

Chapter 9:

Sanitation

Learning Objectives

After completing this chapter, you will be able to:

- Understand the importance of a sanitation program for the prevention of foodborne illness
- Differentiate among cleaning, sanitizing and sterilizing
- Describe proper procedures for cleaning and sanitizing equipment, utensils and food contact surfaces
- Develop a food safety plan for your sanitation practices including standard operating procedures and record templates

Chapter 9: Sanitation



Heidi Throws Out the Trays

The farmers' market manager tries his best to ensure that the market operates properly. However, because the market is held in a building that is used for a number of different purposes, including livestock shows, occasionally the premises aren't as clean as they should be. The manager knows where the janitorial supplies are stored because he often has to sweep the floor before the tables are set up.

Heidi was surprised at how dirty some of the tables were after a horticulture bench show. She realized that she needed to pay more attention to the cleanliness of her market stall. Now Heidi includes market set up in her sanitation program.

Prior to every market Heidi cleans and sanitizes her market tables before laying down her table covers. She brings freshly laundered wiping cloths to every market and puts one into a sanitizing solution for cleaning her sampling area throughout the day. She also cleans and sanitizes her demonstration equipment, utensils and portable coolers before going to the market. She transports the equipment and utensils to market in a covered container. Heidi is careful to store her cleaning and sanitizing products in an enclosed tote away from her baking and sampling supplies.

For two years Heidi recycled styrofoam trays under her cookies. She thought it was a safe practice because she cleaned them. When her customers began bringing in their trays from home, she was concerned that some might be meat trays. She learned from her public health inspector that styrofoam trays, like portion cups, plastic forks, etc. are designed to be used once and discarded.



Cleaning, sanitizing and sterilizing are different processes. Cleaning is the removal of foreign material visible to the eye. Sanitizing reduces the level of pathogens to an acceptable level by using heat or chemical treatments. Sterilization is the complete elimination of microorganisms.

Hazards

Proper cleaning and sanitizing procedures reduce the risk of contamination from the following hazards:

- Biological hazards from contamination with microorganisms from improperly cleaned equipment or surfaces, soiled wiping cloths and dirty utensils
- Chemical hazards from contamination with cleaning and sanitizing chemicals that are not properly rinsed from equipment and surfaces
- Physical hazards from soil or food particles on equipment, utensils, work surfaces or other foreign material that can contaminate food. You and your staff can also introduce physical hazards if cleaning isn't done properly.

Reasons for Cleaning and Sanitizing

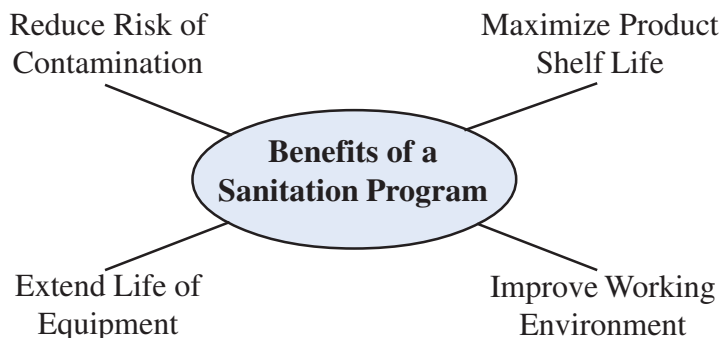
Dirty hands and equipment are the most common carriers of foodborne illness causing microorganisms. These microorganisms are easily controlled through proper cleaning, sanitation and temperature control. The goal of an effective sanitation program is to provide a clean, sanitary environment to market food safely.

Cleaning, sanitizing and sterilizing are different concepts:

- Cleaning removes food residues and other foreign material usually visible to the eye
- Sanitizing is a process using heat or chemical treatments to reduce the level of pathogenic microorganisms to a safe level. Sanitizing is not a substitute for cleaning
- Sterilization is the complete elimination of microorganisms

Sanitary – clean and free of harmful microorganisms and other contaminants.

Disinfection – reduction of microorganisms to a safe level.



As a farm direct marketer you must follow proper cleaning and sanitizing practices at your production site and at the market. You need to develop, implement and monitor written procedures to ensure that your facility is being cleaned and sanitized properly.

Under the Food and Food Establishments Regulation, you **must** have a written sanitation program for your food establishment. Your written procedures must include the cleaning and sanitizing requirements for all your equipment and utensils that are not washed in a dishwasher. You must also include a list of all cleaning and sanitizing agents used, including their concentration and where used.

Ask your regional health authority to review your written sanitation program. If you are a farmers' market manager review the sanitation practices for your market premises with the public health inspector.

A sanitation program has two components – cleaning and sanitizing practices.

Under the Food and Food Establishments Regulation, a written sanitation program is required for permitted food establishments. The program must include cleaning and sanitizing requirements and a listing of cleaners and sanitizers used.

Sanitation program – written procedures outlining cleaning and sanitizing steps and methods.

Maintaining a Clean Workplace

Ensuring that food establishments are clean and safe is an essential component in providing safe food. Dirty premises allow bacteria to multiply, provide food for insects and rodents and discourage customers from returning.

Keep your food establishments clean and in good working order. This makes it easier to clean the facility and helps prevent food becoming contaminated from flaking plaster or paint, debris or chemicals.

Outdoor markets must also be kept clean and well maintained. Garbage collection and disposal, dust control and cleanliness of washroom facilities are especially important for outdoor markets. Holding tanks for waste water from hand wash basins may need to be provided for vendors.

Housekeeping

Housekeeping practices form an integral part of your sanitation program. This includes activities such as janitorial services, garbage collection and disposal, and temporary storage of equipment.

Clean your physical facilities as often as necessary. This will depend on how often the area is used and if it's an area where food is being handled. For example, floors should be cleaned at the end of each business day or throughout the day depending on the nature of your operation. Spills or other accidents must be cleaned up immediately. Storage shelving may require cleaning on a weekly or monthly basis in order to minimize dust, condensation or other contaminants.

Cleaning should be done during periods when the least amount of food is exposed. Use dustless methods of cleaning such as vacuuming, mopping with treated dust mops or sweeping using dust control compounds.

Cleaning of tables is especially important if they are stored "eating side" up because they are more exposed to contaminants. Tables used at a farmers' market should be cleaned and sanitized at the beginning of each market day.

Good housekeeping means keeping a clean, tidy workplace. Keep the premises free of all unnecessary litter. Cleaning activities must not contaminate food.

Dust control compounds – chemical compounds, usually in liquid spray or powdered form, that when used properly help to minimize the amount of dust particles that become airborne during cleaning. Some examples of products available are Dustloc and Soiltac.

On a regular basis, you must clean walls, ceilings, windows and screens. Change the filters on the ventilation system as recommended by the manufacturer so they aren't a source of contamination by dust, dirt and other materials.



Start a Sanitation Plan

All premises need a sanitation plan to ensure that they are thoroughly cleaned. Walk through your premises and list everything that requires cleaning on a daily, weekly and monthly basis. Include the following information:

- Items and areas to be cleaned (tables, walls, floors, light fixtures, storage areas, etc.)
- Cleaning method and directions for use
- Products used, including concentrations
- Frequency and person responsible
- Monitoring records of the plan

Many indoor Alberta Approved Farmers' Markets do not own the market buildings. As a vendor, if you notice any cleaning or sanitizing problems with the facility, notify the market manager who should bring it to the attention of the building owners or property management company.

A clean farmers' market requires commitment from the manager, staff and vendors.

Premises – all elements (interior and exterior) in the building and surrounding property including driveway, parking lot, drainage, building design and construction, sanitary facilities and waste management.

Sanitation and Cleaning of Equipment and Materials

All equipment, utensils and materials including reusable packaging containers *must* be effectively cleaned to remove food residue, debris, soil and bacteria to prevent the contamination of food that may contact them. Cleaning can either be completed manually or mechanically.



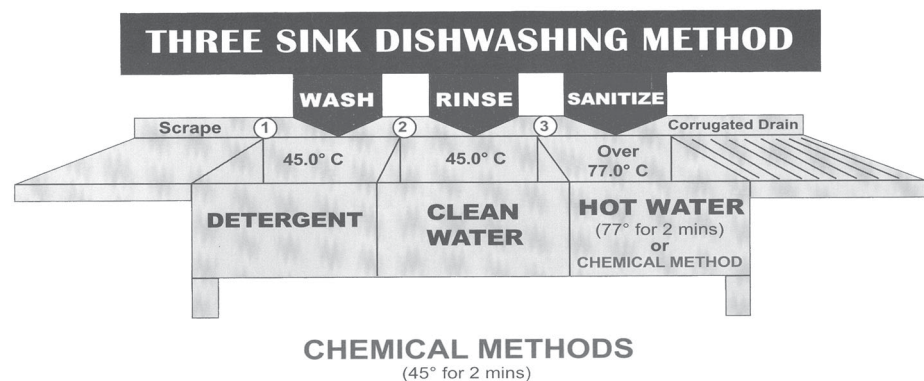
Mechanical cleaning commonly occurs in a processing facility and is not covered in this manual. If you are using a commercial dishwasher refer to the Alberta Food Retail and Foodservices Code, sections 4.2.6 and 4.2.7 and discuss procedures with your public health inspector.

Alberta Food Retail and Foodservices Code is on the web at www.health.gov.ab.ca/professionals/ (click on the first bullet, *Alberta Food and Foodservices Code*).

Cleaning of Equipment and Utensils

To manually clean equipment and utensils, you require at least a double compartment sink of non-corrodible metal. A triple compartment sink is preferred and may be required by your regional health authority. The sinks **must** be large enough to allow complete immersion of the items being cleaned or sanitized. Drain boards **must** be made from non-corrodible and non-absorbent material.

Triple sink dishwashing method is an effective way of cleaning and sanitizing food handling utensils and small equipment.



Chlorine Soution = 100 ppm
 Dilution of 5% Bleach (Chlorine) approximately
 one tbsp. per gallon of water
 1/2 ounce per gallon of water
 1/2 tsp. per litre of water
 2 mL per litre of water

Quaternary Ammonium Solution
 (Quats) = 200 ppm
 Dilution of Quats
 Follow manufacturer's instructions

Figure 9.1 Triple Sink Washing Method

Double or triple sinks may not be available at outdoor Alberta Approved Farmers' Markets. Talk to your regional health authority about acceptable alternatives and work with the public health inspector to develop a proper sanitation plan for your outdoor market.

Steps for Effective Cleaning

- Step 1** Scrape and/or rinse food particles and debris from surfaces
- Step 2** Wash with a detergent solution to loosen soil, bacterial film and grease. For manual washing, maintain the detergent solution at a minimum temperature of 45°C. Grease is difficult to remove if water is less than 45°C. Avoid perfumed detergents because their odor may taint food products.
- Step 3** Rinse with clean, hot, potable water to remove loosened soil and detergent residue. For manual rinsing, maintain the rinse water at a temperature of 45°C or hotter.
- Step 4** Air dry. Towel drying, or storing on a dirty surface or where splashing may occur, can lead to re-contamination of the cleaned surface.

The steps to the cleaning process include rinsing, washing with soap or detergent, rinsing to remove soap residues and air drying. Potable water must be used for cleaning.

You should clean utensils and small food demonstration equipment at your preparation site before going to the market. Clean these items again after the market. In most cases, you must clean market equipment such as refrigerated coolers, tables and freezers at the market prior to opening and again at the end of the day.

The highest levels of contamination are found in areas that are damp such as sink drains, dishcloths, sponges and faucet handles. Pay extra attention to these areas in your sanitation program.

Disposable wiping cloths should be used to wipe floor spills. Wet cleaning cloths used to wipe spills from food contact surfaces should be stored in a sanitizing solution that is made up each market day.

A sanitizing plan outlines the agent and procedures used to sanitize equipment, utensils, materials, etc. It does not include cleaning steps and methods.

Cleaning of Cloths

Do not use wiping cloths, dishcloths or sponges for dishwashing as they harbour bacteria. Use clean, plastic scouring pads or brushes to remove dried residues.

Use wiping cloths for wiping food spills and change them every four hours and when the market closes. Use a new cloth to wipe meat spills and non-food contact surfaces such as floors and walls and dispose of immediately. Single-use paper towels are useful for wiping spills.

If you use dishcloths, use clean ones for every market day. At the market, keep the cloths in separate sanitizing solutions between each use. The sanitizing solutions must be made fresh at the start of each market day. An effective solution is one ml bleach per litre of water (one teaspoon per gallon). Change sanitizing solutions as required. Do not add soap to a sanitizing solution.

You must keep your wiping cloths free of food debris and visible soil. They must not be used for any other purpose.

Sanitizing of Equipment and Utensils

Cleaning does not, by itself, consistently reduce contamination to safe levels. Sanitizing is required to significantly reduce the level of disease causing organisms.

Cleaning **must** precede sanitizing. While not all equipment (for example, vehicles) needs to be sanitized, any utensil or equipment that comes in direct contact with food must be sanitized. Usually utensils and small food demonstration equipment are sanitized at the preparation site before going to the market. Tables and freezers are cleaned and sanitized at the market prior to opening and cleaned again at the end of the day.

Sanitizing can be done by temperature or chemical disinfectants. Apply the approved sanitizer at the proper temperature and concentration and for the appropriate length of time to achieve the necessary reduction in bacteria levels.

Thermal sanitation – sanitation method using hot water or steam for a specified temperature and contact time.

Chemical sanitation – sanitation method using an approved chemical sanitizer at a specified concentration and contact time.

Manual Methods of Sanitizing Equipment and Utensils

There are two steps in the manual method of sanitizing equipment and utensils:

- Step 1** Completely immerse equipment in one of the following solutions for at least 2 minutes:
- Water at a temperature of at least 77°C. Note: if you use a commercial dishwasher to sanitize, the rinse water temperature must be 74°C or hotter, depending on the type of machine
 - Chlorine solution of 100 – 200 mg/L available chlorine at a temperature of not less than 45°C
 - Solution containing a quaternary ammonium compound (quats) having a strength of not higher than 200 mg/L consistent with efficacy at a temperature of not less than 45°C
 - Solution containing not higher than 25 mg/L iodine at a temperature of not less than 45°C

Step 2 Remove equipment and air dry.

Use potable water in all cleaning and sanitizing processes. If you use well or spring water, submit a sample annually to an approved laboratory for testing.

The correct order for cleaning/sanitizing food contact surfaces is:

- 1. Rinse*
- 2. Clean*
- 3. Rinse*
- 4. Sanitize*
- 5. Air Dry*

Available chlorine – amount of chlorine that is free to chemically react with organic matter in order to sanitize a surface.

Check with your regional health authority for specific requirements or alternatives for sanitizing equipment and utensils.

After cleaning tables, freezers and other stationary market equipment, sanitize these items by applying a bleach solution (dilution of 5% chlorine bleach = 100 ppm chlorine solution) from a spray bottle and air dry.

Recipe for Bleach Sanitizing Solution

- 1 tablespoon (1/2 ounce) per gallon of potable water
- 1/2 teaspoon (2 ml) per litre of potable water



For more information on how to calculate dilution rates to achieve specific concentrations or ppm, see Appendix O: Technical Background Information.

Store cleaned and sanitized utensils and equipment well above floor level and in an area that protects them from contamination from splashes, spills, dust, etc. Sanitize items again if they have been stored for more than a day or exposed to contaminants. Wash hands thoroughly before handling any sanitized items.



For more information on proper hand washing procedures see Chapter 13: Personal Hygiene.

Parts per million (ppm) and milligrams per litre (mg/L) – ways of expressing very dilute concentrations of substances. Just as per cent means out of a hundred, so parts per million or ppm means one out of a million. One ppm is equivalent to one milligram of something per liter of water (mg/L).

Sanitizers

Use only approved sanitizers with food and food preparation equipment. Use according to the manufacturer's directions. Do not use scented or color safe bleach. Keep the number of cleaning products to a minimum to avoid confusion and potential mistakes.



For approved products, see *Reference Listing of Accepted Construction Materials, Packaging Materials and Non-Food Chemical Products* found on the Canadian Food Inspection Agency (CFIA) website at www.inspection.gc.ca/english/ppc/reference/cone.shtml

Sanitizing solutions lose their effectiveness with time and temperature. You need to check sanitizer concentrations frequently because they can break down quickly. For example, bleach is only effective if surfaces are free from dirt, food particles and detergent residues. Sanitizers may lose their effectiveness in dirty solutions or when exposed to sunlight. Sanitizing solutions should be made and checked at least daily.

To act as a sanitizer, chlorine must be available to react with organic matter thus killing bacteria and other microorganisms in the process. When a bleach solution becomes soiled, less chlorine is available and the solution loses its effectiveness as a sanitizer. For example, if you have a 200 ppm bleach solution and add soiled cleaning cloths to the solution, the chlorine in the solution will react with the soil in the cloths. Some of the chlorine will no longer be available to chemically react the next time a dirty cloth is placed in the same solution. This is why a sanitizing solution needs to be replaced every day or more depending on how often the solution is used.

The best way to check whether a solution is effective is to use a test strip. Chlorine test papers are available from a chemical supplier. Test papers are extremely sensitive to light and should be replaced every 6 months.

Chlorine test strips are used to test chlorine concentrations.

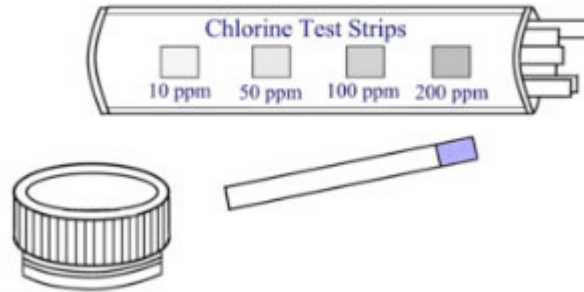


Figure 9.2 Chlorine Test Strips

Using Chlorine Test Strips

- Make sure the test strip is appropriate for the type of sanitizer
- Prepare the sanitizing solution
- Dip a strip into the solution for at least 10 seconds
- Compare the changed color of the strip with the guide on the outside of the package to determine the solution strength

Do not use sanitizers at concentrations above or below the recommended levels. Too high a concentration may be harmful to people and too low a concentration may not sanitize properly. Testing equipment to determine the strength of the sanitizer **must** be available and used with each batch.

Using Quats

Follow label instructions carefully for quats. Using too much can leave a residue that can cause illness. Quats are relatively non-corrosive but tend to foam excessively in a dishwasher and may cause serious rinsing problems. Quats are quite effective when used at 200 mg/L. They are difficult to test and **must** be used according to the manufacturer's label.

Although effective, iodine solutions are rarely used because of the potential for discoloration of cutting boards, utensils and white sinks. An iodine solution will be khaki brown at 12.5 mg/L. Test kits and tablets are available for testing iodine concentration. Fresh chemical should be obtained every four to six months.

Apply the approved sanitizing method or chemical agent at the proper concentration, temperature and for the appropriate length of time to achieve the necessary reduction in bacterial levels. Monitor temperatures and sanitizer concentrations regularly. Sanitizer effectiveness decreases with time and temperature.



Refer to the Alberta Food Retail and Foodservices Code (section 4) for specific cleaning and sanitation requirements www.health.gov.ab.ca/professionals/ (click on the first bullet, *Alberta Food and Foodservices Code*).



Sanitation Word Match

Match the following words with the correct definition

- | | |
|--------------|------------------|
| A. Sanitizer | E. Potable |
| B. Detergent | F. Hand Washing |
| C. Clean | G. Sterilization |
| D. Sanitary | H. Disinfection |

- ___ 1. The complete elimination of microorganisms
- ___ 2. A chemical compound specifically formulated to remove soil, food debris and grease
- ___ 3. The most critical aspect of personal cleanliness; it involves plenty of hot water and soap
- ___ 4. A term that is often used in place of sanitize
- ___ 5. Water fit for human consumption
- ___ 6. Free from dirt, food particles and other visible foreign material
- ___ 7. Free of harmful levels of disease causing microorganisms and other harmful contaminants
- ___ 8. A chemical compound specifically formulated to reduce the numbers of microorganisms on food contact surfaces

You will find the answers at the end of this chapter.

Frequency of Sanitizing

Regularly clean and sanitize utensils and food contact surfaces. Clean and sanitize equipment that is used continuously at room temperature for handling potentially hazardous foods:

- Before market start-up
- Every 4 hours
- Between food types
- After finishing a job

This includes food processors, knives, utensils, metal stem thermometers and all food sampling equipment and utensils. Clean and sanitize cooking equipment such as griddles and electric frying pans between each production and sample batch. If these items are not washed and sanitized, new food will be contaminated by the old food left on the equipment.

Non-food contact surfaces, such as shelves, must be cleaned as often as necessary to keep them clean. Regular monitoring will help you determine the cleaning frequency.

Get into the habit of “clean as you go”. Keep market tables and sales areas clean and tidy throughout the market day. Clean up spills immediately. Monitor the cleanliness of the market equipment throughout the day.

Accepted Chemical Products

All chemicals used, including detergents, cleaning agents and sanitizers, **must** be listed on the Canadian Food Inspection Agency (CFIA) *Reference Listing of Accepted Construction Materials, Packaging Materials and Non-Food Chemical Products*. This document lists all the materials and non-food chemicals that are acceptable for use in food applications.



The *Reference Listing of Accepted Construction Materials, Packaging Materials and Non-Food Chemical Products* can be found on the Canadian Food Inspection Agency (CFIA) website at www.inspection.gc.ca/english/ppc/reference/cone.shtml

Chemical Storage

All chemicals, including cleaning and sanitizing agents, must be stored well away from food, food contact surfaces and food use materials. Further separation should occur within the chemical storage area. Store all cleaning and sanitizing products in a separate area from pest control chemicals to help ensure that pesticides are not accidentally applied to food contact surfaces. Lock your chemical storage area and allow access only to those authorized.

Use inventory control measures to help you track and trace the use of each chemical product. Record the amount of chemical used each market day, the name of the user and the monthly inventory. Inventory records also help you keep track of when chemicals such as sanitizers should be replaced. If stored too long, some sanitizers such as bleach lose their sanitizing properties; the bleaching capacity remains but the disinfecting capabilities are lost.

Preventing Contamination

Contamination of food equipment is one of the leading causes of foodborne illness. Proper cleaning and sanitizing practices control the growth of bacteria and disease causing microorganisms. Food left on work surfaces, equipment and utensils helps microorganisms grow and multiply. When the equipment or utensils are used without being thoroughly washed and sanitized, microorganisms are transferred to the food.

Only cleaned and sanitized surfaces of equipment and utensils must contact raw or cooked ready-to-eat food. Wash and sanitize the food preparation sink before each use.

Replace any chipped, cracked or rusted utensils or equipment immediately. A tiny chip or crack allows a buildup of grease, grime and microorganisms that cannot be easily removed by cleaning and sanitizing.

Use single service items including styrofoam containers, plastic utensils and disposable cleaning cloths only once and then throw out. The definition in the Alberta Food Code for single service is “designed to be used only once and then discarded”. When the styrofoam item is first produced, it is considered clean and sanitary. Once it is used, it cannot be properly cleaned and sanitized for re-use.

Keeping Records

Keep records of your sanitation program. They should document what procedures are monitored, verify their effectiveness and confirm corrective actions. Keep records of:

- Staff training
- Cleaning and sanitizing checklists (what, how, who)
- Cleaning and sanitizing schedules (when, how often)
- Monitoring, oversights and corrective actions
- Sanitation program inspection and verification (was it done)

Keep sanitation records for one year.



Examples of sanitation record forms can be found in Appendix F: Record Templates.

Staff Training

Train all your staff so that they understand the basics of your sanitation program. It is essential that they are aware of how the sanitation program works and their specific duties.

Your staff should know the proper cleaning and sanitizing procedures and why they are essential to maintain the safety of food products. Provide clear instructions to staff that specify:

- Premise areas, equipment, containers and utensils to be cleaned
- The person responsible for the cleaning and sanitizing
- The chemicals or cleaning products, including concentrations and process to be used
- The procedures to be used
- Frequency of cleaning

Provide additional training when there are changes to equipment or processes.

Remember, no matter how good the cleaning product, effort and energy from you and your staff are still required to achieve good results.



Food Safety Plan – Sanitation

As a permitted food establishment, you **must** have written sanitation procedures for your production and market facilities. Discuss your sanitation program with your public health inspector.

In many small facilities, such as farmers' markets, the cleaning and sanitation program may consist of only a few simple steps. Remember to include waste containers and garbage disposal procedures.

Your written sanitation program should identify:

- What is to be cleaned and sanitized including all equipment, utensils and materials (from truck to tables)
- What chemicals and concentrations are to be used for cleaning and sanitizing, include mixing instructions
- What tools are to be used
- How cleaning and sanitizing is to be done. Ensure staff are able to implement your written sanitation program
- Who is responsible for cleaning
- What safety precautions need to be taken
- Who is responsible for checking that the cleaning has been done
- When and how often the activities need to be completed (hourly, daily, weekly, monthly, annually)
- What records need to be kept
- What must be done in the event that procedures are not followed as written (deviation and corrective actions)
- What must be done if food becomes contaminated (corrective actions)



Take the time to continue developing your food safety plan. Create a section in your binder for Sanitation. Use the information in this chapter to build this component of your plan.

Deviation – failure of a standard operating procedure; a problem.

Corrective action – procedures/activities to be taken when a deviation occurs and to prevent the problem from occurring again.

Summary

Food may become contaminated unless effective control measures are taken to properly clean and sanitize equipment, utensils and other food contact surfaces. A sanitation program provides assurance that the food establishment is being cleaned effectively and consistently.

As a farm direct marketing vendor, take measures to protect food from contamination:

- Follow a written sanitation plan for vehicles, crates and totes, tables, equipment, utensils, etc. (who, what, when and how)
- Keep accurate records of cleaning and sanitizing activities in your sanitation log
- Always properly clean, rinse, sanitize and air dry any food contact surface or equipment before using and between using it for raw and cooked foods or between different foods
- Store cleaning supplies in an area separate from food products

As a farmers' market vendor, market manager or farm direct marketer, it is your responsibility to ensure that food sold is safe.

Market Manager Responsibilities

Alberta Approved Farmers' Market managers are responsible for the safety of the market venue.

- Is there a written sanitation program in place for the market, including washrooms, that clearly defines who is responsible, what needs to be done and when it should be done?
- Is there an adequate supply of cleaning products and equipment for the market?
- Do you have a system in place to record cleaning and sanitizing activities at the market? Are these activities recorded each market day?
- If someone else is responsible for cleaning, are you verifying that the activities are being done according to the sanitation program?

Managers need to monitor vendors' cleaning and sanitation activities at the market to ensure food is handled safely.

- Are vendors cleaning and sanitizing tables, equipment and utensils frequently throughout the market day?
- Do vehicles appear clean?
- Are the tables cleaned and sanitized prior to the market opening each market day?
- Are the stalls and tables kept clean and tidy throughout the day?

What's Next

Do you know what FIFO is? Hint: It's not a dog's name; it's an inventory practice. Read the next chapter to learn about FIFO, conditions required for safe storage and more.



Chapter Review

Take a few moments to review the chapter and answer True or False to the following questions.

1. Cleaning and sanitizing are the two components of a sanitation program. _____
2. Towel drying of utensils is a good sanitation practice. _____
3. Food establishments require a written sanitation program. _____
4. It is the farmers' market manager's responsibility to ensure that the market, including washrooms, is kept clean and tidy throughout the market day. _____
5. Sanitizing agents are fairly stable and are good to use repeatedly without changing. _____
6. Dry sweeping is an acceptable method of cleaning. _____

Answers to Chapter Review

- 1) True
- 2) False, towel drying can re-contaminate surfaces. All food contact surfaces must be air dried.
- 3) True
- 4) True
- 5) False, sanitizing agents break down over time and with exposure to dirt and sunlight. Sanitizing solutions must be replaced daily or more depending on the use.
- 6) False, sweeping is acceptable if done with a treated dust mop or with dust control compounds.

Answers to Word Exercise

- | | |
|------|------|
| 1) G | 5) E |
| 2) B | 6) C |
| 3) F | 7) D |
| 4) H | 8) A |