




Importance of Appropriate Food Handling in a Variety of Environments (Personal and Career)

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Lesson Objective

The objective of this lesson is to develop understanding, knowledge, and respect for the proper handling of food and personal hygiene in a personal or career setting. Students will be exposed to concrete situations, personal and mutual respect in the context of preparing food safely while developing an understanding of why safe food handling is so important.

 **Time** One 80-minute class

✂ **Materials**

- Specimens—Five examples of visually contaminated food (see Getting Started)
- Student Handout 1: “Food Checklist: Observing Food Contamination”
- Student Handout 2: “Questions for Summary Respecting the Need for Safe Food Handling”
- Student Handout 3: “Rubrics for This Lesson”
- Five pieces of flip chart paper
- Five felt pens

Getting Started

Approximately a week before the lesson, at least five specimens need to be prepared. These can be such things as raw meat left on a counter, bread in a moist bag, unclean hands on a variety of foods (meat, bread, fruit), hair in a food and so on. The specimens must be made with enough time so that they display some sort of visible contamination, keeping in mind that not all contamination will be visible and reminding students of that fact.

Knowledge Now

Have the students make small groups and write down anything they already know about how to properly take care of food and personal hygiene in the kitchen.

This can include any past information they have learned (as a brainstorming activity) The use of textbooks or notes should not be permitted for the first few minutes of the brainstorming session. Students will likely mention such things as wash surfaces with a bleach solution after exposure to raw chicken wash hands thoroughly before handling any food.

Engaging Interest

Have students share their findings with the class and discuss possible ideas that haven't yet been brought up to expand on their ideas.

Learning Activities

1. Give each student Student Handout 1: "Food Checklist: Observing Food Contamination," have them make five groups and have each group go to a station, where contaminated food item has been set out for them to inspect.
2. Have the students write down their observations on the handout and, as a group, write their observations on the flip chart at that station. This could include such things as mould (and the look of it), dryness, odour, discoloration and so on.
3. Give them about one minute at each station before they rotate to the other stations, adding any new observations to the flip chart and to their own handout.
4. Share the information gathered on the flip charts with the class as a whole.
5. Get them to take their observations and research (with any resources available) the side effects of consuming the contaminated foods. Resources that can be used are textbooks, Internet, pamphlets, food labels, magazines, books or anything else that is available. See the list of possible ideas in the Supplementary Resources section of this lesson.

NOTE: Dispose of contaminated food specimens as soon as this activity is finished.

Assessment/Analysis/Application

1. Give each student a copy of Student Handout 3: "Rubrics for this lesson and briefly discuss it.
2. Place the names of a variety of food items in a hat and have each group choose one food item. Possible items are uncooked chicken, vegetables from the store, uncooked hamburger, frozen fish, soft cheeses and raw eggs.
3. For the item they have chosen, groups will be required to develop a procedure outlining how to handle the food properly, from the preparation to the presentation.
4. Students must also answer questions about how this activity relates to having respect for oneself and others in a home and work environment, using Student Handout 2: "Summary questions: Respecting Practices Need for Safe Food Handling."
5. Students will be given the remainder of the class time to work on this, and whatever they don't finish will be homework to be turned in at the beginning of the next class.

Student evaluation will be done in three ways:

- Credit marks for students' participation.
- Rubric for evaluation of the procedure for dealing with their food choice. Employ the use of the Basic CTS rubric on a 1–4 scale.
- Rubric for evaluation of the questions that deal with respect. Employ the use of the Basic CTS rubric on a 1–4 scale.

Activities for Extension and/or Integration

- This lesson connects very well with the Science 24 curriculum.
- Peer teaching activity: Students could follow this class up by preparing a demonstration of safe food handling practices for their particular food and the need for respecting these food handling practices. The demonstrations could be shown to the students in a Science 24 class or to a junior high or elementary health class.

Subject and Level Learner Outcomes

FOD2150 Safety and Sanitation for an Intermediate Level:

Demonstrate control of food contamination and growth of micro-organisms in food through measures including

- Personal hygiene
- Cross-contamination
- Temperature control
- Pest and garbage control
- Cleaning and sanitation of equipment and utensils

Identify procedures for receiving, handling and storing food and equipment.

Analyze or demonstrate methods of storing, preparing, cooking and serving foods in a safe and sanitary manner.

Science 24

Analyze the relationship between human health and environmental pathogens

- Investigate and describe the conditions necessary for the growth of a specific pathogen (for example, viruses, fungi, bacteria)
- Describe how noncommunicable diseases are transmitted and how they affect human health (For example, food poisoning due to salmonella, E. coli, cholera, dysentery) [**related to learnings/applications in CTS course FOD2150: Food Safety & Sanitation**]
- Investigate and describe how a specific food handling or preparation process is designed to prevent microbial contamination of the final product (For example, cooking, freezing, pickling, salting, vacuum packaging) [**related to learnings/applications in CTS course FOD2150: Food Safety & Sanitation**].

Safe and Caring Topics and Concepts

- Living Respectfully
 - Defining respect:
 - Identifying ways that people show respect and disrespect
 - Taking responsibility for our choices, our actions and the consequences of our actions:
 - Helping others learn or attain a goal
 - Developing positive interdependence and relying each other to complete tasks
 - Giving and receiving help
 - Listening carefully
 - Respecting and appreciating others' ideas, insights, solutions and contributions

Teaching Strategies

Go to www.sacsc.ca Click on Resources, Strategies for strategy descriptions	Cooperative Learning	Inquiry Learning	Direct Instruction
	<ul style="list-style-type: none"> Cooperative carousel 	<ul style="list-style-type: none"> Problem solving 	

Generalization and Transfer	Peer Teaching	Empathy/Affective Education	General Teaching Activities/Ideas
<ul style="list-style-type: none"> Modelling 	<ul style="list-style-type: none"> Cross-grade peer teaching as an extension 		<ul style="list-style-type: none"> Brainstorming

Supplementary Resources

- Canadian Partnership for Consumer Food Safety Education. *Food Safety at Home - You're in Control* (brochure). 2004. Cambridge, Ont:
- Health Canada. 2006. *Canada's Guide to Healthy Eating and Physical Activity*. Ottawa: Government of Canada.
- Longree, K and G Armbruster. 1996. *Quality Food Sanitation*. 5 ed. John Wiley & Sons. The Foodservice Bookstore at Foodservice.com.
- National Sanitation Training Program. 1990. *HACCP (Hazard Analysis Critical Control Point): Safe Food Handling Techniques*. Video. Canadian Restaurant and Food Services Association.
- Nielson, S. 1996. *Everybody's FOODSAFE Kitchen: Your Step-by-Step Guide to Safe Preparation of Food*. Open Learning Agency. Kamloops, BC: Thompson River University.
- www.canfightbac.org This site is excellent for basic information and also has a teacher section with some good student activities.

Student Handout 1

Food Checklist: Observing Food Contamination

Name: _____ **Date:** _____

Instructions: Circulate around each of the five stations and complete your observations. Later you will work in groups to determine various side effects.

Item Number	What Is It?	Observation (For example, mould, dryness, discoloration)	Side Effects

Student Handout 2

Summary Questions: Respecting the Need for Safe Food Handling Practices

Name: _____ Date: _____

Instructions: Please complete these questions on your own.

1. Why do you think it is important to respect different individual food preparation processes while maintaining certain minimal standards related to food safety and sanitation?

2. What consequence does a person exposed to food poisoning face?

Physical consequences:

Mental/psychological consequences:

3. What have you learned about the possible long-term results of food poisoning?

4. What changes might you consider making in your personal or job-related food preparation habits? Why will you make these changes?

Student Handout 3

Rubrics for This Lesson

Rubric for Procedure

Group members' names: _____ Food item: _____

Rating	Criteria	Comments
4	Procedure for handling food shows a step-by-step process from preparation to presentation and is extremely detailed and accurate	
3	Procedure for handling food goes from preparation to presentation and is moderately detailed and accurate	
2	Procedure for handling food goes from preparation to presentation but is lacking in detail and has some inaccuracies	
1	Procedure does not identify basic food handling from preparation to presentation, lacks detail and is inaccurate	

Rubric for Questions

Name: _____ Date: _____

Rating	Criteria	Comments
4	Questions are answered and a clear understanding of the importance of respect when handling food is very evident	
3	Questions are answered but understanding of the importance of respect in handling food is not entirely clear	
2	Questions are answered but there is little to no indication of understanding the importance of respect in handling food	
1	Questions are lacking complete answers and there is no indication of understanding the importance of respect in food handling	