CLEANING

Module 4

The Objectives for **Module 4: Cleaning** are for the participants to understand the basics of:

- The role that cleaning (sanitation) plays in keeping food safe.
- The facilities required in order to wash and sanitize equipment.
- Suitable tools to use.
- The importance of following instructions carefully, particularly when it comes to using potentially harmful cleaning agents.
- The importance of regular cleaning schedules.
- How waste should be stored and properly disposed of to ensure a hygienic environment.
- The importance of reporting the signs of pest infestation, in order to facilitate a quick response.

In Module 3, participants learned the importance of maintaining proper personal hygiene. Module 4 teaches participants how to go further to ensure that the processing facility is also clean. This module focuses on how to ensure that all equipment, utensils, and other aspects of the facility are sanitized.

Participants will learn that there is more than just cleaning to ensure that the facility is sanitized. It is the responsibility of the employee to follow **S**tandard **O**perating **P**rocedures, which include cleaning schedules to properly and regularly clean equipment, utensils, tools, floors and walls.

The more personal this unit is, the more participants will understand the importance of their role in working towards a clean and sanitized workplace.

What does sanitation mean to you?

Sanitation:

keeping yourself and your **workspace clean** in order to keep food safe

Why are clean buildings, equipment and people important?

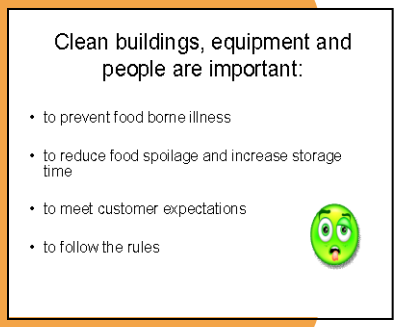
Sanitation

To scaffold the learning in this module, first have participants discuss why they clean their rooms, house and clothing? Participants may respond with: to keep things clean, organized, easy to find, smells good and many other reasons.

Use participants' responses to connect with the reasons why employees are required to clean and sanitize their work environment. Reinforce the concept that food processors must both clean and sanitize.

Participants' possible answers and food processing connections:

- To keep things clean:
  - Food processors keep their equipment clean and sanitized to reduce cross contamination.
- To keep things organized:
  - Employees must know where to put tools, food and waste which helps in finding the above as well.
- Smells good:
  - When the food processing facility is cleaned and sanitized, food waste will be put in the waste and there is less chance of food spoilage.



Review

Review the concept of food borne illness with participants**. Food borne illness happens when something you eat makes you sick**.

Have participants think of a time when they have cleaned out their fridge and found rotten or moldy food.

Ask the following questions:

1) What are some examples of cleaning?
2) What kind of cleaning do you think you might need to do in food processing?

Discuss possible outcomes of not using food before it spoils. Possible outcomes include potential to make consumers sick and losing money due to food spoiling.

Proper Equipment

Employees should know which brooms or brushes to use for specific chores. Cross contamination can occur if brooms or brushes to sweep the floor were also used to brush off equipment.

Active Learning

What you need: Paper, different coloured ink pads and gloves.

Explain to participants that the ink pad is filled with microbes. Have participants put on gloves and touch an inkpad then touch paper (or potatoes, apples, or glasses) that have been placed around the room.

Discuss how the ink traveled from the ink pad to the objects.

Sanitize

Have participants recall what a microbe is. In Module 1, microbe was defined as a **microscopic organism, such as a bacterium, virus or parasite**.

A good review is the video that was previously watched about how microbes grow and multiply.

- *Hand Washing and the Risk of Cross-Contamination* http://www.youtube.com/watch?v=32x65e9zTYo&feature=related

Knowing that microbes are small and invisible is important as the process of sanitizing kills what we cannot see.

If unsure...

ASK!

How do we keep food safe?

Clean and sanitize

Why do we keep our food safe?

To keep a food processing facility contaminate free, employees must know how to properly clean and sanitize.

Unclean kitchens, food and equipment can contaminate food. For example, food processed on unclean equipment may become contaminated by microbes or allergens that have not been properly killed by sanitation.

What makes a facility clean?

- the design of the facility
- how equipment is made and put in
- a good cleaning and sanitation program
- proper employee training

Design of Facility

Along with proper cleaning and sanitizing, the layout of a facility helps to keep the facility sanitary.

Stop Cross Contamination

A good facility design **stops cross contamination:**

- from outside
- between areas
- in storage, production and packaging

The Small Scale Food Processing Association (unknown) provides three key steps to avoiding cross contamination in food processing facilities.

1. Nobody can enter the production area directly from outdoors.
2. Employees should not move from raw to cooked areas.
3. Allergens should be stored in a separate area away from other foods.

Equipment and utensils

- made of material that can be cleaned and sanitized
- colour-coded or labeled for identification and sorting

Make it Clear

Equipment can be colour-coded to help identify use of designated tools with designated substances, such as allergens, and prevent them from cross-contaminating other foods.

Active Learning

Based on the three key steps above, have participants practice how they will move from one area to another while keeping cross contamination in check.

Practice in an actual kitchen or cordon off areas in a classroom using desks and tape on the floor.

Visual Inspection

Equipment and utensils must be located so that they can be easily inspected. Also, their construction and operation must not interfere with their inspection. Finally, any storage of equipment must be done in a sanitary way and create sanitary conditions.

Active Learning

Have participants practice good cleaning methods using a variety of cleaning methods:

- Washing with hot water
- Scrubbing
- Pressure washing
- Alternate methods that don't use water
- Using chemicals: detergents, alkalis or acids

There are 4 steps to good sanitation:

1. pre-clean
2. wash
3. rinse
4. sanitize

CLICK HERE to see how food processor SalsaMan in Nanaimo,BC practices good sanitation at their facility.

4 Steps

There are four key steps to a sanitary program: pre-clean, wash, rinse, and sanitize.

Cleaning and disinfection programs should ensure that all parts of the establishment are appropriately clean, and should include the cleaning of cleaning equipment. Areas and items to be cleaned need to be specified, who is responsible for the tasks, and the methods and frequencies that they are carried out in.

Cleaning and disinfection programs should be continually and effectively monitored for their suitability and effectiveness and where necessary, documented.

Cleaning schedules

Why use cleaning schedules?

Cleaning schedules tell us:

- what to clean
- when to clean
- how often to clean
- who should clean

SalsaMan

Nanaimo, BC based food processor SalsaMan provided the opportunity to showcase what their sanitary program looks like.

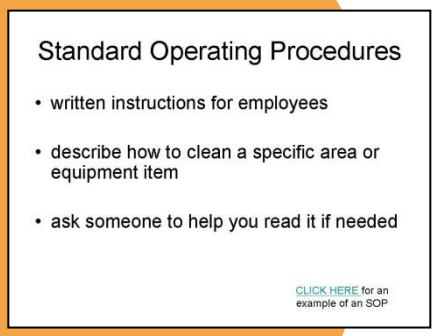
Click on the link and view the 4 steps of a cleaning and sanitation program.

Return to the course at any time by clicking on the black button.

Cleaning Schedules

Cleaning schedules are a part of home and work. Discuss when participants vacuum the floor at home or wash the car.

If an outing is possible, have participants notice the cleaning schedules in washrooms at local coffee shops or big box stores.



Sample SOP

To see a sample SOP, click on the link and you will be directed there.

If you would like each participant to have a copy, you can find the sample SOP in the Course Supplement folder.

It should be noted that some SOPs have space for employees to initial after they completed the task and other SOPs are a list of things to be completed and the order in which they should be completed.

Cleaning Chemicals

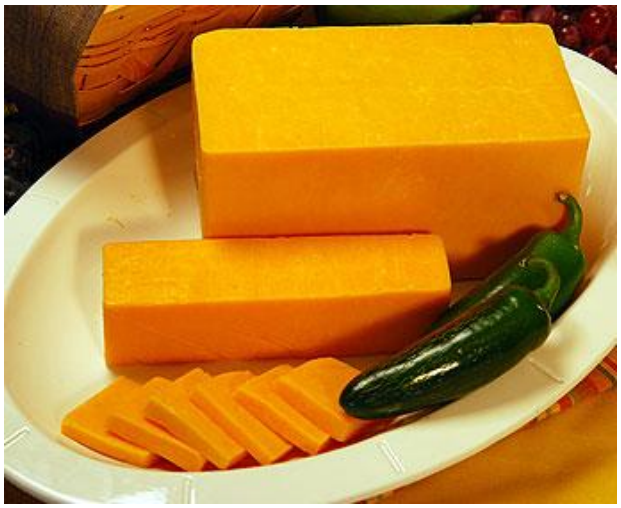
Many cleaning chemicals can be harsh and hazardous to your health.

Do not work with any chemicals that you have not been trained to use.

Know the purpose and hazards

There are many cleaning and sanitizing agents used for a variety of purposes. Employees must be familiar with the agents they will be using for each task.

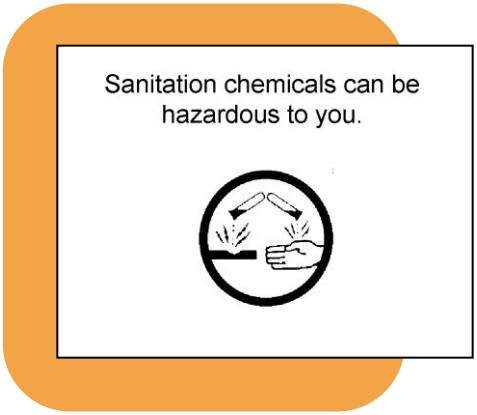
Always review manufacturer's directions for proper strength and applications. Sanitizers can be toxic at higher concentrations and more is not always better.



Active Learning

Bring in a variety of cleaning agents from a food processing facility and talk about the uses and the hazards of each agent.

Alternatively, bring in a variety household cleaning agents and discuss the different purposes and hazards.



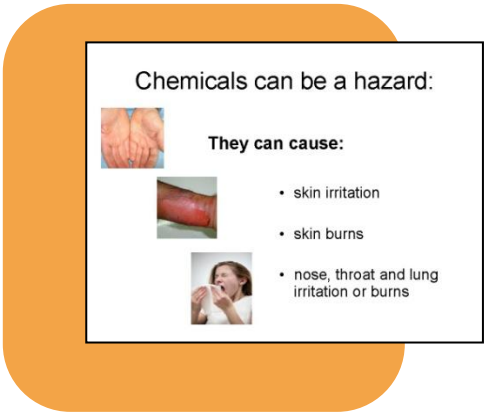
WHMIS

Canada has a national hazard communication standard known as The Workplace Hazardous Materials Information System (WHMIS).

WHMIS has three main elements:

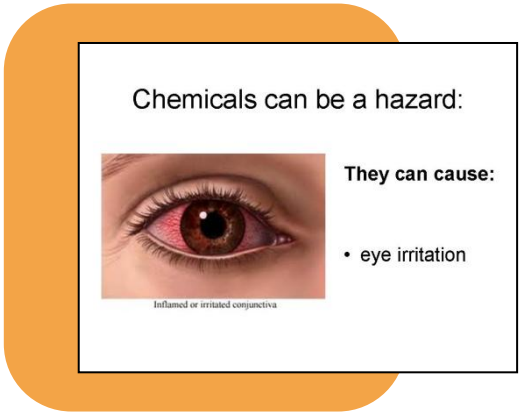
- Cautionary labeling of containers
- Provision of safety material
- Worker education and training.

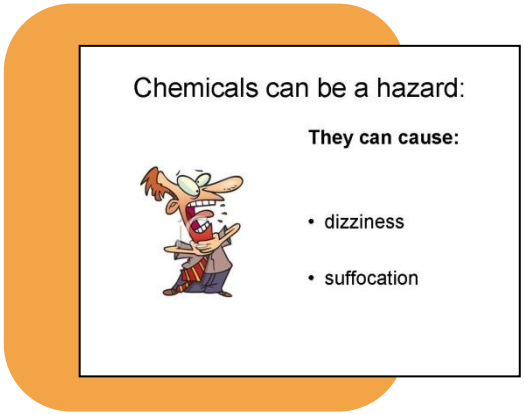
(Health Canada, 2010)

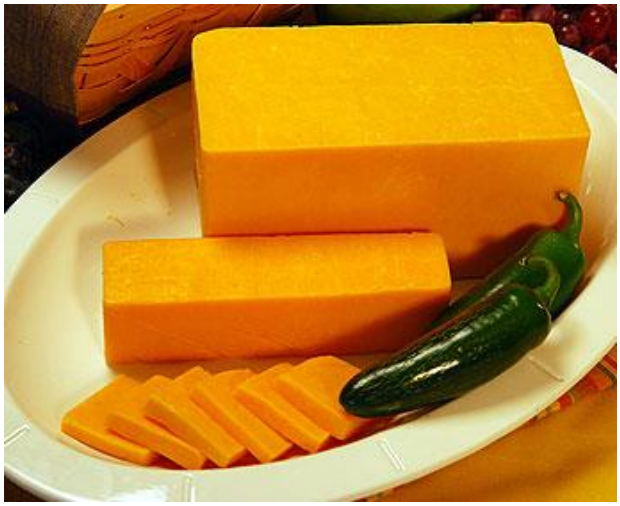


Short Term Effects

Many cleaning chemicals can be harsh and hazardous to your health.







Symptoms

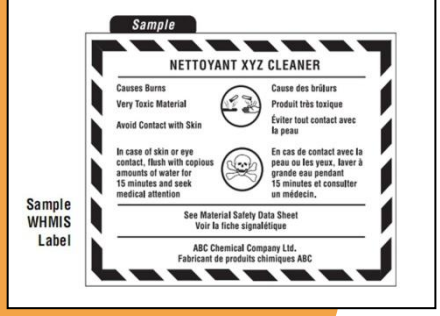
- Simple skin irritation, causing redness and itching.
- More severe chemical burns to the skin from corrosive products or from heated materials like steam.
- Some chemicals have unseen vapours which can get into the nose, throat and lungs, causing simple irritation or even worse, chemical burns.
- It is important to wear personal protective clothing such as goggles because some chemicals, when splashed onto the skin only cause irritation, but when splashed into the eyes, can burn the eyes and even cause blindness.
- Some chemicals, particularly the class of chemicals referred to as solvents, can cause dizziness when inhaled.
- Some chemicals can even overwhelm an employee, especially when over exposed, and cause asphyxia, also known as suffocation.

(SSFPA, unknown)

Workplace Hazardous Materials Information Systems (WHMIS)

For each controlled hazardous chemical, you must know:

- the hazards of the chemical
- how to protect yourself
- what to do in an emergency situation
- where to get more information



Sample WHMIS Label

WHMIS labels

A worker can identify a WHMIS controlled product by the hatched border on the label.

A trained WHMIS worker can answer 4 questions about each chemical in use:

- What are the hazards of the products in use?
- How do you protect yourself?
- What should you do in case of an emergency or spill?
- Where do you get more information?

(SSFPA, unknown)

Active Learning

Have participants practice reading WHMIS labels by answering the four questions above.

Follow procedures to protect yourself:

- make sure you understand the hazards of the chemical you are using
- **use only** the chemicals you have been **trained to use**
- be sure to **read the label** or have **someone explain** the information to you

Follow procedures to protect yourself:

- read the Material Safety Data Sheet (MSDS)
- **use only** the chemicals you have been **trained to use**
- **you must** use the chemicals the way your **supervisor shows you**

Understand the Hazards

Employees have a responsibility to protect themselves and their coworkers by understanding the hazards of the chemical agents they use. Read the label correctly, for two reasons:

- One, understand the hazards associated with the chemicals you are working with.
- Two, make sure that you are using the chemical you are supposed to be using.

Many deaths have occurred when incompatible chemicals have been mixed. Even simple cleaning chemicals, when mixed, can cause noxious gases. For example, bleach and ammonia produces a VERY TOXIC gas.

Read the Material Safety Data Sheet or MSDS. This document contains all of the health hazards, identifies the types of personal protective equipment or PPE that should be worn, and identifies how to handle it safely. MSDSs are required to be maintained for all WHMIS controlled products.

Finally, follow the cleaning instructions carefully.

(SSFPA, unknown)

Change room and washroom

- need to be clean and in good repair
- separate from processing area
- must have sinks with hot and cold water

Sanitary Washrooms

Employers are responsible for ensuring that change rooms and washrooms are available for employees outside of the food processing area.

There should be an adequate number of washrooms and change rooms. As well, these areas need to be maintained and sanitized regularly.

Waste containers and utensils

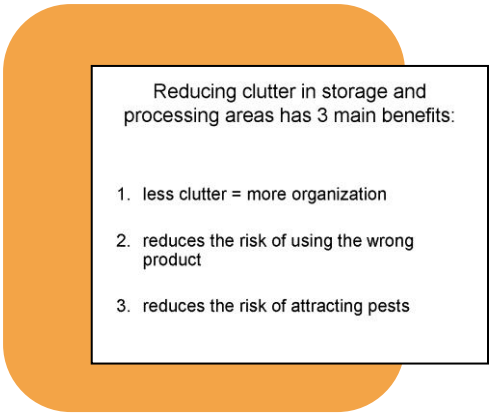
- must be labeled or have a colour code
- must be able to be cleaned
- must be leak proof
- must have lids or locks

Sanitary Waste

Clearly mark containers and utensils used for wastes. If containers and utensils used for waste materials are not clearly identified, this can result in container misuse (e.g. edible food products being held in a garbage container), and cause cross-contamination. Colour-coding and marking these containers and utensils can help prevent cross-contamination.

Clean As You Go

What does **clean as you go** look like? Have participants practice cleaning their work space as they work. If their work space requires them to get rid of waste, the receptacle should be close by and emptied regularly.



Active Learning

Create a mess within the classroom and have participants organize the mess. If storage is not labeled, have participants label the shelves for future participants.

Pests

Pests such as insects, rodents, and birds can contaminate food, ingredients, packaging materials and surfaces. Pests in or around an establishment can lead to contamination from droppings, larvae and dead insects or animals.

Pest Control Program

- Measures both inside and outside the food processing area
- Clearly defines which employee is responsible for different tasks
- Has proper chemicals on hand and training for proper use
- Maintain records to demonstrate that sufficient pest control has been applied
- Includes a schedule and frequency of pest control management

(SSFPA, unknown)

References

Health Canada, (2010). *Workplace Hazardous Material Information System – Official National Site.* Retrieved February 29, 2012 from: http://www.hc-sc.gc.ca/ewh-semt/occup-travail/whmis-simdut/index-eng.php

Small Scale Food Processors (unknown). *Basic Hygiene Training for Food Processor Workers – Module 4 - Sanitation.*

[Untitled photograph of cheese]. Retrieved February 21, 2012, from: dgl.microsoft.com