Topic 4: Food Safety: Assignments and Activities

Assignments and Activities Title: Causes and Prevention of Foodborne Illness

Learning Outcome 1: Identify the causes of foodborne illness.

Learning Outcome 2: Describe strategies to keep food safe during purchasing, storing, preparing, and serving meals

Standards:

NAEYC Early Childhood Program Standards
- Standard 5.B: Ensuring Children's Nutritional Well-being

Head Start Performance Standards
- Standard 1304.23(e) Food Safety and Sanitation

Pearson Education gratefully acknowledges the National Association for the Education of Young Children for the use of their standards. For more information, please visit http://www.naeyc.org/positionstatements/ppp.

Pearson Education gratefully acknowledges Head Start for the use of their standards.

Assignment Introduction Text: Each year in the United States, more than 70 million cases of foodborne illness occur, resulting in 5,000 deaths. This video examines foodborne bacteria including how they are spread. As you watch the video, pay close attention to how the bacteria are spread from surface to surface.

Video Asset: E-coli
http://media.pearsoncmg.com/bc/bc_0media_hk/abcvideos/index.htm?e_coli_at_home

Question 1 Text: It is helpful to examine statistics to determine how serious a problem that contaminated food is in the United States. It is also helpful to think about the source of the contamination. What percentage of food is contaminated when it is purchased? What percentage of foodborne illness comes from home cooking?

Question 1 Hint: Pay special attention to the study by Bart Weimer described in the video. Especially note the percentage of food contaminated when it comes from the grocery store and the percentage of food contaminated through home cooking.

Question 1 Feedback: At least 25 percent of the food that you bring into your home contains disease-causing bacteria. A study by Bart Weimer found that 20 percent of the chicken contained salmonella, 40 percent of the fish contained listeria, and 16 percent of the ground beef contained e-coli. Half of the foodborne illnesses that occur each year in the United States are due to home cooking.
**Question 2 Text:** What are strategies to keep children safe from foodborne illness?

**Question 2 Hint:** As you watch the video, pay attention to both the tips that the researchers give you and to the mistakes that the families make.

**Questions 2 Feedback:** Strategies to keep children safe from foodborne illness include these:

- Make sure that cooking utensils that become contaminated are washed before they are used. For example, if a child plays with or mouths a utensil or a utensil is dropped on the floor, it should be washed.
- Make sure that all surfaces and cooking utensils are properly cleaned before using them again.
- Do not place raw meat on a plate and then reuse it for the cooked meat or buns.
- Make sure that meat is stored on a bottom shelf in the refrigerator.
- Ensure that everyone handling food has washed his or her hands for 20 seconds or more with running water and soap.
- Beware of using a towel for wiping your hands and then using it to wipe other surfaces.
- Make sure that all meats are cooked to the proper temperature.

**Question 3 Text:** You are working in a child care setting. What systems would you put in place to prevent e-coli and other foodborne pathogens from causing illness in your center?

**Question 3 Hint:** Look at the list you developed for Question 2. Think about what policies and regulations you would have in your program to prevent foodborne illness. Also consult your textbook.

**Questions 3 Feedback:** There could be a variety of answers. These could include implementing the Hazard Analysis Critical Control Point (HACCP) such as:

- Identifying potentially hazardous foods.
- Determining critical points where those handling foods can control or reduce the risk of food hazards.
- Knowing critical limits that assist in keeping food safe such as the appropriate temperatures for holding hot or cold foods.
- Developing a monitoring system.
- Developing a corrective action plan if a hazard is identified.
- Verifying procedures.
- Keeping records.

Students might also stress that the program should make sure that all of those who handle food receive training and that periodic checks be conducted on food purchasing, handling, storage, and serving. Using paper towels might also be a suggestion.

**Question 4 Text:** A new coteacher is hired in your classroom. She doesn’t see why she should have to take food safety training. She states, “After all, it’s not like I’m buying or cooking the food. All I do is put the cooked foods into serving bowls so that the children can serve
themselves.” What are the points that you make to your coworker about why food safety training is important?

**Question 4 Hint:** You might explain to the teacher the seriousness of foodborne illness. For example, you might recite the statistic on listeria that is quoted in the video. Think about the critical points where there may be food hazards. Also think about times other than established mealtimes when you might be using foods.

**Question 4 Feedback:** Explain to the teacher that foodborne illness is very serious, resulting in 76 million people getting sick each year and many deaths. For example, 95 percent of people who get listeria need to be hospitalized and 12 percent of those people die. Explain that foodborne illness can occur in any setting including in early childhood programs. Food can become contaminated at many points including while it is being served. For example, bacteria that cause foodborne illness can grow if food is left too long in serving bowls or if it is not kept at the correct temperature. It is also important to be aware of food safety because food might be brought into the classroom for cooking projects or be brought in by parents. The teacher would be the person responsible for determining the safety of this food.
Assignments and Activities Title: Food Safety Standards

Learning Outcome 3: Discuss food safety standards and their impact on food service in early childhood settings.

Standards:

NAEYC Early Childhood Program Standards
- Standard 5.B: Ensuring Children's Nutritional Well-being

Head Start Performance Standards
- Standard 1304.23(e) Food Safety and Sanitation

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Assignment Introduction Text: National, state, and local food safety standards help us to be aware of food safety criteria to reduce foodborne illness. The Caring for Our Children: National Health and Safety Standards is an example that includes many food safety standards. These include standards addressing the purchase of safe foods. An example is buying pasteurized milk or juice rather than fresh or unpasteurized products. The standards also state how to store food properly. For example, the standards state that meat needs to be stored below food that is cooked or ready to eat. The standards also state that food needs to be cooked to the proper temperature and the correct temperature needs to be maintained while serving it. The standards discuss the avoidance of contamination and cross-contamination by ensuring that mops are sanitized before and after use. They also stress the need to sanitize kitchen tools, serving and eating dishes, and countertops and tables. Because sponges often harbor germs and are difficult to clean, the standards recommend not using them in an early childhood facility. Instead, cleaning should be done with a disposable towel or a rag that is cleaned after each use. The standards stress that hands should be washed with soap and running water before eating or handling food. This includes washing under jewelry.

Asset: Food safety scenario

http://media.pearsoncmg.com/ab/ab_ab_mypedicationlab_1/casestudies/Food_Safety_Case_Study.pdf

Question 1 Text: What are practices that Haley used that help to ensure food safety?

Question 1 Hint: Review the introduction.
**Questions 1 Feedback:** Haley helps to avoid contamination and cross-contamination by washing her hands, wearing an apron, removing her jewelry, sanitizing the table and counters, and providing additional serving spoons and eating utensils in case any are dropped on the floor or mouthed by a child. Children also wash their hands.

**Question 2 Text:** What are violations of food safety standards that could cause risks to the children?

**Question 2 Hint:** In some cases there may not be enough information to determine whether a practice is safe. If there is a possibility that it could be a hazard, list it in this section.

**Questions 2 Feedback:** Because the milk is purchased from the local farmer, it may not be pasteurized, which is a potential safety risk. Haley dried her hand on the apron. This may have contaminated her clean hands. We do not know if the sausage was cooked to the proper temperature. If it was not, it could increase the chance of food poisoning. The food should have been kept at the proper temperature before it was served. Letting the food cool, particularly the sausage, and then reheating it increased the food safety risk. The standards recommend not using a sponge because it is difficult to clean and often harbors germs. In addition, wiping the floor and then the table with the same cleaning item could cause germs on the floor to be transferred to the tabletop.

**Question 3 Text:** What are ways to increase Haley’s adherence to food safety standards?

**Question 3 Hint:** Think about ways that Haley could learn about the standards. Also think about ways she could ensure that she is following the standards.

**Question 3 Feedback:** There are many possible answers to this question.

- Haley could gain additional information about food safety by attending workshops and reading articles.
- She could have others monitor her to make sure she is following the standards.
- Haley could encourage the program to establish specific program policies and procedures that will help to ensure food safety. For example, the program could determine safe sources for purchasing food. If the bus is going to be late, the bus driver could call Haley so that she not prepare the food too far in advance.
Assignments and Activities Title: Food Safety Activities for Children

Learning Outcome 4: Design developmentally appropriate activities to educate young children about food safety

Standards:
- NAEYC Early Childhood Program Standards
- Head Start Performance Standards
  - Standard 1304.21(c): Child Development And Education Approach For Preschoolers

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Assignment Introduction Text: Each year in the United States, more than 70 million cases of foodborne illness occur, resulting in 5,000 deaths. It is important that children learn about food safety as one way to prevent foodborne illness. For this assignment, you will be examining a food safety booklet designed for children. As you examine it, think about the important points in the book and how you could help children learn and understand these points using hands-on activities.

Asset: Food safety booklet


Courtesy of the United States Department of Agriculture,

Question 1 Text: Assume that you teach at McCormick Elementary School, a school serving K-third-grade children. You have a schoolwide program on food safety that is based on the information in the food safety activity book. What are the four simple steps that you want the children to understand by the time they complete the food safety program in third grade? What are at least two reasons that it is important for children to learn this information?

Question 1 Hint: Examine the first few pages of the activity book to find the four steps. In answering the second question, think about children’s immediate and long-term safety and the dangers in not being aware of food safety.
**Question 1 Feedback:** The four steps are clean, separate, cook, and chill. Each year thousands of people in the United States get sick from foodborne illnesses. There are also many deaths. Children can learn to protect themselves from some of these illnesses when they have been taught food safety skills. For example, even at a young age, children can learn to wash their hands. Children are also learning life-long skills.

**Question 2 Text:** As the first-grade teacher, you are responsible for the first segment of the food safety program, clean. Examine the activity book for this area. You will see eight points that are important for children to learn. What are four hands-on activities you can use to teach the children these important points?

**Question 2 Hint:** Be creative. Think about the many ways children learn such as through art, music, role-playing, listening to stories, and playing games.

**Questions 2 Feedback:** There will be a variety of answers. Appropriate answers will stress hands-on learning and be developmentally appropriate for the age group. For example, the teacher could tell a flannel board or puppet story and the children could identify each time the character does something that relates to one of the important points. Children could develop a skit or create a book for the kindergarten children on these points. The teacher could create a game in which children sort picture cards into categories (clean and not clean). The teacher could have children wash their hands with a special soap such as glogerm and then use a black light to examine how well they washed their hands.