Unit 2: Sanitary Control of Food Handling Premises
Topic: Layout
Lecture 4
Objectives

At the end of the session, students should be able to:

- Outline clearly the scope of features considered in layout of a FHEs
- Differentiate clearly among the three (3) components of layout
- Assess food flows to ensure that the principles of layout are followed
- List the three (3) criteria to be met in order for the principle of layout to be achieved
- Explain the eight (8) principles of layout, using appropriate examples
Overview

- Consider how access will be gained to all areas
- Consider how the establishment will be maintained in a clean manner
- Consider how activities will flow in relation to each other
- Consider the amount of space there is to work with
- Consider placement of equipment
Overview

- Layout design is a plan that indicate:
  - Spatial allowance
  - Physical facilities
  - Constructional features
  - Work areas with fitted equipment

- The layout of each establishment will be dependent on the food flow pattern
Components of layout

- There are 2 main components of layout.
  - Work centres
  - Work section
- These combine to give a complete plan
Components of layout

1. **Work Centres/Stations**
   - Basic component/unit in a layout
   - Areas where groups of closely related tasks are performed by individuals or groups
     - Bakery – mixing centre/baking centre
     - Pantry – fruit centre/baking centre/cold cut centre
     - Butchery – thawing area/cutting area/prepping area
Components of Layout

2. Sections

- A group of related work centres/stations in which one type of production occurs
- This section is planned after all work centres have been identified and completed and can be joined together
  - Ware washing section
  - Pastry section
  - Pantry section
Components of Layout

3. Complete Plan

- Layout is comprised of work centres/stations joined
- Joined work centres/stations comprise work sections
- Work sections formulate the overall layout
- Joining of work sections should be based on relationship (not pantry/pastry & butchery)
- The necessary support should be in close proximity to the production area
Layout

A well designed food handling premises will address the following:

1. Efficiency
2. Microbiological standards
3. Safety
Layout

There are 8 principles of layout:

1. Functions should proceed in proper sequence directly with a minimum of criss-crossing and backtracking
   • Microbiological, safety, efficiency

2. Smooth rapid production and service should be sought with minimum expenditure of worker time and energy
   • Microbiological, safety, efficiency
Layout

3. Delay and storage of materials in processing and serving should be eliminated as much as possible
   - Microbiological, safety, efficiency

4. Workers and materials should travel minimum distances
   - Microbiological, safety, efficiency

5. Materials and tools should receive minimum handling and equipment should receive minimum worker attention
   - Microbiological, safety, efficiency
Layout

6. Optimum utilization of space and equipment should be achieved
   ▪ Safety, efficiency

7. Quality control must be sought at all critical points
   ▪ Microbiological

8. Minimum cost of production should be sought at all points
   ▪ efficiency
A good work flow

- Minimize time food spends in danger zone
  - Locate storage areas close to receiving areas
  - Locate prep areas near refrigerators and freezers
- Reduce the possibility for contamination
  - Dirty equipment should not be placed where it may touch clean equipment/food
    - Soiled utensils near salad counter
    - Soiled utensils near prep sink
- Areas should be accessible for cleaning
Layout

- **Flow of work**
  Sequence of operations in the processing of materials or the performing of essential functions.
  In a FHE it includes:
  - Work accomplishment
  - Movement of materials from receiving, storage, preparation, service to clean up

- Natural and logical order and sequence must be followed

- Flow could be in a straight line, L-shaped, or U shaped
Typical product flow

1. RECEIVING
   - DRY
     - DRY STORAGE
   - REFRIGERATED STORAGE

2. BAKING
   - MEAT PRE-PREPARATION
   - VEGETABLE PRE-PREPARATION

3. POT WASHING
   - COOKING
   - SALAD PREPARATION

4. FINISHING
   - WASTE DISPOSAL

5. DISH WASHING
   - SERVING AREA
   - DINING ROOM
Conclusion

- Layout and food flow are critical in food handling establishments.
- Adequate space must be provided to ensure that there is minimal possibility for cross contamination as well as exposure of food items, which may allow for the proliferation of micro-organisms.
- PHI are required to assess the flow of food handling activities during inspection activities.