



HOTEL OPERATION II
TRANSPORT AND STORE FOOD IN A SAFE AND HYGIENIC MANNER

INSTRUCTION SHEET	LEARNING GUIDE #1
<p>This learning guide is developed to provide you the necessary information regarding the following content coverage and topics –</p> <ul style="list-style-type: none">• Identify appropriate food transportation• Transport food safely and hygienically• Store food safely and hygienically <p>This guide will also assist you to attain the learning outcome stated above. Specifically, upon completion of this learning Guide, you will be able to –</p> <ul style="list-style-type: none">• hygiene and OHS requirements for food storage and transport• advantages and disadvantages of different forms of transport for particular food items, quantities and circumstances• safe storage principles and practices for different food types, including storage options• characteristics of different food items and conditions required to maintain optimum freshness, palatability and safety <p>Learning Instructions:</p> <ol style="list-style-type: none">1. Read the specific objectives of this Learning Guide.2. Follow the instructions described in number 3 to 10.3. Read the information written in the “Information Sheet 1” from page 1-21. Try to understand what are being discussed. Ask you teacher for assistance if you have hard time understanding them.4. Accomplish the “Self Check - 1” in page 22.5. Ask from your teacher the key to correction (key answers) or you can request your teacher to correct your work for self-check 1.6. If you earned a satisfactory evaluation proceed to “Information Sheet 2”. However, if your rating is unsatisfactory, see your trainer for further instructions or go back to Learning	



HOTEL OPERATION II
TRANSPORT AND STORE FOOD IN A SAFE AND HYGIENIC MANNER

INSTRUCTION SHEET

LEARNING GUIDE #1

Activity #1.

7. Read the information written in the “Information Sheet 2” from page 23-37. Try to understand what are being discussed. Ask you teacher for assistance if you have hard time understanding them.
8. Accomplish the “Self Check - 2” in page 38.
9. Ask from your teacher the key to correction (key answers) or you can request your teacher to correct your work for self-check 2.
10. If you earned a satisfactory evaluation, congratulation you can proceed to next unit of competency. However, if your rating is unsatisfactory, see your trainer for further instructions or go back to Learning Activity #2.



INFORMATION
SHEET 1

LO1- IDENTIFY APPROPRIATE FOOD
TRANSPORTATION

Overview of food safety and hygiene procedures

Food safety and hygiene procedures are critical to ensure that the food served to customers is safe to eat.

Various legislation and regulations exist to ensure this happens across all hospitality businesses, and that procedures are in place to see that they are properly enforced and maintained food safety legislation includes key requirements that businesses must implement to ensure effective compliance. These requirements include the following:

- All staff are in receipt of relevant, regular and accurate food safety and health
- All staff practice and demonstrate a high standard of personal safety and hygiene. For example, this includes regular and appropriate hand washing, for instance, between dealing with raw and cooked foods and after going to the toilet, and using oven gloves when picking up hot pans.

Staff must comply with legislation and regulations governing the organization. Staff must follow and comply with organizational policies written in accordance with such legislation.



1.1 Select suitable food transportation vehicles according to legislative requirements

Food transporting vehicles should be solely used for transportation activities other than transporting chemicals and non-food items. When food and non-food items are transported together there is a high degree of cross contamination. Food transportation should embody:

- Use clean and sanitized transporting vehicles
- Pack food items to be transported
- Do not transport food and non food items together
- Do not use food transporting trailers to transport non food items

Ensuring food safety during transporting and storage

Food safety is a scientific discipline describing handling, preparation, and storage in ways that prevent food borne illness. This includes a number of routines that should be followed to avoid potentially severe health hazards. The tracks within this line of thought are safety between industry and the market and then between the market and the consumer. In considering industry to market practices, food safety considerations include the origins of food including the practices relating to food labeling, food hygiene, food additives and pesticide residues, as well as policies on biotechnology and food and guidelines for the management of governmental import and export inspection and certification systems for foods. In considering market to consumer practices, the usual thought is that food ought to be safe in the market and the concern is safe delivery and preparation of the food for the consumer.

Food can transmit disease from person to person as well as serve as a growth medium for bacteria that can cause food poisoning. In developed countries there are intricate standards for food preparation, whereas in lesser developed countries the main issue is simply the availability of adequate safe water, which is usually a critical item.^[1] In theory, food poisoning is 100% preventable. The five key principles of food hygiene, according to WHOM, are:

1. Prevent contaminating food with pathogens spreading from people, pets, and pests.
2. Separate raw and cooked foods to prevent contaminating the cooked foods.
3. Cook foods for the appropriate length of time and at the appropriate temperature to kill pathogens.



4. Store food at the proper temperature.
5. Do use safe water and cooked materials.

- **Importance of Food Safety to Hotels**

Whether the business is a restaurant, a school or a hotel, food safety regulations must be followed by each to ensure that customers are consuming food that is prepared in safe conditions, and is thoroughly cooked to prevent food poisoning. Many hotels practice such intense food safety procedures that even cleaning maids and maintenance personnel are required to be trained in food safety regulations such as:-

- 1. Personal Hygiene**

One of the most important food safety regulations in the hotel food industry deals with personal hygiene. All persons in the hotel who will be touching food items or items that will touch the food are required to wash their hands after using the rest room. Personal hygiene as a food safety regulation in hotels does not only govern hand washing but also the covering of hair and cuts on the body, wearing clean clothing to work, and covering the mouth and nose when sneezing or coughing and then washing the hands again.

- 2. Cleaning and Disinfection**

Cleaning and disinfecting food preparation areas and items used in preparing food are very important to the food safety standards of a hotel. Items, such as preparation tables, stoves, ovens, knives, stirring utensils, grinding machines and juicing machines, all must be cleaned and disinfected to prevent bacteria from growing in or on the items and potentially causing food poisoning.

- 3. Pest Control**

Making food safe in hotels does not simply mean using cleanliness when handling food or objects that will come into contact with the food. Food pests, such as cockroaches, flies and rodents, can contaminate any foods. Annual or more frequent visits from pest control services will help to prevent such problems and keep the food service sector of the hotel at top quality.



4. Food Preparation

The cooks preparing the food must learn the proper means of preparing dishes. They are required to throw away any expired foods, even if they are only a day past expiration date, and any foods that touch the floor or come into contact with a dirty surface. Cooks are also required to cook food thoroughly unless otherwise directed by the person who is requesting the food item.

5. Inspection

The health department of the county in which the hotel is seated reserves the right to make surprise visits to the hotel or other food service business in order to ensure that the hotel staff is observing proper food safety procedures. Since inspections can be done at any time, it is important that all standards be met or the food service sector of the hotel could be shut down, causing the hotel to lose a significant amount of revenue.

- **General CONCEPT OF FOOD HYGINE**

The term "food hygiene" is used to describe the preservation and preparation of foods in a manner that ensures the food is safe for human consumption. This term typically refers to these practices at an individual or family level, whereas the term "food sanitation" usually refers to these types of procedures at the commercial level within the food industry, such as during production and packaging or at stores or restaurants. Food hygiene in the home kitchen includes things such as the proper storage of food before use, washing one's hands before handling food, maintaining a clean environment when preparing food and making sure that all serving dishes are clean and free of contaminants

Food is a potential source of infection. It is liable for contamination by micro-organisms; at any point during its journey from the producer to the consumer the mail danger from contamination arise from handling distribution and serving of foods. Food hygiene, in its widest sense implies hygiene in the production, handling, distribution and serving of all types of food.

1. Milk Hygiene

Milk is an efficient vehicle for a great variety of disease agents. The sources of infection of milk may be (i) the dairy of animal (ii) the human handler or (iii) the environment, e.g. contaminated



vessels, polluted water, flies, dust etc. But for the production of clean and safe milk the following factors should be taken in to consideration.

- (i) Animal must be healthy and clean
- (ii) Premises where the animal is housed and milked must be hygienic
- (iii) The milk vessels must be sterile and kept covered.
- (iv) The water supply must be safe
- (v) Milk handler must be free from communicable diseases
- (vi) Milkers must wash their hands and arms before milking
- (vii) The distribution of milk must be done under hygienic condition

Much of the milk produced should be treated by boiling but it has some bad effects as it alters the taste of the milk and impairs the food values considerably by destructing vitamins, enzymes and some useful bacteria and alteration of proteins, fats, milk, sugar and salts. So milk should be heated to a temperature of 161° F and cooled to below 50°F

2. Meat Hygiene

The term meat includes various tissues of animal origin. The diseases which may be transmitted by eating unwholesome meat are: Tape worm integrations and Bacterial infestations causing anthrax, tuberculosis, and food poisoning.

The characteristics of good meat are that it should not be pale, pink or a deep purple tint, firm and elastic to touch, should not be slimy and have an agreeable odor.

Slaughter houses are the places where animals, whose flesh is intended for human consumption, are killed. The hygiene of the slaughter house is of paramount importance to prevent the contamination of meat during the process of dressing preferably the slaughter houses should be



away from the residential areas and there must be provision for the disposal of wastes, proper water supply, examination of animals, storage of meat, transportation of meat etc.

3. Fish Hygiene

Fish loses its freshness because of the bacteria with which they become infected. The signs of fresh fish are the stiffness, the bright red gills and the clear and prominent eyes. Fish is the intermediate host of the tape worm. Fish obtained from sewage polluted waters may be infected with cholera and typhoid bacilli. Consumption of certain fish may sometimes give rise to fish poisoning.

4. Fruits and Vegetables

Fruits and vegetables constitute another important source for the spread of harmful organisms. These infections are a serious menace to public health where sewage is used for growing vegetables. The vegetables which are consumed raw in the form of salads, pose a problem in food sanitation. People should be educated to wash the vegetables before eating them raw. Vegetables which are cooked and eaten are free from this danger.

5. Sanitation of Kitchen

Sanitation of kitchen and eating establishment are a challenging problem in food sanitation. These should not be near any accumulation of filth or open drain, droppings or dung and other sources of nuisances. The floor of the kitchen should be smooth and easy to keep clean. The doors and windows should be rat-proof, fly-proof, and of the self-closing type, there should be provision for ample natural lighting facilities aided by proper ventilation.

6. Preservation of Foods

Generally food is preserved by freezing or by using currents of cold air. Cold storage is used for the preservation of foodstuffs and their conveyance from one place to another.

Food may also be preserved in ice, alcohol, vinegar and by other substances, drying is sometimes adopted to, as in the case of fish, vegetables and fruits. By the method of dehydration, vegetable



can be preserved in a very small space for a long time and can be used for cooking by merely soaking in water for a while.

Foods like milk, fish, fruit and jams are also preserved in tins or bottles by proper sealing after all the air has been expelled by heat. Badly preserved foods are not good for health,

7. Adulteration of Foods

Adulteration of food consists of a large number of practices such as mixing, substitution, abstraction, concealing the quality, putting up decomposed foods for sale, misbranding and addition of poisons. The types of adulteration commonly found in the various foodstuffs are as follows;

- (i) Removal of fat and addition of water to milk products are common type of milk adulteration
- (ii) Ghee is adulterated with vegetable oils and animal fats
- (iii) Rice and wheat are mixed with stone chips and gravel to increase bulk
- (iv) Wheat flour is mixed with stone powder and **thesauri** dhal and pea flour
- (v) Tea leaves are adulterated with old tea leaves, leather and saw dust

3.8. Methods of Cooking

Food may be boiled, steamed, roasted, and fried. The method of cooking food should be varied as much as possible; otherwise it will lose its result. Every attention should be paid to cleanliness. Cooking vessels made of aluminum are to be preferred to those made of copper.

Rice and other starch foods should be cooked slowly and green vegetables quickly with proper covering. Well-cooked rice is soft and free from lumps. Dhal should be very carefully husked and then cooked; otherwise it will cause irritation of the bowels. Separate room should be



provided for storage of cooked foods. Water supply should be adequate continuous and safe. Cleaning of utensils and crockery should be done in hot ' water and followed by disinfection.

3.9. Food Handlers

Food sanitation rests directly upon the state of personal hygiene and habits of the personnel working in the food establishments. Education of food handlers in matters of personal hygiene, food handling, utensil and dish washing is the best means of promoting food hygiene.

The hands should be cleaned at all times. Hands should be scrubbed and washed with soap and water immediately after visiting a lavatory.

Finger should be kept trimmed and free from dirt. Head covering should be provided to prevent loose hairs obtaining entrance to foodstuffs. Coughing and sneezing in the vicinity of food and smoking on food premises should be avoided.

3, Food safety hazards

A food safety hazard is a biological, chemical or physical agent, or condition of food, with the potential to cause harm or an adverse health effect when the food is eaten.

Food safety hazards can be classed as:

- Biological such as microorganisms
- Chemical such as chemicals, pesticides, cleaning agents and allergens
- Physical foreign objects that are not supposed to be in the food, such as timber, glass, packaging material and naturally occurring objects – bones, dust and grit.

Any business should aim to reduce the risk of these hazards in its food processing and service, ensuring the food is safe to consume. A food safety program outlines the systems in place to keep food safe and procedures which reduce the risk of the hazards which may occur in the food production and service business.



4.1. Physical hazards

Physical hazards which can be found in food include:

- Objects naturally present in the food (animal hair, bone chips, leaves, etc)
- Objects occurring in agriculture (dirt, manure, leaves, etc)
- Objects added during processing (glass, plastic, hair, metal, etc).

Reducing physical hazards is relatively simple in most hospitality businesses as they are physically visible in the food. They are normally controlled by procedures such as a visual inspection of food and good kitchen procedures such as a no wood or no glass policy, and keeping the food covered.

4.2. Chemical hazards

Chemical hazards which can be found in food include:

- Naturally occurring poisonous chemicals (poison plants such as rhubarb leaves and mushrooms, poisonous animals such as puffer fish, algal blooms, mould toxins, etc)
- Chemicals added via water
- Agricultural chemicals from soils, plants and animals (pesticides, antibiotics, dips, heavy metals, etc)
- Chemicals added during food processing (additives, cleaners, etc).

Some people have an allergic reaction to certain ingredients or parts of food. Common allergens include:

- soybeans and their products
- sesame
- cereals containing gluten
- milk and milk products
- sulphites
- egg and egg products



- peanuts and their products
- fish and fish products

Chemical hazards in foods can be controlled by:

- purchasing from an approved supplier
- covering food and protecting it from contamination
- having an allergen awareness, and strategies to prevent cross contamination from allergens
- separate chemical storage area, away from food
- use of food safe chemicals within the food preparation areas
- correct cleaning procedures

4.3. Biological hazards

Hazards which live within food can occur from multiple sources. These microorganisms (commonly called “germs”) are so small they can only be seen under a microscope. Not all microorganisms are harmful to humans. Pathogens are the microorganisms which cause harm to humans, when they reach a high level in food. Some examples are:

- Bacteria e.g. salmonella, staphylococcus aureus, bacillus cereus
- Viruses e.g. hepatitis A, influenza
- Yeasts
- Moulds
- Protozoa e.g. Guardia

Most food poisoning illness is a result of these microorganisms growing in food. When food is in moist, warm conditions, they multiply to an “infective dose” which makes a person ill.

Most food poisoning occurs due to the continued growth to dangerous levels of microorganisms, particularly bacteria, in food. Food handlers should know about food poisoning bacteria and the conditions they require for growth, to ensure food borne illness is avoided.



It is important to be aware of the different types of food safety hazards which may pose a significant risk to the safety of your customers. Situations when food safety hazards are likely to pose a significant risk are:

- Handling “potentially hazardous foods” which are susceptible to microorganisms’ contamination and growth. These are low acid, high protein foods such as meat, eggs, poultry, and seafood and dairy items.
- handling raw food and fresh foods
- handling food with your hands, rather than using equipment
- cooking food - food needs to be cooked thoroughly to kill microorganisms
- chilling food - food needs to be chilled quickly to reduce the growth of microorganisms
- defrosting foods
- reheating foods
- displaying food on buffets or self service
- preparing food in temperatures in which microorganisms grow rapidly (5°C- 60°C)

Food safety procedures aim to prevent hazards in food, such as stock receipt and stock rotation, food storage, temperature control. Further information can be found in the section

Food safety procedures.

There are also programs to support the safety of food being prepared and served, such as pest control, waste disposal and staff hygiene. More detail can be found by clicking on the link support programs

4. Food safety procedures

All businesses must actively work to promote good personal hygiene of staff and implement everyday work procedures which prevent the growth of microorganisms and limit the opportunity for cross contamination
A food safety program based on identifying and analyzing the food safety hazards which exist in

Version 1 April 2019	CATERING AND TOURISM TRAINING INSTITUTE	Page 13 of 34
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a food service operation, and implementing a simple set of policies and procedures to be followed by a food handlers, can be done by following the six steps below.

A food safety program for each business must follow a systematic documented manner:

1. Identify the potential food safety hazards
2. Identify the means of control of the hazards
3. Monitor the hazards
4. Provide for corrective action
5. Regularly review the program
6. Keep appropriate records.

HACCP codex has twelve steps, making it more suitable for large, complex food service operations requiring a HACCP (Hazard Analysis Critical Control Point) system. Some food business during primary production, food manufacture, food service to vulnerable persons such as hospitals and aged care require a HACCP program which is externally audited on a regular basis.

5.1. Critical control points

Each business must put in **place procedures** at the “critical control points” or the stages in processing or preparation of food, where there is a high risk of contamination or food spoilage.

Common critical control points for hospitality businesses are:

- Purchasing and delivery
- Stock control and food storage
- Preparation
- Cooking
- Cooling
- Reheating
- Holding or display
- Service



Each business needs to identify the critical control points which are relevant to their business and operation.

1. Purchasing and delivery

- Use only reputable or approved suppliers. Ask for evidence of the supplier's food safety program or HACCP certificate.
- Deliveries of food supplies should be made at a convenient time for correct checking and storage procedures to be followed.
- Check the temperature of all perishable, potentially hazardous and frozen foods and record the temperature.
- Check use-by dates.
- Check for any damage or opening to packaging or produce.
- Check for "freezer burn" or visible icicles inside frozen food wrapping.
- Reject the delivery if the delivery does not meet the temperature requirements (<5°C for cold food and -18°C for frozen food), if the food is out of date, or if there is any variation in normal color, texture, odor or general appearance.

2. Stock control and food storage

- Store food immediately and at the correct temperature.
- Cover food and make sure it is clearly labeled and dated.
- Never store food on the floor.
- Separate raw and cooked foods.
- Rotate stock on a first in first out (FIFO) basis.
- Do not store food near chemicals.
- Keep storage areas clean and dry.
- Check storage areas daily for pests and cleanliness.
- Check and record temperature of cold food storage areas; cool rooms, bench fridges, display fridges and preparation fridges to ensure food is being stored at temperatures that don't allow food microorganisms to grow.



3. Preparation

- Always wash hands before commencing any preparation and between raw and cooked foods.
- Prepare raw and cooked foods separately and use separate chopping boards and knives.
- Thoroughly wash all fruit and vegetables in clean water before use, to remove soil, insects and any chemical residues.
- Use clean and sanitized equipment.
- Avoid cross contamination. Cooking destroys most harmful bacteria however cooked foods can be re-contaminated by allowing the transfer of bacteria from raw to cooked food. This can occur with hands, utensils, equipment or surfaces such as benches and cutting boards.
- When preparing food, limit the time high-risk foods such as animal products are in the danger zone. This should be less than one hour preparation time for high risk foods.
- Fingers should not be used to taste food. A tasting spoon should be used and washed after each tasting.
- Thaw foods in a refrigerator, cool room or in the microwave.

4. Cooking

- Cook foods above 75°C.
- Chicken and pork cuts must be thoroughly cooked, so that the centre is no longer pink. Using a meat thermometer is a good idea when roasting meats.
- Record the temperature of potentially hazardous foods when they are cooked.

5. Cooling

- Potentially hazardous food need to be cooled after cooking as quickly as possible. Hot food needs to be chilled to below 5°C as quickly as possible.
- Placing hot food straight into the cool room or freezer is not advisable as it raises the temperature of these storage areas placing the food into the danger zone.



HOTEL OPERATION II

TRANSPORT AND STORE FOOD IN A SAFE AND HYGIENIC MANNER

- Small portions and shallow containers cool food quickly.
- Transfer hot foods into smaller shallow containers.
- Stir food to decrease temperatures.
- Cool the food container in some ice or cold water.

6. Reheating

- Potentially hazardous food needs to be reheated as quickly as possible
- Do not reheat food in a bain-marie or other hot holding equipment, as the temperature is not sufficient to reheat the food quickly.
- Reheat potentially hazardous food once only.
- Reheat food to above 75°C.

7. Holding or display

- Be sure that the bain-marie is above 60°C before filling with food.
- Food must be 'HOT' when it is placed into the heated container (cooked or reheated to 75°C).
- Hot food must remain over 60°C throughout the service period.
- Cold food must be displayed or held at temperatures <5°C.
- Check temperature with thermometer.
- Stir foods to keep even distribution of heat.
- Use separate serving/ladle utensils for each container of food.
- Unwrapped or unpackaged food which is to be displayed on a counter, must be covered at all times, or protected so customers cannot touch or cough on the food.
- Raw food and ready to eat food must be separated (e.g. by using plastic partitions).
- Discard any unused food, potentially contaminated food, or food that there is any variation in normal color, texture, odor or general appearance.

8. Service

- Food is to be served with utensils only.

Version 1 April 2019	CATERING AND TOURISM TRAINING INSTITUTE	Page 17 of 34
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HOTEL OPERATION II

TRANSPORT AND STORE FOOD IN A SAFE AND HYGIENIC MANNER

- Foods which are to be held hot for service must not be allowed to fall below 60°C.
- Foods which are to be served cold must be kept refrigerated at <5°C until serving time.
- Single use, disposable, take away food and drink containers, lids, and drinking straws must be kept in hygienic, covered receptacles until used.

5. Food safety monitoring

Each hospitality business must monitor the food safety hazards and controls in place at the critical control points. Different ways of monitoring or checking food safety hazards may be:

- check and record food temperature using a thermometer probe
- check and record the food deliveries at receipt
- check and record the use by date or preparation date
- check and record the temperature of cold storage equipment such as fridges, cool rooms, display cabinets and freezers
- check and record the temperature of hot food storage equipment such as bain maries, warming cabinets
- check and record the cooking temperature
- check and record the time and temperature when chilling food
- check for bacterial growth using bacterial swabs and tests
- chemical tests

6.1. Corrective actions

Each hospitality business must take corrective actions if the food hazards are found not to be under control, or the food poses a risk of harm if eaten.

When checking and monitoring food safety, staff need to take action if there is a procedure not followed, or the critical control points are breached, or they feel that there is an incident that may pose a food safety hazard. The corrective action should either remedy the food safety hazard or

Version 1 April 2019	CATERING AND TOURISM TRAINING INSTITUTE	Page 18 of 34
	Compiled By: Getahun Dessalegn	



HOTEL OPERATION II

TRANSPORT AND STORE FOOD IN A SAFE AND HYGIENIC MANNER

prevent the food from being consumed. Staff must also take steps to prevent the hazard from happening again. All corrective actions must be written down in a record book. Examples of some common corrective actions are:

- rejection of deliveries
- disposal of out of date food
- disposal of food items which are not able to be identified
- organizing equipment repairs or service
- organizing pest control services
- Reporting incidents to management.

Some examples of incidents where there are indications of a possible food hazard and where corrective actions may be required are:

- customer complaints
- out of date food
- spoiled, unattractive food
- unclean equipment
- physical objects found in food
- pest sightings
- loose garbage and food residue
- food poisoning illness reports



HOTEL OPERATION II
TRANSPORT AND STORE FOOD IN A SAFE AND HYGIENIC MANNER

SELF-CHECK 1

WRITTEN TEST

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Discuss possible hazards that may occur in a premise? (2 points)
2. Describe about microorganisms briefly (3 points)
3. How to transport Food item properly (5 points)
4. How to protect Food spoilage (2 points)
5. Write the following HACCP principles(5)



HOTEL OPERATION II
TRANSPORT AND STORE FOOD IN A SAFE AND HYGIENIC MANNER

Answer Sheet

Score = _____

Rating: _____

Name: _____

Date: _____

Short Answer Questions

1. In any premises there might occur physical, chemical or biological agent in a food that can potentially create food hazards.
2. Micro-organisms are either single celled or multi-cellular organisms that result in spoilage, infection or intoxication of food items if they have pathogenic characteristics.
3. Use industry best practices in order to implement food safety during transportation
 - Use clean transporting trailers
 - Do not transport food and non food items together

Version 1 April 2019	CATERING AND TOURISM TRAINING INSTITUTE	Page 21 of 34
	Compiled By: Getahun Dessalegn	



HOTEL OPERATION II
TRANSPORT AND STORE FOOD IN A SAFE AND HYGIENIC MANNER

- Apply proper loading and unloading procedures
 - Avoid cross contamination through proper wrapping and packaging
4. How to protect Food spoilage
- Maintain personal hygiene
 - Proper storage of food
 - Do not store raw and cooked foods
 - Clean and sanitize preparing and cooking utensils
 - Avoid cross contamination of food
5. Write the following HACCP principles
- Conduct a hazard analysis
 - Determine CCP
 - Establish control limit
 - Establishing system to control the CCP
 - Establish corrective action to be taken
 - Review the system
 - Documentation

Information Sheet #2	LO2: Transport food safely and hygienically
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LO2: TRANSPORT FOOD SAFELY AND HYGIENICALLY



1. Transporting food safely and hygienically Introduction

FOR THE SPECIFIC INDUSTRY SECTOR AND ORGANISATION:

- sources and effects of microbiological contamination of food in transit
- methods of transportation and storage to ensure the safety of food
- temperature controls and temperature danger zones, for storage of main food types used in the business
- the contents of food safety transportation procedures include in organizational food safety program, safe manual handling techniques such as loading and unloading, lifting and dealing with heated surface

1.1. Sanitary Food Transportation Act

During the late 1980s, complaints and press reports indicated trucks were hauling garbage and subsequently used to carry meat, poultry and produce without a sanitation step in between.

GAO looked into the matter and upon review concluded it could not find any conclusive evidence that this was a common practice.

Although the report stated these findings, Congress enacted the Sanitary Food Transportation Act in 1990.

Transporting packaged vs Bulk food items

- ▶ In retail, restaurant and end use product distribution, the risk of microbial contamination from the trailer may be minimized by following **leading practices** that reduce

Version 1 April 2019	CATERING AND TOURISM TRAINING INSTITUTE	Page 23 of 34
	Compiled By: Getahun Dessalegn	



contamination since products are contained in packaging and are not in direct contact with the trailer.

- ▶ Different concerns exist with bulk transportation as most all product is raw and in direct contact with the trailer increasing the risk of contamination.
- ▶ The risk of cross contamination of packaged food and nonfood products may be minimized by current industry best practices.

Temperature Control

- ▶ It's a common industry practice to have **quality control processes** in place to check and inspect the temperature of products during shipping, unloading and loading activities.
- ▶ One such common practice is that companies check temperatures of fresh, temperature-sensitive products when making backhaul pick-ups and receiving product.
- ▶ Other common practices is for receiving firms to implement policies to have 3rd party distributors **record product temperatures** en route to their distribution center.

Current Industry Practices for Cleaning Vehicles

- Trailers are frequently swept throughout the day to remove any debris.
- Spills and odors are addressed promptly and thoroughly when identified through inspection.
- Inspection, verification and documentation are integral part of most food safety plans.
- ▶ Retailers, wholesalers and distributors should have effective methods which meet the needs of their individual supply chain systems.
- ▶ Most non-bulk foods being transported by the industry are enclosed in packaging and do not come into direct contact with trailer surfaces.
- ▶ A review of your trailer cleaning program may be needed to determine if your current program meets the act.

Segregation of foods/non-foods

- ▶ Current industry practices indicate foods may be transported simultaneously and sequentially with nonfood products with minimal risk.
- ▶ By using a **leading practice that segregates food and non foods** on the same trailer the potential risk of cross-contamination from nonfood may be minimized.
By implementing a **leading practice** it may minimize excessive wear and tear on trucks, reduce man-hours and reduce gas emissions and consumption for fuel



HOTEL OPERATION II
TRANSPORT AND STORE FOOD IN A SAFE AND HYGIENIC MANNER



HOTEL OPERATION II
TRANSPORT AND STORE FOOD IN A SAFE AND HYGIENIC MANNER

Self-Check 2	Written Test
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Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. What is the importance of segregation of food and non food items?
2. What is SFTA? (5 points)
3. Why should we need to control the temperature of food during transportation?
4. Why should food needs to be packed during transportation?



HOTEL OPERATION II
TRANSPORT AND STORE FOOD IN A SAFE AND HYGIENIC MANNER

Answer Sheet

Score = _____

Rating: _____

Name: _____

Date: _____

Short Answer Questions

1. Food and non-food items should be segregated during transportation in order to eliminate cross contamination that can be sourced from the non-food items
2. SFTA is safe food transporting act used to ensure food safety during transportation.
3. Temperature is an important factor for pathogens to grow and produce food in food. So in order to prevent food intoxication and infection temperature should be controlled.
4. Packing is important to avoid cross contamination of food.



HOTEL OPERATION II
TRANSPORT AND STORE FOOD IN A SAFE AND HYGIENIC MANNER

Information Sheet #3

LO3: Store food safely and hygienically

LO3: STORE FOOD SAFELY AND HYGIENICALLY

It's important to take care how you store food to make sure it's safe to eat. Find out below about storing food in the fridge, freezer, or in containers such as tins and jars.

Food storage varies based on different conditions: Among environmental conditions that affect food storage are:

a. humidity

b. light

c. pests

d. temperature

Q3. list at least ten pests that cause problem to food.

Food that goes in the fridge

Some food needs to be kept in the fridge to help stop bacteria from growing on it, such as food with a 'use by' date, cooked food and ready-to-eat food such as desserts and cooked meats.

Make sure your fridge is cold enough

You need to make sure your fridge is cold enough otherwise food poisoning bacteria will still be able to grow. Your fridge should be between 0°C and 5°C.

If you're not sure how the temperature setting or dial works on your fridge, you could use a fridge thermometer to check it's the right temperature.

Here are a few other fridge tips that you might find useful:

- keep the fridge door closed as much as possible
- wait for food to cool down before you put it in the fridge



Keeping food in the fridge

To help stop bacteria from growing, remember:

1. When the label says '**keep refrigerated**', **make sure you do keep the food in the fridge**. If the food isn't labeled with any storage instructions and it's a type of food that goes off quickly, you should put it in the fridge and eat it within two days
2. Some jars and bottles need to be kept in the fridge once they've been **opened**. Always check the label and follow any storage instructions
3. When you're preparing food, keep it out of the fridge for the **shortest time** possible, especially when the weather (or the room) is warm
4. If you have made some food (such as a sandwich or a cold dish) and you're not going to eat it straight away, **keep it in the fridge** until you're ready to eat it
5. If you're having a party or making a buffet, leave the food in the fridge until people are ready to eat. Generally, you shouldn't leave food out of the fridge for more than four hours
6. Cool leftovers as quickly as possible (ideally within one to two hours) and then store them in the fridge. Eat any leftovers within two days, except for cooked rice, which you should eat within one day to help avoid food poisoning

Storing meat

It's especially important to store meat safely to stop bacteria from spreading and to avoid food poisoning. You should:

-store raw meat and poultry in clean, sealed containers on the bottom shelf of the fridge, so they can't touch or drip onto other food

-follow any storage instructions on the label and don't eat meat after its 'use by' date

Version 1 April 2019	CATERING AND TOURISM TRAINING INSTITUTE	Page 29 of 34
	Compiled By: Getahun Dessalegn	



HOTEL OPERATION II

TRANSPORT AND STORE FOOD IN A SAFE AND HYGIENIC MANNER

-when you have cooked meat and you're not going to eat it straight away, cool it as quickly as possible and then put it in the fridge or freezer. Remember to keep cooked meat separate from raw meat

Keeping food in the freezer

The freezer is a great tool for making sure you've always got some food in stock and for helping to avoid wasting food.

You can keep food safely in the freezer for years, in theory, as long as it has stayed frozen the whole time. However, the taste and texture of food changes if it's frozen for too long, so you might well find that it's not very nice to eat.

For safety, it's OK to freeze most raw or cooked foods providing you do the following things:

- freeze it before the 'use by' date
- follow any freezing or thawing instructions on the label
- thaw it in the fridge so that it does not get too cold. Or, if you intend to cook it as soon as it's defrosted, you could defrost it in a microwave
- try to use it within one to two days after it's been defrosted – it will go off in the same way as if it were fresh
- cook food until it's steaming hot all the way through

When frozen meat and fish (and some other foods) thaw, lots of liquid can come out of them. If you're defrosting raw meat or fish, this liquid will spread bacteria to any food, plates or surfaces that it touches. Keep the meat and fish in a sealed container at the bottom of the fridge, so that it can't touch or drip onto other foods.

Storing dry food, tins, jars and drinks

Many types of food don't need to be kept in the fridge to keep them safe to eat, for example dry foods such as rice, pasta and flour, many types of drinks, tinned foods, and unopened jars. But it's still important to take care how you store them.

Version 1 April 2019	CATERING AND TOURISM TRAINING INSTITUTE	Page 30 of 34
	Compiled By: Getahun Dessalegn	



HOTEL OPERATION II

TRANSPORT AND STORE FOOD IN A SAFE AND HYGIENIC MANNER

Here are some tips:

- try to keep food in sealed bags or containers - this helps to keep them fresh and stops anything falling into the food by accident
- don't store food or drinks near cleaning products or other chemicals
- don't use old food containers to store household chemicals, and don't store food in containers that have been used for other purposes
- only reuse plastic water bottles if they're not damaged and you can clean them
- don't store food on the floor, because this can encourage mice, ants and other pests
- keep the storage area dry and not too warm
- remember that some types of food might need to be kept in the fridge once you've opened them – follow any storage instructions on the label

Tin cans

When you open a can of food and you're not going to use all the food straight away, empty the food into a bowl, or other container, and put it in the fridge.

Don't store food in an opened tin can, or re-use empty cans to cook or store food. This is because when a can has been opened and the food is open to the air, the tin from the can might transfer more quickly to the can's contents.

This advice doesn't apply to foods sold in cans that have resealable lids, such as golden syrup and cocoa, because these types of food don't react with the can.

Cling film and kitchen foil

Cling film

Cling film is useful for protecting food but, like many things, it needs to be used correctly.

Version 1 April 2019	CATERING AND TOURISM TRAINING INSTITUTE	Page 31 of 34
	Compiled By: Getahun Dessalegn	



HOTEL OPERATION II

TRANSPORT AND STORE FOOD IN A SAFE AND HYGIENIC MANNER

Not every type of cling film is suitable for using with all foods. Check the description on the box to see what foods it can be used with.

There are three main points to remember when using cling film:

1. don't use cling film if it could melt into the food, such as in the oven or on pots and pans on the hob
2. you can use cling film in the microwave (in accordance with the manufacturer's instructions), but make sure the cling film doesn't touch the food
3. Only let cling film touch high-fat foods when the description on the box says the cling film is suitable for this. High-fat foods include some types of cheese, raw meats with a layer of fat, fried meats, pies and pastries, and cakes with butter icing or chocolate coatings

Kitchen foil

Kitchen foil, which is made from aluminium, can be useful for wrapping and covering foods. But it's best not to use foil or containers made from aluminium to store foods that are highly acidic, such as:

- tomatoes
- rhubarb-sour testing with red and green stem
- cabbage
- many types of soft fruit

This is because aluminium can affect the taste of these sorts of food, especially if they are stored in aluminium containers for a long time.

Specific food types include:

1. Dairy products
2. Dried food

Version 1 April 2019	CATERING AND TOURISM TRAINING INSTITUTE	Page 32 of 34
	Compiled By: Getahun Dessalegn	



HOTEL OPERATION II
TRANSPORT AND STORE FOOD IN A SAFE AND HYGIENIC MANNER

3. Eggs
4. Frozen food
5. Fruit and vegetables
6. Meat and fish

Self-Check 3	Written Test
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Directions: Answer all the question listed below. Use the Answer sheet provided in the next page:

1. What are the conditions considered during food storage? Explain in detail
2. What is the appropriate food storage temperature?
3. Why should one need to control the storage temperature of food items?

Version 1 April 2019	CATERING AND TOURISM TRAINING INSTITUTE	Page 33 of 34
	Compiled By: Getahun Dessalegn	



HOTEL OPERATION II
TRANSPORT AND STORE FOOD IN A SAFE AND HYGIENIC MANNER

4. What is the advisable temperature to store potentially hazardous food items?

Answer Sheet

Score = _____

Rating: _____

Name: _____

Date: _____

Short Answer Questions

1. Food storage condition should be:
 - Clean storage area
 - Pest control
 - Control storage temperature
2. Temperature that ranges out of danger zone is the most advisable.
 - Cold food <5°C and hot food >60°C
3. We control storage temperature in order to avoid food intoxication and infection
4. Canned food should be stored up to -18°C and hot food should be placed in a Bain Marie and chafing dish(above 60°C).