



Oil Seed and Pulse Processing

Level II

Based on October 2019, Version 2 Occupational standards

Module Title: Implementing the Food Safety Program and Procedures

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LG# 58

LO 1-Implement the food safety program

Instruction sheet

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics:

- Identifying food handling requirements
- Carrying out food handling with food safety program
- Controlling Food safety hazards with food safety program
- Meeting where food safety control requirements
- Taking corrective action
- Recording food safety information
- Maintaining the workplace in a clean and tidy order
- Conducting work with workplace environmental guidelines

This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Identify food handling requirements
- Carry out food handling with food safety program
- Control Food safety hazards with food safety program
- Meet where food safety control requirements
- Take corrective action
- Record food safety information
- Maintain the workplace in a clean and tidy order
- Conduct work with workplace environmental guidelines

**Learning Instructions:**

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below.
3. Read the information written in the information Sheets
4. Accomplish the Self-checks
5. Perform Operation Sheets
6. Do the “LAP test”



Information Sheet-1 Identifying food handling requirement

1.1 Terminology:

HACCP: A system which identifies, evaluates, and controls hazards which are significant for food safety.

Hazard: A biological, chemical or physical agent in, or condition of, food with the potential to cause an adverse health effect.

Risk: The probability of causing an adverse health effect caused by the occurrence and the severity of a particular hazard in food when prepared and consumed according to its intended use.

Pre-Requisite Program (PRP): Any specified and documented activity or facility implemented in accordance with the Codex General Principles of food hygiene, good manufacturing practice and appropriate food legislation, in order to establish basic conditions that are suitable for the production and handling of safe food at all stages of the food chain

Food hygiene: All conditions and measures necessary to ensure the safety and suitability of food at all stages of the food chain.

Food safety: Assurance that food will not cause harm to the consumer when it is prepared and/or eaten according to its intended

1.2 Introduction

Handling food properly and safely is essential to preventing food borne illness. This page sets out to offer you the highest quality information on how to handle food safely, making it safe to eat, and stopping it from spoiling. You will learn about:

- Preparing food in a safe manner.
- Serving food in a safe manner
- Stopping the spread of bacteria through cross contamination
- Routines to follow and habits to avoid.

Food handling

A food handler is anyone who handles packaged or unpackaged food directly as well as the equipment and kits used to prepare or serve food and/or surfaces that come into contact with food.

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- Food receipt and storage
- Food preparation
- Cooking, holding, cooling, chilling and reheating
- Packaging, disposal

• Food Storage

- ✓ Always refrigerate perishable food within 2 hours—1 hour when the temperature is above 90 °F (32.2 °C).
- ✓ Check the temperature of your refrigerator and freezer with an appliance thermometer. The refrigerator should be at 40 °F (4.4 °C) or below and the freezer at 0 °F (-17.7 °C)

• Preparation

- ✓ Always wash hands with warm water and soap for 20 seconds before and after handling food.
- ✓ Don't cross-contaminate

1.3 Food handling requirement

There is little margin for error in any stage of food handling, whether it is preparation, processing, packaging, storage, transportation or offering it for sale. If you prepare high risk foods the standards required of you will be much stricter than if you only prepare low risk foods.

- Protects people from getting sick.
- Protects your businesses reputation with customers.
- Protects your job.

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Self-Check 1	Written Test
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Directions: Answer all the questions listed below. Use the Answer sheet provided in the below:

1. Define food handling (5 point)
2. Write food handling requirements (5 point)

Note: Satisfactory rating - 5 points Unsatisfactory - below 5 points

You can ask you teacher for the copy of the correct answers.



Information Sheet-2 Carrying out food handling safety program

2.1 Food handling safety program

A food safety program is a written document indicating how a food business will control the food safety hazards associated with the food handling activities of the business. Only certain high risk food businesses are required to have food safety programs:

Safe food handling is based on two key principles. These principles are the basis of safe food handling practices that you are required to follow in your workplace

2.2 Two basic principles of Food safety

- I. Preventing food being contaminated; and
- II. Controlling bacteria from growing in food.

I. Preventing food being contaminated

These principles are the key to maintaining the hygiene of food and to preventing an outbreak of food poisoning. A food safety program systematically identifies the food safety hazards that may reasonably be expected to occur in your workplace.

II. Controlling bacteria from growing in food

It outlines the food safety procedures that must be followed to prevent, control and eliminate food safety hazards. It also documents how these procedures comply with food regulations and legislation. How? Means

- By making personal hygiene practices
- By making food preparation/ processing practices
 - ✓ Temp control
 - ✓ The prevention of cross contamination

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

1. Define food handling program (5 point)
2. Write food safety principle (5 point)

Note: Satisfactory rating - 5 points Unsatisfactory - below 5 points

You can ask you teacher for the copy of the correct answers.



Information Sheet-3 Controlling food safety hazards

3.1 Food safety hazard

- **Biological**

- ✓ Bacteria
- ✓ Parasites
- ✓ Viruses

- ✓ Mold
- ✓ Yeast

- **Chemical**

- ✓ Cleaning agents
- ✓ Sanitizers

- ✓ Polishes
- ✓ Lubricants

- **Physical**

- ✓ Staples
- ✓ Jewelry
- ✓ Hair
- ✓ Glasses

- ✓ stones
- ✓ strings
- ✓ Wood

3.2 Control food safety hazards in the industries are:-

I Implement Prerequisite Training Programs (PRPs)

- Training
- Food safety
- Sanitation
- Standard operating procedures
- Personal hygiene
- Employee health
- Product instructions (recipe and process)
- Equipment
- Facility design
- Supplier selection and control
- Product specifications
- Major food allergen management
- Chemical and pest control
- Food defense
- Food recall procedures
- Crisis management



- **Trained, and/or instructed in food hygiene to a level appropriate to the operations they are to perform.**

Inadequate hygiene training, and/or instruction and supervision of all people involved in food related activities pose a potential threat to the safety of food and its suitability for consumption. Those engaged in food operations that come directly or indirectly into contact with food should be trained, and/or instructed in food hygiene to a level appropriate to the operations they are to perform.

See Annex 1: Example of a staff training record form

Regular Snip

All personnel should be aware of their role and responsibility in protecting food from contamination or deterioration. Food handlers should have the necessary knowledge and skills to enable them to handle food hygienically. Those who handle strong cleaning chemicals or other potentially hazardous chemicals should be instructed in safe handling techniques.



II **Implement either Hazard Analysis Critical Control Point (HACCP) and ISO 22000**

Principle 1 - Identify any hazards that must be prevented, eliminated or reduced to acceptable levels.

Principle 2 - Identify the critical control points (CCP) to control identified hazards.

Principle 3 - Establish critical limits that should be respected to ensure that each CCP is under control.

Principle 4 – Establish a monitoring system to assure that CCP are under control

Principle 5 – Establish corrective actions when monitoring indicates that a critical control point is not under control.

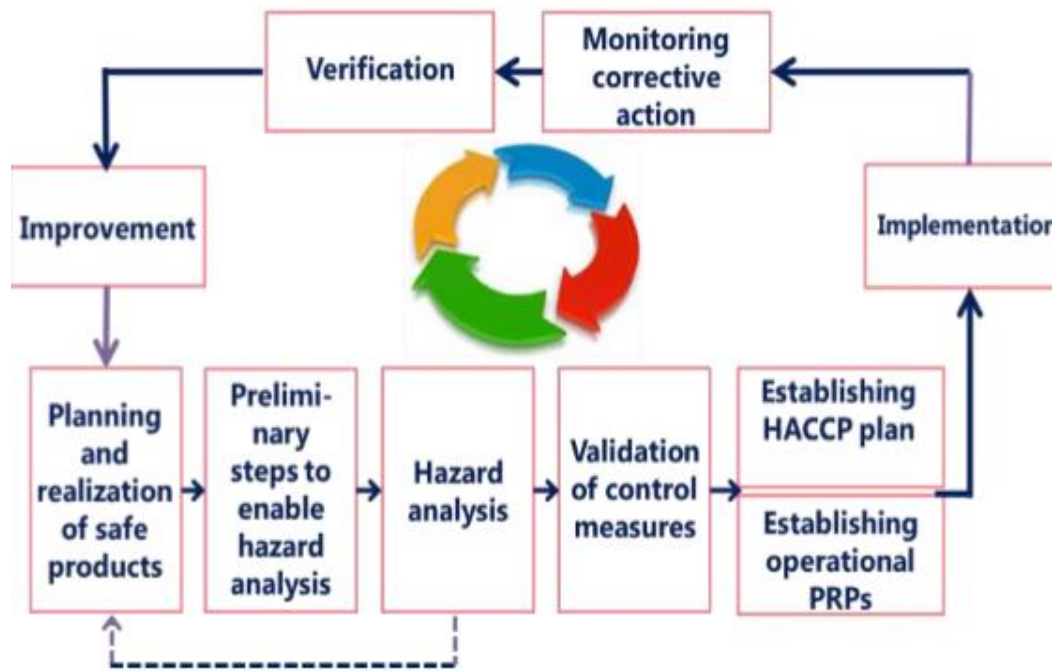
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Principle 6 – Establish verification procedures that confirm proper functioning of the HACCP system.

Principle 7 – Organize documents regarding all procedures and records related to these principles and to their application.

❖ **Steps in implementing ISO 22000**



III Avoid oil adulteration

IV produce/train skilled manpower/ technologists

V Implement KAIZEN

VI Start oil fortification (protection)



A



B



C



D

Figure 1 some example of unclean oil companies (A,B,C and D)



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

1. List at least three (3) food hazards (5point)
2. Define food hazard controlling method (5 point)

Note: Satisfactory rating - 10 points Unsatisfactory - below 5 points

You can ask you teacher for the copy of the correct answers.



Information Sheet-4 Health condition and illness

4.1 Health condition

Health conditions, like illnesses, injuries and impairments, affect our ability to function or enjoy life. Many of them are related to food and nutrition – from food allergies and intolerances, over dental and gut health, to the non-communicable diseases, like diabetes, cancers, cardiovascular, and respiratory diseases.

4.2 illness condition

Illness is defined as the ill health the person identifies themselves with, often based on self-reported mental or physical symptoms. In some cases this may mean only minor or temporary problems, but in other cases self-reported illness might include severe health problems or acute suffering. It may include health conditions that limit the person’s ability to lead a normal life. According to this definition illness is seen as a rather wide concept.

Foodborne illnesses are usually infectious or toxic in nature and caused by bacteria, viruses, parasites or chemical substances entering the body through contaminated food or water. Foodborne pathogens can cause severe diarrhea or debilitating infections including meningitis. Foodborne diseases may lead to long-lasting disability and death. Examples of unsafe food include uncooked foods of animal origin, fruits and vegetables contaminated with faces, and raw shellfish containing marine bio- toxins.

4.3 Negative impacts of foodborne illnesses

Foodborne illnesses are a preventable and underreported public health problem. These illnesses are a burden on public health and contribute significantly to the cost of health care. They also present a major challenge to certain groups of people. Although anyone can get a foodborne illness, some people are at greater risk. For example:

- Children younger than age 4 have the highest incidence of laboratory-confirmed infections from some foodborne pathogens, including Campylobacter,

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Cryptosporidium, and Salmonella, Shiga toxin-producing Escherichia coli O157, Shigella, and Yersinia.

- People older than age 50 and those with reduced immunity are at greater risk for hospitalizations and death from intestinal pathogens commonly transmitted through foods.

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Self-Check 4	Written Test
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Directions: Answer all the questions listed below. Use the Answer sheet provided in the below:

1. Define health condition (5point)
2. Define illness condition (5 point)

Note: Satisfactory rating - 5 points Unsatisfactory - below 5 points

You can ask you teacher for the copy of the correct answers.



Information Sheet-5 Taking and reporting food safety control requirements

5.1 Taking food safety control requirements

Food control is critical to ensure fair practices in the food trade to foster economic opportunities of all stakeholders along the food chain. In an age of rapidly changing food technologies and ever-increasing global food trade, controlling foodborne hazards along the entire food chain has taken on a pivotal role. In order to cope with complex emerging challenges of the 21st century, food control systems need to be up to date with the latest developments, operate based on the concept of risk analysis and be harmonized with international standards and best practices developed by Codex Alimentary.

5.2 Reporting food safety control requirements

5.2.1 Food safety control

What are they about food safety control?

A national food control system ensures that food available within a country is safe, wholesome and fit for human consumption, conforms to food safety and quality requirements and is honestly and accurately labeled as prescribed by the law. As such, food control systems protect the health and safety of consumers and help assure the safety and quality of foods being traded both nationally and internationally.

5.2.2 Important food safety control

Why are they important food safety control?

Protecting the health of citizens of a country is one of the fundamental roles of a government and closely linked to the achievement of several Sustainable Development Goals (SDG), in particular SDG 2 and 3. At the same time, food control is critical to ensure fair practices in the food trade to foster economic opportunities of all stakeholders along the food chain. In an age of rapidly changing food technologies and ever-increasing global food trade, controlling foodborne hazards along the entire food chain has taken on a pivotal role.

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5.2.3 Work food safety control

How they work food safety control?

In order to operate effectively, a food control system requires appropriate legal and policy instruments, well-qualified human resources, sound institutional frameworks as well as financial assets, equipment and infrastructure (including access to laboratories) as its foundation.

The regulatory authorities designated under the food control system (also known as competent authorities) help ensure food safety and quality along the food chain and manage food safety hazards, fraud issues, emerging risks and emergencies. This work includes oversight and inspection of Food Business Operators (FBOs), information collection processes that contribute to a better understanding of the food chain; and programmes aimed at preparing for and managing food safety emergencies. Appropriate connections to the foodborne disease surveillance systems are key to ensure a whole chain approach, up to the consumer, and in case of need, appropriately address food safety events and emergencies, both upstream (identifying the source of an outbreak) and downstream (being able to identify the population at risk)

5.2.4 What we does food safety control?

- Assess the national food control system using a newly developed FAO/WHO tool that allows countries to identify priority areas of improvement and plan sequential and coordinated activities to reach expected outcomes
- Advise national governments on policy and institutional frame works for food safety
- Develop modern, effective national food legal frame works through teams of legal advisors working closely with food safety experts giving due consideration to harmonizing legal frameworks with WTO requirements.
- Develop science and risk-based regulations, making sound use of the risk analysis framework, and anchored in Codex Alimentary standards, guidelines and codes of practice

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Self-Check 5	Written Test
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Directions: Answer all the questions listed below. Use the Answer sheet provided in the below:

1. Why are they important food safety control? (5point)
2. Why are they important food safety control?(5 point)

Note: Satisfactory rating – 5 points Unsatisfactory - below 5 points

You can ask you teacher for the copy of the correct answers.



Information Sheet-6 Recording food safety information

6.1 Recording food safety information

Keeping food safety records will help to monitor food safety and hygiene in your business. Each section of this food safety program and the supplement documents indicates the records that you must keep.

- Find the records you will use for your business.
- Check each record to see if it fits the way your business operates.
- If you think a record fits the way your business operates as it is, use a copy of the blank form and add it to your food safety program.
- If the record sheets in this publication do not suit your business, you can design your own. This might include setting out the information differently.
- If you use an alternative, make sure that:
 - You collect the same information as the example record(s) you are replacing
 - Your written records are in English
- If you use a record you have designed yourself, add a blank copy to your food safety program. It is recommended that you check with your council environmental health officer to make sure it complies with your food safety program.
- Tick the records you will use in your business

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Self-Check 6	Written Test
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Directions: Answer all the questions listed below. Use the Answer sheet provided in the below:

1. What is the importance of food safety recording? (5point)
2. Why recording food safety information? (5 point)

Note: Satisfactory rating - 10 points Unsatisfactory - below 5 points

You can ask you teacher for the copy of the correct answers.



Information Sheet-7 Maintaining Workplace information

7.1 Food safety program

A food safety program is a documented system that identifies the food safety hazards in the handling of food in a food business and details the way the hazards will be controlled in that business. An appropriate and well implemented food safety program can help a food business:

- Ensure food for sale is safe.
- Manage their operations better through improved record keeping and cost control.
- Demonstrate that all due diligence was exercised in the preparation and sale of food.

7.2 Standard Operating Procedures (SOPs)

The most important requirement in the food industry is that every product meant for human consumption must be pure and safe. A significant amount of expenditure in any food industry business is spent on protecting consumers from contaminated or unsafe foods. These preventative measures are both time- and resource-intensive, but constitute an essential part of doing business in the food industry.

Ensuring food safety and product quality is a demanding, ongoing undertaking that affects every level of the food supply chain. In order to prevent recalls and improve productivity, food processors and manufacturers need an effective food safety management system. This Whitepaper outlines the legal requirements for food safety in some of the world’s major markets and compares them with the most common standards. This information is meant to help food industry companies choose the best standard for their business. The whitepaper covers the following topics: Legal food safety requirements in the EU, USA, and China

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7.3 Specifications

Essentials for Food Specification managements are

I. **Purchasing Decisions**

Companies must decide whether they wish to manufacture certain ingredients such as chemicals and inks or purchase them from another company. Buying these items from an outside source would entail exerting control over the manufacturing process of another company. This may quickly become difficult. Using global databases and software, companies can create partnerships and work together to create and maintain high-quality products.

II. **Leveraging the Information from Production Reports**

Production reports help managers understand the hints of food manufacturing. They also help control costs and quality. Acting on the information in the production report will help companies rectify problems immediately and ensure the quality and safety of the product in the long run. Setting up Control and Measuring Systems control systems and certifications such as the ISO 22000 Certification and the Safe Quality Food certification schemes help companies keep track of how their operations are being conducted and whether changes are needed to ensure the elimination of product contamination at any stage.

III. **Inventory Management**

Contaminated inventory can impact the quality of the end-product by utilizing control systems companies can measure the quality of inventory available and ensure their final products are safe for consumption. Furthermore, inventory management helps keep track of important information such as the manufacturing date, expiration date, and so on.

IV. **Sanitation in Storage**

Storage and transportation are the sources of the greatest potential for contamination due to pests and the external environment.

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Whether the company sets up its' own storage and transportation or hires them from a third-party-vendor, it's essential there is a thorough inspection of the premises and processes used. This helps control the quality of the product.

7.4 Log sheets

The following worksheets are intended to serve as templates to cover most of the documentation and recordkeeping that will occur as part of a typical fresh produce food safety program. Not every size and type of operation will need to use every sheet, but most operations will want to capture and record most of the information these sheets are designed to document. It is expected that these sheets will serve as a foundation and inspiration for further customization. For example, some operations may find it beneficial to create separate log sheets to document the cleaning and sanitation of different types of equipment or different areas within a packing facility. Separate log sheets for different washing or sanitizing tanks may be useful as well.

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Self-Check 7	Written Test
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Directions: Answer all the questions listed below. Use the Answer sheet provided in the below:

1. Define food Safety program? (3points)
2. Write work place information (3 point)

Note: Satisfactory rating - 10 points Unsatisfactory - below 5 points
You can ask you teacher for the copy of the correct answers.



Operation sheet 1 food handling

Needed raw materials for food handling: soap, sanitizer, thermometers

Steps

1. Conduct a Hazard Analysis.
2. Identify Critical Control Points.
3. Establish Critical Limits.
4. Monitor Critical Control Points.
5. Establish Corrective Actions.
6. Establish Record Keeping Procedures.
7. Establish Verification Procedures.
8. Record data

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LAP Test	Practical Demonstration
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Name: _____ Date: _____

Time started: _____ Time finished: _____

Task1 Conduct HACCP Principle.



LG#59

LO 2-Participate in maintaining and improving food safety

Instruction sheet

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics:

- Monitoring work area, materials, equipment and products
- Identifying food safety requirements
- Identifying work place information
- Identifying food safety breach
- Taking corrective action with the food safety program
- Raising food safety issues

This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Monitor Work area, materials, equipment and product
- Identify food safety requirements
- Identify work place information
- Identify and report food safety breach
- Take corrective action
- Raise food safety issues

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below.
3. Read the information written in the information Sheets
4. Accomplish the Self-checks
5. Perform Operation Sheets
6. Do the "LAP test"



Information Sheet-1 Monitoring work area, materials, equipment and products

1.1 Introduction

Monitoring is a process of determining how well our plans are being implemented. You cannot monitor something if you do not have a plan or basic structure of how something should be done, or a defined goal or target. The whole process of monitoring is to ensure that food safety hazards are reduced or eliminated before they become an issue. Regular checking and monitoring will ensure problems are highlighted early and effective controls can be implemented. Work operations refer to the work itself and includes systems and procedures, staff performance, and levels of service in the workplace.

1.2 Monitoring work area, materials, equipment and products

Work area, materials, equipment and product are routinely monitored to ensure compliance/ fulfillment with food safety requirements. Products or materials handled and stored need to be monitor can include

- Raw materials
- Ingredients
- Consumables
- Finished product
- All equipment shall be constructed of appropriate materials.
- The design and placement of equipment shall ensure it can be effectively cleaned and maintained.
- Equipment which is in direct contact with food shall be suitable for food contact and meet legal requirements where applicable

Monitoring; may include

- Taking temperatures
- Collecting samples
- Conducting visual inspections
- Conducting other tests as required
- Perform quality parameter test

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Self-Check 1	Written Test
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Directions: Answer all the questions listed below. Use the Answer sheet provided in the below:

1. Define food Safety program? (3points)
2. How to monitor work area? (3 point)

Note: Satisfactory rating - 10 points Unsatisfactory - below 5 points
You can ask you teacher for the copy of the correct answers.



Information Sheet-2 Food safety requirements

2.1 .Introduction

Food is safe when it poses no unacceptable microbiological, chemical or physical risks to humans." This description forms the basis of the laws and regulations on food safety and is the point of departure for the way in which the NVWA organizes and carries out its supervisory task. Food safety means different things to different people in Dutch society. This can give rise to debate and incomprehension as regards the competent authority's work.

2.2 Food safety is needed to human health

Food and safety are basic human needs. Human health may be at risk if food safety is not in order. The converse is not true, because even if food safety is in order, food consumption can still give rise to health problems. For example, someone might eat too much or too little of a particular food or ingredient. Illness from unsafe food can strike at different points in time. This will often be shortly after the food has been eaten if a virus or bacterium is the cause, but may take far longer if the symptoms are the result of a high risk chemical substance. Physical contaminants in the food, such as glass or plastic, can cause discomfort or injury to the person eating them practically immediately.

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

1. Define food Safety requirement? (3points)
2. Write the need of food Safety requirement (3 point)

Note: Satisfactory rating - 10 points Unsatisfactory - below 5 points

You can ask you teacher for the copy of the correct answers.



Information Sheet-3 Identifying work place information

3.1 work place information

Collection of information is timely and relevant to organizational needs .Each organization must have access to information and data if it is to function efficiently. This information needs to be collected (or created), stored and cared for and be easily accessed or retrieved. Records, then, are sources of information (documents or other items) which the organization wants or needs to retain

Correspondence, faxes, letters, memos, email, computer databases, customer records, library catalogue, computer files, copies of letters, other documents, sales records, monthly forecasts, targets achieved, forms, membership forms, insurance forms, invoices, accounts from suppliers; to debtors, personnel records, personal details, salary rates, minutes of meetings, staff meetings, board meetings.The overall objective of any records management system is to provide the right information, at the right time, to the right person(s) at an affordable cost. Information is stored so that specific information is available when it is needed and in such a way that security and confidentiality is maintained.Business equipment/technology available in the work area is used to obtain information effectively. Types of technology or business equipment can assist in the effective collection of information Such as

- Photocopier
- Computer
- Printer
- Binder
- Filing systems – manual, computerized or electronic
- Answering machine
- Fax machine
- Telephone

All staff should know how to use this technology and equipment. If in doubt staff should ask for training or help to become familiar with the manufacturer’s instructions

.Someone in the organization should ensure that regular maintenance is carried out and that any faults or hazards are reported immediately; this will ensure the efficient collection of information continues.

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3.2 Process work place information

- Use business equipment/technology to process information in accordance with organisational requirements
- II .Process information in accordance with defined timeframes, guidelines and procedures
- Update, modify and file information in accordance with organisational requirements
- Collate and dispatch information in accordance with specified timeframes and organizational requirements

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

1. Write process of workplace information ?(3points)
2. Write the need of workplace information (3 point)

Note: Satisfactory rating - 10 points Unsatisfactory - below 5 points
You can ask you teacher for the copy of the correct answers.



Information Sheet-4 Identifying food safety breach

4.1 Identifying food safety breach

Food safety breach is identifying by inspection, food law and regulation and food control management.

4.1.1 Food Law and Regulations

The development of relevant and enforceable food laws and regulations is an essential component of a modern food control system. Many countries have inadequate food legislation and this will impact on the effectiveness of all food control activities carried out in the country. Food law has traditionally consisted of legal definitions of unsafe food, and the prescription of enforcement tools for removing unsafe food from commerce and punishing responsible parties after the fact. It has generally not provided food control agencies with a clear mandate and authority to prevent food safety problems. The result has been food safety programs that are reactive and enforcement-oriented rather than preventive and holistic in their approach to reducing the risk of foodborne illness. To the extent possible, modern food laws not only contain the necessary legal powers and prescriptions to ensure food safety, but also allow the competent food authority or authorities to build preventive approaches into the system.

In addition to legislation, governments need updated food standards. In recent years, many highly prescriptive standards have been replaced by horizontal standards that address the broad issues involved in achieving food safety objectives. While horizontal standards are a viable approach to delivering food safety goals, they require a food chain that is highly controlled and supplied with good data on food safety risks and risk management strategies and as such may not be feasible for many developing countries. Similarly, many standards on food quality issues have been cancelled and replaced by labeling requirements.

In preparing food regulations and standards, countries should take full advantage of Codex standards and food safety lessons learned in other countries. Taking into account the experiences in other countries while tailoring the information, concepts and requirements to the

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national context is the only sure way to develop a modern regulatory framework that will both satisfy national needs and meet the demands of the SPS Agreement and trading partners.

Food legislation should include the following aspects:

- It must provide a high level of health protection;
- It should include clear definitions to increase consistency and legal security;
- It should be based on high quality, transparent, and independent scientific advice following risk assessment, risk management and risk communication;
- It should include provision for the use of precaution and the adoption of provisional measures where an unacceptable level of risk to health has been identified and where full risk assessment could not be performed;
- It should include provisions for the right of consumers to have access to accurate and sufficient information;
- It should provide for tracing of food products and for their recall in case of problems;
- It should include clear provisions indicating that primary responsibility for food safety and quality rests with producers and processors;
- It should include obligation to ensure that only safe and fairly presented food is placed on the market;
- It should also recognize the country's international obligations particularly in relation to trade; and
- It should ensure transparency in the development of food law and access to information.
- Guidelines for the development of food laws are contained

4.1.2 Food Control Management

Effective food control systems require policy and operational coordination at the national level. While the detail of such functions will be determined by the national legislation, they would include the establishment of a leadership function and administrative structures with clearly defined accountability for issues such as: the development and implementation of an integrated national food control strategy; operation of a national food control programme; securing funds and allocating resources; setting standards and regulations; participation in

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international food control related activities; developing emergency response procedures; carrying out risk analysis; etc.

Core responsibilities include the establishment of regulatory measures, monitoring system performance, facilitating continuous improvement, and providing overall policy guidance.

4.1.3 Inspection Services

The administration and implementation of food laws require a qualified, trained, efficient and honest food inspection service. The food inspector is the key functionary who has day-to-day contact with the food industry, trade and often the public. The reputation and integrity of the food control system depends, to a very large extent, on their integrity and skill. The responsibilities of the inspection services include:

- Inspecting premises and processes for compliance with hygienic and other requirements of standards and regulations;
- Evaluating HACCP plans and their implementation;
- Sampling food during harvest, processing, storage, transport, or sale to establish compliance, to contribute data for risk assessments and to identify offenders;
- Recognizing different forms of food decomposition by organoleptic assessment; identifying food which is unfit for human consumption; or food which is otherwise deceptively sold to the consumer; and taking the necessary remedial action;
- Recognizing, collecting and transmitting evidence when breaches of law occur, and appearing in court to assist prosecution;
- Encouraging voluntary compliance in particular by means of quality assurance procedures;
- Carrying out inspection, sampling and certification of food for import/export inspection purposes when so required;
- In establishments working under safety assurance programmes such as HACCP, conduct risk based audits.

Proper training of food inspectors is a prerequisite for an efficient food control system. As current food systems are quite complex, the food inspector must be trained in food science and technology to understand the industrial processes, identify potential safety and quality problems, and have the skill and experience to inspect the premises, collect food samples and

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carry out an overall evaluation. The inspector must have a good understanding of the relevant food laws and regulations, their powers under those laws, and the obligations such laws impose on the food sector. They should also be conversant with procedures for collecting evidence, writing inspection reports, collecting samples and sending them to a laboratory for analysis. With gradual introduction of HACCP systems in the food industry, the inspector should be trained to handle HACCP audit responsibilities. Clearly, there is a continuing need for training and upgrading the skills of existing inspectional staff and having a policy for human resource development, especially the development of inspectional specialists in specific technical areas.

As human resources in some food control agencies in developing countries may be limited, environmental health inspectors are often also asked to work as food inspectors. This is not the ideal situation as they may lack the skills and knowledge to effectively evaluate and inspect food operations. If environmental health inspectors must be used, then they should be carefully supervised and provided with on-the-job training.

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Self-Check 4	Written Test
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Directions: Answer all the questions listed below. Use the Answer sheet provided in the below:

1. How to identify food safety breach ?(3points)
2. Write the need of food inspection Services (3 point)

Note: Satisfactory rating - 10 points Unsatisfactory - below 5 points
You can ask you teacher for the copy of the correct answers.



Information Sheet-5 Taking corrective action with the food safety program

5.1 Taking corrective action with the food safety program

Corrective action as “any action to be taken when the results of monitoring at the CCP indicate a loss of control.” In a HACCP system, corrective actions taken in the event of a deviation at a CCP must accomplish the following:

- Determine and correct the cause of non-compliance,
- Identify the product that was produced during the process deviation and determine its disposition, and
- Record the corrective actions that have been taken.

Specific corrective actions must be developed for possible deviations at each CCP in the HACCP plan for a product. To the extent possible, corrective actions should be pre-planned. However, it is not possible to pre-plan for all corrective actions. You need to have a process in place to control nonconforming product and evaluate it to determine it’sultimately.

The second important task a corrective action must accomplish is to identify product affected by the deviation and determine its final disposition. With regard to identification and isolation of the affected product, the following steps must be accomplished:

- Step1.All affected product (i.e. that processed since the last point at which the CCP was known to be under control) must be isolated.
- Step2.Isolated product must be clearly marked (e.g. with firmly attached tags) with information including: hold number, product, amount, date held, the reason for the hold, and the name of the person holding the product.
- Step3 .The producer must maintain control of the product from the hold date to the date of final disposition. Furthermore, the product must be held under conditions that minimize its further deterioration (e.g. refrigeration or freezing where necessary).

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Self-Check 5	Written Test
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Directions: Answer all the questions listed below. Use the Answer sheet provided in the below:

1. How to taking corrective action with the food safety program?(3points)
2. Write the need of taking corrective action with the food safety program? (3 point)

Note: Satisfactory rating - 10 points Unsatisfactory - below 5 points

You can ask you teacher for the copy of the correct answers.

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Information Sheet-6 Raising food safety issues

6.1 Introduction

Food safety is the absence -- or safe, acceptable levels -- of hazards in food that may harm the health of consumers. Food-borne hazards can be microbiological, chemical or physical in nature and are often invisible to the plain eye: bacteria, viruses, or pesticide residues are some examples.

It has a critical role in assuring that food stays safe at every stage of the food chain - from production to harvest, processing, storage, distribution, all the way to preparation and consumption.

6.2 Raising food safety issues

With an estimated 600 million cases of foodborne illnesses annually, unsafe food is a threat to human health and economies, disproportionately affecting vulnerable and marginalized people, especially women and children, populations affected by conflict, and migrants.

An estimated three million people around the world -- in developed and developing countries -- die every year from food and waterborne disease. Food is the starting point for our energy, our health and our well-being. We often take for granted that it is safe, but in an increasingly complex and interconnected world where food value chains are growing longer, standards and regulations are that much more important in keeping us safe.

6.3 Food Safety, Everyone’s Business

Under the theme “Food safety, everyone’s business”, the action-oriented campaign will promote global food safety awareness and call upon countries and decision makers, the private sector, civil society, UN organizations and the general public to take action.

The way in which food is produced, stored, handled and consumed affects the safety of our food. Complying with Global food standards, establishing effective regulatory food control systems including emergency preparedness and response, providing access to clean water,

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applying good agriculture practices (terrestrial, aquatic, livestock, horticulture), strengthening the use of food safety management systems by food business operators, and building capacities of consumers to make healthy food choices are some ways in which governments, international organizations, scientists, the private sector and civil society work to ensure food safety.

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Self-Check 6	Written Test
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Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Define food safety (3 points)
2. Write the different between food safety and food quality (5 points)
3. Mention at least two key principles of safe food raising (5 points)

Note: Satisfactory rating - 15 points Unsatisfactory - below 15 Points

You can ask you teacher for the copy of the correct answers.



LG#60

LO 3-Comply with personal hygiene standards

Instruction sheet

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics:

- Meeting Personal hygiene
- Reporting health conditions and illness
- Making clothing and footwear
- Complying movement around the workplace

This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Meet personal hygiene
- Report health conditions and illness
- Make clothing and footwear
- Comply movement around the workplace

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below.
3. Read the information written in the information Sheets
4. Accomplish the Self-checks
5. Perform Operation Sheets
6. Do the "LAP test



Information Sheet- 1 Meeting Personal hygiene

1.1 Introduction

A food handler is any person who works in a position where they come into contact with food or food preparation. This may be directly through cooking, packing or serving food, however it can also be indirectly through storing, transporting and delivering food. Even those who come into contact with food preparation surfaces such as cutlery, crockery, benches and kitchen utensils are also considered food handlers and are subject to the same rules and regulations as those who directly handle food.

1.2 Legislation governing personal hygiene

Food handlers and food businesses have legal obligations with regards to their personal health and hygiene. The Food Safety Standard states that food handlers must take all practicable measures to ensure his or her body, anything from his or her body, and anything he or she is wearing, does not contaminate food or surfaces likely to come into contact with food. This means that as a food handler, you must do everything in your power to make sure you are preparing food safely.

1.3 Personal hygiene

Good personal hygiene is essential for any food handler and minimizes the risk of food contamination. Most people carry harmful bacteria on their bodies and can unwittingly transport them to food. Touching your mouth, nose, hair or even your clothing can spread bacteria and cause contamination. Even healthy people are not immune and must practice good personal hygiene to minimize this risk. So what can you do to help prevent the spread of harm

Personal hygiene including:-

- Wear mouth musk, hat/hairnet beard snoods, gloves and overshoes that completely cover the hair.
- Do not comb your hair in a processing room or storeroom.
- Cover all cuts, burns, sores and abrasions with a clean, waterproof dressing.

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- Do not smoke or eat in any room where there is open food because bacteria can be transferred from the mouth to the food.
- Do not spit in a processing room or storeroom.
- Wash hands and wrists thoroughly with soap after using the toilet, eating, smoking, coughing, blowing your nose, combing your hair, handling waste food, rubbish or cleaning chemicals.
- Dry them on a clean towel before handling food again.
- Keep finger nails cut short.
- Do not wear perfume or nail varnish as these can contaminate products.
- Do not handle any food if you have sores, boils, septic spots, a bad cold, chest infection, sore throat or a stomach upset full bacteria

1.4 Hand washing

Even if hands look clean, they can still harbor harmful germs and bacteria so correct hand washing is absolutely paramount when working with food. Improper hand washing is one of the leading causes of food contamination and is responsible for the spread of deadly bacteria such as Salmonella, E. coli, and Novo virus, as well as dangerous respiratory infections such as Adenovirus and Hand-Foot-Mouth disease. In fact, The CDC estimates that throughout the world over 2.2 million children under the age of 5 die each year from diarrhea and respiratory infections caused by improper food preparation.

Hands should be thoroughly washed after starting work, handling money, handling raw meat, sneezing or touching the face, and of course, visiting the toilet. One gram of feces can contain as many as one trillion bacterial microbes! That is why it is so important to wash your hands thoroughly after visiting the toilet and handling animal product such as fresh meats and free range eggs. This sounds easy enough, but many food handlers do not understand the correct process for hand washing.

Correct hand washing is broken down into 6 steps:

Step 1. Wet hands - Use warm to hot water to wet your hands and remove any visible dirt

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Step 2. Apply soap - Apply a liquid soap to your hands. Try to avoid or limit the use of bar soaps as they can harbour bacteria. If you do need to use bar soap, then ensure that it is stored in a container that allows for self drainage and is cleaned regularly.

Step 3. Lather and scrub - Rub your hands together well with the soap for a minimum of 20 seconds. Make sure to thoroughly clean palms, the back of the hands, between each finger and under the fingernails.

Step 4. Rinse - Rinse off the soap using warm running water for at least 20 seconds and be sure to point fingers downwards while rinsing.

Step 5. Turn off the tap - Taps can be a breeding ground for bacteria when people turn them on using dirty hands, so try to use a paper towel to turn the tap off.

Step 6. Dry - Wet hands can carry up to one thousand times more germs than dry hands, so it's important to dry hands thoroughly using a paper towel or hand dryer. Do not use a tea towel or your apron as this will contaminate your hands again.

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Self-Check 1	Written Test
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Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Define food hygiene (3 points)
2. Write the steps of personal hygiene (5 points)
3. How to keep personal hygiene (5 points)

Note: Satisfactory rating - 15 points Unsatisfactory - below 15 Points

You can ask you teacher for the copy of the correct answers.



Information Sheet- 2 Reporting health conditions and illness

2.1 Reporting health conditions and illness

Food handlers must report health problems to the manager of the establishment before working with food. If they become ill while working, they must immediately report their condition, and the food handler must stop working and see a doctor. It is important for food handlers to report their health problems to their manager because:

- I. Their illness could contaminate food;
- II. Their illness could cause financial loss to the business because of producing poison food.

The required reporting of Emergency Illnesses and Health Conditions by healthcare providers, which include healthcare facility managers, is done in accordance with the DPH’s annual List of Reportable Diseases, Emergency Illnesses and Health Conditions in a format approved by the Commissioner. A copy of this document will be made available to facilities during the onboarding process. Required data elements for the DPH implementation of Epicenter include:

- Facility identifier
- Encrypted patient identifier
- Encrypted visit number
- Date and time of healthcare encounter
- Patient date of birth or age in years
- Patient home zip code
- Patient gender
- Patient class
- Free text chief complaint
- Ethnicity
- Country of origin
- Discharge disposition
- Discharge diagnosis
- Discharge date/time
- Triage notes



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. Write the purpose reporting health conditions and illness (5 points)
2. List at least 5 required data elements for the DPH implementation of Epicenter (5points)

Note: Satisfactory rating - 5 points Unsatisfactory - below 5 Points

You can ask you teacher for the copy of the correct answers.



Information Sheet- 3 Making clothing and footwear

3.1 Introduction

Food handling uniforms are designed for hygiene, comfort and function. They are meant to protect the employee from the products and machinery, as well as keeping themselves clean and contaminant-free when handling food.

3.2 Making clothing and footwear

Dirty clothing is one of the leading causes of cross contamination in the kitchen as it can carry bacteria from one place to another. It is important that all clothing be laundered and stored correctly to prevent the spread of bacteria. Clothing must also be microbial clean, meaning that the microbes on the garment have been reduced to a safe level. Always use good quality cleaning products and be sure to store clean clothes in a clean, dry place, away from any possible sources of contamination. Many protective items such as gloves and hairnets are designed to be used once only, and must be disposed of after use and never re-used. Long hair should always be tied back and preferably contained using a hair net. Jewellery should also be kept to a minimum.

3.3 Appropriate clothing and footwear:

It should be designed to ensure that the body and clothing itself does not contaminate food or surfaces likely to come into contact with food. Examples of clothing designed to prevent contamination by the body include:

- Purpose designed overalls or uniforms
- Hair-nets
- Beard snoods
- Gloves and overshoes

Make sure that

- You wear the correct uniform
- Your uniform is clean
- Your hair is clean and covered

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- You must be remove all jewellery (including earring, nose, piercings, watches)
- Your hands are clean and washed regularly
- Your fingernails are clean, short and free of nail varnish

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

1. Write the purpose appropriate clothing and footwear (5 points)
2. How to wear clothing and footwear during food preparation (5points)

Note: Satisfactory rating - 5 points Unsatisfactory - below 5 Points

You can ask you teacher for the copy of the correct answers.



Information Sheet- 4 Complying movement around the workplace

4.1 Complying movement around the workplace

In your workplace you will be expected to comply with safe food handling practices as indicated by three possible sources:

- I Legislation – which can include national legislation, regional legislation and/or local legislation
- II Enterprise policies and procedures – as determined by the individual employer
- III The requirements of any internal safe food handling system implemented by the business –

I Legislation

You must research the requirements of any legislation impacting on your workplace to determine the specifics of the legally imposed obligations you, personally, and the business where you work are under.

To do this:

- Speak with management, the owner, your supervisor and/or more senior staff and enquire about what applies where you work
- Visit your local health/food safety authority in-person and ask them what applies and what obligations you are under
- Research the requirements on the internet.

II Enterprise policies and procedures

Policies and procedures will vary between businesses however all operations can be expected to have internal requirements reflecting their legislated obligations and addressing identified workplace food safety hazards. Potentially, food safety hazards exist in every food premises at every stage of food handling:

- Purchasing food for use in the premises
- Receiving goods from suppliers into the premises
- Food storage prior to preparation and/or service
- De-frosting/thawing frozen food

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- Preparing of raw materials for sale/service and the cooking food (including the cooling hot food for storage after it has been cooked)
- Cold holding and hot holding and display of prepared food for sale/service
- Re-heating of prepared food
- Serving food
- Self-service of food by customers to themselves.

In addition, workplace policies and procedures can be expected to exist to address other food safety-related issues such as:

- Cleaning and sanitizing of food utensils, equipment, areas and food contact and preparation surfaces
- Specific food handling techniques required by the workplace to optimize food safety – as applicable to the equipment they use, the food they prepare and other factors applying in the premises
- Personal hygiene – and requirements applying to ensure staff do not contaminate food by their actions
- Equipment maintenance – and the need to keep food equipment, kits (including food thermometers) and areas properly maintained to ensure they operate as required (for example, it is important for refrigerators, freezers and hot and cold holding units to reach the temperatures they are supposed to reach)
- Use of food thermometers – to check food and equipment temperatures

III Internal safe food handling systems

Organizational requirements for safe food handling may (also) be contained within a system known as a „Food Safety Plan“ or „Food Safety Program“, or similar. This system may be legally imposed on the business and apply to all food premises in the country, or it may be a system the workplace voluntarily imposes on itself in order to optimize the safety of the food it serves/sells. Such a system will:

- Identify the workplace food safety hazards – at each stage of the food handling process and in all areas where food is handle

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- Describe specific action you must take to keep food safe at the premises – these are known as „safe food handling practices and procedures“ designed to keep food „under control“ (meaning the food is always handled and stored within parameters of time and temperature to ensure it remains „under control“ and hence safe to eat)
- Describe specific action you must take if the food becomes unsafe – such as recalling the food from sale/consumption, disposing of it and investigating the cause of the „out of control“ situation so remedial action can be taken to prevent a recurrence of the problem.
- Identify the records to be kept to assist you maintain a safe food environment, and allow you to prove you have done so.
- These records must be completed „as required“ for the individual record type and it is a vital part of your job, where these records exist, to complete them fully as required and when required.
- Types of records to be kept will vary depending on the food safety system being used but can include:
 - Approved Food Suppliers List – listing those businesses from whom your workplace is allowed to buy food: if a business is not named on this list you are not allowed to purchase food (or beverages) from it
 - Goods Receiving Form – requiring you to record a proportion (say, 5%) of all inwards food deliveries, detailing the food delivered, the name of the supplier and the temperature of all hot, cold and frozen food delivered into the premises
 - Cold Storage Temperature Log – recording the daily temperatures of fridges, freezers and coolrooms
 - Ready To Eat Food On Display Log – recording the daily temperatures of both hot and cold foods while they are stored for display/sale to the public in units such as Bain maries, salad wells and other refrigerated or hot display units

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4.2 Behavior in the workplace

Our behavior in the kitchen may also be a source of food contamination, and some things you may do without thinking can be seriously harmful. When moving around the workplace try the following tips:

- Avoid all unnecessary contact with ready to eat foods such as salads, cooked meat or fruit. This has been proven to significantly reduce the risk of food contamination.
- If you cough or sneeze into your hands, always ensure you wash your hands thoroughly and replace any gloves.
- Never touch your face, hair, jewellery or clothing while preparing food.
- Do not taste food with your fingers or with utensils that are then returned into the food.
- Do not smoke. If you do need to smoke, always ensure it is done well away from all food preparation areas, and ensure your hands and face are washed thoroughly afterwards.
- Wipe perspiration from your face away using a cloth or paper towel, then wash your hands thoroughly.
- Avoid chewing gum while preparing food.
- Replace any protective clothing such as aprons and gloves when moving from one area of the kitchen to another.
- Always know your company policies regarding moving between workstations.

4.3 Housekeeping and hygiene

- Housekeeping and cleaning systems shall be in place which ensure appropriate standards of hygiene are maintained at all times and the risk of product contamination is minimized.
- The premises and equipment shall be Documented cleaning procedures shall be in place and maintained for the building, plant and all equipment.
- Cleaning procedures for processing equipment, food contact surfaces and environmental cleaning in high-care/high-risk areas shall as a minimum include the:
- Responsibility for cleaning item/area to be cleaned

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- Cleaning materials to be used ,
- Cleaning records and responsibility for verification.
- Method of cleaning, cleaning chemicals and concentrations
- This shall be based on the potential hazards (e.g. microbiological, allergen, foreign-body contamination or product-to-product contamination).
- Acceptable levels of cleaning may be defined by visual appearance, microbiological testing or chemical testing as appropriate.
- Where cleaning procedures are part of a defined prerequisite plan to control the risk of a specific hazard , and

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Self-Check 4	Written Test
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Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page.

1. In your workplace you will be expected to comply with safe food handling practices as indicated by three possible sources: what are these sources (5 Point)?
2. How to apply housekeeping and hygiene? (2point)

Note: Satisfactory rating - 15 points Unsatisfactory - below 15 points
You can ask you teacher for the copy of the correct answers.



Operation sheet -2	procedure of implement food safety
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Objective

- To understand food quality and food safety
- To provide quality food product to world market

Needed materials and equipment

- | | |
|--|---|
| <ul style="list-style-type: none"> ❖ Overalls ❖ Jackets ❖ Visibility vests/clothing ❖ Aprons ❖ Safety shoes and boots ❖ Ear muffs and ear plugs ❖ Goggles and masks | <ul style="list-style-type: none"> ❖ Gloves and gauntlets ❖ Waterproof clothing and Footwear ❖ Respirators ❖ Headwear, helmets and hair nets ❖ Weather protection. |
|--|---|

Chemicals may include:

- ❖ Acid cleaners and brighteners
- ❖ Bowl cleaners
- ❖ Carpet care products
- ❖ Rust inhibitors,
- ❖ Phosphatizes

Detergents of all types and strengths including

- ❖ Pre-treatment agents

Emulsion cleaners including

- | | |
|--|--|
| <ul style="list-style-type: none"> ❖ Drain cleaners, ❖ Degreasers ❖ Floor cleaners ❖ Powdered and liquid chemicals | <ul style="list-style-type: none"> ❖ Solvent cleaners ❖ Steam cleaners |
|--|--|



Steps Operation sheet

- 1 prepare personal protective equipment (PPE)
- 2 Prepare raw materials and equipment
- 3 Identify food safety hazards analysis
- 4 Control food safety hazards
- 5 Measure devices, equipment and kits used in the work area
- 6 Monitoring work area
- 7 Identify maintenance tasks to be undertaken
- 8 Identify corrective actions
- 9 Keeping personal hygiene
- 10 Monitor housekeeping and hygiene

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LAP Test	Practical Demonstration
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Name: _____ Date: _____

Time started: _____ Time finished: _____

Instructions: Given necessary templates, tools and materials you are required to perform the following tasks within --- hour.

Task 1. Implement food safety





Reference

- 1 Aarestrup, F. M., Wegener, H.C. and Collignon, P. 2008. Resistance in bacteria of the food chain: Epidemiology and control strategies. *Experimental Review Anti-infective Therapy* 6: 733-750.
- 2 Allos, B.M. 2001. *Campylobacter jejuni* infections: update of emerging issues and trends. *Clinical Infectious Disease* 32: 202-226.
- 3 Blaser, M.J.1997.Epidemiologic and clinical features of *Campylobacter jejuni* infections. *Journal of Infectious Diseases*176:103-105.
- 4 Caprioli, A., Morabito, S, Brugere, H. and Oswald, E. 2005. Enterohaemorrhagic *Escherichia coli*: emerging issues on virulence and modes of transmission. *Veterinary Research* 36: 289–311.
- 5 Craun, G.F, Calderon, R.L. and Craun, M.F. 2005. Outbreaks associated with recreational water in the United States. *International Journal of Environmental Health Research* 15: 243–262.
- 6 Domenech, E., Escriche, I. and Martorell, S. 2008. Assessing the effectiveness of critical control points to guarantee food safety. *Food Control* 19: 557- 565.
- 7 Donnely,C.W.2002. *Listeria monocytogenes*: a continuing challenge. *Nutrition Review* 59: 183-194.
- 8 IOM 2012. Addressing foodborne threats to health. The National Academies Press, Washington, DC., USA Jadhav,V.J. and Pal, M.2001) Application of hazard analysis and critical control point system in food establishments. *Beverage and Food World* 28:53-55.
- 9 Karesh, W. B., Cook, R.A., Bennett, E.L. and Newcomb, J. 2005. Wildlife trade and global disease emergence. *Emerging Infectious Diseases* 11:1000-1002.
- 10 Mead, P.S, Slutsker, L., Dietz V, McCaig LF, Bresee JS, Shapiro C, Griffin PM, and Tauxe RV. 1999. Food related illness and death in the United States. *Emerging Infectious Diseases* 5: 607–625.

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- 11 Nguyen, T., Wilcock A. and Aung, M. 2004. Food safety and quality systems in Canada. *International Journal of Quality and Reliability Management* 21:655-671.
- 12 Pal, M. 2002. Mycotoxicoses: A global health problem. *Beverage and Food World* 29:1113.
- 13 Pal, M. 2005. Importance of zoonoses in public health. *Indian Journal of Animal Sciences* 75:586-591.
- 14 Pal, M. 2007. *Zoonoses*. 2nd edition. Satyam Publishers, Jaipur, India. Pal, M. 2013. Food safety is becoming a global public health concern. *The Ethiopian Herald*. February 1, 2013. P. 8. Pal, M., Demissie, D., Demissie, K. and Abera, F. 2014. Microbial food safety: A challenge to public health. *Beverage and Food World* 41: 39-41.
- 15 Pal, M. and Jadhav, V. J. 2013. Significance of probiotics in human health. *Beverage and Food World* 41: 65-67.
- 16 Pal, M., Gebrezabihar, W. and Rahman, M.T. 2014. The roles of veterinary, medical, and environmental professionals to achieve One Health. *Journal of Advanced Veterinary Animal Research* 1: 148-155.
- 17 Peter, H. and John, H. 2001. Antibiotic growth promoter. *Journal of Veterinary Pharmacology and Therapy* 24: 5-13.
- 18 Rhoades, J.R., Duffy, G. and Koutsoumanis, K. 2009. Prevalence and concentration of verocytotoxigenic *Escherichia coli*, *Salmonella enterica* and *Listeria monocytogenes* in the beef production chain: A review. *Food Microbiology* 26:357-376.
- 19 Stobbering, E.E. and Vanden Bogaand, A.E. 2000. Spread of antibiotic resistance from food animal to man. *Acta Veterinariae Scandinavia* 93: 47-52. Vallet, B. 2009. Editorial. *OIE Bulletin* No 2.P. 1. Woolhouse, M. E. and S. Gowtage-Sequeria, S. 2005. Host range and emerging and reemerging patho-gens. *Emerging Infectious Disease*. 11:1842-1847.



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