FACS: Sanitation & Food - Support Services (HST)

Summary
Students will understand the importance of practicing sanitation and proper food handling to promote health and wellness. Through demonstration, students will learn the importance of handwashing in breaking the cycle of infection.

Main Core Tie
FACS 6th Grade
Strand 1

Time Frame
1 class periods of 45 minutes each

Group Size
Large Groups

Materials
1. Option I - A white ball or a similar object about the size of a tennis ball, that can be thrown or passed around the room and a sealable plastic bag.
2. Option II - A cutting board, food items, (such as chicken, an apple) a knife, and soap
3. GloGerm powder (www.glogerm.com)
4. A black light
5. An information sheet or a video on food safety
6. A guest speaker relating to food and sanitation such as a county health inspector, a USDA inspector, or a restaurant owner or manager.

Background for Teachers

Intended Learning Outcomes
- Identify potential hazards that exist in health care and demonstrate prevention of injury or illness through safe work practices.
- Practice the proper handwashing technique and explain its importance in preventing the spread of disease.
- Explain safe food-handling procedures and government agencies responsible for making sure restaurants and other food handling companies comply with those practices.

Instructional Procedures

PROPER HAND WASHING and CROSS CONTAMINATION
Option I -- Obtain a white ball or an object about the size of a tennis ball and place it in a sealable plastic bag containing some GloGerm powder. Shake the ball to coat it with the powder. The students will probably notice the powder. The teacher may or may not decide to comment on the powder. The students could be told that there is a powder on the ball but it is harmless and will help in a later part of the lesson.
Continue to ask questions. But this time, toss the ball to the person who will be answering, or have the students pass the ball around so everyone gets a chance to touch it. Some questions might have many answers, so several students could respond differently to the same question.
Pass the ball around some more to make sure all students have had a chance to get some GloGerm on their hands. Ask for student responses to the following questions:
** What are some things you know you are supposed to do (or not do) to keep food safe to eat?

(Accept all answers and guide students to respond with ideas like keeping cold foods cold, using food before expiration dates, not thawing meat at room temperature, wiping down counters, washing hands before preparing foods, promptly taking care of leftovers, etc.)

If the students do not volunteer the answer, washing hands before preparing food, be sure to mention it as a lead in to the next part of the lesson. Continue the lesson by telling the students that the powder on the ball represents cross contamination -- which means that whenever they touch a surface contaminated with germs, bacteria, or whatever, their hands become contaminated also. Tell them that the powder on their hands will show up under a black light. Demonstrate this by going around the room with the black light.

Have several students wash their hands like they normally would. Use the black light to see if they did a good job. Ask the class if anyone has ever taught them the correct way to wash their hands. Demonstrate the correct method of hand washing, then have the students wash their hands. If desired, go around the room again with the black light to see the results.

Ask questions like:
** What do you suppose a food inspector is?
** Between the time produce (fresh fruits and vegetables) is ready for harvest in the field and eaten by you at home, name as many people as you can who might touch or handle it in some way.
** If food is eaten in a restaurant, what additional people may have touched or handled it?
** What kinds of diseases can people get from eating spoiled or contaminated food?

Option II -- A teacher or student demo: Rub some GloGerm powder on your hands. The teacher may or may not decide to comment on the powder. You can explain that the GloGerm enables you to see germs under the black light which will be used later in the demo. Wash your hands under running water (without soap or rubbing much). Pick up and handle a food item (i.e. raw chicken), placing it on a cutting board and cutting it up. Wash your hands again under water and then the cutting board and knife (without soap or rubbing much). Cut another raw food item (i.e. an apple) on the cutting board. Turn on the black light and show how the GloGerm powder has spread from the hands to the chicken, cutting board, knife, and then the apple. Talk about what would happen if the apple is then eaten. This is called cross contamination and is how germs can easily be spread. Proper hand washing and washing of food equipment/utensils with soap and hot water for 20 seconds and the proper washing of kitchen equipment/utensils using hot water, soap, and scrubbing is critical in preventing cross contamination. Place hands, food and equipment items under the black light to see the difference. (The same discussion can occur during the demonstration as in Option I) Students can each put GloGerm on their hands, wash their hands, and check under the black light to see how effectively they washed their hands.

Help students understand that all food sold commercially in the United States must pass inspection by one of two government agencies - United States Department of Agriculture (USDA) and the Food and Drug Administration (FDA). These agencies employ thousands of people who inspect food, train food workers, and concern themselves with the safety of the food supply in the United States. Once the food is purchased for home consumption, however, no federal inspector comes into the home to make sure you continue safe food-handling procedures.

It may be wise to reassure the students that their bodies have defenses against disease and not to become paranoid about touching things like doorknobs, desktops, each other, etc. The best advice is to be cautious and wash hands frequently -- especially:
- Around sick people
- Whenever preparing or eating food
- After using the bathroom
• After changing diapers
• After handling money
• After sneezing, coughing, or blowing one’s nose
• After playing with or petting animals

FOOD-BORNE ILLNESSES
After using the "Disease Detective" have the students discuss how to keep foods safe.
Follow up the activity with the Operation Risk Student Activity Guide Sheet.

Extensions
Have students discuss communicable diseases as it relates to their health and well-being. Stress the
importance of maintaining good health and wellness by utilizing appropriate precautions.
Students can explore various therapeutic, diagnostic, biotechnology research and development, and
support services health care careers that directly work with communicable diseases.

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