



International  
Trade  
Centre

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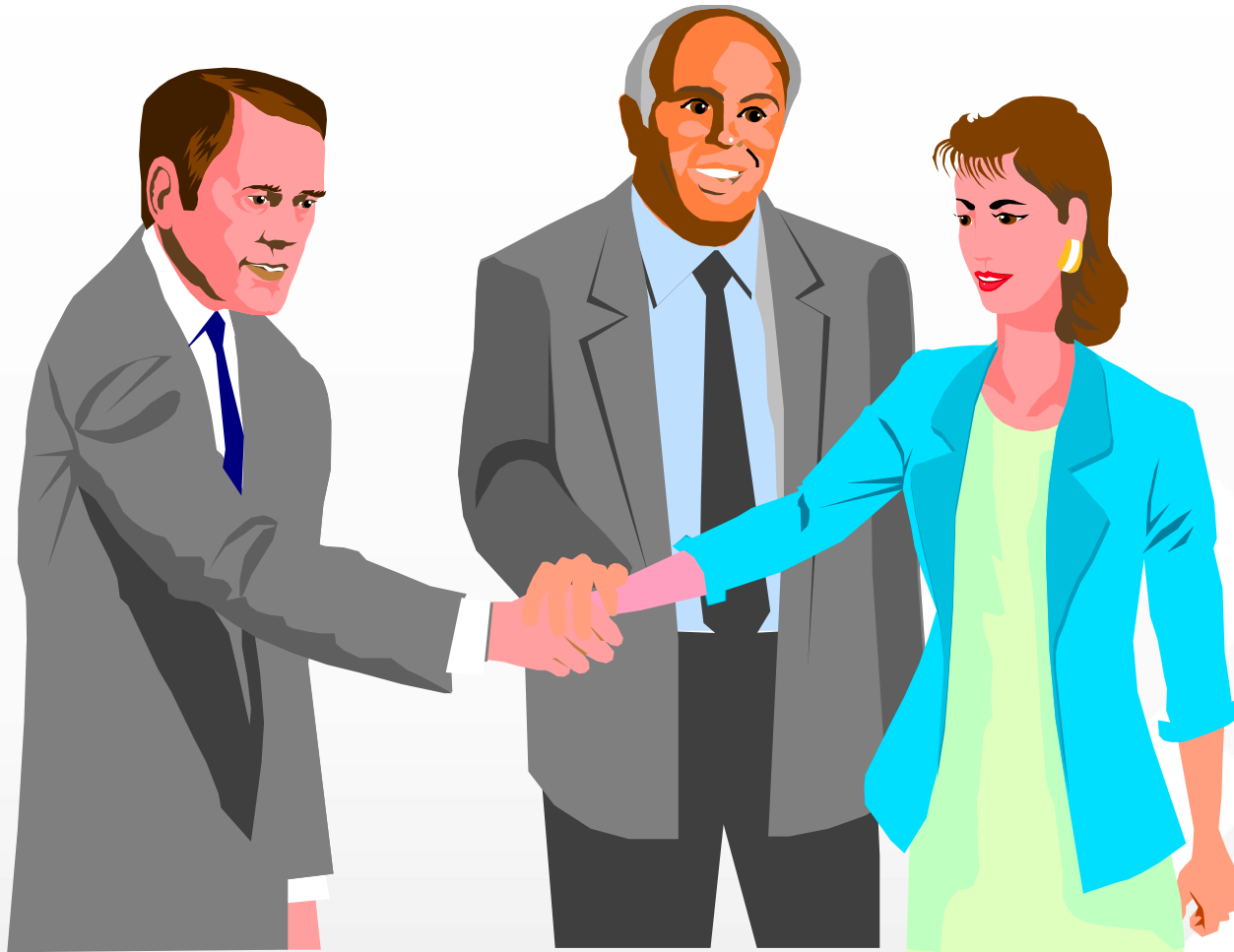
# WELCOME

## Awareness training workshop on Hygiene Practices and Food Safety System according to Codex HACCP in Oilseed Value Chain for National, Regional and International Trade

*“Improving Food Safety and Compliance with SPS measures to increase export revenues in the Oilseeds Value Chain” (STDF/PG/486)*



# Introduction



# Topics – Day 1

- SESSION 1 – Concepts of Quality and Food Safety, Codex Alimentarius and Global Trends
- SESSION 2 – Codex Recommended International Code of Practice General Principles of Food Hygiene
- SESSION 3 – General Principles of Food Hygiene in Primary Production
- SESSION 4 – General Principles of Food Hygiene in Establishment Design and Facility
- SESSION 5 – General Principles of Food Hygiene in Control of Operations

# Topics – Day 2

- SESSION 6 – General Principles of Food Hygiene in Maintenance and Sanitation of Establishment
- SESSION 7 – General Principles of Food for Personal Hygiene followed in the Establishment
- SESSION 8 – General Principles of Food Hygiene in Transportation
- SESSION 9 – General Principles of Food Hygiene related to Product Information and Consumer Awareness
- SESSION 10 – General Principles of Food Hygiene for Training in the establishment

# Topics – Day 2

- SESSION 11 – SPS measures for oilseed value chain – Standards related to oilseed value chain
- SESSION 12 – Food Hygiene Laws in Myanmar
- Session 13: Financial implications in implementing food Hygiene in oilseed value chain and feedback on access to finance opportunities
- Session 14: Way forward and milestones in implementing food hygiene and food safety according to HACCP under the STDF Project

# Learning objectives

- CREATE AWARENESS ON FOOD QUALITY AND FOOD HYGIENE
- CREATE AWARENESS ON IMPORTANCE OF FOOD HYGIENE IN FOOD SAFETY
- UNDERSTAND THE OBJECTIVE AND RATIONAL OF FOOD HYGIENE PRINCIPLES
- UNDERSTAND HOW TO IMPLEMENT FOOD HYGIENE ACCORDING TO CODEX HACCP
- UNDERSTAND WHAT CAN GO WRONG IN IMPLEMENTING FOOD SAFETY

# Code of Conduct



- Attendance
- Mobile phones
- Essentials
- No late comers



# Session 1 – Concepts of Quality and Food Safety, Codex Alimentarius and Global Trends



Quality is not a matter  
of **chance** .....

It's a matter of **choice**.

Until this **need** is acknowledged,  
it is unlikely that a **commitment**  
at any level can be expected...

# What is Quality in food?



# Quality is? (1/2)

- Conformance to specification
- Getting it right first time
- Gained by prevention, not inspection or cure
- A better product, better market acceptance, better profitability
- Employee trust, training, involvement & responsibility in company operations

## Quality is? (2/2)

- Customer sets standard
- Reduction of total cost
- Continuous improvement
- Avoiding waste by eliminating errors
- Doing the right thing to add value
- Using all resources
- Customer satisfaction
- Buyer and seller confidence in the product or service to be provided



# What is food safety....?



# Food Safety - definition

assurance that food  
will not cause harm to the consumer when it  
is prepared and/or eaten according to its  
intended use

Harm can be caused due to  
**Food Safety Hazards**

# Have you ever suffered from food borne illness?





# Have you ever suffered from?

jaundice;  
diarrhea;  
vomiting;  
fever;  
sore throat  
with fever;



# Guess what is the.....

- Most common illness in children below 5 years of age in developing countries?
- Disease that reports 1.5 billion episodes annually?
- Single cause for 2.5 million death every year in developing countries

**SINGLE ANSWER**

# What are these things that cause it

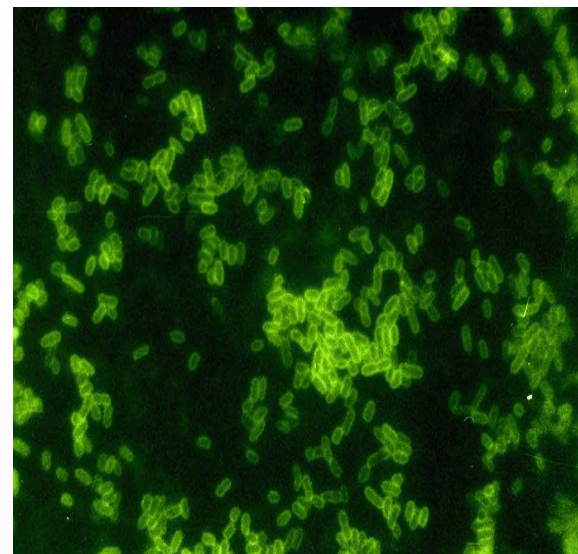
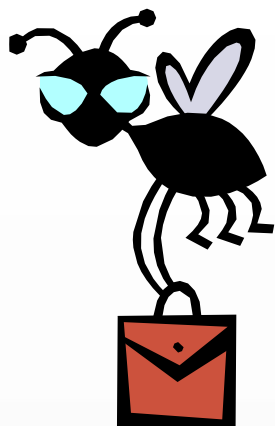
Bacteria

Virus

Fungus

Harmful chemicals

Physical injury due to glass, wood,  
metal pieces, stones



# Some common food safety hazards



# Benefits of food hygiene (1/2)

- Systematic approach covering all aspects of food safety from raw material to end product
- Preventive approach compared to solely retrospective end product testing
- Cost effective control
- Assure control of hazard if correctly implemented
- Focused approach



## Benefits (2/2)

- Preventive measure to reduce product losses
- It is the basis for both quality and food safety management systems (ISO 9001 & ISO 22000)
- Promoted by International authorities
- Supports defense of due diligence
- Facilitates international trade
- Complies with legal requirements

# Identify the food safety.....

- Presentation & mouth feel of food
- Taste of food
- Shelf life of food
- Packaging material in which food packed
- Leakage of the product
- Nutritive labeling of food
- Ingredients of product
- Design and colour of the label and logo

# Identify the food safety.....

- Presentation & mouth feel of food - **QUALITY**
- Taste of food - **QUALITY**
- Shelf life of food – **FOOD SAFETY**
- Packaging material in which food packed - ??
- Leakage of the product - ??
- Nutritive labeling of food – **QUALITY**
- Ingredients of product - ??
- Design and colour of the label and logo - **QTY**
- Storage conditions – **FOOD SAFETY**



# Identify the food safety.....

- Moisture %
- Free Fatty Acids (FFA)
- Country of Origin
- Bags Weighing 26 Kilos
- Packing in Jute bag
- Product Name in Local Language
- Fumigation instructions

# Globalization



**World Agriculture and Food trade – USD 3,251 billion**  
**WTO international Food Statistics 2015**

# Impact of globalization

Contaminants/hazards associated with food enter food chain – consequences

- Risks to human health (food safety)
- Economic impact (product destruction, market losses, etc)
- Less availability of food due to contaminants

Governments imposing regulatory requirements especially for health & safety - Private sector also imposing standards

To facilitate international trade WTO was established in 1995

# WTO Agreements....

To prevent indiscriminate use, rules & disciplines laid down in Non-tariff Agreements

- Agreement on the Application of Sanitary and Phytosanitary Measures (SPS)
- Agreement on Technical Barriers to Trade (TBT)

# WTO Agreement on SPS

To protect human, animal & plant health from risks arising from additives, contaminants, toxins or disease causing organisms

Requires that members of WTO when establishing their own SPS measures consider

- International Standards, Guidelines or recommendations
- May deviate with scientific justification and risk assessment (Transparency & Equivalence)
- All Codex documents referred to in SPS Agreement

# WTO Agreement on TBT

- Prevent use of technical regulations and voluntary standards as unjustified barriers
- Covers all other than food safety aspects of food standards (Quality provisions, nutritional, labeling, test methods etc.)
- Technical regulations and voluntary standards are prepared, adopted and applied according to some basic principles, in order to minimize the negative impact on trade

# TRADE ISSUES – SPS OR TBT

- Label design & layout
- Shelf life declaration
- Allergen declaration
- Can/bottle shape and size
- Vegetarian/Non vegetarian declaration
- Weight and content declaration
- Pest control & fumigation guidelines
- Pesticide/heavy metal residues
- Quarantine requirements

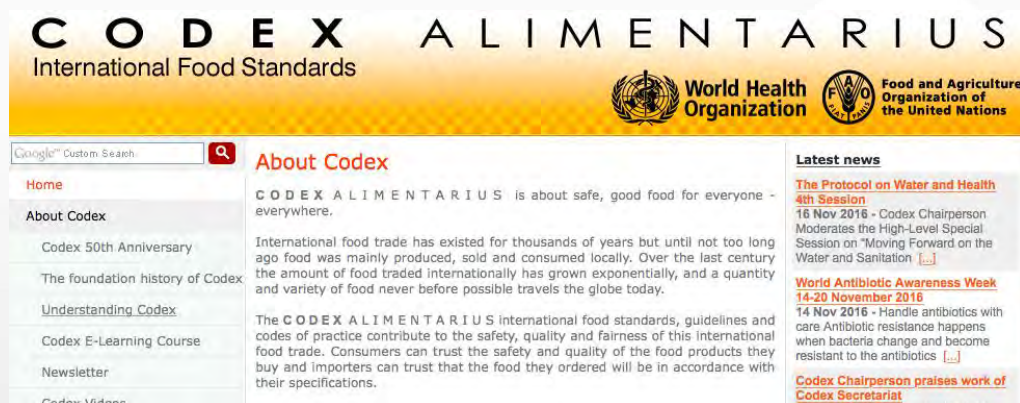
# TRADE ISSUES – SPS OR TBT

- Label design & layout – TBT
- Shelf life declaration – SPS
- Allergen declaration – SPS
- Can/bottle shape and size/weight – TBT
- Vegetarian/Non vegetarian declaration - TBT
- Weight and content declaration – TBT
- Pest control & fumigation guidelines – SPS
- Pesticide/heavy metal residues – SPS
- Quarantine requirements – SPS



# Recognition & status of Codex Standards

Since 1995 Codex standards have become international benchmarks for harmonization under the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS)



# Codex Alimentarius Commission

Intergovernmental body single reference point

**Founded** in 1962 to implement the Joint FAO/WHO Food Standards Programme

**Membership** - 187 countries & 1 member org (EU)

## **Programme Objectives**

- protect the health of consumers
- ensure fair practices in international food trade
- coordinate all food standardization work at the international level

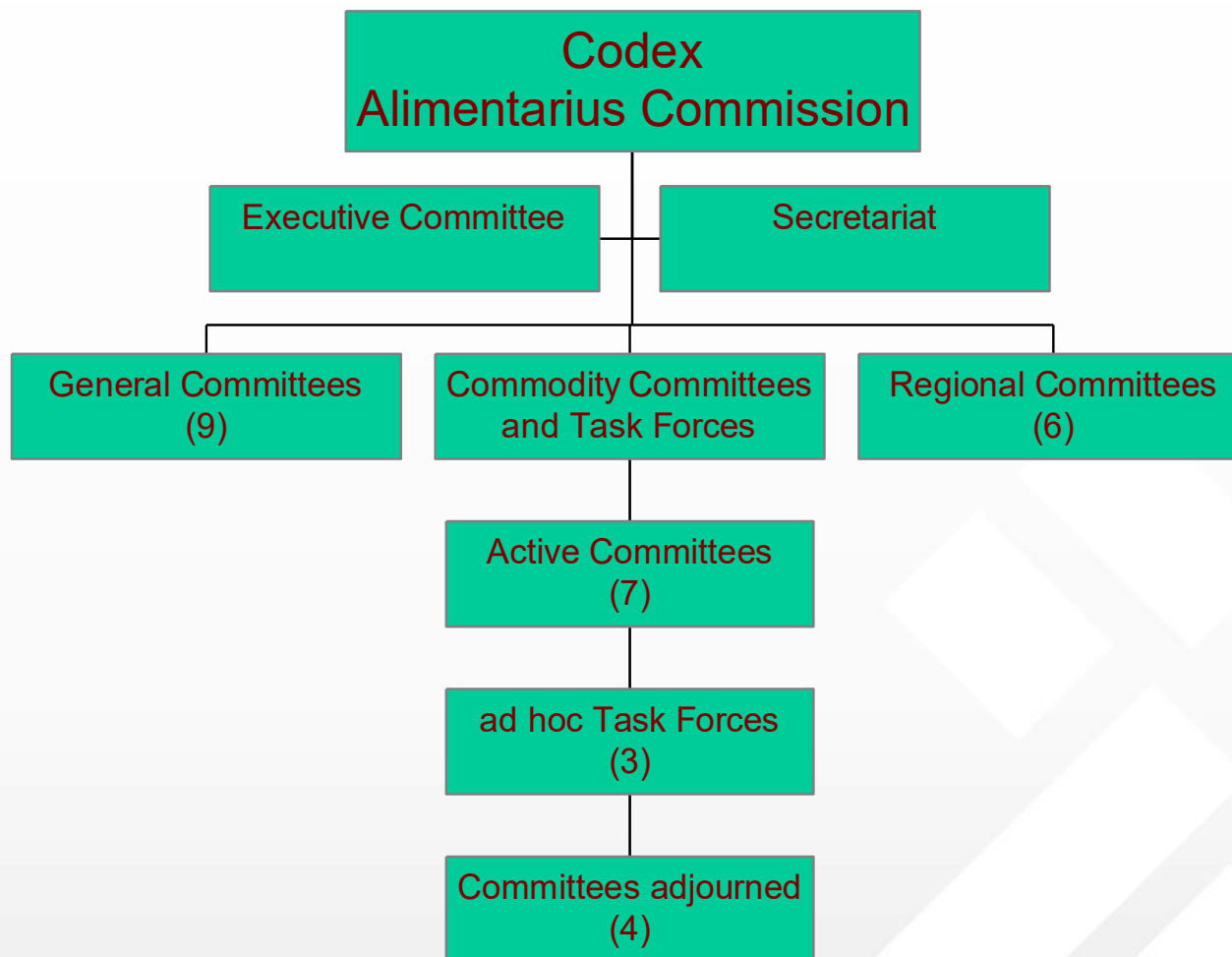
# History of Codex

- 1945: FAO was founded with responsibilities covering nutrition and associated international food standards
- 1948: WHO was founded with responsibilities covering human health and in particular a mandate to establish food standards
- 1961: FAO Conference established Codex Alimentarius Commission (CAC) and requested an early endorsement by WHO of a joint FAO/WHO food standards programme

# History of Codex

- 1962: the Joint FAO/WHO Food Standards Conference requested the CAC to implement a Joint FAO/WHO food standards programme and create the Codex Alimentarius
- 1963: World Health Assembly (WHA) approved the establishment of the Joint FAO/WHO Food Standards Programme and adopted the status of the CAC

# Structure of Codex Alimentarius



# Codex Alimentarius Purpose

Codex Alimentarius developed collection of:

- Code of practices i.e. General Principles of Food Hygiene (51)
- Guidelines (73)
- Standards (212)
- Other related text or recommendations (5)

Collectively referred Codex Standards (341)



**C O D E X** A L I M E N T A R I U S  
International Food Standards

World Health Organization | Food and Agriculture Organization of the United Nations

**Codex Standards**

All Codex texts are publicly available from this website:

The availability of Codex texts on this website, for type of text and for language, is automatically updated in the table below:

Type of Text	EN	FR	ES	AR	PT	RU
Code of practice	51	51	51	19	16	22
Guidelines	73	72	72	22	43	20
Mac	4	3	3	1	0	1
Standards	212	209	211	55	107	91
TOTALS	341	336	336	136	167	137

**Latest news**

**The Protocol on Water and Health**  
20 September 2016  
18 Nov 2016 - Codex Alimentarius, the High Level Expert Session on "Water Followed on the Water and Health"...

**World Aquaculture Agreement Week**  
14-18 September 2016  
14 Nov 2016 - The Codex Alimentarius, the High Level Expert Session on "Water Followed on the Water and Health"...

**Codex Commission on Food Hygiene**  
4 Nov 2016 - The Codex Alimentarius, the High Level Expert Session on "Water Followed on the Water and Health"...

**Food Safety and Inspection Service (FSIS)**  
23 Oct 2016 - The Codex Alimentarius, the High Level Expert Session on "Water Followed on the Water and Health"...

**Twitter** by @FAO/WHO

# What are Standards ?

- Documented agreements
- Containing specification
- Consistently used as rules, guidelines or definitions of characteristics
- Ensure that material, products, processes & services are fit for their purpose



# Why Standards ?

Support in selection of Goods/Commodities/  
Services

Easier market orientation for obtaining

- Good quality
- Compatibility
- Interchangeability

Source of neutral and unbiased information

Confidence between trade partners

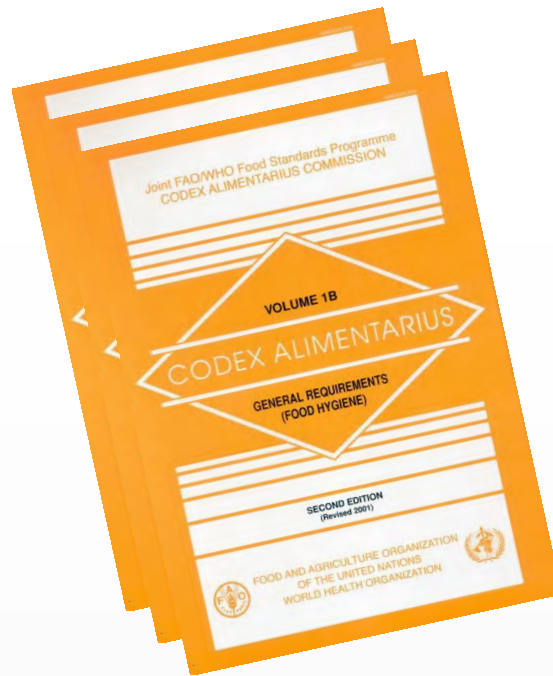


# International Législation on Food Safety

- USA – Processing of red meats (primarily beef and pork), poultry (primarily chicken and turkey), fruit, vegetable juices & seafood
- EU – All food manufacturing facilities to incorporate HACCP into their food safety systems
- Australia & New Zealand – Food Standards Code requires all food businesses undergoing substantial transformation of their products to adopt approved food safety programs based on the HACCP methodology

# International Législation on Food Safety

- Canada – Food Safety Enhancement Program (FSEP) of the Canadian Food Inspection Agency (CIFA) encourages and supports the development, implementation and maintenance of HACCP systems in all federally registered establishments



# Session 2 – Codex Recommended International Code of Practice General Principles of Food Hygiene

# Codex General Principles of Food Hygiene - objectives

- Identifies principles of food hygiene applicable throughout the food chain
- Recommends a HACCP-based approach to ensuring food safety
- Provides guidance on how to implement hygiene principles
- Establishes a framework for *specific* hygiene codes



# Farm-to-fork concept



Food Safety is ensured only when good hygienic practices are implemented along the entire food chain

Therefore....

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# Governments can use it to:

- protect consumers adequately from illness or injury caused by food; policies need to consider the vulnerability of the population, or of different groups within the population;
- provide assurance that food is suitable for human consumption;
- maintain confidence in internationally traded food; and
- provide health education programmes which effectively communicate the principles of food hygiene to industry and consumers.

# Industry can apply hygienic practices to:

- provide food which is safe and suitable for consumption;
- ensure that consumers have clear and easily-understood information, by way of labelling and other appropriate means, to enable them to protect their food from contamination and growth/survival of foodborne pathogens by storing, handling and preparing it correctly; and
- maintain confidence in internationally traded food.

# Consumer to apply these hygiene principles to:

- recognize their role by following relevant instructions and
- Applying appropriate food hygiene measures.



# Do I understand food safety terms used....



# Definitions from Codex Standards

- Food Hygiene- all conditions and measure 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 use
- Hazard- a biological, chemical or physical agent in, or condition of, food with the potential to cause an adverse health effect
- Containment- a biological and chemical agent, foreign matter, or other substances not intentionally added to food which may compromise food safety or suitability



## Session 3 – General Principles of Food Hygiene in Primary Production

# Hygiene in Primary Production

## **OBJECTIVES:**

Primary production should be managed in a way that ensures that food is safe and suitable for its intended use.

Where necessary, this will include:

avoiding the use of areas where the environment poses a threat to the safety of food;

controlling contaminants, pests and diseases of animals and plants in such a way as not to pose a threat to food safety;

adopting practices and measures to ensure food is produced under appropriately hygienic conditions.

# Hygiene in Primary Production

## **Rationale**

To reduce the likelihood of introducing a hazard which may adversely affect the safety of food, or its suitability for consumption, at later stages of the food chain.

# Hygiene in Primary Production

## Environmental Hygiene

- Prevent introduction of potentially harmful substances from environment that would lead to an unacceptable level of such substances in food

## Hygienic Production

- control contamination from air, soil, water, feeds, fertilizers, pesticides, veterinary drugs
- control plant and animal health
- prevent faecal and other contamination



# Hygiene in Primary Production

## Handling, Storage and Transport

- Sort to segregate material which is evidently unfit for human consumption;
- dispose of any rejected material in a hygienic manner; and
- Protect from contamination by pests, chemical, physical or microbiological contaminants or other objectionable substances

# Hygiene in Primary Production

## Cleaning, Maintenance and Personal Hygiene

Appropriate facilities and procedures should be in place to ensure that:

- any necessary cleaning and maintenance is carried out effectively; and
- an appropriate degree of personal hygiene is maintained.



# How does one apply knowledge of hygiene principles in primary production through the food chain

- When buying raw materials
- When making raw material specifications
- When selecting supplier

# Activity 1: Application of principles of hygienic practices primary production

Team A – Environment hygiene

Team B – Hygienic production

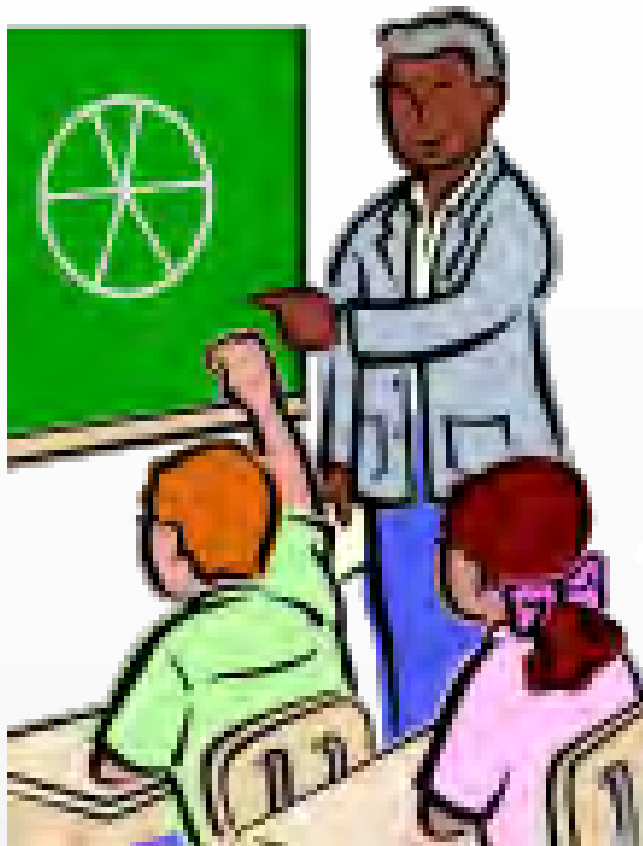
Team C – Warehouse hygiene

Team D – Transportation hygiene

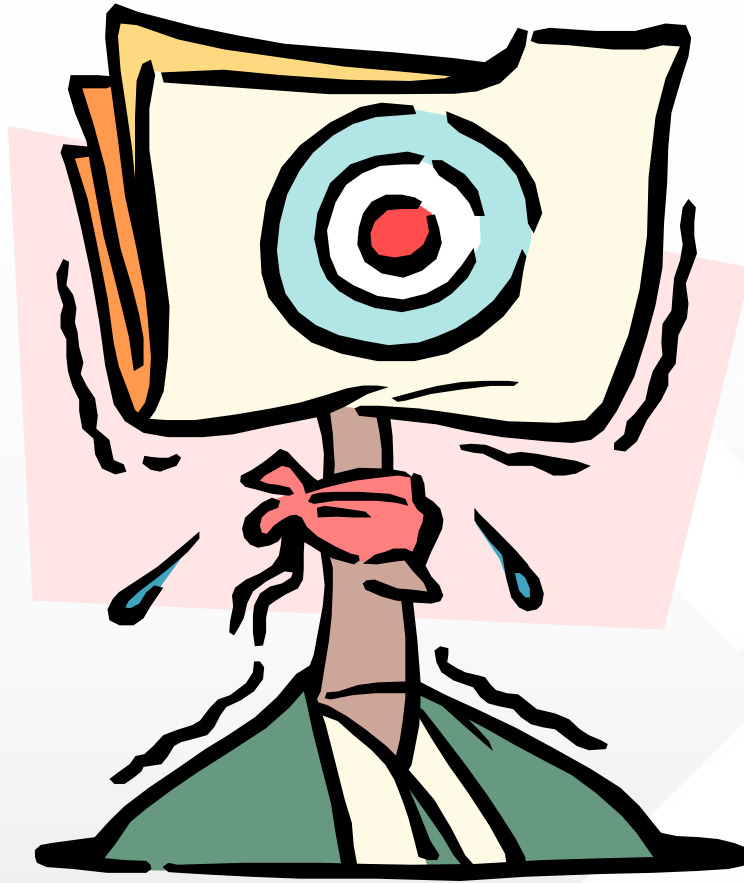
Team E – Cleaning, maintenance and personal hygiene



# Participants Presentations



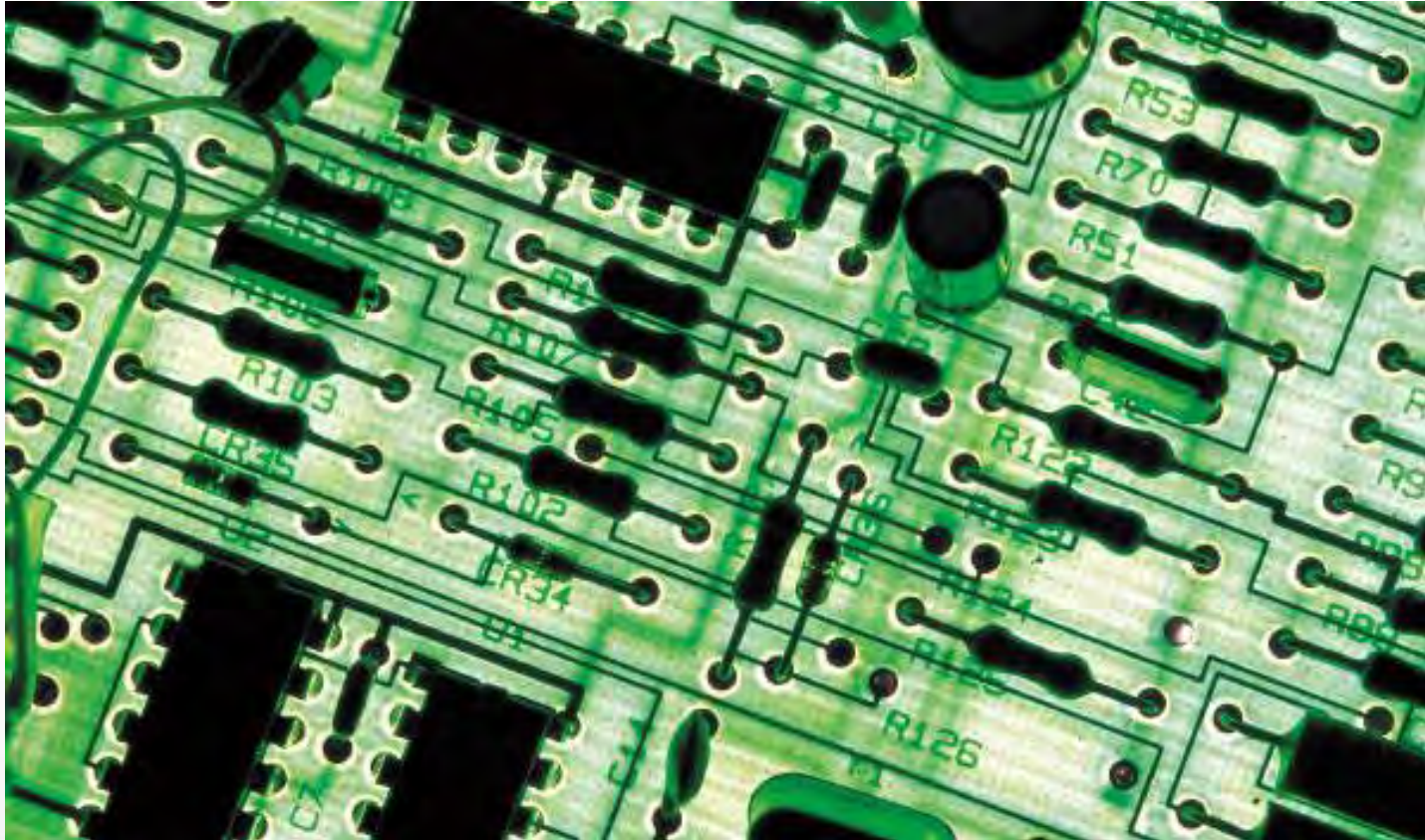
# End of Day 1



# DAY 2



# What we did yesterday?





# Session 4 – General Principles of Food Hygiene in Establishment Design and Facility



# Establishment: Design & Facilities

## OBJECTIVES:

premises, equipment and facilities should be located, designed and constructed to ensure that:

- Contamination is minimized;
- Permits appropriate maintenance, cleaning and disinfections and minimize air-borne contamination;
- surfaces and materials, including in contact with food, are non-toxic, suitably durable, and easy to maintain and clean;
- Suitable facilities are available for temperature, humidity and other controls; and
- Effective protection against pest access and harborage.



# Establishment: Design & Facilities

## Rationale

Attention to good hygienic design and construction, appropriate location, and the provision of adequate facilities, is necessary to enable hazards to be effectively controlled.

# Establishment: Design & Facilities

## Establishment location

- away from pollution, flooding, infestation
- facilitate waste removal

## Equipment location

- for proper functioning, maintenance, cleaning, sanitation and monitoring

## Design and layout of premises and rooms

- sorting, segregating and hygienic disposal of unfit food
- permit good food hygiene and prevent cross-contamination

# Establishment: Design & Facilities

## Internal structure and fittings

- wall, ceilings and floors smooth and impervious, non-toxic materials
- floors allow drainage and cleaning
- ceilings and overhead fixtures minimize dirt, condensation and particles
- windows cleanable, minimize dirt, fitted with screens
- doors smooth and non-absorbent for cleaning and disinfection
- food contact surfaces smooth, impervious, non-toxic materials, easy to clean and sanitise

# Establishment: Design & Facilities

## Temporary/Mobile Premises and Vending Machines

- sited, designed and constructed to prevent contamination of food and harbouring pests

## Equipment and Containers

- designed to be cleaned, disinfected and prevent contamination
- materials nontoxic under use conditions
- can be moved or disassembled for cleaning, sanitation and inspection

# Establishment: Design & Facilities

Food control and monitoring equipment

- cooking and refrigeration equipment for control and monitoring of time/temperature of food to control microorganisms
- monitoring of critical limits in HACCP plan

Container for waste and inedible substances

- clearly identified to prevent accidental contamination of food
- consider construction, impervious materials and lockable, as appropriate to prevent malicious or accidental contamination

# Establishment: Design & Facilities

## Facility water supply

- adequate potable water (meeting WHO guidelines)
- non-potable water systems identified and separate
- no cross-connection of potable and non-potable systems

## Drainage and waste disposal

- designed and constructed to prevent contamination of food and potable water

# Establishment: Design & Facilities

## Cleaning facilities

- for cleaning food and utensils
- adequate hot and cold potable water

## Personal hygiene facilities and toilets

- adequate for hygienic washing and drying of hands
- lavatories of hygienic design
- facilities for personnel to change clothing

# Establishment: Design & Facilities

## Temperature control

- adequate facilities for heating, cooling, cooking, refrigerating and freezing food
- adequate refrigerated and frozen storage of food
- monitoring of food temperatures
- control of ambient temperatures for food safety and suitability



# Establishment: Design & Facilities

## Air quality and ventilation

- natural or mechanical ventilation to minimise air borne particles and moisture
- control of ambient temperatures
- control odours
- control humidity
- prevent air-flow from contaminated areas to clean areas
- maintenance and cleaning

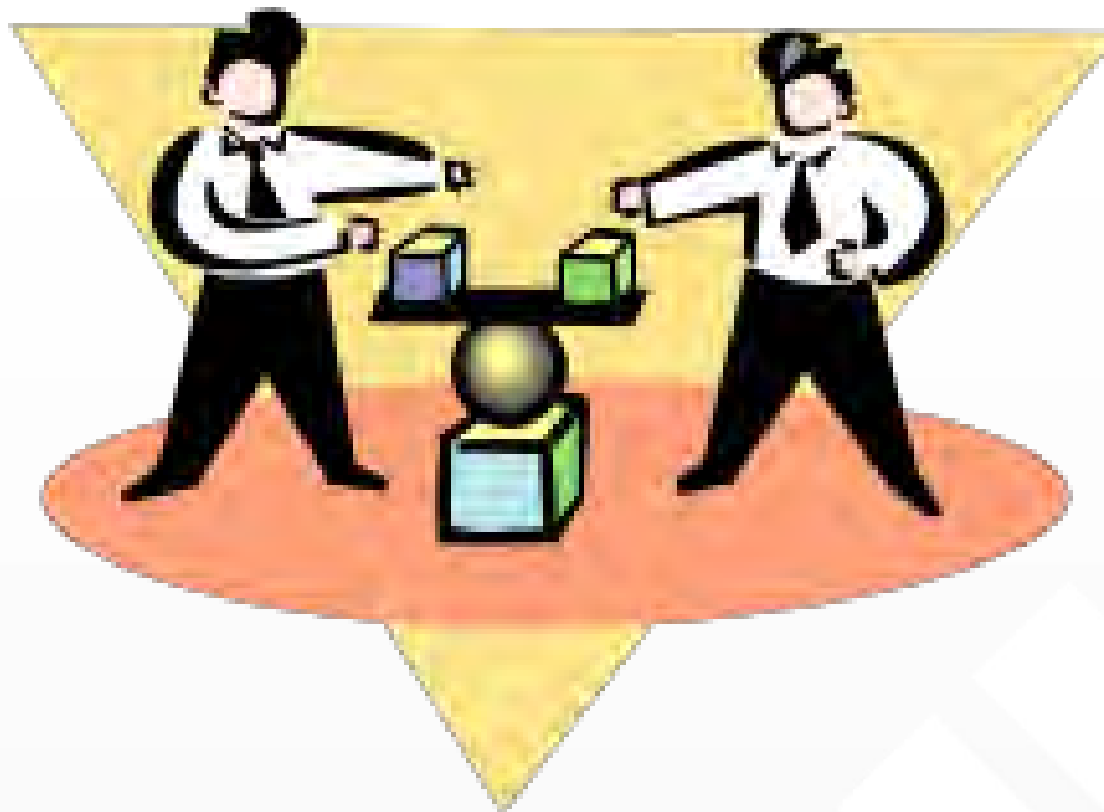
## Lighting

- adequate for hygienic operations
- not to be misleading of colours
- protect food from contamination and breakage

# Establishment: Design & Facilities

## Storage

- adequate for food, ingredients and non-food chemicals
- designed and constructed for maintenance and cleaning
- prevent harbouring
- prevent contamination of food
- minimise deterioration (temperature and humidity control)



## **Session 5 – General Principles of Food Hygiene in Control of Operations**

# Control of Operations

## **OBJECTIVES:**

To produce food which is safe and suitable for human consumption by:

- formulating design requirements with respect to raw materials, composition, processing, distribution, and consumer use to be met in the manufacture and handling of specific food items; and
- designing, implementing, monitoring and reviewing effective control systems.

# Control of Operations

## Rationale

To reduce the risk of unsafe food by taking preventive measures to assure the safety and suitability of food at an appropriate stage in the operation by controlling food hazards.

# Control of Operations

## Control of food hazards

- HACCP

## Time and temperature control

- most common cause of foodborne illness
- control of cooking, cooling, processing and storage
- specify time and temperature limits
- calibration and testing of temperature recording devices

## Specify process steps

- processes contributing to food hygiene may include chilling, thermal processing, irradiation, drying, chemical preservation, vacuum modified atmosphere packaging

# Control of Operations

Microbiological and other specifications

- in HACCP or other management systems, microbiological, chemical or physical specifications, including action limits, monitoring and analysis, should be based on sound science

Microbiological cross-contamination

- system for preventing contamination of ready-to-eat food by raw, unprocessed food
- food handlers
- physical and time separation
- processing areas
- protective clothing and footwear
- equipment and utensils



# Control of Operations

## Physical & chemical contamination

- as appropriate, specifications for raw materials
- not acceptable materials/ingredients known to contain parasites, undesirable microorganisms, pesticides or toxic substances which would not be reduced to acceptable levels

## Packaging

- design and materials to minimise contaminates, prevent damage, accommodate labeling
- materials or gases non-toxic under storage and use conditions
- durable, cleanable, able to be disinfected

# Control of Operations

## Water

- potable water (meeting WHO guidelines) for contact with food, as an ingredient, or for ice or steam in direct contact with food or food contact surfaces
- exceptions: steam or fire protection; in food handling without hazard (clean seawater); water circulated for reuse. Must not be a risk to the safety and suitability of food
- Management and supervision
- knowledgeable of food hygiene (see item 10.3)

# Control of Operations

## Documentation and records

- where necessary and appropriate
- refined for shelf-life of product

## Recall procedures

- for complete, rapid recall for any food safety hazard
- consider need for public warnings
- disposition of recalled product.

# Activity : Equipment and tools required to control operations



Team A – Processor

Team B – Farmer

Team C – Collector

Team D – Farmer

Team E – Collector



## **Session 6 – General Principles of Food Hygiene in Maintenance & Sanitation of Establishment**

# Establishment: Maintenance and Sanitation

## **OBJECTIVES:**

To establish effective systems to:

- ensure adequate and appropriate maintenance and cleaning;
- control pests;
- manage waste; and
- monitor effectiveness of maintenance and sanitation procedures.

# Establishment: Maintenance and Sanitation

## Rationale

To facilitate the continuing effective control of food hazards, pests, and other agents likely to contaminate food.



# Establishment: Maintenance and Sanitation

## Maintenance and cleaning

- maintain facility and equipment for function, cleaning and sanitisation, and preventing contamination
- cleaning chemicals; use instruction, segregation, identification
- cleaning procedures and methods

## Cleaning programme

- All parts of establishment cleaned
- Continually and effectively monitored

# Establishment: Maintenance and Sanitation

## Pest control programs

- Preventing access
- Harborage and infestation: prevent access to food, water, breeding sites, refuse
- Monitoring and detection
- Eradication

# Establishment: Maintenance and Sanitation

## Waste management

- removal and storage
- prevent accumulation in food handling and storage areas
- clean waste storage areas

## Monitoring effectiveness

- pre-operational inspections
- microbiological sampling and testing



# **Session 7 – General Principles of Food Hygiene for Personal Hygiene in the Establishment**

# Establishment: Personal Hygiene

## **OBJECTIVES:**

To ensure that those who come directly or indirectly into contact with food are not likely to contaminate food by:

- maintaining an appropriate degree of personal cleanliness;
- behaving and operating in an appropriate manner.

# Establishment: Personal Hygiene

## Rationale

People who do not maintain an appropriate degree of personal cleanliness, who have certain illnesses or conditions or who behave inappropriately, can contaminate food and transmit illness to consumers.

# Establishment: Personal Hygiene

## Health status

- prevent people with foodborne illness from handling food
- medical examinations if clinically or epidemiologically indicated

## Illness and injury

- Jaundice; diarrhoea; vomiting; fever; sore throat with fever; visibly infected skin lesions; discharges from ear, eye or nose
- to be reported to management



# Establishment: Personal Hygiene

## Personal cleanliness

- personal cleanliness
- wear protective clothing, head covering, footwear
- cuts and wounds should be covered
- [hand washing](#)

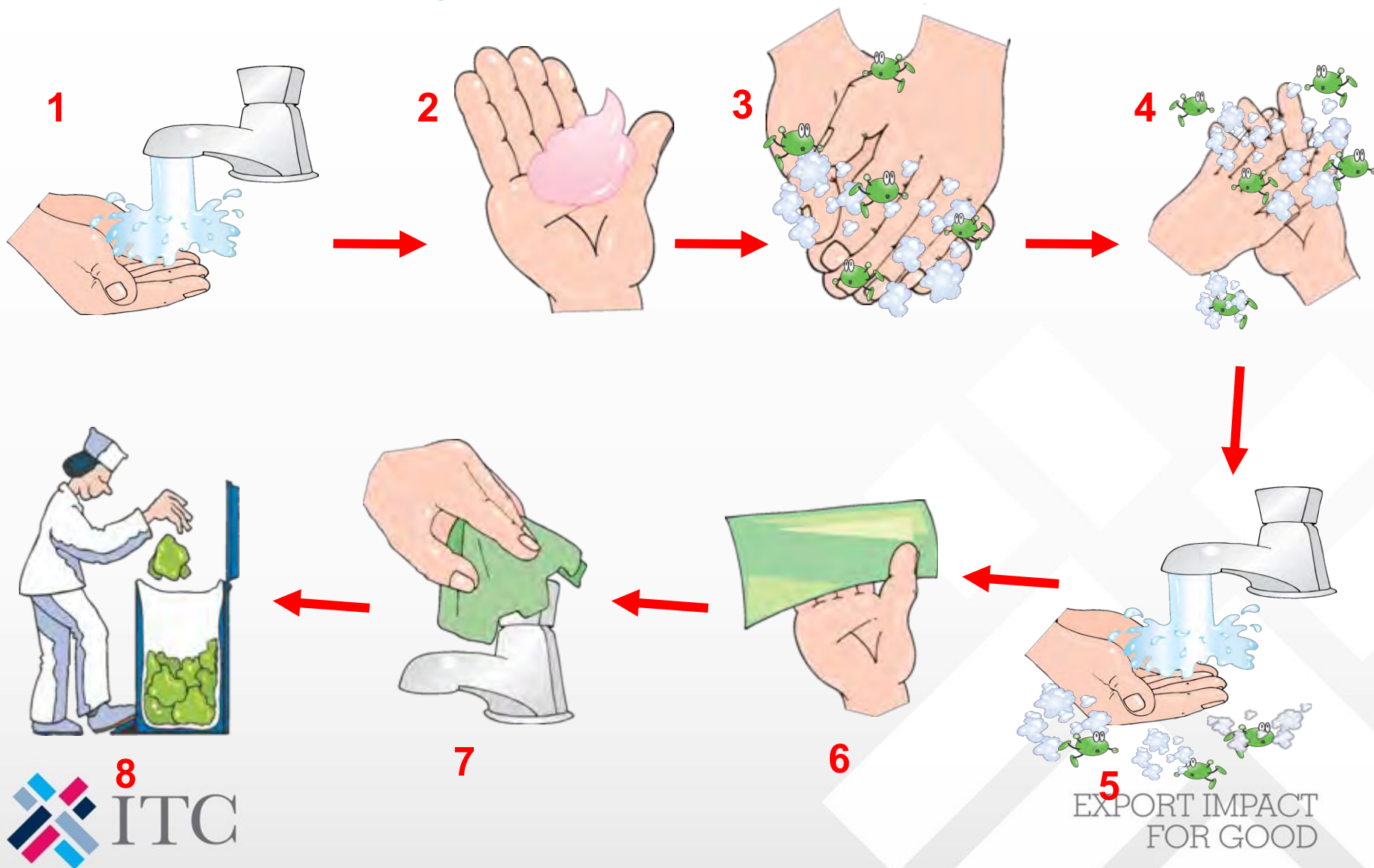
## Personal behavior

- refrain from smoking, spitting, chewing/eating, sneezing or coughing over unprotected food
- prevent jewelry, watches, etc. in food handling areas

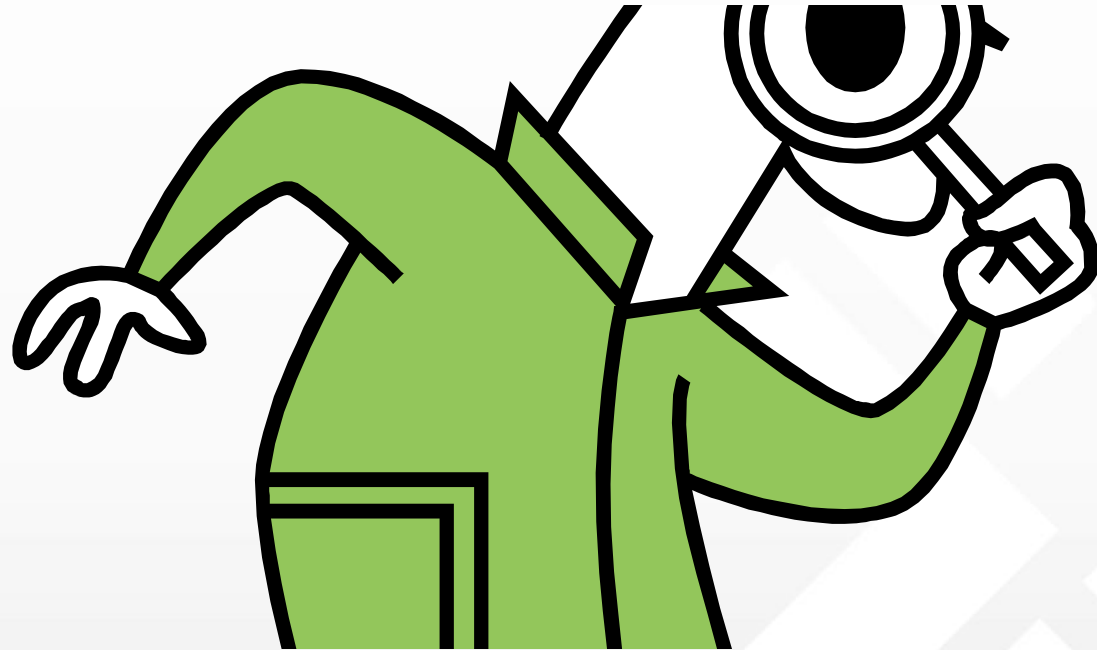
## Visitors

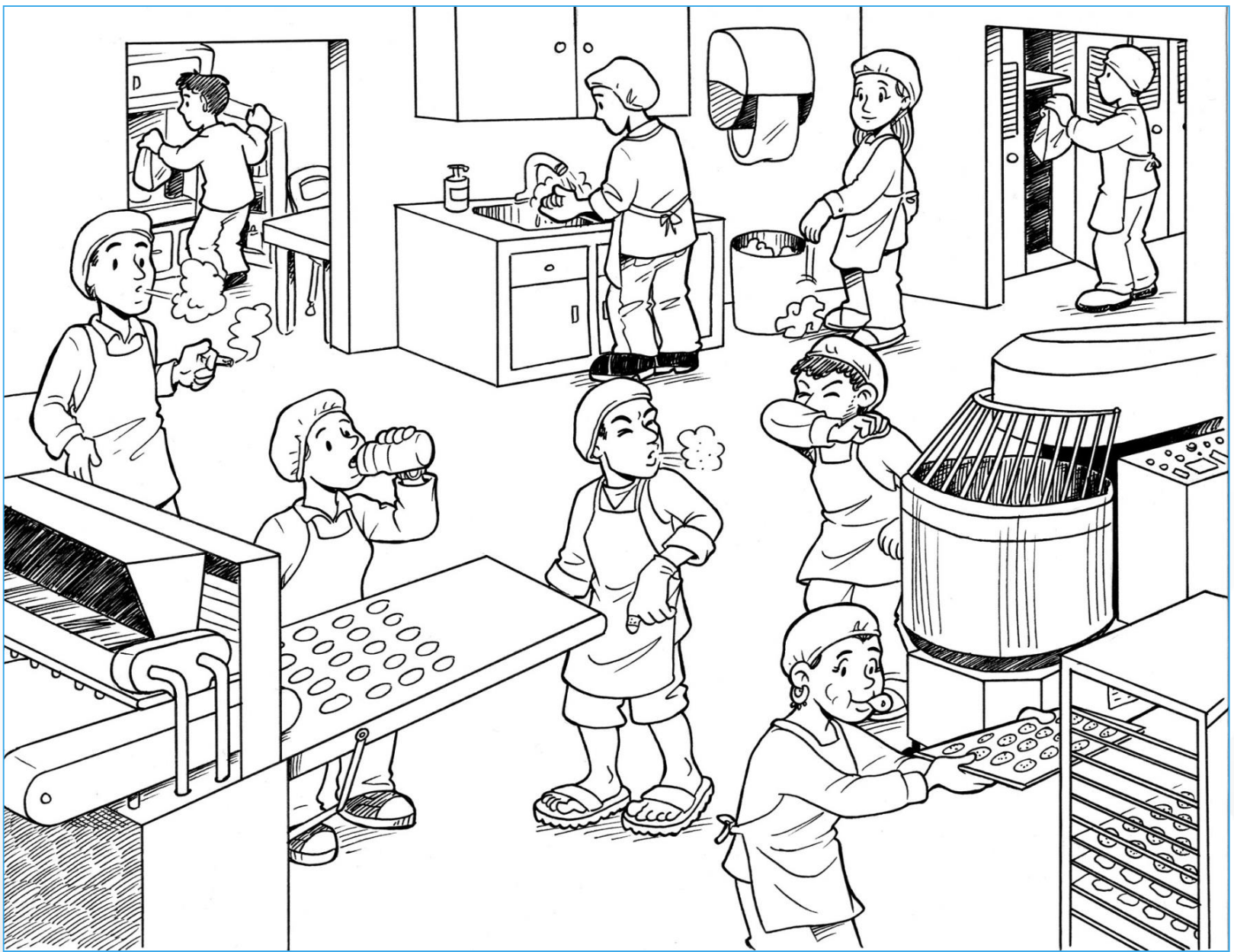
- to meet same expectations for personal hygiene

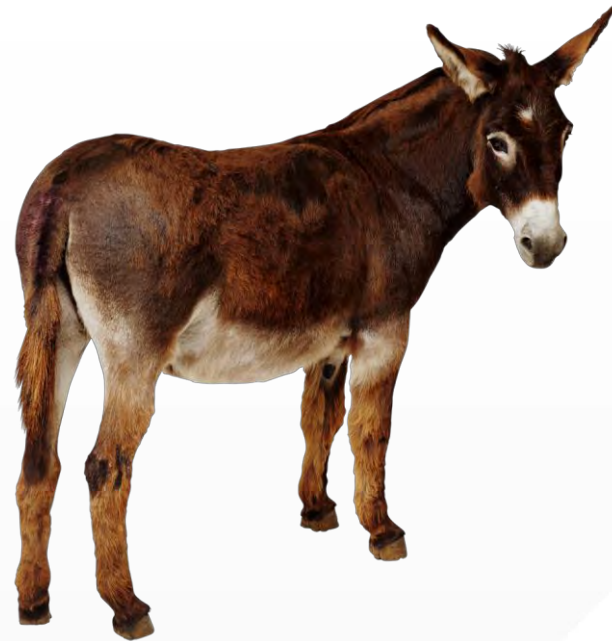
# Hand washing method



## Activity 2: Identify in the picture given the lapses in following personal hygiene in the facility







## **Session 8 – General Principles of Food Hygiene in Transportation**



# Transportation

## OBJECTIVES:

Measures should be taken where necessary to:

- protect food from potential sources of contamination;
- protect food from damage likely to render the food unsuitable for consumption; and
- provide an environment which effectively controls the growth of pathogenic or spoilage micro-organisms and the production of toxins in food.

# Transportation

## Rationale

Food may become contaminated, or may not reach its destination in a suitable condition for consumption, unless effective control measures are taken during transport, even where adequate hygiene control measures have been taken earlier in the food chain.



# Transportation

Conveyance and bulk containers designed and constructed to

- prevent contamination
- be effectively cleaned and sanitized
- permit effective separation of food/non food during transport
- Effective protection from contamination
- maintain temperature and other conditions to protect food from bacteria growth & deterioration
- allow for measurement and monitoring

Use and maintenance

- maintained in state of cleanliness, repair & condition
- effective cleaning and sanitization between loads
- consider need for dedicated transport and containers



## Session 9 – General Principles of Food Hygiene related to product information and consumer awareness

# Product Information & Consumer Awareness

## OBJECTIVES:

Products should bear appropriate information to ensure that:

- adequate and accessible information is available to the next person in the food chain to enable them to handle, store, process, prepare and display the product safely and correctly;
- the lot or batch can be easily identified and recalled if necessary.

# Product Information & Consumer Awareness

## OBJECTIVES:

Consumers should have enough knowledge of food hygiene to enable them to:

- understand the importance of product information;
- make informed choices appropriate to the individual; and
- prevent contamination and growth or survival of foodborne pathogens by storing, preparing and using it correctly.

# Product Information & Consumer Awareness

## Rationale

Insufficient product information, and/or inadequate knowledge of general food hygiene, can lead to products being mishandled at later stages in the food chain. Such mishandling can result in illness, or products becoming unsuitable for consumption, even where adequate hygiene control measures have been taken earlier in the food chain.

# Product Information & Consumer Awareness

## Lot identification

- permanently marked to identify producer and lot (Codex Stan 1-1985)

## Product information

- for next person in food chain
- proper handling, display, storage, preparation and use

## Labeling

- prepackaged foods
- proper handling, storage and use (Codex Stan1 - 1985)

## Consumer Education

- in particular, relationship of time/temperature control and foodborne illness

# Activity 4: design labels as per hygiene principle for the following products

Team A – Sesame oil 1 lt

Team B – Peanut oil 5 lt

Team C – Roasted Sunflower Seeds  
250 gms

Team D – Fried salted peanuts 250  
gms

Team D – Sesame seed cake 25 kgs



## Session 10 – General Principles of Food Hygiene for training in the establishment



# Training

## **OBJECTIVES:**

Those engaged in food operations who 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.

# Training

## Rationale

Training is fundamentally important to any food hygiene system.

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.

# Training

## Awareness and responsibility

- all personnel handling food
- special training for cleaning chemicals and other hazardous materials

## Training programs

- depends on the food, the process and storage conditions

## Instruction and supervision

- periodic assessment of training effectiveness
- food hygiene knowledge of managers and supervisors (see item 5.6)

## Refresher training

- routine review and updating

# Training

## Awareness and responsibility

- all personnel handling food
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# **Session 11**

## **SPS Measures related to oilseed value chains and Food safety issues in the sector in Myanmar**

# SPS Measures along oilseed value chain

- Implement hygiene along the value chain  
GAP at farm level; hygienic practices while transportation and storage of oilseeds; hygienic practices while processing oilseeds (cleaning, roasting, hulling, crushing or any other value addition)
- Implement HACCP in processing facilities
- Producers comply to product standards  
esp on food safety issues – MRLs, Aflatoxins, moisture, FFA, additives, antioxidants
- Develop control mechanism for above

# Oilseed Value Chain

FARMER implements GAP

Control on

- Use of agricultural chemicals
- Implementation of GAP

Collector whole sale buyer implements Codex hygiene in warehouse

Control needed on

- Moisture
- FFA
- Aflatoxins
- Implementation of hygiene in warehouse

Trader/Processor implements Codex hygiene/HACCP

Control needed on

- Moisture
- FFA
- Aflatoxins
- Implementation of hygiene/HACCP

Exporter/shipping PSI Regulations

Control needed on

- Availability of all certificates and shipping documents

REGULATORY CONTROL

# Codex documents to guide SPS measures

- To implement Recommended International Code of Practice General Principles of Food Hygiene CAC/RCP 1 – 1969
- To implement Hazard Analysis and Critical Control Point (HACCP) System and Guidelines for its Application
- Oilseed products to meet codex standards



# Codex Standards - Oilseed Products

- CODEX STAN 210 – 1999 amendment 2015 Standard for Named Vegetable Oils
- CODEX STAN 19 – 1981 rev 2015 Standard for edible fats & oils not covered in individual standards
- CAC/RCP 36 – 1987 rev 2015 Code of Practice for Storage & Transport of Edible Fats & Oil in Bulk
- CAC/RCP 55 – 2004 Code of Practice for the Prevention & Reduction of Aflatoxin Contamination in Peanuts

# Codex Standards - Oilseed Products

- CAC/RCP 22 – 1979 Code of Hygienic Practice for Groundnuts (Peanuts)
- CAC/RCP 75 – 2015 rev 2016 Code of Hygiene Practice for low moisture foods
- CODEX STAN 193 – 1995 General Standard for Contaminants and Toxins in Food and Feed
- CODEX STAN 1 – 1985 General Standard for the Labelling of Pre Packaged Foods
- Additional standards like MRLs, food additives

# CODEX STAN 210 – 1999

## Standard for Named Vegetable Oils

- Essential composition and quality factors - % fatty acids and split point
- Food additives – flavors, antioxidants, antioxidant synergists and antifoaming agents – MRLs
- Contaminants – CODEX STAN 193 - 1995
- Hygiene - CAC/RCP 1-1969 & CAC/GL 21-1997
- Labelling – CODEX STAN 1 – 1985 & for non-retail containers
- Method of analysis and sampling

# CODEX STAN 210 – 1999

## Standard for Named Vegetable Oils

Appendix – other quality and composition factors –

- Quality characteristic – insoluble impurities, soap content, Fe, Cu, acid and peroxide value
- Composition characteristics - Baudouin test should be positive for sesame seed oil
- Chemical & physical characteristics – density, refractive index, saponification & iodine value
- Identity characteristics - Levels of desmethylsterols, tocopherols and tocotrienols
- Method of analysis of sampling

# CODEX STAN 193 – 1995

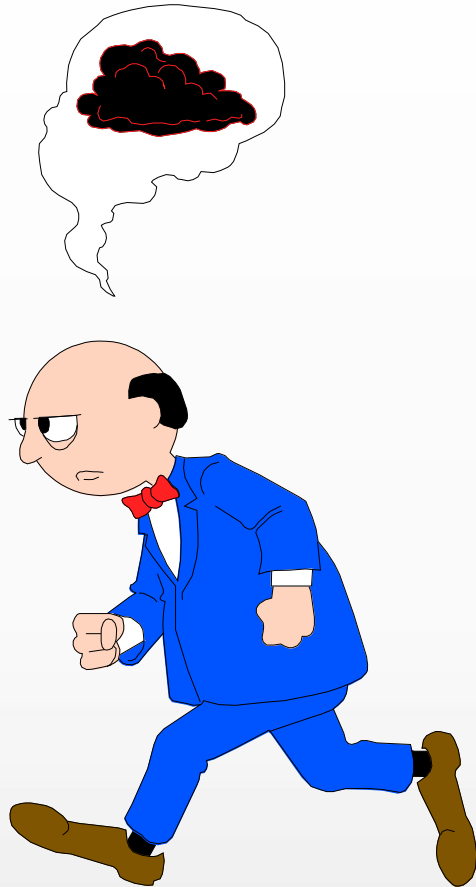
## Contaminants & toxins in food and feed

Schedule – Maximum (MLs) & guideline levels

- Mycotoxins – aflatoxins, ochratoxins etc
- Metals – As, Cd, Pb, Hg, Sn
- Radionuclides
- Others – acrylonitrile, chloropropanols, HCN, melamine

Includes sampling plan and analytic methods

# Questions and doubts



# Training assessment

Please give your feedback on the course conduction and content.

Thank You ...

# TO END ...

