# Handwashing and Sanitation

## Summary

The students will experience and visualize first hand the importance of proper handwashing through a handwashing experiment with different temperatures of water and with a different length of time to wash. Proper handwashing and preparing foods by applying sanitation rules and guidelines will help to prevent food-borne illness and contamination.

#### Main Core Tie

**Dietetics and Nutrition 1** 

Strand 1 Standard 2

#### Time Frame

1 class periods of 90 minutes each

### **Group Size**

**Small Groups** 

#### Materials

Introduction: Prepare an 8 foot by one-inch strip of paper taped together to be used as an introduction to Sanitation.

Handwashing activity:

cooking oil

cinnamon

hand soap

fingernail brush

clean paper towels

timer

sink

Food Borne Illness Activity: 1 cup each of the following items, doubled bagged in a Ziplock freezer bag and labeled as "1", "2", "3", etc.

abrasive (sink) cleanser, baby powder, laundry detergent, cream of tartar, dry carpet cleaner, granulated sugar, all-purpose flour, baking powder, plant food, powdered sugar, salt and cake flour. Video:

Clean Up Your Act, from Learning Seed, 20 minutes (Not available in current video catalog) Handouts:

"Fact Sheets" from Utah Department of Health on Food-borne illnesses - Giardia, Campylobacter, Handwashing, Hepatitis A, Salmonella, and Shigella.

Student Worksheet for Food Borne Illness Activity

## **Background for Teachers**

The teacher needs to research current information on Food-borne illness and encourage proper handwashing as a preventive measure as you can't always see, smell or feel the bacteria that may cause food-borne illness as illustrated in the hands-on activity.

## Student Prior Knowledge

The importance of proper handwashing to prevent food-borne illness and contamination.

## **Intended Learning Outcomes**

The student will understand and practice the importance of proper handwashing as a preventive measure to food-borne illness and will apply other methods of sanitation in the preparation of foods.

#### **Instructional Procedures**

Introduction: Using the 8 foot by 1-inch strip of paper that is taped together, throw it out to a student and ask, "What do you think this represents?" It is 8 feet long. Open it up for discussion.

Tell them this illustrates the distance of eight feet that a cough or sneeze contaminates with germs if it is not covered with a hand or Kleenex tissue.

Begin lecture on sanitation.

Explain the importance of proper handwashing. Have the students do the handwashing activity. It will take 15 to 20 minutes. (Because I use Glo-Germ with my Foods I students, I came up with a different activity to show the importance of handwashing or you could use Glo-Germ)

All of the students need to go to their sink in the unit. Roll up any sleeves so the hands and wrists are exposed.

Each student needs to rub about 1 tbs. cooking oil thoroughly on their hands like lotion.

Walk around and sprinkle about 1/2 tsp. ground cinnamon on each pair of hands. The students need to rub the cinnamon with the oil all over their hands.

For a group of four students, assign each student a different handwashing technique:

Cold water for 10 seconds

Cold water for 20 seconds

Warm water with soap for 10 seconds

Warm water with soap for 20 seconds

Have the students compare how clean each of their hands are. Note, who still has oil and cinnamon left.

Demonstrate and explain the importance of the temperature of water with the application of soap and friction to clean hands thoroughly. It takes a minimum of 20 seconds to clean hands which is how long it takes to sing the ABC song together. Again, have all of the students thoroughly wash their hands singing the ABC song together.

Show the video - Clean Up Your Act.

Introduce Food-borne illness with the student activity. Hand out the student worksheet. Explain that each student will receive 12 bags that contain a similar looking white powder of some kind. Using the names of the items from the top of the worksheet, identify from the label and mark the "number" which corresponds with the package to the paper. Then complete the sentences by unscrambling the basic rules of food safety. (Pass the bags out so each table has a couple to work with, keep the bags moving and pass them in the same direction. Make sure they are not opened or broken)

Discuss how this experience relates to food borne illness as you can't always taste, smell of see if something is contaminated. Go over the correct answers. Finish up with your notes.

Assignment to read the Fact Sheets from the Utah Dept. of Health. Each student or unit needs to write 5 important facts from each page to be discussed together as a class at the beginning of next class.

## Bibliography

Food Borne Illness Activity originated from Kristi Belliston (American Fork High School) and Rebecca Cox (Lone Peak High School)

Fact Sheets from Utah Dept. of Health.

#### Authors

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