

Dinner's Ready



But is it Safe?

Prepared by:

Jane Jett – Extension Educator, Posey County

Brenda Hagedorn – Extension Educator, Perry/Spencer County

DINNER'S READY.....But is it Safe?

Description:

We are fortunate to live in a country with highly effective food safety standards for producers, wholesalers and retailers. Specific government agencies are responsible for establishing food safety standards, conducting inspections and ensuring that the standards are met. But once the food is purchased and taken home, it is then the responsibility of the consumer to maintain its safety. This lesson will focus on safe food preparation and handling at home, including tips on cooking, temperatures, storage and cleaning.

Lesson Objectives:

1. To understand how bacteria are spread.
2. To learn effective ways to control disease-causing bacteria when preparing, cooking, and storing food at home.
3. To identify common misconceptions regarding food safety.

Optional Activities for teaching the lesson:

Teach how quickly **bacteria multiply** by using 4 containers and dry beans or other small items of consistent size. In one container put one bean, 2 in another, 16 in another and 64 in another. Then ask the following question: How many bacteria would you get if you started with one and waited 20 minutes? 60 minutes? 100 minutes?

(Answer: 2, 16, and 64.)

At the conclusion of the lesson, review material presented with this quick and easy **balloon activity**. Blow up a large balloon. Using a fine-tipped, permanent marker, write terms from the lesson on the balloon. (The terms should be close together, so when the balloon is caught the thumb will be on top of, or near, one of them.) Choose things you specifically talked about. Some options may be: food poisoning, bacteria, young children, older adults, 20 seconds, Happy Birthday, cross-contaminate, freezer, thawing food, separate, microwave food, food thermometer, bleach, rinsing meats, sanitizing, sponges, kitchen towels, food storage, chill, 2 hours, appliance thermometer, before eating, after touching garbage, drying rack, internal temperature, clean. Ask participants to bat the balloon to each other and when it is caught, they should explain something they learned about the term under their **right thumb**. If they can't remember anything specifically about that term, simply ask them to share anything they learned during the lesson.

Introduction:

Approximately 1 in 6 Americans will have food poisoning each year, resulting in an estimated 128,000 hospitalizations. Many of these cases could have been prevented with a little knowledge and a few preventive measures. By employing the basic food safety principles of clean, cook, separate and chill, you can protect yourself and those you serve from foodborne illness.

Who's at Risk?

Certain groups of people are more susceptible to foodborne illness. This means that they are more likely to get sick from contaminated food and, if they do get sick, the effects are much more serious. These groups include:

- Pregnant women
- Young children
- Older adults
- Persons with chronic illnesses

Clean

Wash hands and surfaces often.

Why it matters....

Illness-causing bacteria and viruses can survive in many places around your kitchen, including your hands, utensils, and cutting boards.

Unless you wash your hands, utensils, and surfaces the right way, you could spread bacteria to your food, and your family.

Follow these top tips to keep your family safe:

Wash hands the right way—for 20 seconds with soap and running water.

Washing your hands the right way can stop the spread of illness-causing bacteria and viruses.

Here's how to do it:

- Wet your hands with warm or cold running water and apply soap.
- Rub your hands together to make a lather and scrub them well. Be sure to scrub the backs of your hands, between your fingers, and under your nails. Bacteria can hide out here too!
- Continue rubbing hands for at least 20 seconds. Need a timer? Hum "Happy Birthday" from beginning to end twice.
- Rinse your hands well under running water.
- Dry your hands using a clean towel or air dry.

And when to do it:

- Before eating food.
- Before, during, and after preparing food.
- Before and after treating a cut or wound.
- Before and after caring for someone who is sick.
- After handling uncooked eggs, or raw meat, poultry, seafood, or their juices.
- After blowing your nose, coughing, or sneezing.
- After touching an animal or animal waste.
- After touching garbage.
- After using the toilet.

Wash surfaces and utensils after each use.

Bacteria can be spread throughout the kitchen and get onto cutting boards, utensils, and counter tops. To prevent this:

- Use paper towels or a clean cloth to wipe up kitchen surfaces or spills. Wash cloths often in the hot cycle of your washing machine.
- Wash cutting boards, dishes, utensils, and counter tops with hot, soapy water after preparing each food item and before you go on to the next item.
- As an extra precaution, you can use a solution of one teaspoon of unscented, liquid chlorine bleach in one quart of water to sanitize washed surfaces and utensils.

Wash fruits and veggies—but not meat, poultry, or eggs!

Did you know that—even if you plan to peel fruits and veggies—it's important to wash them first because bacteria can spread from the outside to the inside as you cut or peel them?

Here's how to wash all your produce effectively...

1. Cut away any damaged or bruised areas.
2. Rinse produce under running water. Don't use soap, detergent, bleach, or commercial produce washes.
3. Scrub firm produce—like melons or cucumbers—with a clean produce brush.
4. Dry produce with a paper towel or clean cloth towel... and you're done.

5. The good news? Bagged produce marked “pre-washed” is safe to use without further washing.

Why not wash meat, poultry, and eggs?

Washing raw meat and poultry can actually help bacteria spread, because their juices may splash onto (and contaminate!) your sink and countertops.

All commercial eggs are washed before sale. Any extra handling of the eggs, such as washing, may actually increase the risk of cross-contamination, especially if the shell becomes cracked.

Chill

Refrigerate promptly.

Why it matters.....

Did you know that illness-causing bacteria can grow in perishable foods within two hours unless you refrigerate them? (And if the temperature is 90 °F or higher during the summer, cut that time down to one hour!)

But by refrigerating foods promptly and properly, you can help keep your family safe from food poisoning at home.

Follow these top tips to keep your family safe.

Refrigerate perishable foods within two hours.

Cold temperatures slow the growth of illness causing bacteria. So it's important to chill food promptly and properly. Here's how:

- Pack your refrigerator with care. To properly chill food (and slow bacteria growth), cold air must be allowed to circulate in your fridge. For this reason, it's important not to over-stuff your fridge.
- Your fridge should be between 40 °F and 32 °F. Appliance thermometers help you know if the fridge is cold enough.
- Get perishable foods into the fridge or freezer within two hours. In the summer months, cut this time down to one hour.
- Remember to store leftovers within two hours as well. By dividing leftovers into several clean, shallow containers, you'll allow them to chill faster.

Freezing

You can freeze almost any food. That doesn't mean that the food will be good to eat – or safe.

- Freezing does not destroy harmful bacteria, but it does keep food safe until you can cook it.
- Your freezer should be 0 °F or below. Appliance thermometers help you know if the freezer is cold enough.

Never thaw or marinate foods on the counter.

Many people are surprised at this tip. But since bacteria can multiply rapidly at room temperature, thawing or marinating foods on the counter is one of the riskiest things you can do when preparing food for your family.

To thaw food safely, choose one of these options:

- Thaw in the refrigerator. This is the safest way to thaw meat, poultry, and seafood. Simply take the food out of the freezer and place it on a plate or pan that can catch any juices that may leak. Normally, it should be ready to use the next day.
- Thaw in cold water. For faster thawing, you can put the frozen package in a watertight plastic bag and submerge it in cold water. Be sure to change the water every 30 minutes. Note: If you thaw this way, be sure to cook the food immediately.
- Thaw in the microwave. Faster thawing can also be accomplished in the microwave. Simply follow instructions in your owner's manual for thawing. As with thawing in cold water, food thawed in the microwave should be cooked immediately.
- Cook without thawing. If you don't have enough time to thaw food, just remember, it is safe to cook foods from a frozen state—but your cooking time will be approximately 50% longer than fully thawed meat or poultry. To marinate food safely, always marinate it in the refrigerator.

Know when to throw food out.

You can't tell just by looking or smelling whether harmful bacteria has started growing in your leftovers or refrigerated foods.

Be sure you throw food out before harmful bacteria grow by checking the *Safe Storage Times* chart at <http://www.foodsafety.gov/keep/charts/index.html>.

Separate

Don't cross-contaminate.

Why it matters.....

Even after you've cleaned your hands and surfaces thoroughly, raw meat, poultry, seafood, and eggs can still spread illness-causing bacteria to ready-to-eat foods—unless you keep them separate.

But which foods need to be kept separate, and how?

Use separate cutting boards and plates for produce and for meat, poultry, seafood, and eggs.

Placing ready-to-eat food on a surface that held raw meat, poultry, seafood, or eggs can spread bacteria and make you sick. But stopping cross-contamination is simple.

- Use one cutting board for fresh produce, and one for raw meat, poultry, or seafood.
- Use separate plates and utensils for cooked and raw foods.
- Before using them again, thoroughly wash plates, utensils, and cutting boards that held raw meat, poultry, seafood, or eggs.

•Once a cutting board gets excessively worn or develops hard-to-clean grooves, consider replacing it.

Keep meat, poultry, seafood, and eggs separate from all other foods at the grocery. Make sure you aren't contaminating foods in your grocery bag by:

- Separating raw meat, poultry, seafood, and eggs from other foods in your shopping cart.
- At the checkout, place raw meat, poultry, and seafood in plastic bags to keep their juices from dripping on other foods.

Keep meat, poultry, seafood, and eggs separate from all other foods in the fridge. Bacteria can spread inside your fridge if the juices of raw meat, poultry, seafood, and eggs drip onto ready-to-eat foods. But stopping this contamination is simple.

•Place raw meat, poultry, and seafood in containers or sealed plastic bags to prevent their juices from dripping or leaking onto other foods. If you're not planning to use these foods within a few days, freeze them instead.

•Keep eggs in their original carton and store them in the main compartment of the refrigerator—not in the door.

Watch the "Separate" video to learn more about preventing cross contamination. After entering the site, scroll to the bottom of the page for the video. <http://www.foodsafety.gov/keep/basics/separate/index.html>

Cook

Cook to the right temperature.

Why it matters.....

Did you know that the bacteria that cause food poisoning multiply quickest in the "Danger Zone" between 40° and 140° Fahrenheit?

And while many people think they can tell when food is "done" simply by checking its color and texture, there's no way to be sure it's safe without following a few important but simple steps.

Use a food thermometer.

Cooked food is safe only after it's been heated to a high enough temperature to kill harmful bacteria. Color and texture alone won't tell you whether your food is done. Instead, use a food thermometer to be sure.

- If you don't already have one, consider buying a food thermometer. Learn more about the different types of food thermometers available.

- When you think your food is done, place the food thermometer in the thickest part of the food, making sure not to touch bone, fat, or gristle.
- Wait the amount of time recommended for your type of thermometer.
- Compare your thermometer reading to the **Safe Minimum Internal Temperature Chart** (included with this lesson) to be sure it's reached a safe temperature.
- Some foods need 3 minutes of rest time after cooking to make sure that harmful germs are killed. Check the **Safe Minimum Internal Temperature Chart** for details.
- Clean your food thermometer with hot, soapy water after each use.

Microwave food thoroughly (to 165 °F).

To make sure harmful bacteria have been killed in your foods, it's important to microwave them to 165° or higher. Here's how:

- When you microwave, stir your food in the middle of heating.
- If the food label says, "Let stand for X minutes after cooking," don't skimp on the standing time. Letting your microwaved food sit for a few minutes actually helps your food cook more completely by allowing colder areas of food time to absorb heat from hotter areas of food. That extra minute or two could mean the difference between a delicious meal and food poisoning.
- After waiting a few minutes, check the food with a food thermometer to make sure it is 165°F or above. Watch the "Cook" video to learn more about using a food thermometer to check for doneness. Scroll to the bottom of the page for the video. <http://www.foodsafety.gov/keep/basics/cook/index.html>

References/Resources

1. <http://www.foodsafety.gov/keep/basics/index.html>
2. <http://www.msue.msu.edu>
3. <http://fyi.uwex.edu/safepreserving/2014/09/09/safe-healthy-wash-those-kitchen-towels/>
4. <http://www.fsis.usda.gov/>

Food Safety Myths Exposed

Common myths about food safety at home....

Myth #1: Food poisoning isn't that big of a deal. I just have to tough it out for a day or two and then it's over.

Fact: Many people don't know it, but some foodborne illnesses can actually lead to long-term health conditions, and 3,000 Americans a year die from foodborne illness. Get the facts on long-term effects of food poisoning.

Myth #2: It's OK to thaw meat on the counter. Since it starts out frozen, bacteria isn't really a problem.

Fact: Actually, bacteria grow surprisingly rapidly at room temperatures, so the counter is never a place you should thaw foods. Instead, thaw foods the right way.

Myth #3: When cleaning my kitchen, the more bleach I use, the better. More bleach kills more bacteria, so it's safer for my family.

Fact: There is actually no advantage to using more bleach than needed. To clean kitchen surfaces effectively, use just one teaspoon of liquid, unscented bleach to one quart of water.

Myth #4: I don't need to wash fruits or vegetables if I'm going to peel them.

Fact: Because it's easy to transfer bacteria from the peel or rind you're cutting to the inside of your fruits and veggies, it's important to wash all produce, even if you plan to peel it.

Myth #5: To get rid of any bacteria on my meat, poultry, or seafood, I should rinse off the juices with water first.

Fact: Actually, rinsing meat, poultry, or seafood with water can increase your chance of food poisoning by splashing juices (and any bacteria they might contain) onto your sink and counters. The best way to cook meat, poultry, or seafood safely is to make sure you cook it to the right temperature.

Myth #6: The only reason to let food sit after it's been microwaved is to make sure you don't burn yourself on food that's too hot.

Fact: In fact, letting microwaved food sit for a few minutes ("standing time") helps your food cook more completely by allowing colder areas of food time to absorb heat from hotter areas of food.

Myth #7: Leftovers are safe to eat until they smell bad.

Fact: The kinds of bacteria that cause food poisoning do not affect the look, smell, or taste of food. To be safe, use the *Safe Storage Times* chart <http://www.foodsafety.gov/keep/charts/index.html> to make sure you know the right time to throw food out.

Myth #8: Once food has been cooked, all the bacteria have been killed, so I don't need to worry once it's "done."

Fact: Actually, the possibility of bacterial growth increases after cooking, because the drop in temperature allows bacteria to thrive. This is why keeping cooked food warmed to the right temperature is critical for food safety.

Myth #9: Marinades are acidic, which kills bacteria—so it's OK to marinate foods on the counter.

Fact: Even in the presence of acidic marinade, bacteria can grow very rapidly at room temperatures. To marinate foods safely, it's important to marinate them in the refrigerator.

Myth #10: If I really want my produce to be safe, I should wash fruits and veggies with soap or detergent before I use them.

Fact: In fact, it's best not to use soaps or detergents on produce, since these products can linger on foods and are not safe for consumption. Using clean running water is actually the best way. The food supply in the United States is among the safest in the world. However, when certain disease-causing bacteria or pathogens contaminate food, they can cause foodborne illness, often called "food poisoning." The Federal government estimates that there are about 48 million cases of foodborne illness annually — the equivalent of sickening 1 in 6 Americans each year. And each year, these illnesses result in an estimated 128,000 hospitalizations and 3,000 deaths. Although everyone is susceptible, some people are at greater risk for developing foodborne illness.

Sanitizing Kitchen Sponges

Sponges can spread harmful bacterial "all over" your kitchen. To prevent your sponges from spreading germs you need to sanitize them.

The problem with sponges is that they don't dry out between uses and the moisture helps harmful bacteria multiply. A sponge can be cleaned and sanitized safely if you follow some guidelines. To clean and sanitize a sponge you can do one of three ways. You can use your microwave, dishwasher or a sanitizing solution.

To sanitize sponges in your microwave follow these simple rules:

- 1) First, sponges that have metallic scrub pads should not be disinfected/sanitized in the microwave, but can be placed in a dishwasher for cleaning and sanitizing.
- 2) Make sure the sponge is completely wet. Being wet is essential because otherwise the sponge could catch fire in the microwave.
- 3) Put the wet sponge in the microwave for one minute on high. One minute of microwaving is sufficient to kill bacteria.
- 4) Be careful when removing the sponge from the microwave, because it will be hot. You may want to set a timer for 10-15 minutes and then take the sponge out of the microwave when it has cooled.

Another way to clean and sanitize your sponges is to use your dishwasher, but once again there are some rules to follow:

- 1) Use the hottest and longest cycle on your dishwasher
- 2) Use the dry cycle

According to the United State Department of Agriculture (USDA) microwaving sponges kills 99.99999 percent of bacteria present on them, while dishwashing kills 99.9998 percent of bacteria.

A third way to sanitize your sponges:

- 1) Use a solution of one-quarter to one-half of a teaspoon of concentrated bleach (8.25 percent sodium hypochlorite) per quart of warm, not hot water.
- 2) Soak the sponge for one minute.

When you need to wipe up raw juices from meats, which can be particularly high in bacteria, instead of using your sponge or dishcloth, use clean paper towels and throw them away. Then sanitize your counters with the one-quarter to one-half teaspoon of concentrated chlorine bleach in one quart of water. Spray this solution on the counters and let dry or wipe it on with a clean cloth and let the counters air dry.

If you use dishcloths Michigan State University Extension recommends that you use a clean dishcloth each day. When dishcloths or sponges smell bad it is because of all the bacteria in them.

Keeping your dishcloth or sponge as clean as possible helps to keep your kitchen clean and in the long run, also helps to keep you and your family healthy.

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Safe & Healthy: Wash those kitchen towels!

Posted on September 9, 2014 by Barb Ingham
University of Wisconsin Extension

A new study suggests that if you are looking for contamination in your kitchen, you just might check those kitchen towels. A recent study published in the Journal of Food Protection Trends investigated the occurrence of bacteria in kitchen towels often used to dry dishes, hands, and other surfaces in the home kitchen. Several studies have documented the common occurrence of large populations of fecal bacteria in kitchen sponges and clothes used when washing dishes by hand, where the moist environment and collected food residues create an ideal environment for the growth of bacteria.

In the August study, a total of 82 kitchen hand towels were collected from households in 5 major cities in the United States and Canada and the numbers of total bacteria, fecal bacteria, and Escherichia coli (nonpathogenic, generic) in each towel were determined. Households that provided the towels answered a survey related to towel use and frequency of cleaning including: age of towel (in months), frequency of washing of towel in days per month, towel frequency of use, and the number of days since the towel was last washed. All kitchen towels collected in the 5 cities had at least 1,000 bacteria per towel and some had 1,000,000,000 per towel. The overall average across the 82 kitchen towels was 100,000,000 per towel. Fecal bacteria were detected in 89.0% of towels and E. coli in 25.6% of towels.

The results show that kitchen towels can be a source of bacteria that can cross-contaminate otherwise clean dishes, hands, and surfaces. Frequent cleaning is a must! The best choice for high-bacteria kitchen clean ups, such as wiping up after handling raw meat, fish, poultry or eggs, is to use a paper towel. If you don't use paper towels for clean-ups, here are some kitchen safety tips:

- If you use a kitchen towel, launder it after each meal.
- If you can't do laundry right away, remove the towel from the kitchen to a rack for drying, and then launder once you have enough for a load.

- Use hot-water machine washing followed by machine drying to help reduce the number of bacteria harboring in your towel.
- Keep one set of towels just for hand-drying in the kitchen, and another for drying dishes and counter-tops. Launder at the end of each day. Color-coding the towels, i.e. green ones for clean hands and red ones for kitchen surfaces, will help prevent cross contamination. And if you have young children, color-coding towels will make learning easier.
- Don't hand-dry dishes with a cloth towel. Allow dishes to drain in a drying rack, well separated to facilitate air movement.

Safe Minimum Internal Temperature Chart

Cook food to these minimum internal temperatures as measured with a food thermometer before removing food from the heat source. For reasons of personal preference, consumers may choose to cook food to higher temperatures.

Minimum Internal Temperature & Rest Time

Beef, Pork, Veal & Lamb

Steaks, chops, roasts - 145 °F - and allow to rest for at least 3 minutes

Ground meats - 160 °F

Ham, fresh or smoked (uncooked) - 145 ° - and allow to rest for at least 3 minutes

Fully Cooked Ham - Reheat cooked hams packaged in USDA-inspected plants - 140 °F

All other hams - 165 °F

All Poultry (breasts, whole bird, legs, thighs, and wings, ground poultry, and stuffing) - 165 °F

Eggs - 160 °F

Fish & Shellfish - 145 °F

Leftovers - 165 °F

Casseroles - 165 °F

Source: <http://www.fsis.usda.gov/>

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