## Investigating Your Health: Fearless Food Safety

## Name:

**Objective:** Investigate food safety by describing ways to prevent foodborne illness, describing the correct hand washing procedure, and tracking how many times you wash your hands in one day.

**Food safety** is handling, storing, and preparing food in ways to keep food safe. **Crosscontamination** is the spreading of bacteria to clean surfaces that can cause foodborne illness. To prevent cross-contamination, keep raw meat, fish, and poultry away from ready-to-eat foods, like fresh fruits and vegetables. Don't use a plate or knife that touched raw meat. Always wash your hands after you touch raw meat. Washing countertops and using clean dishes and silverware can also prevent cross-contamination. Washing your hands correctly, and before touching food, may also prevent bacteria from spreading to food. Cooking foods to their proper temperatures will prevent foodborne illness from occurring. Salmonella is the most common foodborne causing pathogen. It can be found in raw meat, fish, poultry, and eggs. E. coli is another pathogen that can be found in raw or undercooked meat, fish, and poultry. Both salmonella and E. coli are bacteria that can cause foodborne illness. **Foodborne illness** happens when you get sick from eating a food contaminated with a harmful substance. If food safety measures are not followed, you or the people you're cooking for could get sick. For more interesting food safety tips, see the *Try This at Home* recipe!



## Hand Washing Practices

1. During the course of one day, track how many times you washed your hands. Describe the circumstances for why you washed your hands each time in the table below.

Why did you wash your hands?			
1			
2			
3			
4			
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15			

2. Investigate and describe the correct way to wash your hands as recommended by the Food and Drug Administration (FDA). Be sure to explain the importance of soap/water, how long to wash your hands for, and how to turn off the faucet.)

Turn on the faucet so that the water is warm. Wet your hands with running water. Apply soap. Rub your hands together for 20 seconds or as long as it takes to sing "Happy Birthday to You" twice. Scrub under your fingernails and between your fingers. Rinse off all soap under running water. Use a clean paper towel to turn off the water. Dry your hands with another clean paper towel.

3. List 3 instances when you should wash your hands.

Before eating: After using the bathroom: After blowing your nose, coughing, or sneezing: After touching an animal: After touching garbage: Before and after treating a cut; Before, during, and after preparing food.

4. Investigate and describe below 2 other ways can you prevent foodborne illness.

There are many possible responses. A few common methods include: refrigerating or freezing meat, poultry, eggs, and other perishables as soon as you get them home from the store; not thawing meat on the counter, but rather in the refrigerator; separating raw meats from other foods in your grocery-shopping cart, grocery bags, and in your refrigerator; using different cutting boards for fresh fruits & vegetables and raw meats; and heating leftovers properly.

## **TEACHER EDITION**

5. Complete the table below to identify 3 ways foodborne illness can occur and what bacteria caused the illness. There are many possible responses. Common responses may include:

Situation	Cause	Bacteria
Example: Improper Storing	Raw meat was stored next to fresh vegetables in the refrigerator	E. Coli Salmonella
Cross-Contamination	Using the same fork to eat salad after it was used to whisk raw eggs	Salmonella
Improper Handling	Raw chicken was not cooked to the proper temperature	E. Coli Salmonella
Improper Storing	Raw meat was stored next to fresh vegetables in the refrigerator	E. Coli Salmonella

6. Ask a family member if they have had any bad experiences with mold, bacteria, or foodborne illness. Describe their experience below.

There are many possible responses.