

Seafood should always be kept in the refrigerator or freezer until preparation time.

Don't crowd the refrigerator or freezer so tightly that air can't circulate. Check the leftovers in covered dishes and storage bags daily for spoilage. Anything that looks or smells suspicious should be thrown out.

A sure sign of spoilage is the presence of mold,



which can grow even under refrigeration. While not a major health threat, mold can make food unappetizing.

Mold is deceptive in that only a small part is visible. The larger part extends below the surface of the food. However, it is possible to save a part of the food by cutting off and discarding the visible blemish along with a large section of the food around it.

Many items besides fresh meats, vegetables, and dairy products need to be kept cold. For instance, mayonnaise and ketchup should go in the refrigerator after opening. Some spices keep best when refrigerated. Always check the labels on cans or jars to determine how the contents should be stored. If you've neglected to refrigerate items, it's usually best to throw them out.

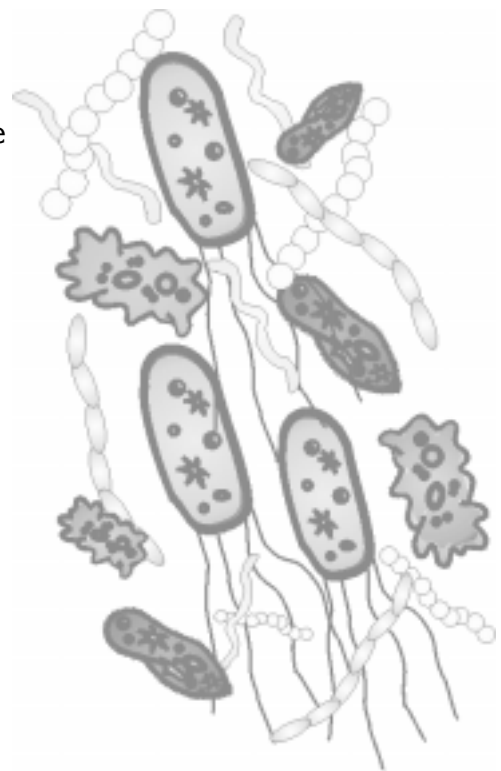
For foods that can be stored at room temperature, some precautions will help make sure they remain safe. Potatoes and onions should not be stored under the sink, because leakage from the pipes can damage the food. Potatoes don't belong in the refrigerator either. Store them in a cool, dry place. Don't store foods near household cleaning products and chemicals.

When you're putting canned goods away, move the older ones to the front of the shelf and put the new cans in the back rows so you'll be sure to use the old ones first. Check all cans to see if any are sticky on the outside. This may indicate a leak.

Keep It Clean

The first cardinal rule of safe food preparation in the home is: Keep everything clean.

The cleanliness rule applies to the areas where food is prepared and, most importantly, to the cook. It's plain common sense to wash hands thoroughly before starting to prepare a meal and after handling raw meat or poultry. Cover long hair with a net or scarf, and be sure that any open sores or cuts on the hands are completely covered. If the sore or cut is infected, stay out of the kitchen.



Keep Temperature Right

The second cardinal rule of home food preparation is: Keep hot foods hot and cold foods cold. Use a thermometer to ensure that meats are completely cooked. For instance, beef and lamb should be cooked to at least 145 °F, ground beef and pork to 160° F, and poultry to 175° F. Don't eat poultry that is pink inside.

Eggs should be cooked until the white is firm and the yolk begins to harden.

Seafood should be thoroughly cooked. Fish is done when the thickest part becomes opaque and the fish flakes easily when poked with a fork. Shrimp can be simmered 3 to 5 minutes or until the shells turn red. Clams and mussels are steamed over boiling water until the shells open (5 to 10 minutes). Oysters should be sautéed, baked, or boiled until plump, about 5 minutes. Protect seafood from cross-contamination after cooking, and eat it promptly.

Cooked foods should not be left standing on the table or kitchen counter for more than 2 hours. Disease-causing bacteria grow in temperatures between 40° F to 140° F. Cooked foods that have been in this temperature range for more than 2 hours should not be eaten.

If a dish is to be served hot, get it from the stove to the table as quickly as possible. Reheated foods should be brought to a temperature of at least 165 degrees F. Keep cold foods in the refrigerator or on a bed of ice until serving. This rule is particularly important to remember in the summer months.

After the meal, leftovers should be refrigerated as soon as possible. Meats should be cut in slices of three inches or less and all foods should be stored in small, shallow containers to hasten cooling. Be sure to remove all the stuffing from roasted turkey or chicken and store it separately. Leftovers should be used within three days.

And here are just a few more parting tips to keep your favorite dishes safe. Don't thaw meat and other frozen foods at room temperature. Instead, move them from the freezer to the refrigerator for a day or two; or defrost in cold water (changing the water every 30



minutes), in the microwave oven, or during the cooking process. Never taste any food that looks or smells “off,” or comes out of leaking, bulging, or severely damaged cans or jars with leaky lids.

Though all these do’s and don’ts may seem overwhelming, remember, if you want to stay healthy, when it comes to food safety, the old saying “rules are made to be broken” does not apply!

