Food Families

KITCHEN SAFETY

MODULE 5

This module was developed in collaboration with

Child & Youth Network

KITCHEN SAFETY

Module Component	Details
Topic:	Safe Food Handling
Time Required:	120 minutes
Objective:	The objective of this module is to teach participants how to implement the rules of safe food handling for their home kitchen. Participants will learn how to protect themselves and their families with information related to handling, storing, cooking, and reheating food. Participants will also be taught basic knife skills while preparing a new healthy recipe.
Learning Outcomes:	By the end of this session, participants will be able to: • Explain the need for kitchen safety • Implement general food safety tips in their own kitchen • Identify the basic rules for cleaning and sanitizing their kitchen, equipment, and tools • Properly implement hand washing techniques for the entire family • Properly store food • Safely cut a variety of foods, including meat and vegetables • Prepare a new healthy recipe
Materials Required:	• Black light for Ice Breaker • Food thermometer • Refrigerator thermometer • Multi-food prep cutting boards • Meat and vegetables based on recipe • Knife set (or at least a boning knife)
Preparation Required:	• The facilitator may wish to invite a special guest speaker from the MLHU to lead the discussion around Safe Food Handling at Home. Contact the Food Families Program Coordinator for contact information and an introduction to the right person. • The facilitator will also want to consider inviting a Chef from the guest speaker list to lead the group through the Knife Skills component of the module. Contact the Food Families Program Coordinator for assistance. • Rent, borrow, or purchase a black light for the Ice Breaker activity as well as Glo Germ cream to use on the participant's hands.

Module Component	Details
Budget Considerations:	• Food thermometer – 12 x $12/thermometer = $144.00 • Fridge thermometer – 12 x $7/thermometer = $84.00 • Knife set – 12 x $25/set (2 or 3 piece) = $300.00 • Cutting boards – 12 x $20/board = $240.00 • Black light rental = $25.00 – $35.00 • Recipe ingredients = $150.00 – $200.00
Handouts:	• Storage Chart • Cooking Chart • Clean Factsheet • Cook Factsheet • Separate Factsheet • Chill Factsheet • Chicken Stir Fry Recipe • Food Safety At Home • Safe Food Handling Checklist
Sources:	• www.befoodsafe.ca • http://www.who.int/foodsafety/areas_work/food-hygiene/5keys-poster/en/ • Growing Chefs
Summary Instructions: **A** = Activity **P** = Presentation **Q** = Question(s)	**P** Welcome & Agenda (5 minutes) **A** Ice Breaker – How Quickly Can Germs Spread? (20minutes) **P** The Four Core Practices Of Food Safety (20 minutes) **Q** Q & A With Guest Speaker (15 minutes) **P** The Four Knives For Your Home Kitchen (10 minutes) **A** Knife Demonstration And Chicken Stir Fry Prep (40 minutes) **A** Evaluation & Wrap Up (10 minutes)

MODULE CONTENT

Part 1 – Presentation – Welcome And Agenda (10 minutes)

Instruction: PP Slide 3 – Welcome the participants to the session.

ASK:

- Did anyone price match this past week?
- How many of you completed and used a meal plan?
- Are you tracking where you spend your money?

Encourage a few people to share their experience and results.

PP Slide 4 – Share the agenda for this module:

- Black light activity
- The Four Core Practices of Food Safety
- Q & A with MLHU guest
- Introduction to kitchen knives
- Making your own chicken stir fry

Part 2 – Activity – Ice Breaker – How Quickly Can Germs Spread? (20 minutes)

Instruction: PP Slide 5 – Black light is most commonly known for its use in bowling alleys and on crime scene investigations. In this module though, the black light will allow participants to see the how easily bacteria can invade their kitchen when they cook, simply by not washing their hands properly. The activity will highlight the importance of washing their hands well and sanitizing all kitchen equipment and work areas.

Instructions:
Washing Hands:

- Take the participants into the kitchen. The activity works best if the kitchen can be made dark.
- Shake the bottle of Glo Germ oil well and place a small amount, about the size of a quarter, into the palm of one hand of each participant.
- Encourage the participants to use the Glo Germ as though it was soap and ask them to "wash their hands".
- Once they have "washed their hands", turn out the main light sources and shine only the black light into the darkness.

- Focus the black light on the hands of individual participants and view "glowing germs" that existed before hand washing. Be sure to check the backside of thumbs, the back of the hands, and around rings on fingers.
- Turn the light back on and have the group pull out cell phone, grab a cutting board, pick up a dark coloured coffee mug as this will simulate the easy and quick ways that germs can be transferred.
- Turn the lights back off and shine the black light on some cell phones and door/drawer handles to get a sense for how much bacteria may be transmitted from the items we touch.

Ask the group what they learned about hand washing through the activity and how quickly germs can spread.

Part 3 – Presentation – The Four Core Practices Of Food Safety (20 minutes)

Instruction: PP Slide 6 – The purpose of this section of the module is to outline the risks of bacteria and foodborne illness in the kitchen and how to best combat these concerns.

The following information has been taken from the Canadian Partnership For Consumer Food Safety Education website:
http://befoodsafe.ca/be-food-safe/4-simple-steps-clean-separate-cook-chill/

NOTE: For groups with participants who may benefit from information in a language other than English, the World Health Organization does provide access to "Five Keys To Safer Food" in as many as 88 languages. The information is very close to the Four Core Practices, with an added component that provides information about safe supplies. For those participants who may benefit, please provide them with the following website:
http://www.who.int/foodsafety/areas_work/food-hygiene/5keys-poster/en/

Provide the handout, "Safe Food Handling Checklist" and walk through each section of the handout individually.

1. **CLEAN** – Wash hands and surfaces often.

Bacteria can be spread throughout the kitchen and get onto hands, cutting boards, utensils, counter tops, and food. To Fight BAC, always:

- Wash your hands with warm water and soap for at least 20 seconds before and after handling food and after using the bathroom, changing diapers, and handling pets.
- To make sure you wash your hands for at least 20 seconds, sing "Happy Birthday To You" twice (in your head is fine ☺).
- Wash your cutting boards, dishes, utensils, and counter tops with hot soapy water after preparing each food item before you go on to the next food.

- Consider using paper towels to clean up kitchen surfaces. If you use cloth towels, wash them often in the hot cycle of your washing machine.
- Rinse fresh fruits and vegetables under running tap water, including those with skins and rinds that are not eaten.
- Rub firm-skin fruits and vegetables under running tap water or scrub with a clean vegetable brush while rinsing with running tap water.

Hand out the "Clean" factsheet and highlight any additional information or directions you wish to cover with the group.

2. SEPARATE – Don't cross-contaminate.

Cross-contamination is how bacteria can be spread. Improper handling of raw meat, poultry, seafood, and eggs can create an inviting environment for cross-contamination. As a result, harmful bacteria can spread to food throughout the kitchen.

- Separate raw meat, poultry, seafood, and eggs from other foods in your grocery shopping cart, grocery bags, and in your refrigerator.
- Use one cutting board for fresh produce and a separate one for raw meat, poultry, and seafood.
- Never place cooked food on a plate that previously held raw meat, poultry, seafood, or eggs.

Hand out the "Separate" factsheet and highlight any additional information or directions you wish to cover with the group.

3. COOK – Cook to the safe internal temperature.

Food is safely cooked when it reaches a high enough internal temperature to kill the harmful bacteria that cause foodborne illness. Use a food thermometer to measure the internal temperature of cooked foods. The best way to Fight BAC is to:

- Use a food thermometer that measures the internal temperature of cooked meat, poultry, and egg dishes to make sure the food is cooked to a safe internal temperature.
- Cook roasts and steaks to a minimum of 145°F (63°C). All poultry should reach a safe minimal internal temperature of 165°F (74°C) as measured with a food thermometer. Check the temperature in the innermost part of the thigh and wing and the thickest part of the breast with a food thermometer.
- Cook ground meat, where bacteria can spread during grinding, to at least 160°F (71°C). There is a higher risk of illness with undercooked beef. Colour is not always the most reliable indicator of when meat is cooked, so use a food thermometer to check the internal temperature of burgers.
- Cook eggs until the yolk and white are firm, not runny. Don't use recipes in which eggs remain raw or only partially cooked.

- Cook fish to 158°F (70°C) or until the flesh is opaque (not able to be seen through) and separates easily with a fork.
- Make sure there are no cold spots in food (where bacteria can survive) when cooking in a microwave oven. For best results, cover food, stir, and rotate for even cooking. If there is no turntable, rotate the dish by hand once or twice during cooking.
- Bring sauces, soups, and gravy to a boil when reheating. Heat other leftovers thoroughly to 165°F (74°C).

Hand out the "Cook" factsheet and highlight any additional information or directions you wish to cover with the group.

Hand out the Cooking Chart to provide guidance related to safe internal temperatures.

4. **CHILL** – Refrigerate promptly.

Refrigerate foods quickly because cold temperatures slow the growth of harmful bacteria. Do not over-stuff the refrigerator. Cold air must circulate to help keep food safe. Keeping a constant refrigerator temperature of 40°F (4°C) or below is one of the most effective ways to reduce the risk of foodborne illness. Use an appliance thermometer to be sure the temperature is consistently 40°F (4°C) or below. The freezer temperature should be 0°F (-18°C) or below.

- Refrigerate or freeze meat, poultry, eggs, and other perishables as soon as you get them home from the store.
- Never let raw meat, poultry, eggs, cooked food, or fresh cut fruits or vegetables sit at room temperature more than two hours before putting them in the refrigerator or freezer (one hour when temperature is above 90°F (32°C)).
- Never defrost food at room temperature. Food must be kept at a safe temperature during thawing. There are three safe ways to defrost food: in the refrigerator, in cold water, and in the microwave. Food thawed in cold water or in the microwave should be cooked immediately.
- Always marinate food in the refrigerator.
- Divide large amounts of leftovers into shallow containers for quicker cooling in the refrigerator.
- Use or discard refrigerated food on a regular basis.

Hand out the "Chill" factsheet and highlight any additional information or directions you wish to cover with the group.

Hand out the Storage Chart to provide guidance regarding how long items can be safely stored.

Provide the participants with both the fridge thermometer and the internal food temperature thermometer.

Part 4 – Questions – Q & A With Guest Speaker (10 minutes)

Instruction: PP Slide 7 – If you have invited a guest speaker from the local Health Unit, plan to have at least 10 minutes available at this point in the module to allow participants to ask questions about food safety that may not have already been covered. As a facilitator, you may want to have one or two questions prepared to get the discussion started.

Part 5 – Present – The Four Knives For Your Home Kitchen (15 minutes)

Instruction: PP Slide 8 – The purpose of this section of the module is to introduce the four main knives most people will use in their kitchens. If, as a facilitator, you don't feel comfortable leading this part of the module, a guest chef with experience should be invited to lead the group. Contact the Food Families Program Coordinator for more information.

Introduce the four main knives to the group. Have the actual knives available to demonstrate to the group what they look like, what to use them for, and specific techniques that will allow participants to use them safely.

1. **Chef's Knife –** Most chefs would recommend an 8 to 10 inch chef's knife, although that is often larger than most are initially comfortable using. However, the longer the edge, the more versatile and efficient the knife will be. The knife is also safer when there is more blade to work with because there is a larger surface area to do the actual work of cutting. The chef's knife can be used for 90% of daily kitchen tasks including most slicing and dicing of fruits, vegetables, meats, and fish.

How <u>not</u> to use a chef's knife: Although used for most kitchen tasks, it should not be used to butcher or carve poultry, to remove the skin of large vegetables such as butternut squash, or to puncture holes in cans. The broadness of a chef's blade makes it difficult for tasks suited to a smaller knife.

2. **Paring Knife –** A paring knife picks up where a chef's knife leaves off, and is best for slicing and mincing items too small for a larger blade. Garlic, shallots, or strawberries are perfect for foods that require an attention to detail. A paring knife is typically about 3 ½ inches long.

How not to use a paring knife: Avoid using pairing knives to cut very hard vegetables such as celery root, carrots, or parsnips. These smaller knives don't carry enough weight to easily slice through the foods, which may prompt you to increase the pressure or tighten your grip as you're cutting. Forcing the cut is a signal that you aren't using the right blade for the job and can cause the knife to slip.

3. **Serrated Knife –** Serrated knives are most commonly used for slicing bread and are often referred to as "Bread Knives." This knife can actually take on more than just bread. The serrated knife is typically around 6 inches long and is especially useful for foods with waxy surfaces such as tomatoes, pineapples, watermelons, citrus, and peppers. The jagged edge can grip and penetrate those slippery exteriors, while the flat blade of a chef's knife might slip or slide across the surface. Definitely don't let bread be the only thing you cut using this knife.

How not to use a serrated knife: Serrated knives should only be used for slicing, rather than chopping foods. Using a sawing motion with the knife allows the teeth along the blade to grip and cut through ingredients, which is why a serrated knife should not be used to slice smaller food such as berries, small herbs, or garlic.

4. **Boning Knife –** As the name implies, the boning knife is the best blade for cutting up or boning fish, meat, or poultry of any size. Most knives are designed to cut straight lines, but with anything that has a ribcage or joints, there are very few straight lines. It is important that a knife is flexible when cutting in these situations.

How not to use a boning knife: The boning knife should not be used to cut through bones, but to cut around them. The knife functions similarly to a jigsaw, providing flexibility to separate meat from the bone, as well as slice through joints and cartilage.

Part 6 – Activity – Knife Demonstration And Chicken Stir-Fry Prep (40 minutes)

Instruction: PP Slide 9 – 10 – This activity will provide an opportunity for the facilitator or guest chef to go through a step-by-step demonstration of how to safely and effectively cut various food items while preparing a chicken stir-fry recipe the participants will take home with them.

Encourage each participant to wash his or her hands before beginning the food prep process.

Ensure each participant receives the following materials:

- Cutting board(s)
- Knife(s)
- Skin-on, bone-in chicken (enough chicken that each person has to cut the meat off around bones and take all the skin off)
- Vegetables (a variety of different and more difficult ones to cut)
- Appropriate store containers or bags

Instruction: If possible, have a couple of volunteers available to support the participants as they work through the cutting and food preparation process.

Clean up: Include all the participants in cleaning and sanitizing the kitchen and workspaces.

Part 7 – Activity – Wrap Up And Evaluation (10 minutes)

Instruction: PP Slide 11 – Ask the participants to describe some of the important lessons they learned during the module:

- What was the most helpful idea or concept you learned today?
- What are the four concepts you need to think about to keep food safe in your kitchen?
    - Clean
    - Separate
    - Cook
    - Chill

Provide the participants with the evaluation handout to complete before they leave.