

# Chapter 7

## Food safety

### Introduction

The food you serve the children in your care should be safe to eat. All food must be stored and prepared in a manner to prevent food-borne illness and to reduce the risk of food allergies. Make food safety a top priority in your centre.

You and your staff must practice good hygiene when preparing and serving food. As well, food must be stored correctly and cooked properly. Ensure that all staff is trained in proper food handling practices. Contact your district Public Health Inspector for information on PROTON, our food handler certification program.

This chapter contains information on the four steps to safe food handling:

- Clean
- Chill
- Separate
- Cook

You will also find information on the topics of:

- Food service tips
- Glove use for the food handler
- Allergy prevention
- Rodent and insect control

### Tips for success

- **Clean:** Bacteria can spread throughout the kitchen and get on hands, cutting boards, knives and counter tops. Wash hands and surfaces often to help keep hands and food contact surfaces clean
- **Chill:** Bacteria multiply fastest at temperatures between 4 °C (40 °F) and 60 °C (140 °F). Cold temperatures can prevent harmful bacteria from growing
- **Separate:** Cross-contamination is how harmful bacteria spread. Keep raw meat/ poultry/ seafood and their juices, away from one another and other food during storage and preparation
- **Cook:** Meat, poultry, seafood and eggs should be cooked to their proper final cooking temperatures

# **CLEAN: Wash hands and surfaces often.**

Micro-organisms can spread throughout the food preparation area and get on hands, cutting boards, knives and counter tops. Frequent cleaning can keep this from happening. Proper hand washing is one of the most important things you can do to prevent food-borne illness. Proper cleaning of food items, food preparation utensils and surfaces are also key preventative activities.

**Thoroughly washing hands, using warm soapy water, may eliminate nearly half of all cases of food-borne illness.**

Wash your hands:

- When you arrive at work
- Before preparing, serving or eating food items, and particularly after handling raw meats, poultry and raw vegetables
- After handling dirty dishes
- After you have been to the washroom
- After sneezing, coughing or blowing your nose
- After mopping the floor or any other cleaning duty
- After handling chemicals
- After handling any animals

Measures to help prevent food-borne illness when preparing and serving food, include:

- Use proper utensils to handle food instead of direct contact with your hands.
- Keep your fingernails short and free from polish. Use a nailbrush to remove any microorganisms under the nails. Do not share nailbrushes
- Remove jewelry from your hands and wrists. Jewelry can trap dirt and pathogens. You may unknowingly lose a piece of the jewelry in the food
- Wipe your hands with disposable paper towels. If you wipe your hands on a cloth or on your clothing you could end up transferring dirt and bacteria back onto your hands
- **Do not use gloves in place of using proper hand washing**

For more information on the proper hand washing method, refer to the section on *Hand washing* in Chapter 2. For more information on proper glove use, refer to the section on *Glove Use for the Foodhandler*, in Chapter 7.

Properly clean food items, food preparation utensils and surfaces:

- Wash all fruits and vegetables, including those that you peel or cut like melons and oranges
- The use of a clean vegetable brush can assist in the cleaning of fruits and vegetables. Use the brush while rubbing the food item under cold running water
- Wash and sanitize all counter tops, cutting boards, taps and sinks. Don't forget the handles of drawers, fridges, etc. in the food preparation area
- Wash dishcloths with hot soapy water after every use
- Change dishcloths, aprons and towels often

# CHILL: Refrigerate/freeze foods promptly.

Bacteria multiply fastest at temperatures between 4 °C (40 °F) and 60 °C (140 °F). This temperature range is known as the **Danger Zone**. Cold temperatures can prevent harmful bacteria from growing.

Many food-borne illnesses are the result of time and temperature abuse.

Examples of time and temperature control problems include the following:

- Improper internal temperature (whether hot held or cold held) of food when delivered. (i.e., This is a very important step to monitor when food is catered to your centre)
- Improper thawing
- Preparation of food items left at room temperature for extended periods of time
- Inadequate cooking or heat processing
- Inadequate hot holding
- Inadequate cooling
- Inadequate reheating

Food products which can support bacterial growth such as meat, poultry, fish, dairy products, gravies and custards must not be left in the **Danger Zone** except during cooking or heat processing. Refer to Appendix 7 for food safety/temperature resources.

Food safety practices that you need to implement at your centre to ensure food is kept out of the Danger Zone, include:

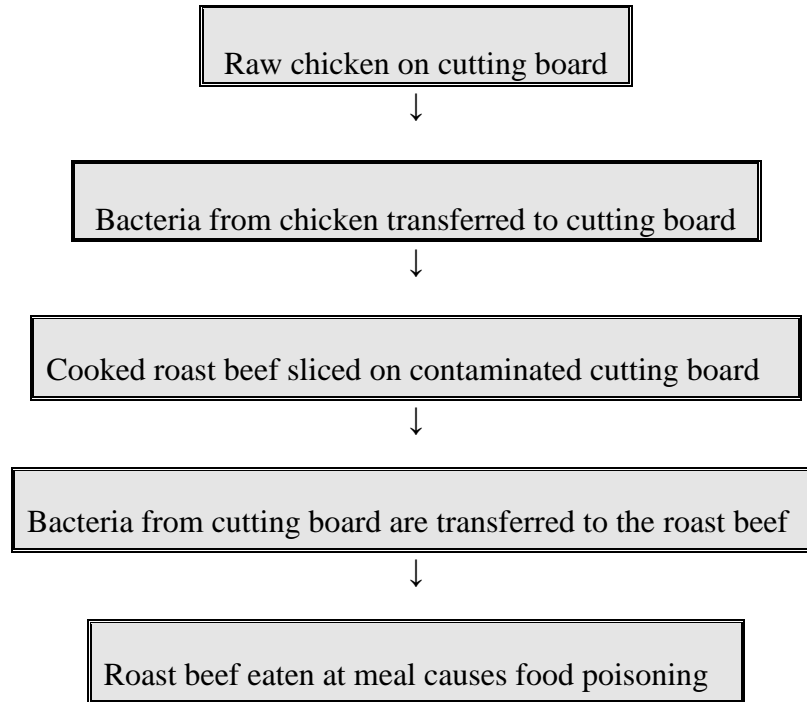
- Setting the fridge temperature to less than 4 °C. Keep a fridge thermometer in every refrigeration unit to allow you to routinely monitor its temperature. This includes fridges in infant rooms that are used to store baby bottles and baby food.
- Never defrost food at room temperature. Thawing is to be done under proper refrigeration or cold running water. A microwave may also be used, however food that is thawed using this method must be immediately cooked.
- Large cuts of meat (e.g., whole birds, roasts, etc.) that are to be cooled must be broken down into small portions and store in shallow dishes, such that they can be chilled quickly.

If your centre is serving food provided by a catering service, ensure that the food is received either properly cold held at 4 °C (40 °F) or lower or properly hot held at 60 °C (140 °F). Food is to be maintained at the proper cold hold or hot hold temperature until it is served. Check the temperature with an accurate probe thermometer and record it in a log book. Disinfect the thermometer prior to each use. Refer to the section on *Keeping your centre clean* in Chapter 2. Make sure that your caterer is inspected by the Health Department in which they are located. If you change caterers or your food preparation method, notify your area public health inspector immediately.

## Separate: Don't cross-contaminate.

Keep raw meat/poultry/seafood and their juices separate cooked and ready-to-eat food during storage and preparation. Quite often food items which are generally safe become contaminated because they have come in contact with a surface, utensil, hand or piece of equipment which is contaminated. This is an indirect contamination known as cross-contamination.

An example of cross-contamination:



Some examples of surfaces, utensils and equipment which may cause cross-contamination are:

- Cutting boards
- Slicers
- Mixers
- Grinders
- Knives
- Tongs
- General serving utensils
- Food preparation tables
- Testing thermometers

Cross-contamination can be minimized by following these simple rules:

- Prevent raw meat juices from dripping onto other foods in the fridge
- Place washed produce in a clean, food-grade container with a lid
- Keep foods covered
- Ensure that ready-to-eat foods are stored above and well away from raw meats and unwashed produce
- Use separate utensils and cutting boards for raw foods and cooked food items
- Ensure all utensils, equipment and food contact surfaces are cleaned and disinfected after every use. Refer to the section on *Keeping your centre clean* in Chapter 2

# COOK: Cook meat, poultry, seafood and eggs to their proper final cooking temperatures

Don't rely on "colour test" to determine when meats are done. Colour is not a reliable indicator to determine if food is thoroughly cooked. Use a food thermometer to measure the internal temperature of cooked foods. Food is safely cooked when it reaches a high enough internal temperature to kill the harmful bacteria that causes illness.

Follow these rules to ensure that food is cooked properly:

- Partially cooking meat/poultry/seafood to reduce cooking future cooking time is not recommended. If you must pre-prepare food for a later time or the following day, always thoroughly cook food to its required final cooking temperature. Once cooked it can be properly cooled and stored
- Bring sauces, soups and gravy to a boil when reheating
- Use a probe thermometer to verify the internal temperature of the food that you prepare
- The following chart outlines the required final cooking temperatures of various foods:

## FINAL INTERNAL COOKING TEMPERATURES

<b>Ground Meat and Mixtures</b>	
Ground beef, pork, veal lamb	71 °C (160 °F)
Ground turkey, chicken	74 °C (165 °F)
<b>Fresh Beef, Veal, Lamb</b>	
Beef, lamb and veal roast and steaks	Medium-rare 63 °C (145 °F)
	Medium 71 °C (160 °F)
	Well Done 77 °C (170 °F)
<b>Poultry</b>	
Chicken and turkey, whole	82 °C (185 °F)
Poultry parts	74 °C (165 °F)
Duck and goose	74 °C (165 °F)
Stuffing (cooked alone or in bird)	74°C (165 °F)
<b>Fresh Pork</b>	
Fresh (raw)	Medium 71 °C (160 °F)
<b>Ham</b>	
Fresh (raw)	71 °C (160 °F)
Pre-cooked (to reheat)	74 °C (165 °F)
<b>Eggs and Egg Dishes</b>	
Egg dishes and casseroles	63 °C (145 °F)
<b>Seafood</b>	
Fin fish	70 °C (158 °F)
Shrimp, lobster and crabs	70 °C (158 °F)
<b>Leftovers and Casseroles</b>	
All leftover foods	74 °C (165 °F)

# Food service tips

Many disease causing micro-organisms can be spread through food. The following tips will help ensure that the food served at your centre is safe and will not cause food-borne illness.

- Children and staff must wash their hands before eating. If the meal is interrupted (e.g., helping a child in the bathroom or wiping a runny nose), wash hands again before eating. Refer to the section on *proper hand washing* in this chapter
- Ensure that no one with symptoms of illness is responsible for food preparation
- Food handlers must properly wash their hands at the handwash basin in the food preparation area before handling any food
- All food handlers must wear an appropriate hair restraint (e.g., hair net)
- The food preparation must take place in the designated food preparation area (e.g., kitchen) and **not** in the classroom
- The food preparation area must be separated by a door or gate from areas where the children play
- Do not serve unpasteurized milk or unpasteurized milk products
- Do not serve ungraded, cracked or grade C eggs
- Ensure that all raw fruits and vegetables are thoroughly washed before serving to children
- Ensure that children do not share their food, utensils, cups or drinking bottles. This will help to reduce the risk of spreading germs from person to person
- Ensure that all refrigeration units are equipped with accurate indicating thermometers
- Ensure that all infant bottles are kept refrigerated and are properly labeled with the child's name
- Ensure that food products do not come into direct contact with the lunch table. Protect food products by serving them on a disposable sanitary article (e.g., paper plate), or on a plate that can be properly cleaned and sanitized
- Do not touch the working end of cutlery, only use the handle to pick it up
- Handle clean cups, bowls and glasses so fingers and thumbs do not touch the inside or the lip

- Food items served to children at the centre must be from an approved source. An approved source is a food premise that is inspected by the appropriate federal, provincial or municipal inspection agency (e.g., supermarkets or bakeries are approved sources). Food that is made in the home of a parent or staff member is **not** from an approved source, unless the home is inspected by the local health department, and these foods should not to be served to the children. An exception is made for food provided by a parent for his or her own child. Refer to Appendix 7 *Food from an approved source* for more information
- Records must be maintained for all food products that are purchased and/or brought in from an approved source. Ensure you record who brought in the food, to whom the food was served, the date when the food was brought in and where the food was purchased. These records are necessary to aid in an investigation, should a food-borne illness occur
- It is strongly recommended that persons responsible for food preparation have training in safe food handling. York Region Community and Health Services Department, Health Protection Division offers PROTON, a certificate course on safe food handling. To contact your public health inspector for additional information on the program, including course dates, call York Region *Health Connection* at 1-800-361-5653, TTY 1-866-252-9933

# Glove use for the food handler

Proper hand washing coupled with the proper use of utensils is the preferred method to handling food. However, if you have any cuts, burns, open sores, skin diseases on your hands, when worn appropriately, gloves can act as an effective barrier for disease and bacteria transmission. If you have any cuts, burns, open sores, or skin diseases on your hands, report it to your kitchen or facility supervisor immediately. If your facility requires you to wear gloves when handling food, they must be changed frequently. Gloves must be changed between each new task, and after coming into contact with raw meats.

Appropriate disposable gloves that can be used include:

- Neoprene
- Nitrile
- Polyethylene
- Vinyl

**Do not wear latex gloves. Latex can cause severe allergic reactions and are not recommended for use in a child care setting.**

Wearing gloves is never a substitute for proper routine hand washing. For more information on how and when to wash your hands, refer to Appendix 2 *Correct hand washing procedures*.

# Food safety for allergy prevention

- An allergy risk list with the child's name and allergy-producing food items needs to be:
  - Dated
  - Current
  - Available to all staff for routine review
- When in doubt about a food's ingredients, do not serve it to a child with allergies
- Obtain as much detail from the parent(s) regarding the food items causing allergies and the child's reaction to them. Arrange for parent(s) to provide their own substitute food when it is the safest alternative
- To reduce the risk of a child having an allergic reaction to a food, it is recommended that the child care centre provides all food, including birthday cakes and special occasion food items
- Written and detailed recipes listing all the ingredients will prevent giving a child a food which may cause an adverse reaction. At times, simple substitutions can be made so that a separate portion can be prepared for a child with allergies
- Do not reuse a dish that has not been properly cleaned and sanitized. Traces of the food, such as tomato, corn or egg, may be left behind and could seriously harm a child who is allergic to them
- When serving a substitute food to a child with an allergy, use different utensils than those used to serve the regular food. Thoroughly clean and sanitize utensils after each use
- Ensure that children do not share their food with each other
- If a child is sick after eating, detailed information describing what they ate and drank and the symptoms, such as vomiting, diarrhea, skin rash, or a respiratory problem can help determine if they have had an allergic reaction
- Do not use latex gloves in the child care centre, due to potential allergic reactions
- If, after discussions with parents, you have any concerns about their instructions, you can consult with the Health Protection Division staff of the York Region *Health Connection* at 1-800-361-5653, TTY 1-866-252-9933

# Rodent and insect control

Proper food storage practices and garbage handling will help minimize rodent and insect infestations.

- Clean all food spills immediately
- Screen all doors and windows in your child care centre. Maintain them in a good repair
- Rotate food stock regularly to prevent insect infestations in old grain products
- Store food products in insect and rodent-proof containers. This includes food used in classrooms for sensory play
- If an infestation occurs, hire a licensed pest control operator to eliminate the problem. Arrange for the pest control service at a time when children are not present. Refer to the section on *Pesticides* in Chapter 4
- If you find rodent droppings or signs of an infestation, clean and thoroughly disinfect the area. Refer to the section on *Keeping your centre clean* in Chapter 2