





Nutrition Education for ESL Programs

LEVEL: **BEGINNING HIGH**



Nutrition Standard	Key Message #6: Students will demonstrate safe food handling practices at home, at school and on the job.
Content Objective	Students will be able to reduce the spread of germs in everyday environments.
Behavior Change Objective	Students will demonstrate increased safe food handling practices at home.
Language Objective	Students will be able to read about the spread of germs.
Instructional Approach	Demonstration and Narrative Reading
Class Length	3 hours 
Topic	Health 



NUTRITION BACKGROUND INFORMATION FOR TEACHERS

(NOTE: The following background information is intended for teachers only in order to answer students' questions. It is not meant to be the basis of a lesson or to be presented in a lecture to students. Research shows that nutrition education which is skill based is more effective than knowledge-based instruction.)

Key Message #6: Students will demonstrate safe food handling practices at home, at school and on the job.

Objective 6.2 Students will be able to reduce the spread of germs in everyday environments.

Discussions with adult Latino ESL students around the state of California (Prehm & Associates, 2002) indicated that students are aware of the importance of basic kitchen cleanliness. Cleanliness and other aspects of food safety can be sensitive topics with adults. Present the topic as something parents should teach their children, so that they are aware and stay healthy, and not to suggest that adult students do not use proper practices. Keep awareness high throughout the school term by giving food safety guidelines for foods brought in for class potlucks. Reinforce safe food handling practices by talking about why certain food safety practices are important as you actually model them during food tasting in class or other times when food is being prepared or served in the classroom.

Basic Rules:

- Wash hands (front, back, between fingers and under nails) for 20 seconds) with hot, soapy water before cooking or handling food and after using the bathroom, changing diapers and handling pets, etc. A way to gauge 20 seconds is to sing the alphabet song for children or count to 20 for adults.
- Wash hands before eating.
- Wash cutting boards, dishes, utensils and counter tops with hot, soapy water after preparing each food item and before you move on to the next food.
- Use plastic and other non-porous cutting boards. These boards should be run through the dishwasher or washed in hot soapy water after use.
- Use paper towels to clean kitchen surfaces. Germs can grow on cloth towels and sponges. Wash kitchen towels and sponges often in hot soapy water.
- Wash fruits and vegetables with running water. Use a brush to loosen dirt.
- Do not use soap on food.
- Store food in clean, covered containers. Tight lids help keep pests from getting into the food.
- Refrigerate or freeze perishables, prepared foods and leftovers within two hours or sooner.
- Put leftovers in shallow containers so they cool faster.
- Eat leftovers within 2 days so it does not spoil. A good motto to use in the kitchen is "When in doubt, throw it out." It is not worth risking one's health by eating food where the safety is in question.
- Never defrost food at room temperature. Thaw food in the refrigerator, under cold running water or in the microwave. If foods are thawed in the microwave, they should be cooked immediately following the thawing process.
- Marinate foods in the refrigerator.
- Do not put a lot of food in the refrigerator or freezer, or "over-stuff" it. Cold air must be able to circulate to keep food safe.



NUTRITION BACKGROUND INFORMATION FOR TEACHERS

Key Word Search: *food safety*

Websites for more information (2008)

Fight Bac!

http://www.pueblo.gsa.gov/cic_text/food/fight-back/fightbac.htm

Food Safety

www.foodsafety.gov

Wellness Ways Food Safety

<http://web.aces.uiuc.edu/wellnessways/FoodSafety.html>

Food Safety Information that can be shared with students' children:

www.foodsafety.gov/~fsg/Fsgkids.html

American Dietetic Association Food Safety website.

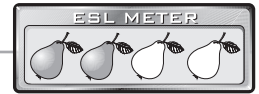
<http://www.homefoodsafety.org/index.jsp>

Ordering Information: Glo Germ Kit: Glo Germ Company, P.O. Box 537, Moab Utah 84532,
800-842-6622; www.glogerm.com

Poster: Fight BAC! API/Fight BAC & API/BAC store, 4471 Nicole Dr., Lanham, MD 20706.
301-731-6100, http://www.fightbac.org/component/option,com_virtuemart/Itemid,34/



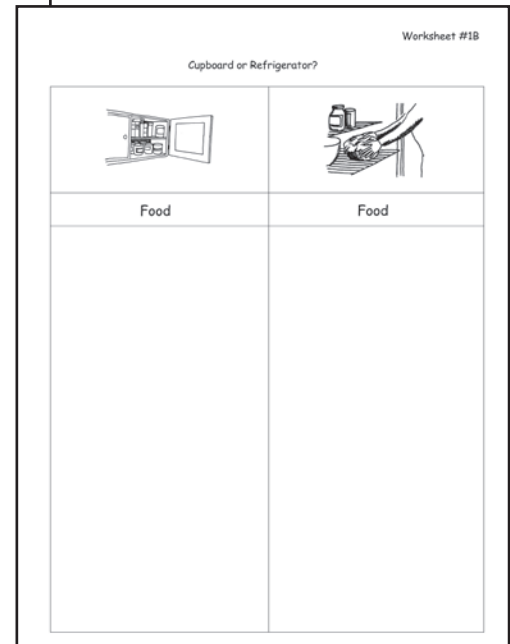
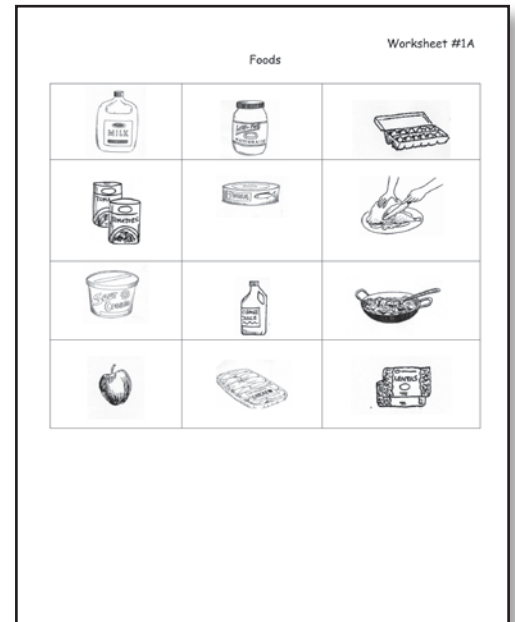
LESSON PLAN



Beginning High

Warm-up/Review (15 min.)

- Do a survey. (Ask students to raise their hands.)
 - Ask students "How many of you ever cook or prepare food, at home or at work?"
 - "How many people EAT food?"
 - State that today you are going to talk about keeping food safe to eat.
- Categorize foods as "perishable" (needing refrigeration) / "non-perishable" (not needing refrigeration).
 - Group students in pairs.
 - Show a transparency of **Worksheet #1A** and identify the foods in the pictures.
 - Pass out Worksheet #1A, "Foods" cut up or have students cut them and put them in envelopes.
 - Pass out Worksheet #1B, "Cupboard or Refrigerator?"
 - Direct students to put the foods on the Refrigerator side of the grid if the foods have to go in the refrigerator or on the Cupboard side of the grid if they don't. (There may be some disagreement since packaged foods like mayonnaise can go in the cupboard until they are open, and then should be refrigerated.)
- Check the activity.
 - Call on student volunteers to report where they placed each of the foods.
 - Using transparencies of **Worksheets #1A** and **#1B**, place the pictures and ask the class if they agree with the volunteer.
 - Discuss reasons for placement and reasons for disagreement.
- Conclude that some foods need to be in the refrigerator so they don't *spoil*, or go bad or make people sick.



MATERIALS

Transparency/Worksheet #1A, "Foods," (cut up);
 Transparency/Worksheet #1B, "Cupboard or Refrigerator?"



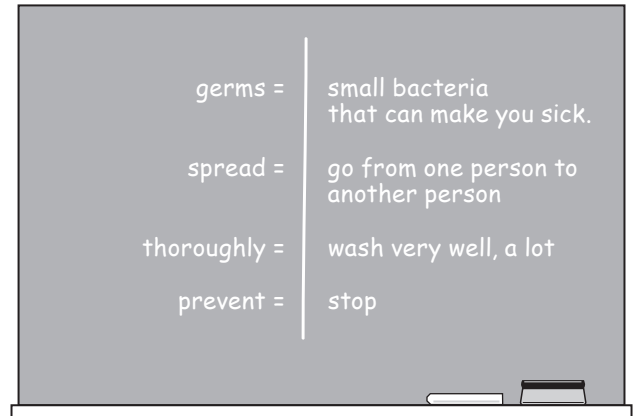
LESSON PLAN



Beginning High

Introduction (10 min.) 

- Review known vocabulary** using actual items or pictures: **cutting board, knife, fork, spoon, bowl, hot water, sponge, soap, clean, dirty, hands.**
- Introduce new vocabulary.**
 - Put the knife, spoons and forks together and tell students that these are called '**utensils**'. Write word on board.
 - Explain the word **germs**, "they are **bacteria**; so small you can't see them, but they can make you very sick". Write the word on the board.
 - Is it a good idea to prepare food or eat with dirty hands? Yes or no?
 - What can happen if you are working outside or in the bathroom, don't wash your hands, then cook, prepare or eat food? Can you get sick? Can your family get sick? Yes, you can spread **germs**."
 - Explain that **spread** means to go from one area to another. Write the word on the board.
 - Explain that you can *prevent* germs from spreading, or stop them, by *cleaning thoroughly*, cleaning very well. **Put the vocabulary words and definitions on the board:**
- Inform Students of the **lesson objective**. "Today we are going to see how germs are spread and how to prevent them from spreading."

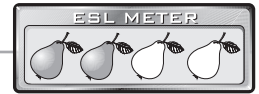


MATERIALS

Realia/visuals: cutting board, knife, fork, spoon, bowl, container, hot water, soap, sponge, towel



LESSON PLAN



Beginning High

Demonstration/Presentation (35 min.)

1. **Explain that you will be using a product called Glo-Germ** to show how germs are spread.
 - Make sure students understand that Glo-Germ **does not contain real germs**, but to imagine that it does.
 - Show the students the Glo-Germ powder and UV lamp.

2. Use the UV lamp to **show nothing on the knife, hands, cutting board, bowl.**

3. Use the Glo-Germ kit to **show the spread of germs.**
 - **Sprinkle the Glo-Germ** powder very lightly over chopped lettuce and tomato. (Do not use very much. It should **not be visible** with ordinary light.)
 - **Place the food on the cutting board**, cut it with the knife and place it in a bowl.
 - **Using the UV lamp**, show the students how the **“germs” have spread from the food to the knife, board and bowl.**

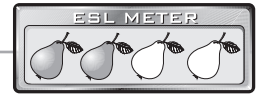
4. **Ask “How can we prevent, stop, the germs from spreading?”**
 - Demonstrate and state that you are washing the food (or pantomime if water is not available. Use visual of a faucet).
 - Demonstrate or pantomime and state that you are washing the utensils and other items.
 - Demonstrate or pantomime and state that you are washing your hands for at least 20 seconds.
 - Pantomime putting food in the refrigerator.

MATERIALS


Glo-Germ kit- black box, UV lamp, extension cord; lettuce, tomatoes, cutting board, knife, bowl, water, soap for washing hands or antiseptic hand wipes



LESSON PLAN



Beginning High

Practice 1 (30 min.) 

1. **Divide the class into five groups.** Each group will prepare a lettuce and tomato salad using Glo-Germ.
2. **Project Transparency #2** and explain that each group will use the Glo-germ differently:
 - Group 1: Puts Glo-Germ on **hands only**.
 - Group 2: Puts Glo-Germ on **food**.
 - Group 3: Puts Glo-Germ on a **knife**.
 - Group 4: Puts Glo-Germ on a **cutting board**.
 - Group 5: Puts Glo-Germ on a **bowl**.
3. **Select a leader of each group.**
4. Direct **leaders** to **fill out** their group's part of **Transparency #2**.
5. **Provide** each group with **supplies** for the task - lettuce, tomatoes, cutting board, knife, soap and water for washing hands and utensils, water for washing food, towel/paper towels.
6. Direct students to **make a salad** that **does not have "germs."** There will be a **prize** for the team with the **cleanest salad**.
7. **Check comprehension of instructions for task by asking questions:**
 - "What group will put Glo-Germ on their hands? Group 1, yes.
 - What group will put Glo-Germ on the food? Etc.
 - Who are the leaders?
 - What will the leaders do? Fill out one part of the worksheet. Yes!"
8. **Circulate to sprinkle Glo Germ**, observe and assist. (**Teacher** should be in **control** of **Glo Germ** so students do not use too much and so that it is sprinkled only on the group's assigned area.)
9. Tell groups to **begin**.

Transparency #2

Glo-Germ Chart

Group	Task	Did germs spread?	Where did they spread?
1.	Put Glo-Germ on hands only.		
2.	Put Glo-Germ on food.		
3.	Put Glo Germ on the knife.		
4.	Put Glo Germ on the cutting board.		
5.	Put Glo Germ on the bowl.		

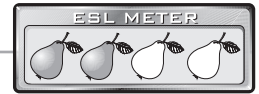
Groups who answer "No" to "Did the germs spread?" win a prize!

MATERIALS

Transparency #2,
"Glo-Germ Chart"



LESSON PLAN



Beginning High

Practice 1 (cont.)

10. When the students are finished making the salad, **use the UV lamp** on each sample so students can see if there are germs and if they have spread. Ask the students "Did the germs spread? Where did the germs spread to?" "Which group has the cleanest salad?"

11. Have students visit the other groups to see if the germs spread, and where they spread. (Or have the Glo- Germ kit black box in the front of the class and have groups come to the front to see the different groups' salads.)

12. Fill out Transparency #2.

Ask students,

- "Group 1, Did your Glo-Germ spread?"
- Where did it spread to?"
- Do for all groups.
- Fill in transparency with class.

13. Make the health connection: it is important to wash your hands, your food, utensils and surfaces before you cook or prepare food, and before you eat food (even if you don't cook). Everybody eats, and anybody can get sick! It's important to put food in the refrigerator so it doesn't get warm. Germs grow in warm places.

14. Begin a list on the board and write:

How to Stop the Spread of Germs

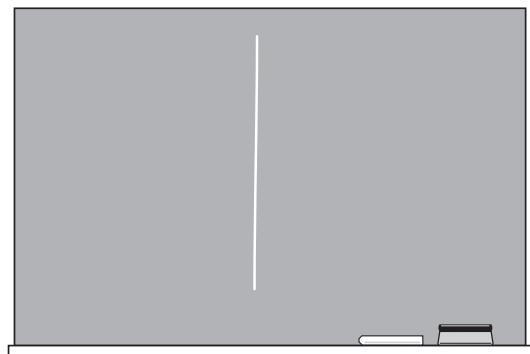
- Write the first suggestion.
- Elicit more ideas from students and compile a list.
- Encourage students to come up with some of the ideas that are on the application journal page, e.g.
 - Wash hands for 20 seconds.
 - Wash the knife.
 - Wash the fruit and vegetables.
 - Wash the cutting board.
 - Put food from the cutting board into a clean bowl.
 - Wash hands when finished.
 - Use different cutting boards for meat and vegetables.
 - Put the salad in the refrigerator.

Transparency #2

Glo-Germ Chart

Group	Task	Did germs spread?	Where did they spread?
1.	Put Glo-Germ on hands only.		
2.	Put Glo-Germ on food.		
3.	Put Glo Germ on the knife.		
4.	Put Glo Germ on the cutting board.		
5.	Put Glo Germ on the bowl.		

Groups who answer "No" to "Did the germs spread.?" win a prize!



MATERIALS

Transparency # 2, "Glo Germ Chart"; materials for each group: cutting boards, knives, bowls; lettuce and tomatoes; Glo Germ kit - UV lamp, extension cord; bowls of water or sink, soap for washing hands/ hand wipes if water is not available; prizes for winning group (e.g. 5-A-Day refrigerator magnets, pencils, or key chains; store coupons.)



LESSON PLAN




Beginning High


Presentation 2 (30 min.)


1. Tell students they will be reading about germs.
2. **Project transparency of Worksheet #3:** "All About Germs."
3. **Cover up the 4 paragraphs** and show only the title and the first 'graphic' of a germ.
4. **Elicit prior knowledge** and ask students to predict what they might see in the reading.
5. Using transparency, **slowly reveal each sentence** and each new graphic, reading the text aloud, checking comprehension and asking students to guess what might come next.
 - **Continue** process, checking to make sure that students understand the narrative.
6. **Stop and explain vocabulary as you read.**
 - "What is spread?" Refer to the board definition.
 - "What is illness? Yes. Stomachache, vomiting, nausea, diarrhea." etc.
 - **Explain or pantomime the vocabulary**, if needed, by using the items brought to class as you read.
7. **Read aloud** once more and have **students listen**.
8. **Pass out Worksheet #3.** Give students time to **read silently** by themselves.
9. When students are finished, **ask questions again to check comprehension** and provide students a chance to ask questions.
10. **Ask students to find specific vocabulary words in the text.** For example, say 'Underline the word 'germ or germs'. How many times do you see that word? Circle the word 'spread or spreading.' How many times do you see that word? **Repeat** for **other vocabulary** words.


Worksheet #3

All About Germs!

- 

Germs are small living things that can make you sick and spread illness. They are so small that you can't see or feel them.
- 

Germs can live on food and places where you prepare food. They grow in warm places. They **spread** from cutting boards to utensils, from counters to sponges and towels.
- 

You can keep your food safe by washing your hands with hot water and soap before you cook, handle or prepare food and before you eat. Wash your hands again when you finish. Wash your hands for 20 seconds.
- 

You can **prevent** germs from spreading. Always wash cutting boards, dishes, utensils, and counters with hot water and soap before preparing the next food. Put food in the refrigerator quickly to keep it cold.

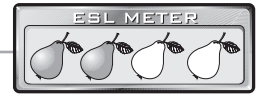
Adapted from "Fight BAC! Four Simple Steps to Safety" by the Partnership for Food Safety Education www.fightbac.org

MATERIALS

Transparency/ Worksheet #3:
"All About Germs"



LESSON PLAN



Beginning High

Practice 2 (20 min.)

1. Have students **read aloud in pairs**.
 - Circulate helping with pronunciation and comprehension problems.
 - Monitor that each partner has a chance to read all 4 paragraphs while the partner listens.
2. Have 4 different **students volunteer to read one paragraph aloud**.
3. **Check comprehension** by asking questions again, and seeing if students have any questions.

Assessment (20 min.)

1. **Inform students that they will be taking a quiz**, that they are to work individually and that you will collect and grade the quizzes.
2. **Project a transparency** of quiz and **explain directions**.
3. **Distribute Worksheet #4, "Quiz."**
 - Have students complete it.
 - Direct students to work on their own.
4. **Collect** when finished and **grade** according to this rubric:

Rubric: 1 point per correct answer.
14 points total. Pass = 10 points.


5. Return next day, if possible.


Worksheet #4


Quiz


Name: _____ Date: _____


A. Instructions: Write the correct letter on the line.


a.


b.


c.


d.


e.

1. counter _____ 2. sponge _____ 3. towels _____

4. cutting board _____ 5. utensils _____

B. Instructions: Write the correct word on the line.

hot	sick	spread	finish	grow
washing	small	food	seconds	see

1. Germs are _____ living things that can make you _____.
2. They are so small you can't _____ them.
3. Germs can live on _____ and places where you prepare food.
4. They _____ from cutting boards to utensils.
5. Germs _____ in warm places. Keep food cold.
6. You can keep your food safe by _____ your hands with _____ soapy water.
7. Wash hands again when you _____.
8. Wash your hands for 20 _____.

MATERIALS

Transparency/Worksheet #4, "Quiz"



LESSON PLAN



Beginning High

Application (10 min.)

1. **Pass out Nutrition Journal** or use Worksheet #5.
2. **Review the directions** using yourself as a model.
 - Have students rate their food handling practices **before the lesson** by circling 1, 2 or 3 to indicate "never," "sometimes" or "always."
 - Have students plan what they will do in the future. It may be to maintain "always" or to improve from "sometimes" to "always."
3. **In one week**, have **students report back** on their progress by filling out the **"My Report" section** and share with a partner.
 - Have students **write the date**.
 - Have students **write two statements** about a change they made: **Now I** _____.
 - Have students **set a new goal for handling food safely**: **I will** _____.
4. **In another week**, have students **write a sentence** about their progress: **Now I** _____.

Worksheet #5
Journal

My Goal: I will cook safely at home.

Directions:

1. Circle what was true for you BEFORE the Lesson.
2. Circle what your plans are for the FUTURE.
3. Circle ONE new safety tip you will try this week.
4. Do your Report.
5. Talk to a partner.

BEFORE THE LESSON... Did you...?	SCALE 1 = never 2 =sometimes 3 =always	IN THE FUTURE... Will you...?
1 2 3	...wash hands for <u>20 seconds</u> with hot water and soap.	1 2 3
1 2 3	... rinse sponges with hot soapy water.	1 2 3
1 2 3	... wash meats, fruits and vegetables before eating or cooking.	1 2 3
1 2 3	... wash the knife after cutting meat.	1 2 3
1 2 3	... wash the cutting board and utensils with hot, soapy water.	1 2 3
1 2 3	... put food in the refrigerator quickly.	1 2 3

MY REPORT DATE:

1. Now I _____.

2. Next week, I will _____.

REPORT #2 DATE:

1. Now I _____.

MATERIALS

"My Nutrition Journal" or Transparency/Worksheet #5

