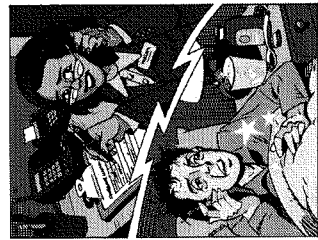


Welcome to FOODSAFE Level 1

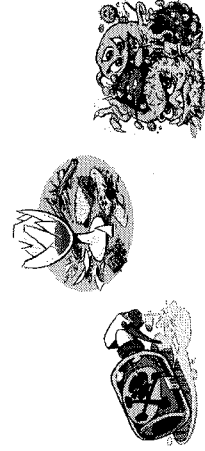


At the end of FOODSAFE Level 1, participants will be able to describe and apply safe food handling practices at each step of the food preparation process from receiving to serving, in order to reduce the risk of food contamination.

Overview



Unit 1
The Causes of Foodborne Illness

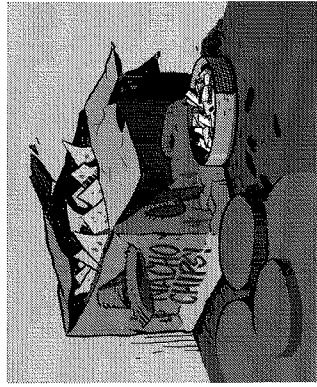
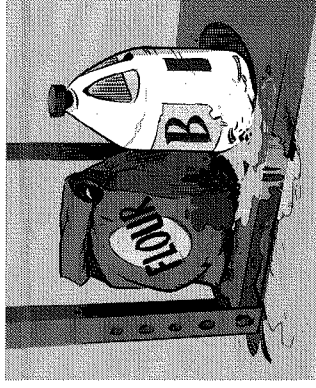
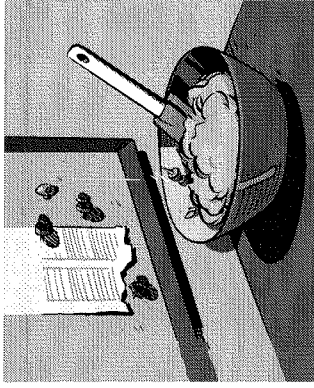


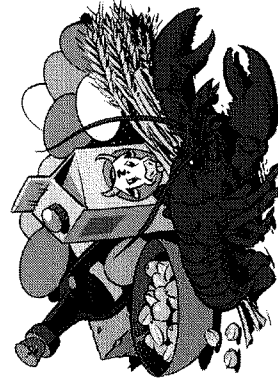
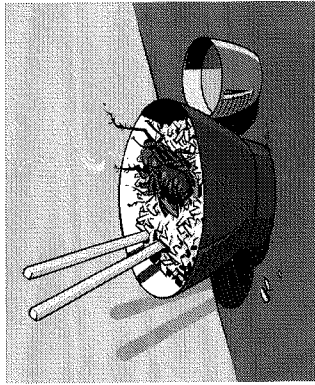
The Causes of Foodborne Illness

Name That Hazard!



...or is it a hazard?





Unit 1 Review



1. Glass shards, tacks and hair are examples of:
- a) chemical contaminants
 - b) physical contaminants
 - c) biological contaminants

FOODSAFE Level 1

Unit 1 Review



2. Pesticides and cleaning agents are examples of:

- a) chemical contaminants
- b) physical contaminants
- c) biological contaminants

FOODSAFE Level 1

Unit 1 Review



3. A bottle of bleach has been left on the vegetable prep table. The bottle is leaking and bleach has coated some chopped lettuce. This is an example of:

- a) chemical contamination
- b) physical contamination
- c) biological contamination

FOODSAFE Level 1

Unit 1 Review



4. *Most* cases of foodborne illness in the food service industry are caused by:

- a) chemical contaminants
- b) physical contaminants
- c) biological contaminants

FOODSAFE Level 1

Unit 1 Review



5. A guest with a severe nut allergy has asked if there are nuts in a stir-fry dish they want to order. You are almost sure there are no nuts in the dish. What is the first thing you should do?

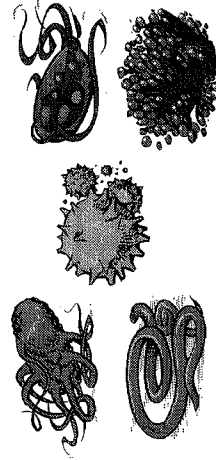
- a) Tell the guest there are no nuts in the dish.
- b) Do a visual check of the dish to see if you can see any nuts.
- c) Check with the chef and check the ingredient list.

FOODSAFE Level 1

Unit 2



**Unit 2
Microbes & Foodborne Illness**



Microbes and Foodborne Illness Part 1



FOODSAFE Level 1

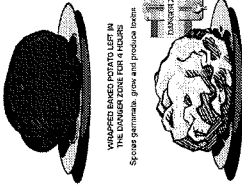
- Bacteria
- Viruses
- Parasites
- Protozoa
- Fungi



FOODSAFE Level 1

Spores & Toxins

RAW POTATO
Contains solanine (toxic alkaloid) spores



POWDERED BAKED POTATO LEFT IN THE DANGER ZONE FOR 4 HOURS
Spores germinate, grow and produce toxin

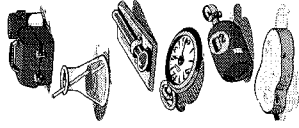


BAKED POTATO EATEN
Toxin causes infection



FOODSAFE Level 1

FATTOM



FOODSAFE Level 1

Food



FOODSAFE Level 1

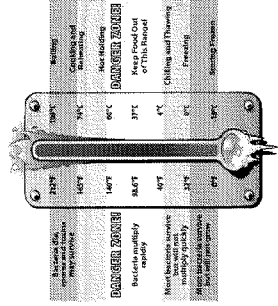
Acid

ACIDIC	NEUTRAL - HIGHER RISK FOODS							ALKALINE						
0-3	3.5	4.0	4.6	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	10-14	
LEMONS - 2.5 pH	ORANGE JUICE - 3.5 pH	APPLES - 3.5 pH	CRANBERRY JUICE - 3.0 pH	YOGURT - 4.0 pH	CONDENSED MILK - 4.5 pH	EGGS - 7.5 pH	MEAT - 6.5 pH	POULTRY - 6.0 pH	FISH - 6.5 pH	DAIRY - 6.5 pH	GRAIN - 6.5 pH	VEGETABLES - 6.5 pH	BEANS - 6.5 pH	WATER - 7.0 pH



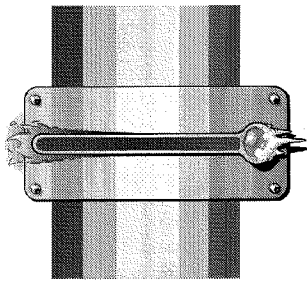
FOODSAFE Level 1

Temperature



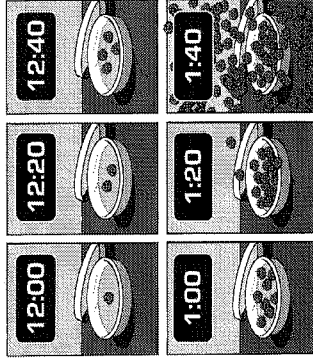
FOODSAFE Level 1

Unit 2



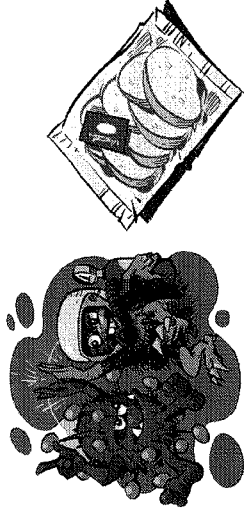
FOODSAFE Level 1

Unit 2



Time

Oxygen



FOODSAFE Level 1

Unit 2

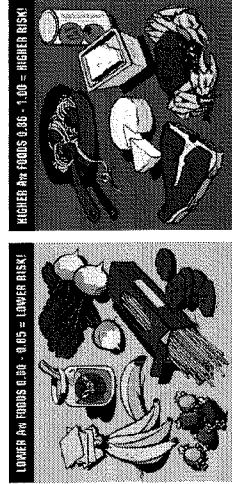


FOODSAFE Level 1

Unit 2



Moisture

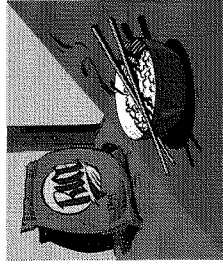


FOODSAFE Level 1

Unit 2



Which is Potentially Hazardous?



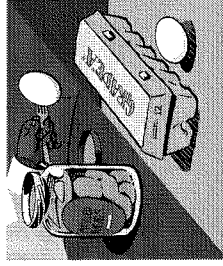
Why?

FOODSAFE Level 1

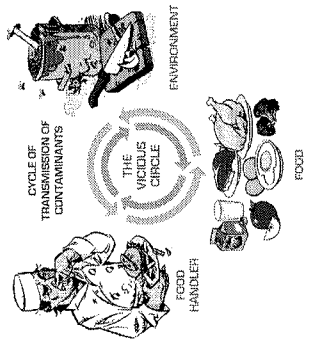
Unit 2



Which is Potentially Hazardous?



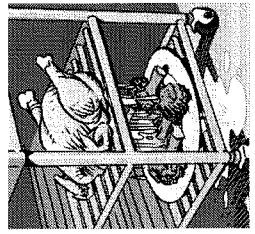
Why?



Microbes and Foodborne Illness Part 2

Direct Transmission

Pathogens transfer directly from the source of contamination to food



Cross-Contamination
(indirect transmission)

when there is an intermediate step between the source and the food



Unit 2 Review



1. Microbes that can cause illness or death are called:

- a) toxins
- b) yeasts
- c) pathogens

FOODSAFE Level 1



2. The DANGER ZONE temperature range where bacteria can multiply rapidly is:
- a) 0°C (32°F) to 4°C (40°F)
 - b) 4°C (40°F) to 60°C (140°F)
 - c) 60°C (140°F) to 74°C (165°F)

FOODSAFE Level 1



3. Raw hamburger that contains *E. coli* has been prepared on a cutting board. The same board is then used, without sanitizing, to slice tomatoes for the hamburgers and the *E. coli* is transferred to the tomatoes. This is an example of:
- a) direct transmission
 - b) cross-contamination
 - c) spore production

FOODSAFE Level 1



4. A bacterium with a protective coating that can survive high temperatures, cold and chemicals is called a:
- a) spore
 - b) virus
 - c) fungi

FOODSAFE Level 1



5. Foods that contain toxins:
- a) are usually discoloured and have an unpleasant odor
 - b) grow a yellowish fuzz that must be removed before eating
 - c) may not look, smell or taste different from uncontaminated food

FOODSAFE Level 1



Unit 3
Food Safety Plans & HACCP

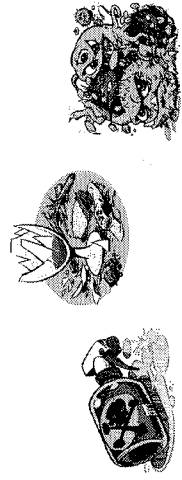


FOODSAFE Level 1



A Food Safety Plan identifies:

HAZARDS

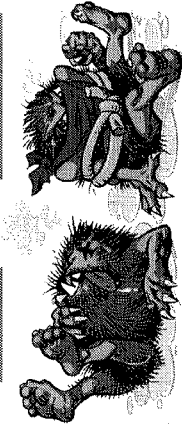


A Food Safety Plan identifies:

CRITICAL CONTROL POINTS

Kill Step!

Control Step!



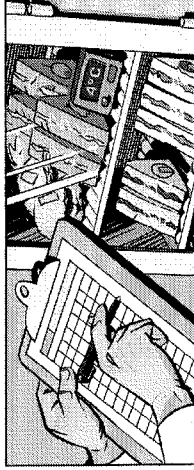
A Food Safety Plan identifies:

CRITICAL LIMITS



A Food Safety Plan identifies:

MONITORING ACTIONS



A Food Safety Plan identifies:

CORRECTIVE ACTIONS



Unit 3 Review



1. One step in a Food Safety Plan is:
 - a) monitoring critical limits
 - b) following procedures for chemical storage
 - c) preparing a cleaning schedule for staff



FOODSAFE Level 1

Unit 3 Review

2. Food handlers should follow Food Safety Plans to ensure:

- a) food contact surfaces are sanitary
- b) recipes are followed precisely
- c) food safety hazards are minimized



FOODSAFE Level 1

Unit 3 Review

3. A Critical Control Point is:

- a) the point after which no further action can be taken to eliminate a hazard
- b) a procedure that should be followed when critical limits are not met
- c) a biological, physical or chemical hazard that may contaminate food



FOODSAFE Level 1

Unit 3 Review

4. A Corrective Action in a Food Safety Plan is:

- a) a biological, physical or chemical hazard that may contaminate food
- b) a procedure that should be followed when critical limits are not met
- c) the specific and measurable limit for critical control point



FOODSAFE Level 1

Unit 3 Review

5. Pre-made sandwiches are displayed in a self-serve cooler. The temperature of the cooler was 3°C at 11:00 am. You checked the cooler again at 12:00 noon and found the temperature had risen to 6°C. What corrective action should you take?

- a) transfer the sandwiches to a working cooler that is below 4°C
- b) immediately discard the sandwiches
- c) adjust the temperature gauge on the cooler

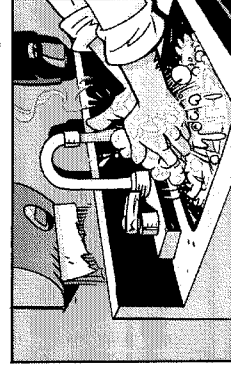


FOODSAFE Level 1

Unit 4

Unit 4

Food Handler Health and Hygiene



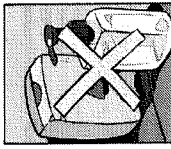
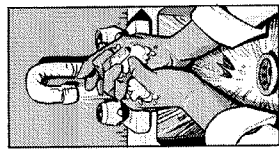
FOODSAFE Level 1

Unit 4

Food Handler Health & Hygiene

Hand Washing

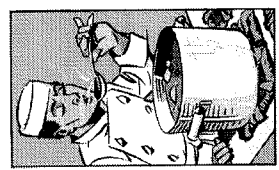
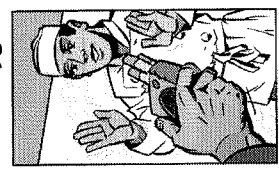
Personal hygiene



Personal hygiene



Personal hygiene



Unit 5
Receiving and Storing Food Safely



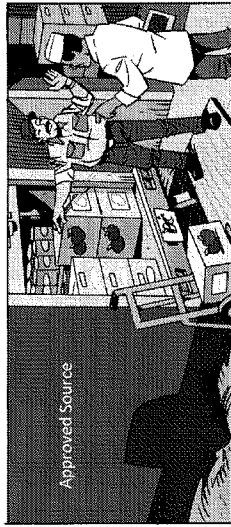
Receiving and Storage

FOODSAFE Level 1

Unit 5



Receiving

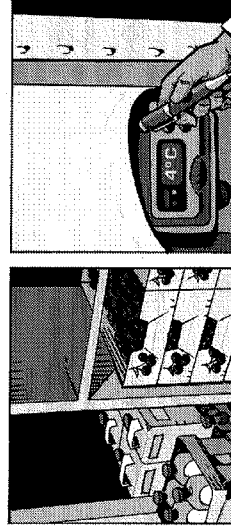


FOODSAFE Level 1

Unit 5



Receiving

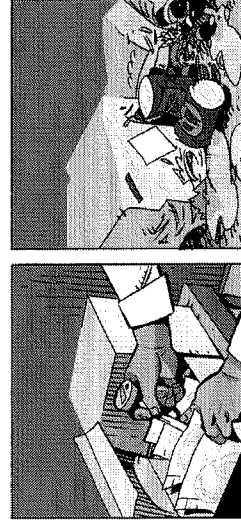


FOODSAFE Level 1

Unit 5



Receiving



FOODSAFE Level 1

Unit 5



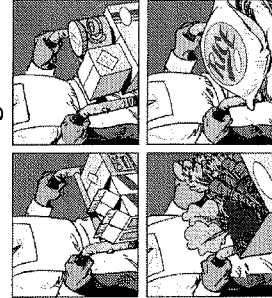
Receiving

FOODSAFE Level 1

Unit 5



Storing



FOODSAFE Level 1

Unit 5

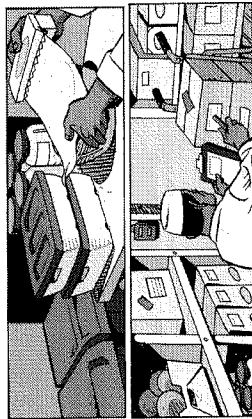


Storing

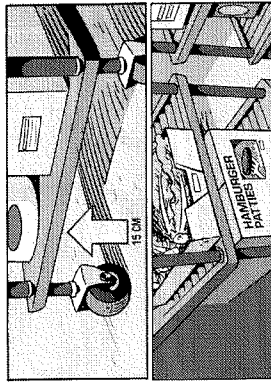




Storing



Storing



Storage



Unit 5 Review



1. When receiving a shipment of food, the internal temperature of frozen food should be:

- a) -18°C (0°F)
- b) 4°C (40°F)
- c) 60°C (140°F)



2. Food should only be accepted from approved sources because they:

- a) are subjected to regular inspections
- b) provide easy credit term for restaurants
- c) have adequate storage space on the vehicle



FOODSAFE Level 1

Unit 5 Review

3. A food shipment of a box of frozen chicken breasts, four cartons of milk, a crate of raw carrots and three bags of flour has just arrived. What should be put away first? Second? Third? Last?
- a) frozen chicken breasts
 - b) cartons of milk
 - c) bags of flour
 - d) crate of raw carrots



FOODSAFE Level 1

Unit 5 Review

4. The *first in, first out* (FIFO) rule means that food is organized so that:
- a) frequently used items are close to the door
 - b) the first products loaded onto the delivery truck are unloaded first
 - c) older stock is used before new stock



FOODSAFE Level 1

Unit 5 Review

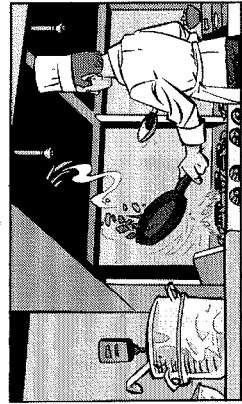
5. You are receiving a shipment of potentially hazardous refrigerated food. The temperature gauge on the delivery truck is not working. What should you do first?
- a) reject the shipment
 - b) check the temperature of the food
 - c) ask the driver how long the gauge has been broken



FOODSAFE Level 1

Unit 6

Unit 6 Preparing Food Safely



FOODSAFE Level 1

Unit 6

Preparing Food Safely Part 1



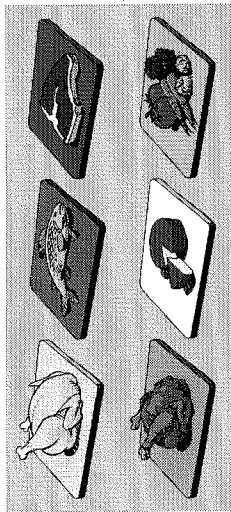
FOODSAFE Level 1

Unit 6

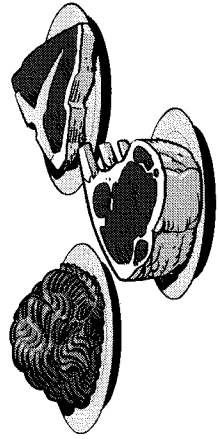
Thawing



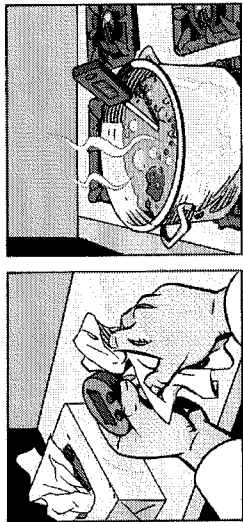
Colour-coded Cutting Boards



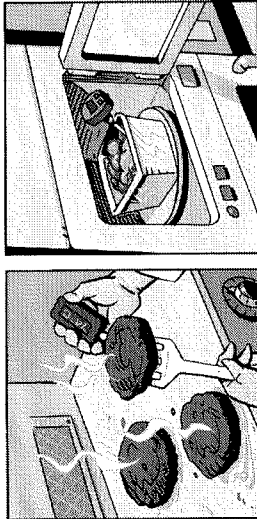
How Would You Like That Cooked?



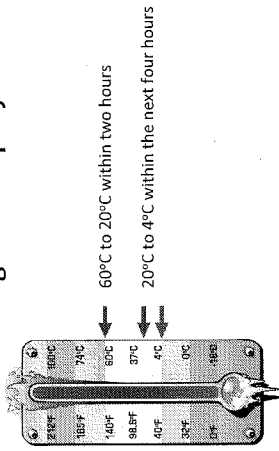
Using a Food Thermometer



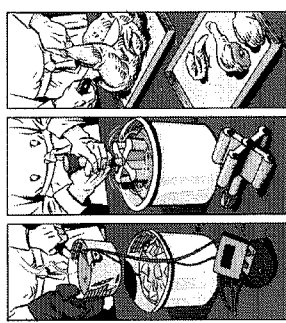
Using a Food Thermometer



Cooling Foods Rapidly



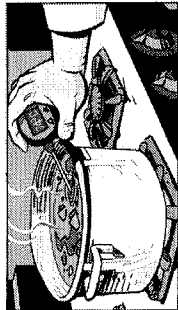
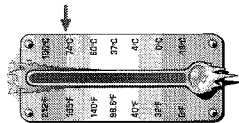
Methods for Cooling Foods





Re-Heating Foods

Re-heat cooled foods rapidly to a minimum temperature of 74°C



Preparing Food Safely Part 2



Unit 6 Review



1. Which is NOT a safe way to thaw frozen food?
 - a) submerged in cold running water
 - b) at room temperature on an elevated shelf
 - c) in the refrigerator or walk-in cooler



2. You have just cut up a raw chicken on a cutting board. You now want to slice cucumbers for a salad. You have thoroughly washed your hands. What must you do next to prevent cross-contamination?
 - a) use a clean, sanitized cutting board and knife
 - b) wipe the cutting board with a warm, soapy cloth
 - c) pour vinegar on the cutting board to sanitize it



3. The correct way to check that a meatloaf has reached a high enough internal temperature to kill pathogens is to:
 - a) follow the prescribed cooking time in the recipe
 - b) press on the top to check that the juices are clear
 - c) insert a probe thermometer into the middle

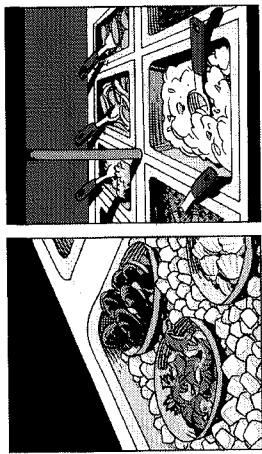
4. Before putting food into a hot-holding unit, the food must be heated to at least:
- a) 37°C (99°F)
 - b) 60°C (140°F)
 - c) 74°C (165°F)

5. Rapid cooling of hot foods is important for food safety because it:
- a) helps prevent the growth of pathogens
 - b) prevents a skin from forming on the top of food
 - c) preserves the taste and colour of the food

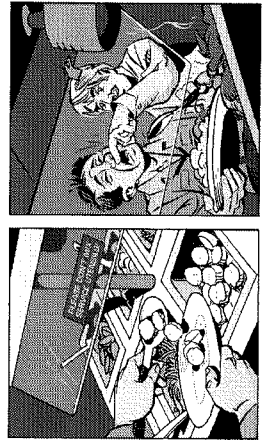
Unit 7
Serving Food Safely



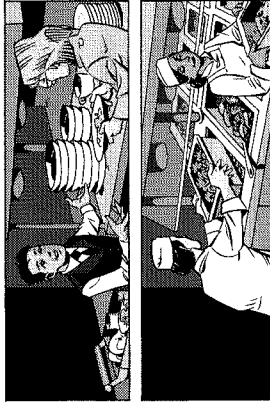
Self Service and Buffets



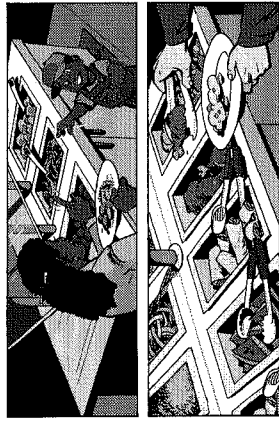
Self Service and Buffets



Self Service and Buffets



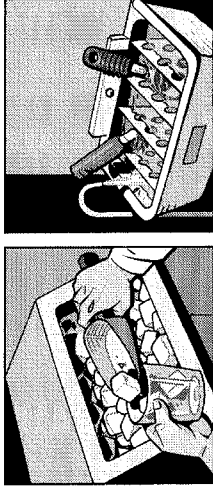
Self Service and Buffets



Serving Food



Serving Food



Serving Food



Clearing and Setting Tables



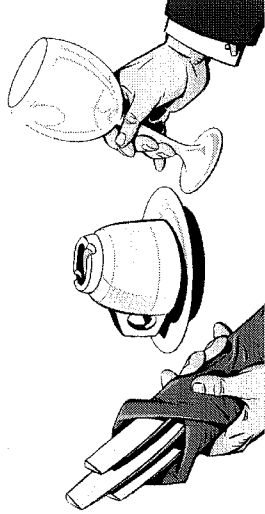
Clearing and Setting Tables



Clearing and Setting Tables



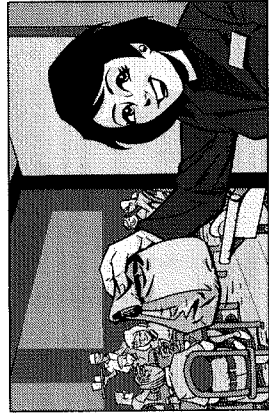
Clearing and Setting Tables



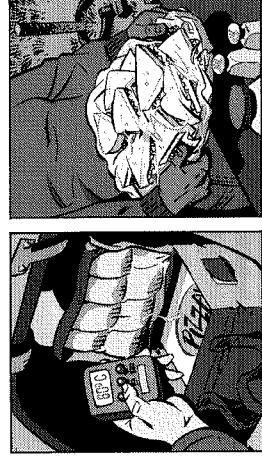
Single Service Items



Taking Away Leftovers



Catering and Delivery



Unit 7 Review



1. Mixing service utensils between dishes on a buffet could:
- a) affect people with food allergies
 - b) make cleanup more difficult
 - c) create longer lineups at the buffet

2. Cold salad bars must be chilled to hold food at or below 4°C (40°F) in order to:
- a) preserve the flavour of the food
 - b) kill pathogens that may be in the food
 - c) prevent pathogens from multiplying in the food

3. Frequently used ice cream scoops should be stored between uses in:
- a) gel sanitizer
 - b) cold running water
 - c) warm, soapy water

4. Leftover food from a buffet table must be:
- a) reused
 - b) reheated
 - c) discarded

5. Hot food being transported off premises for catering or delivery must:
- a) maintained at or above 60°C (140°F)
 - b) tightly wrapped in plastic wrap
 - c) maintained at or below 4°C (40°F)

Unit 8
Cleaning, Sanitizing & Pest Control



Cleaning, Sanitizing & Pest Control



Cleaning

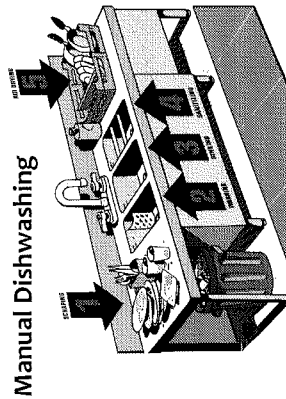
Cleaning with soap and water and rinsing well with clean water will remove surface dirt and grease, but will not remove all harmful bacteria.



Sanitizing

Sanitizing eliminates or substantially reduces harmful bacteria on a cleaned surface.

Dishware, utensils and food contact surfaces such as counters, tables and cutting boards should be cleaned, then rinsed and then sanitized.



Manual Dishwashing

Mechanical Dishwashing

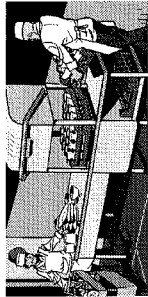
High Temperature
Wash Cycle: 60°C or follow manufacturer's instructions
Sanitizing Cycle: 82°C or follow manufacturer's instructions



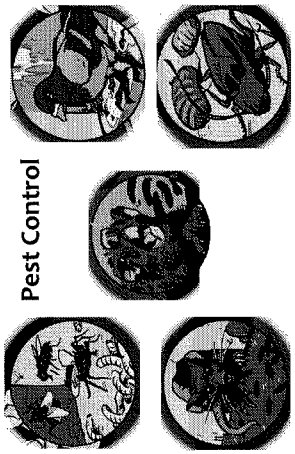
Mechanical Dishwashing

Low Temperature

Wash Cycle: 60°C or follow manufacturer's instructions
 Sanitizing Cycle: 50ppm chlorine or 12.5ppm iodine
 or follow manufacturer's instructions



Pest Control



Pest Control

Unit 8 Review



2. Sanitizing with a commercial grade sanitizer will:
- a) remove only surface dirt and grease
 - b) substantially reduce the number of bacteria
 - c) promote the growth of bacteria

1. Cleaning with soap and water and rinsing with clean water will:
- a) remove only surface dirt and grease
 - b) substantially reduce the number of bacteria
 - c) promote the growth of bacteria

FOODSAFE Level 1
Unit 8 Review

3. Cleaned and sanitized dishware should be:

- a) dried with a clean, dry towel
- b) stored while still warm and damp
- c) air dried on a clean, sloped surface

FOODSAFE Level 1
Unit 8 Review

4. Unless otherwise stated in the manufacturer's instructions, the temperature of the sanitizing cycle of a high temperature dishwasher must reach at least:

- a) 22°C
- b) 62°C
- c) 82°C

and run for at least 10 seconds.

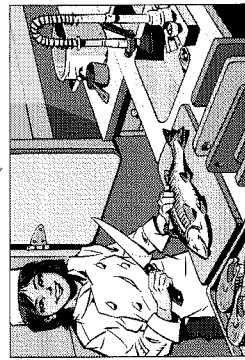
FOODSAFE Level 1
Unit 8 Review

5. Brown, oval-shaped casings are a sign of:

- a) flies
- b) rats or mice
- c) cockroaches

FOODSAFE Level 1
Unit 9

Unit 9
Premises Requirements



FOODSAFE Level 1
Unit 9

Premises Requirements

- potable water
- adequate hot water supply
- adequate cooler & freezer storage
- adequate lighting
- grease traps



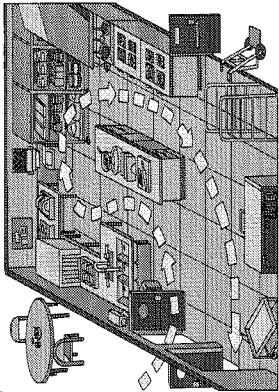
FOODSAFE Level 1
Unit 9

Premises Requirements

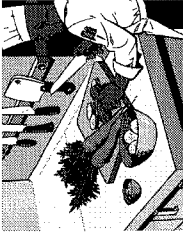
- proper ventilation
- proper waste disposal
- dedicated hand washing sinks
- proper dish washing facilities



Premises
"Flow"



Food Contact Surfaces



- durable
- non-absorbent
- easy to clean
- non-toxic
- smooth
- light-coloured

Thank You for Taking
FOODSAFE Level 1

