

# **Module 08    Lecture 01**

# **Good hygienic practices**

# Good Manufacturing Practices (GMP)

**That combination of manufacturing  
and quality control procedures  
aimed at ensuring that products are  
consistently manufactured to their  
specifications**

***IFST (UK)***

# **Good Hygienic Practices (GHP)**

**All practices regarding  
the conditions and measures  
necessary to ensure  
the safety and suitability of food  
at all stages of the food chain**

***( Based on the Codex definition of Food Hygiene )***

# Codex general principles of food hygiene (1)

Identify the *essential* principles of food hygiene applicable *throughout the food chain*, to achieve the goal of ensuring that food is safe and suitable for human consumption

# Food safety

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

***Codex 1997***

# Food suitability

**Assurance that food is acceptable for  
human consumption  
*according to its intended use.***

***Codex 1997***

# Contaminant

**Any biological or chemical agent,  
foreign matter, or substances  
not intentionally added to food  
which may compromise  
food safety or suitability**

***Codex 1997***

# Contamination

**The introduction or occurrence  
of a contaminant in a  
food or  
food environment**

# Cleaning

**The removal of  
soil, food residue,  
dirt, grease or other  
objectionable matter**

***Codex 1997***

# Disinfection

**The reduction, by means of  
chemical agents and/or physical methods,  
of the number of microorganisms  
in the environment,  
to a level that does not compromise  
food safety or suitability**

# Areas examined under GHP

- 1. Primary production**
- 2. Establishment: design and facilities**
- 3. Control of operation**
- 4. Establishment: maintenance and sanitation**
- 5. Establishment: personal hygiene**
- 6. Transportation**
- 7. Product information and consumer awareness**
- 8. Training**

# Primary production

Hygienic practices should reduce the likelihood of introducing hazards that may be difficult or impossible to control at later stages of the food chain

Examples: *pesticides, antibiotics, mycotoxins, microorganisms* in foods eaten raw or fresh

# Establishment : design (1)

*Premises, equipment, surfaces and facilities should be located, designed and constructed to ensure*

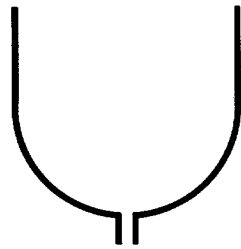
- ◆ **minimum contamination**
- ◆ **proper maintenance, cleaning, disinfection**
- ◆ **protection against pests**

# Establishment: design (2)

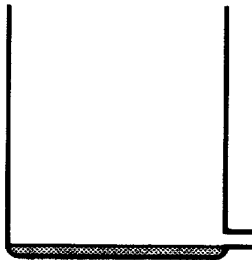
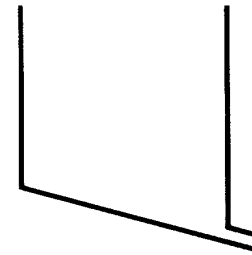
*Evaluation of the premises takes into account*

- **Location**
- **Equipment**
- **Facilities :**    **water**  
                          **air**  
                          **lighting**  
                          **storage**

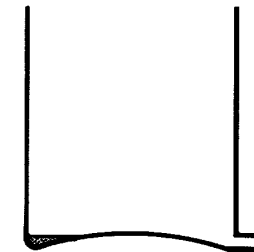
# Examples of hygienic equipment design



**Good**



**Bad**



# Establishment : practice

- **“Good housekeeping” applies to the surroundings and the roof of the establishment**
- **Pest control starts at the boundaries of the premises**
- **Water management deals with incoming and used water**
- **Windows are closed or screened**
- **Internal surfaces are smooth and easy to clean**
- **Floors have rounded corners**
- **Ceilings and ducts are accessible for cleaning**

# Establishment : practice (cont.)

- **Dry zones are designed to remain dry**
- **Drains can be cleaned**
- **Cable trays carry cables, not dirt or dust**
- **Insectocuters are effective**
- **Only potable water is in contact with food**
- **Air handling systems deliver the required air quality (and not contaminants)**
- **Doors are closed when not used**

# Control of operation

- Control of food hazards through HACCP
- Hygiene control: **Time & temperature**  
**Humidity**  
**(Cross) contamination**  
**Microbiological specifications**
- Incoming materials (incl. packaging materials)
- Water, air, steam
- Management, documentation, recall procedures

# Control : practice

- **Separate potentially contaminated materials from uncontaminated ones**
- **Assure that treatments are effective**
- **Assure that cleaning is effective**
- **Assure that measurements, tests and recording keeping are reliable and accurate**
- **Perform hazard analysis when changes occur**
- **Update the HACCP plan with any change**

# Establishment : maintenance & sanitation

## *Objective*

*to control possible sources of  
food contamination through*

- ◆ **Maintenance and cleaning**
- ◆ **Pest control systems**
- ◆ **Waste management**
- ◆ **Monitoring**

# Maintenance

*Establishments and equipment should be kept in condition to*

- ◆ **facilitate sanitation procedures**
- ◆ **function as intended, particularly at Critical Control Points (CCPs)**
- ◆ **prevent contamination of food e.g. metal shards, flaking plaster, debris, chemicals, pests, dust**

# Cleaning

## *Cleaning procedures involve*

- ◆ **removing gross debris from surfaces**
- ◆ **applying a detergent solution**
- ◆ **rinsing with water**
- ◆ **disinfection where necessary**
- ◆ **dry cleaning**

# Pest control

*Good hygienic practices should*

- ◆ **prevent pests from entering the premises**
- ◆ **protect food from pests**
- ◆ **eradicate infestations immediately**
- ◆ **include regular inspections**

# Establishment: personal hygiene

*To prevent food from being contaminated, personnel who come in contact with it must receive clear instruction on the following*

- ◆ **Health status**
- ◆ **Illness and injuries**
- ◆ **Personal cleanliness**
- ◆ **Personal behaviour**

# Transportation

## *Measures should be taken to*

- ◆ protect food from :
  - i) contamination sources
  - ii) damage likely to render the food unsuitable for consumption
- ◆ provide an environment that controls the growth of pathogenic or spoilage microorganisms and toxin production in food

# Product information and consumer awareness

- **Lot identification**
- **Product information**
- **Labelling**
- **Consumer education**

# Consumer information

*Consumers should know enough about food hygiene to be able to*

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

# Training

- **Awareness and responsibilities**
- **Training programs**
- **Instruction and supervision**
- **Refresher training**

# Key messages

- **Good Manufacturing Practices are the basis of safe food production and preparation**
- **Good Hygienic Practices deal with safety and suitability requirements to be followed world-wide**
- **Each food operation should adapt existing codes to their particular conditions**
- **They should determine which practices are critical to product safety and thus must be included in the HACCP plan**