This book belongs to:



Activity Book for Level 2

Project Director: Judy A. Harrison, Ph.D.

The University of Georgia Cooperative Extension Service

Project Associates: Angela Fraser, Ph.D.

North Carolina State University Cooperative Extension Service

Melissa Mixon, Ph.D, R.D., L.D.

Mississippi State University Cooperative Extension Service

Bob Molleur

The University of Georgia

Advisors: Susan Conley

U.S. Department of Agriculture, Food Safety and Inspection Service

JoAnn Pittman

U.S. Food and Drug Administration

Collaborator: Jan Singleton, Ph.D.

National Program Leader - Food Science and Food Safety

U.S. Department of Agriculture,

Cooperative State Research, Education and Extension Service

Special thanks to: The Partnership for Food Safety Education

This material is based upon work supported by the Cooperative State Research, Education, and Extension Service, U.S. Department of Agriculture, under special project number 99-41560-0815.

FIGHT BAC!® is a registered trademark of The Partnership for Food Safety Education.



College of Agricultural and Environmental Sciences College of Family and Consumer Sciences

The University of Georgia and Ft. Valley State University, the U.S. Department of Agriculture and counties of the state cooperating. Cooperative Extension, the University of Georgia Colleges of Agricultural and Environmental Sciences and Family and Consumer Sciences, offers educational programs, assistance and materials to all people without regard to race, color, national origin, age, gender or disability.

An Equal Opportunity Employer/Affirmative Action Organization Committed to a Diverse Work Force.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, The University of Georgia College of Agricultural and Environmental Sciences and the U.S. Department of Agriculture cooperating.



Activity Book for Level 2

FIGHT BAC!® FOR SAFE FOOD WORD FIND

```
D
                E
                    В
                         L
                            M
                                N
                                     X
                                         L
        \mathbf{C}
                 I
                         L
                             \mathbf{O}
                                 G
                                     \mathbf{C}
                                             X
                                                  E
            Η
                     L
                                          A
                                                      L
    В
        O
            L
                M
                    G
                         \mathbf{C}
                             E
                                 D
                                          P
                                              S
Α
                                     A
                                                  Q
                                                      R
    \mathbf{C}
        L
            E
                N
                    E
                         В
                             G
                                 0
                                                  E
                                                      X
M
                                     M
                                         N
                                             W
    A
        D
            L
                \mathbf{C}
                     J
                         O
                             N
                                 C
                                     I
                                         L
                                             В
                                                 D
                                                      E
G
W
    A
        R
            G
                C
                     S
                        O
                             P
                                 R
                                     K
                                         L
                                             M
                                                 0
                                                      X
        C
            C
                     E
В
    A
                L
                         A
                            N
                                 O
                                     Η
                                         E
                                              L
                                                  Τ
                                                      A
        O
            X
                I
                     P
                         G
                             L
                                 A
                                     R
                                         M
                                                  S
    0
                                             N
                                                      O
                             Q
        T
            Η
                         P
                                 R
                                     \mathbf{C}
                                         L
G
    A
                O
                    A
                                                  E
                                                      N
        \mathbf{C}
                                              T
            T
                E
                    R
                         I
                             A
                                 W
                                     A
                                         \mathbf{O}
                                                  E
                                                      R
В
    A
        \mathbf{C}
                W
                                 R
                                          S
                                                      P
    В
            0
                    A
                         S
                             Η
                                     A
                    T
                         E
    Η
        E
            R
                O
                            M
                                 A
                                     Τ
                                         E
                                                  K
                                                      L
        T
                    E
                         R
                                     M
                                         E
                                              T
    0
            Τ
                Η
                            M
                                 0
                                                  E
                                                      R
                    Τ
                        O M O M E
    L
        E
            A N
                                              T
                                                 R
                                                      E
K
```

Find the underlined words in the puzzle above. Circle each one when you find it.

<u>Wash</u> your hands by rubbing them together using <u>soap</u> and warm running water. Always do this before you touch food.

Clean kitchen counters before you make food on them.

Rinse fuits and veggies before you eat them.

Chill foods like milk, eggs and meats by keeping them in the refrigerator.

Keep cold foods <u>cold</u>.

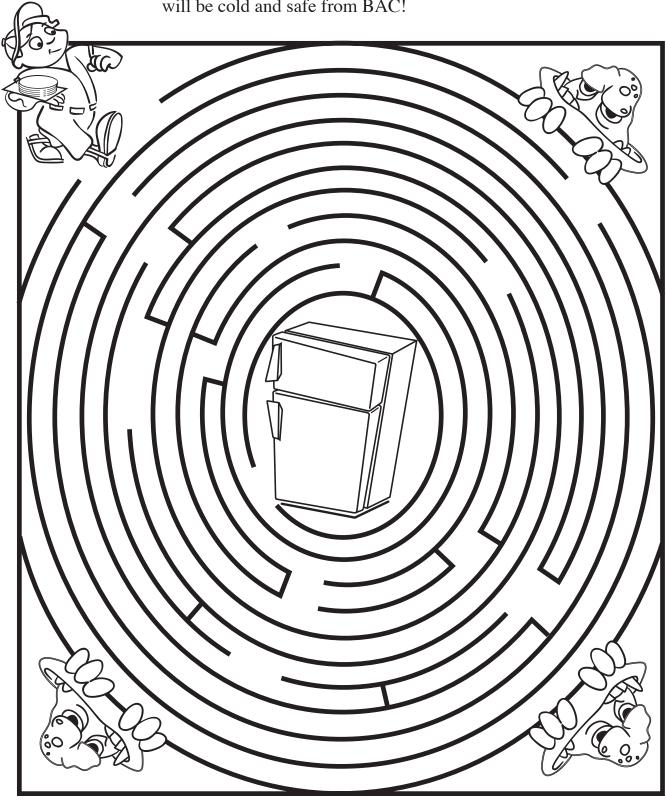
Separate raw meats from your other foods.

When you <u>cook</u> foods like meats, poultry and eggs, the heat can kill harmful <u>bacteria</u>.

To tell when your foods are safely cooked, use a food thermometer.

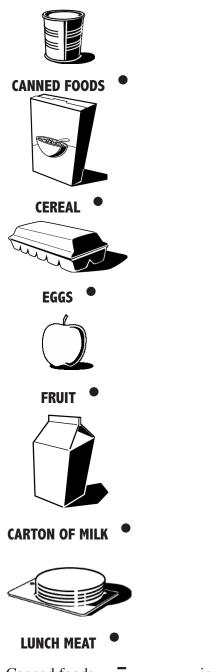
THE A-MAZE-ING REFRIGERATOR FIGHTS BAC!®

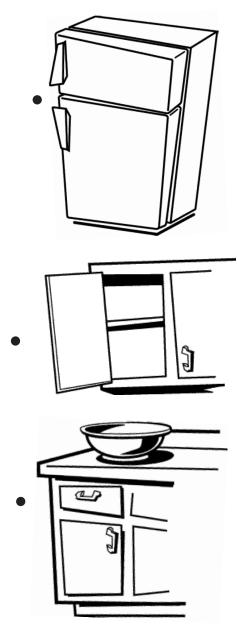
Help Raji get the lunch meat back into the refrigerator where it will be cold and safe from BAC!



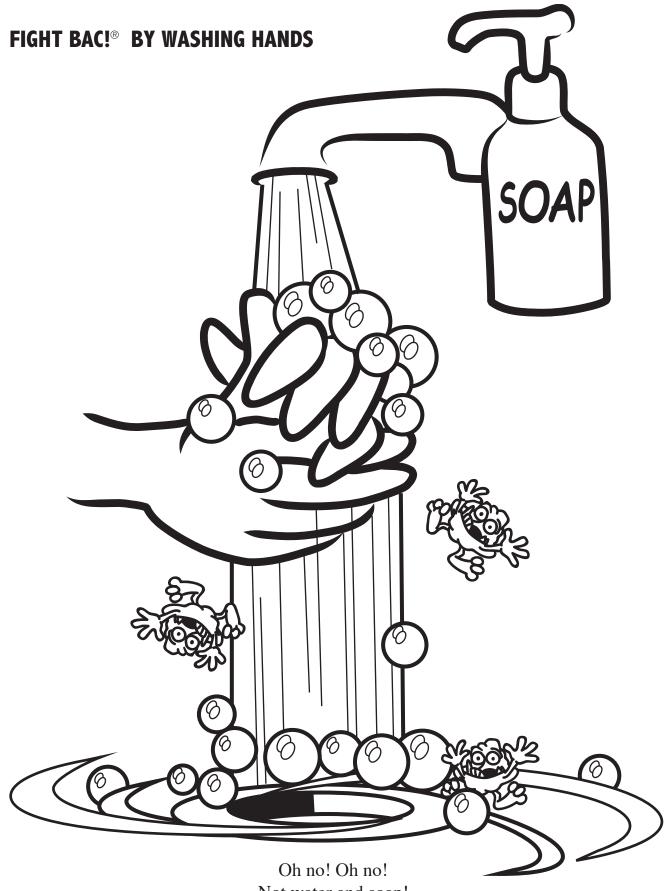
FIGHT BAC!® FOOD STORAGE MATCH AND MEASURE

Draw a straight line from the dot beside each food to the dot beside the place where you can safely store it to Fight BAC![®]. Use a ruler to measure the length of each of your lines in inches. Write the answers in the spaces below.

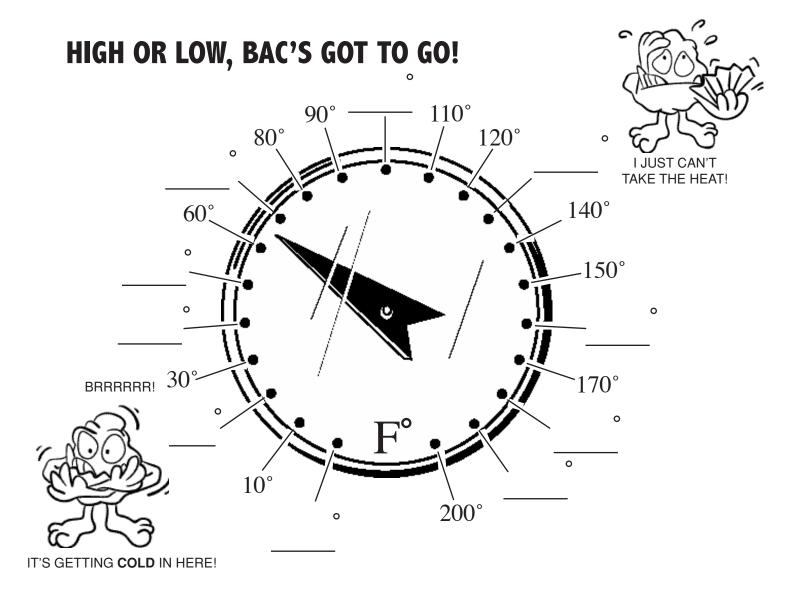




- 1. Canned foods = ____ inches
- 2. Eggs = _____ inches 5. Cereal
- 3. Whole fruit = _____ inches
- 4. Lunch meat = _____ inches
- 5. Cereal **=** _____ inches
- **=** _____ inches 6. Carton of milk **=** _____ inches



Not water and soap! When you use them, there's not much hope!



- 1. Fill in the missing numbers on the thermometer.
- 2. Use markers or crayons to decorate it.
- 3. Use your thermometer to answer the riddles below.
- Riddle 1: I'm the temperature used for storing foods in your freezer. BRRRRRR!

 What temperature am I?_____
- Riddle 2: I'm the temperature used to keep cold foods safe in your refrigerator. Brrr!

 What temperature am I? ______
- Riddle 3: I'm the temperature that makes hamburgers safe to eat. BAC can't take the heat.

 What temperature am I? ______



Clean, Separate, Cook and Chill!

If you don't do this, BAC can make you ill.

So Clean, Separate, Cook and Chill!

IT ALL ADDS UP TO SAFE FOOD

Write the answer in the blank.

1.
$$15 + 15 =$$
 ____ E

6.
$$19 + 25 =$$
 ____ A

8.
$$21 + 17 = M$$

9.
$$17 + 28 =$$
 W

Look at the blanks below. Each blank has one of the answers to the addition and subtraction facts you just worked. Find the letters above that go with each answer. Write the letters in the blanks to answer the riddle.

Example:
$$1. 15 + 15 = 30$$

Find all the blanks that have 30 listed below them and write the letter "E" in the blank.

What should you do to keep food safe from BAC?

The Science of Fighting BAC!®

A look at measuring temperature

Materials needed for this experiment:

large plastic bowl crushed ice cold water hot water

2 large styrofoam cups food thermometer

pencil paper

clock with a second hand for measuring time

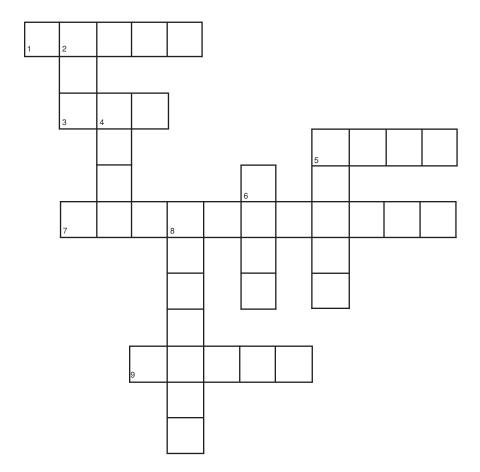
Methods used to do this experiment:

- 1. Get your pencil and paper ready. At the top of your paper, write your name and the title of this experiment. Draw a line down the center of your page to divide it into two columns. Label one column QUICK CHILLING, and label the other column ROOM TEMPERATURE.
- 2. Fill the large plastic bowl half full with equal amounts of cold water and crushed ice.
- 4. Raise your hand. Your teacher will give you two large styrofoam cups of hot water.
- 5. Set one cup of hot water on your table. Set the other cup in your ice-water bath.
- 6. Measure the temperature of the hot water in each cup by placing the food thermometer in the water. Wait 15 seconds before taking a reading. Under each column heading, write down the time of the measurement and the temperature of the water in the cup.
- 7. Wait 2 minutes. Measure the temperature of the water in each cup again. Record the time and temperatures. Repeat this step until your teacher says to stop.

Answer these questions on your paper:

- 1. Which cup of water cooled down more quickly?
- 2. What could you have done to the one that cooled more quickly to make it cool even faster?
- 3. If you helped a grown-up cook a big pot of chili to serve the next day at a festival, how would you tell them to cool it quickly? How should they store it to keep it safe?

FIGHT BAC!® FOOD SAFETY CROSSWORD



ACROSS

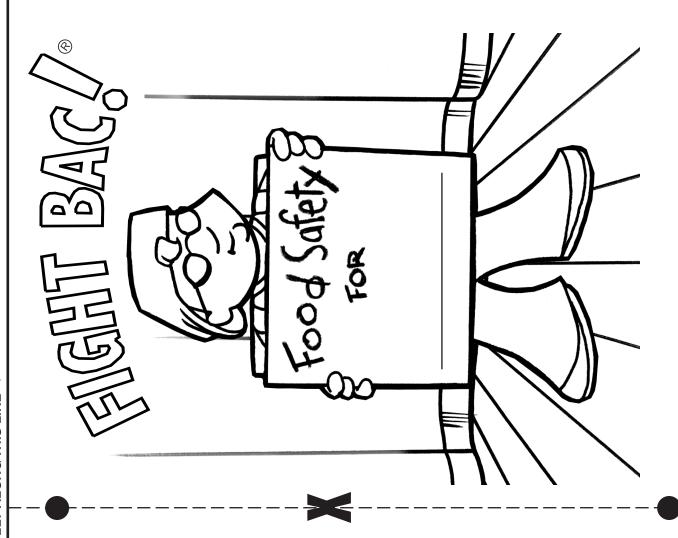
- 1. Do this quickly to get foods to 40 degrees Fahrenheit or below.
- 3. Never leave foods like lunch meat sandwiches, milk, soups or other cooked foods at room temperature for more than ___ hours.
- 5. To _____ food safely, make sure that the food reaches the proper temperature to get rid of BAC!
- 7. To make sure that foods like hamburgers get safely cooked, use one of these.
- 9. Do this to help remove soil and BAC! that could be on fruits and vegetables.

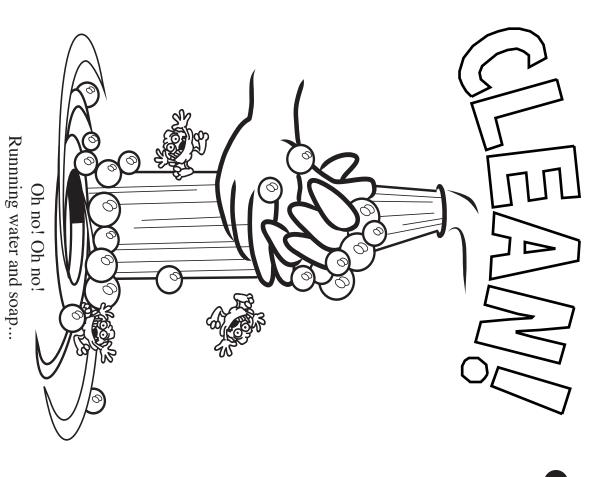
DOWN

- 2. Use a special container made to keep hot foods ____, above 140 degrees Fahrenheit, if you take them to school in your lunch.
- 4. Do this to hands after using the bathroom, after touching pets and before touching food.
- 5. Something you should do to kitchen counters before you make food on them.
- 6. Keep cold foods like lunch meats _____, at or below 40 degrees Fahrenheit in your refrigerator.
- 8. The best way to wash your hands is with soap and warm _____ water while rubbing them together.

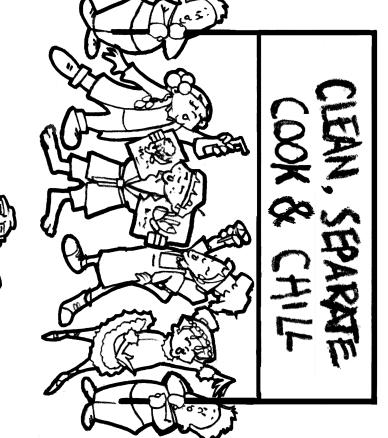
Make your own Fight BACI® book!

- 1. Write your name on the sign worn by the boy in the picture.
- 2. Carefully cut out this page and the next two pages along the black line.
- 3. Punch holes in each page at the black circles.
- 4. Put string or yarn through the holes to hold the pages together. Tie the string at the X.
- 5. Fold your book at the dotted line so that your name is on the front.





FIGHT BACO



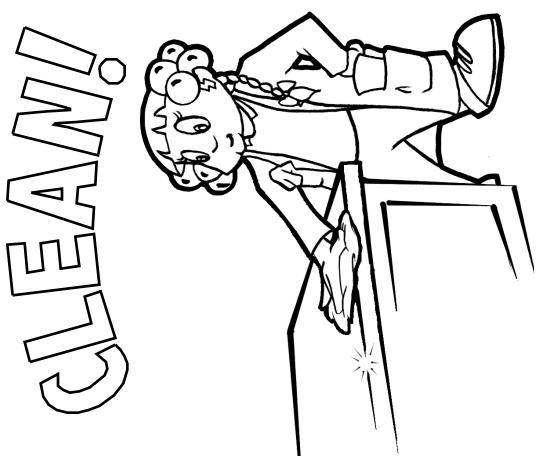
Clean! Separate! Cook! And Chill!...
So BAC Won't Be Able to Make You III!

When you use these... I don't have much hope!

Put cold foods and leftovers away as soon as you can.

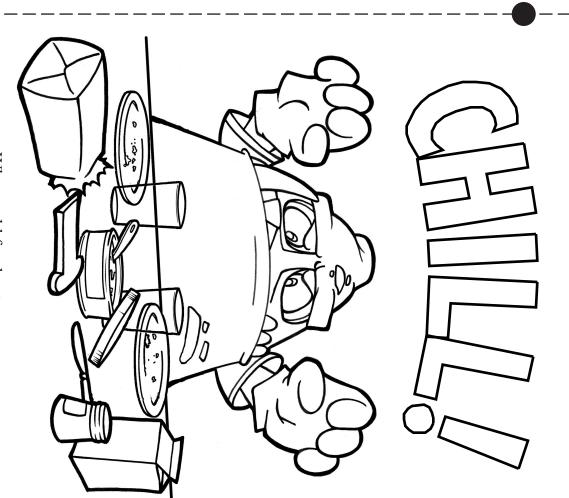
BAC hates the cold!

BRRRR!!!



Wash counters and tables before you put food on them and when you finish.

Rinse your fruits and veggies, too!



When cold food gets warm...
I wake from my nap...
I can grow in your food and give you a
ZAP!

7

Cook foods to a safe internal temperature.

Beef, Lamb, Veal and Pork Steaks, Roasts and Chops: 145°F* Ground Beef, Pork, Veal and Lamb; Egg Dishes: 160°F

Chicken and Turkey

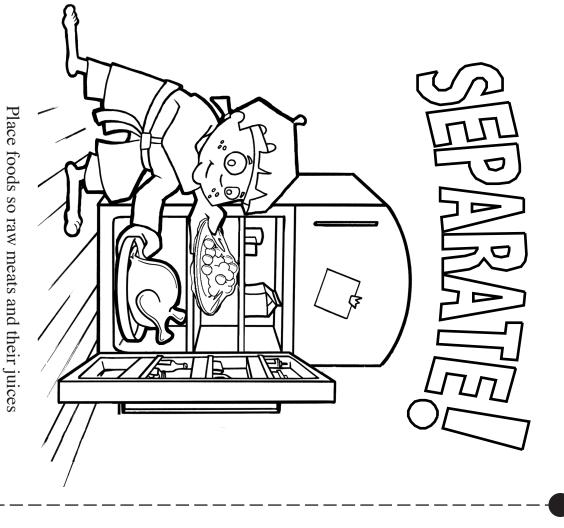
Leftovers and Casseroles: 165°F (Whole, Pieces, Ground): 165°F

*allow meat to rest for 3 minutes before carving or serving

I gotta go! I can't take the heat!!! When the temperature is high... Oh no! Oh no! Say it isn't so...



Also keep raw meats away from foods that have already ന that you can safely eat raw like apples or lettuce. Keep raw meats away from foods been cooked. HI-YAHHHHH!



Make sure grown-ups use a food thermometer to know when foods are safely cooked!

4

stay away from other foods.

НІ-ҮАНННННІ!

