

How to Host a Food Safety Education Camp

Food Safe Families

The Food Safety Education Camp is an interactive learning experience that has become USDA's primary outreach mechanism for teaching elementary school-aged children about the science of food safety. The Camp demonstrates the four basic food safety practices -- Clean, Separate, Cook and Chill -- from the Food Safe Families campaign as being good preventive health behaviors. Use any or all of the lessons below to focus on one or all four behaviors for a classroom, community health fair or retail food safety event. The Camp lessons can be adapted to fit your food safety needs.

Station 1 – Clean

Hand Washing

Teaching the value of hand washing is one of the most important things you can do to prevent the spread of foodborne illness. Participants should sprinkle Glo Germ powder or a similar material to simulate the presence of bacteria on their hands and then place their hands under an ultra violet light to illuminate the "germs." Participants wash their hands again with warm water and soap for 20 seconds (or they can sing the Happy Birthday song twice) and then dry them with paper towels. They place their hands under the light again to see how well they washed their hands. Any "germs" left on their hands will glow under the light. Remind students it's important to wash hands before and after preparing food, after using the restroom and after playing with pets.

*Note – In the absence of Glo Germ and an ultra violet light, this activity can be used with oil and cinnamon. Place a few drops of oil on the hands. Rub hands together to distribute the oil evenly. Sprinkle cinnamon lightly over the oiled hands. Glitter can also be used as a substitute for cinnamon.

Supplies:

Glo Germ powder OR oil and cinnamon or glitter

Ultra violet light

Soap

Water

Paper towels

Sink (if available)

For more resources:

www.scrubclub.org

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Station 2 – Separate

Cutting Boards

Participants will learn how to avoid cross-contamination by preventing raw meat, poultry, or seafood juices that contain harmful bacteria from contaminating cooked or ready-to-eat foods and fresh produce. Set out different color cutting boards and place fresh fruit or vegetables on one cutting board and raw meat or poultry that is tightly covered or in a sealed bag on the other cutting board. If raw juices are visible in the tightly covered or sealed package, hold it up as a visual demonstration. Discuss how these juices could make the students sick if the juices come in contact with the raw or cooked food on the other cutting board. Emphasize the importance of hand washing after handling raw meat, poultry, or fish. Be sure to mention that different utensils must be used for raw and cooked or ready-to-eat foods. Discuss this as another example of potential cross-contamination.

Supplies

2 different colored cutting boards

Several pieces of fruit and vegetables

Package of sealed or tightly covered raw meat or poultry

*Fake food is optional

Two different serving spoons, spatulas or tongs

Station 3 – Cook

Microwave Safety

Participants will learn why it's important to follow package cooking instructions and use a food thermometer when preparing microwavable foods and snacks. Pre-prepared microwavable foods need to be properly cooked to prevent food poisoning (or foodborne illness). Some convenience foods are **not** ready-to-eat products. Reading the product label and following the cooking instructions tells you how to safely cook the product. Be sure to follow all package instructions for microwaving food, such as covering or stirring the food and allowing a "stand time". (Stand time is the time between removal of the food from the heat source and consumption. The food continues to cook during this time). These steps ensure the food is cooked evenly. And always use a food thermometer to ensure the food has reached the safe internal temperature. Skipping these key cooking directions may allow harmful bacteria to survive and lead to food poisoning.

Some examples of common after school snacks that would be heated in the microwave (e.g., chicken nuggets, pizza bagels, hot pockets.) Discuss the package cooking instructions and then cook the food accordingly. If you don't know the wattage of your oven, try looking on the inside of the oven's door, on the serial number plate on the back of the oven, or in the owner's manual or contact the manufacturer. Use a food thermometer to check the internal temperature and ask the class why it's important. A food

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thermometer should be placed in the thickest part of the food and make sure it's not touching bone, fat or gristle. Place the thermometer in the center or thickest portion of the food. Rotate and stir the food to avoid cold spots and to ensure the food is cooked thoroughly and safely. When using the microwave oven to reheat food, cover food to hold in moisture and promote safe, even heating. Reheat leftovers to at least 165 °F or steaming hot.

Supplies

Microwave

Microwave safe plate

Several boxes of microwavable food (chicken nuggets, bagel bites, etc)

Food thermometer

Spoon or spatula

For more resources:

http://www.fsis.usda.gov/Fact_Sheets/Microwave_Ovens_and_Food_Safety/index.asp

http://www.fsis.usda.gov/Fact_Sheets/Kitchen_Thermometers/index.asp

Station 4 – Chill

Packing Safe Lunches

Participants will learn about the importance of cold storage, how to properly store foods in a refrigerator or cooler, and the need to keep hot food hot and cold food cold. Use the sealed package of meat or poultry from Station 2 and place it on a plate. Tell students it should go on a plate so that raw juices do not drip onto other foods. Demonstrate with blue gels or other cold sources how to safely pack a lunch or cooler. Use multiple cold sources to keep perishable food safe at 40°F or below. Ask students why it's important to keep potato salad cold? Is it okay to eat if it hasn't been kept cold? Explain that bacteria can grow quickly in warm temperatures, which can make you sick if you eat food that isn't kept cold. Bacteria on food can double in number in as little as 20 minutes if food is not kept at a safe temperature. Refrigerators should be kept at 40°F or below. Show participants when it reads 40°F. An appliance thermometer should be kept in the refrigerator (40°F) or below and one should be kept in the freezer at 0°F or below. An appliance thermometer can also be kept in a cooler.

Harmful bacteria multiply rapidly in the "Danger Zone" — the temperatures between 40 and 140 °F. So, perishable food transported without a cold source won't stay safe long. Insulated, soft-sided lunch boxes or bags are best for keeping food cold, but metal or plastic lunch boxes and paper bags can also be used. If using paper lunch bags, create layers by double bagging to help insulate the food. A cold source, such as a frozen gel pack or re-usable ice pack should be packed with perishable food in any type of lunch bag or box and placed on top of the food.

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Supplies

Bag of ice
Blue gels or cold packs
Appliance thermometer
Sealed package of meat or poultry (from Station 2)

Station 5 – Danger Zone

Bacteria on food can double in number in as little as 20 minutes if these foods are not kept at safe temperatures. Bacteria grow and multiply in the so-called Danger Zone. The Danger Zone is the range of temperatures between 40 °F - 140 °F. Never leave food out of refrigeration over 2 hours. If the temperature is above 90 °F, food should **not** be left out more than 1 hour. Use Petri dishes and lentil beans representing (bacteria) to simulate a 20 minute elapse of time between each of the Petri dishes that show how the bacteria (lentils) double.

Exercise - Begin with 4 lentil beans in the first dish, the second dish should have 8 beans after the first 20 minutes. The third dish should have 16 beans after 20 more minutes. The fourth dish should have 32 beans, etc

Supplies

3 Petri dishes
1 bag of lentil beans

For more resources:

http://www.fsis.usda.gov/Fact_Sheets/Danger_Zone/index.asp

Station 6 - Ask Karen

Neither rain, sleet, nor snow will stop “Karen” from answering your food safety questions. “Karen,” a virtual computer based USDA employee is on the job 24/7 and available in English and Spanish. Interact with Karen by asking her food safety questions. Using a laptop, go to askkaren.gov and type in a food safety question. Or use an iOS or android powered device to go to m.askkaren.gov and type in a food safety question. Let participants ask questions and discuss what they think the answer might be and why. Type in the question and then discuss how “Karen” answered it. Ask participants how this resource could be important around dinner time or when mom is fixing a big holiday meal.

Other resources:

www.askkaren.gov

Station 7– Food Safety Games

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Reinforce the 4 key steps of food safety with the BAC Catcher game and other food safety games and quizzes to reinforce the 4 messages. Downloads are available through the Partnership for Food Safety Education, USDA and FDA.

Supplies:

Food Safety Word Match

<http://www.fda.gov/Food/ResourcesForYou/Consumers/KidsTeens/ucm251726.htm>

Food Detective (online only)

<http://www.fooddetectives.com/>

Food Safety Bean Bag Toss Game

<http://www.fightbac.org/education-a-outreach/kids-pages/241-bean-bag-toss-game>

Fight BAC Kid's Page

<http://www.fightbac.org/education-a-outreach/kids-pages>

Food Safety Quiz

http://foodsafety.adcouncil.org/assets/5/FoodSafety_Quiz.pdf

Food Safety Activity Book

http://foodsafety.adcouncil.org/assets/5/FoodSafety_ActivityBook.pdf