#### Foodborne Illness Is Serious!

More and more, foodborne illness is in the news. According to The OODS Centers for Disease Control and Prevention, foodborne illnesses in the United States affect millions of people and cause thousands of deaths every year. An estimated 800,000 illnesses occur in children under the age of 10.

That's where Your Game Plan for Food Safety fits in. As part of The Partnership for Food Safety Education's nationwide Fight BAC!™ Campaign, this program is specially designed for use in fourth, fifth

and sixth grade classrooms just like yours.

## Teaching Food Safety Is Important . . .

The good news is that there are many things children and families can do to help ensure that their food is safe to eat — at home, at school and even when eating out. All they need is a basic awareness of proper food handling, cleanliness practices, and the importance of temperature in controlling/killing bacteria. And as a teacher, you play a big role in helping to "spread the word . . . not the germs!"

## ... and It's Easy!

Your Game Plan for Food Safety helps you teach food safety in a way that is both easy for you and exciting for your students. Using the inquiry approach to learning, the program inspires children to discover the science behind food safety as they experiment . . . investigate . . . and explore.

Let's Get Started!

We come to

#### **Outcomes:**

This experiment simulates how easy it can be to cross-contaminate food when storing and preparing it. Sponges and paint are used to show how bacteria can spread from raw meat, fish or poultry to cooked foods or vegetables. Remind students that bacteria on a cutting board can spread to other foods, too — like a bagel.

- Cooked meat, fish or poultry should never be placed back on the same (unwashed) plate that was used for the raw meat, fish or poultry.
- Every cutting board must be thoroughly washed between uses, in a dishwasher or with hot water\* and soap. This is especially important when the same cutting board has been used for raw meat, fish or poultry and is going to be used for vegetables that will be eaten raw.
- \*Hot water should be used with caution.

#### **Integrated Learning:**

#### Science learning:

- Use observation techniques.
- Use data collected to predict correct future

#### **Mathematics:**

Problem solving.

#### Language arts:

 Write expository essay stressing reasons it is important to separate food:

Paragraph 1 — write focus statement

Paragraph 2 — reason 1 with supporting details
Paragraph 3 — reason 2 with supporting details
Paragraph 4 — reason 3 with supporting details
Paragraph 5 — conclusion

#### Technology:

Use web site to research types of bacteria.



#### **QUESTION**

Is there a potential danger in using the same equipment to prepare raw meat and other foods?

## MY HYPOTHESIS:



Plastic ("non-porous") cutting boards are easiest to clean.

# SAFELY SEPARATE

#### **Materials Needed:**

- 2 clean sponges, cut in the shape of chicken legs
- Red or other brightly-colored poster paint
- Paint brush
- Cutting board
- Cucumber
- Clean, light-colored plate
- Serrated knife

#### **PROCEDURE**

- 1. Dampen both sponges. Set one sponge aside to represent the "cooked chicken."
- 2. Paint both sides of the other sponge to represent raw chicken. Pretend that the paint is the juice of the chicken that may have been contaminated with Salmonella!
- **3.** Place the painted sponge on the cutting board and use a knife to cut the sponge in half. Move the painted sponge onto the plate, and don't wash the cutting board.
- **4.** Next, cut a slice of raw cucumber on the same cutting board you used in Procedure #3.
- **5.** Now, place the clean sponge ("cooked chicken") that was cooked well-done on the plate with the "raw chicken" sponge.



- After #3, this is where I observed the paint (representing Salmonella) on —
  - the cutting board:
  - the knife:
  - my hands:
  - the plate:
- After #4, this is what happened to the cucumber slices:
- After #5, this is what happened to the "cooked chicken" sponge:
- Chart the path of "Salmonella" paint between each item.



- This is how I can get rid of the paint "bacteria" on —
  - the cutting board:
  - the knife:
  - my hands:
  - the plate:
- If I touch something else without washing my hands — or use the knife again this is what can happen:
- To kill the bacteria on the chicken, it is important to:
- If someone ate the raw cucumber, this is what could happen:
- This is what can happen when cooked chicken is placed on the same plate as raw chicken:



Remind your family members to wash all cutting boards and utensils between uses in the dishwasher or with hot water and soap.

Be sure to always rinse vegetables and fruit in cold water before eating or preparing them!