



CHAPTER I

QUANTITY FOOD PRODUCTION

Learning Objectives : At the end of this unit learners would be able to :

1. explain bulk food production
2. list the objectives and features of Institutional catering.
3. describe the characteristics Airline catering
4. state the features of hospital catering



I. DEFINITION

When food is made to cater more number of persons, it is termed as bulk food production. There is no specific definition for Bulk Food Preparation but we can narrate it as “Any Food prepared for a number more than 25 can be termed as Bulk or Mass or Volume Food Production”.

II. CATEGORIZATION OF BULK FOOD PRODUCTION (PLACE WISE)

There are two basic categories under which the mass food or bulk food can be divided are:-

a) Commercial Catering

Places like hotels, restaurants, motels, clubs, bars, banquets, airline catering, transport catering, fast food outlets etc., where the food is made and served for earning profits.





b) Social Catering

Places like school canteens, college mess, employee cafeteria, mid day meals at Government primary schools, hospital catering and other similar food production done to provide good, healthy and cost effective food for masses without aiming for earning profits.

III. MENUS USED

- For commercial Catering Units: They do production as per their menus and the forecast play a major role in deciding the bulk or number of portions to be made. To compete with other similar units they emphasize on a blend of unique and traditional food items.
- For Social Catering Units: The production is done as per cyclic menus and the bulk is fixed as the number of portions to be made is known. Emphasis is given to the balanced diet with variation in the meals.



IV. TYPES OF MEALS SERVED

At different places the food is prepared for different group of people. At hospital food is made for patients and their attendants, Doctors and staff; and at a school it is for the students. As we know, food also gets its different shade when we serve food to different categories of people.

Following major meals are served at different units;

- Breakfast
- 11 a.m. tea/coffee with snacks
- Lunch
- 4 p.m. tea/coffee with snacks
- Dinner



The above meals are normally served at places like hotel, coffee shop, room service, employee's cafeteria, residential school mess, hospitals etc.





For banquets and parties when food is made in bulk, it is served for meals like lunch or dinner.

Places like fast food outlets and catering services available at common social places like railway station etc.; specific items are made and are served throughout the day.

V. SALIENT FEATURES

- The aim and objective of such bulk food production is to supply hygienic and safe food to the masses.
- Food is served to complement their other activities and to fulfillment of the objectives of the institution as related to the Industrial Canteens. The food prepared at such places is made on a cyclic menu.
- Other outlets aiming to earn profit do the production as per their menu and the forecast.
- A perfect planning, Proper Indenting, Portion Control and minimized wastage are the key factors for bulk food production and service.
- Ease of making food, ease of serving such food in a short span of time is must as the serving time at places like Institutions, Industries and hospitals is limited.

VI. MANPOWER REQUIREMENT

- For commercial Catering Units:** They do production as per their menus and they need specialized manpower to accomplish the job as they sell it to earn profit and reputation amongst their clients.
- For Social Catering Units:** They do need specialists but only few needed as the rest of the work is repeated type only the quantum of work is large.



VII. EQUIPMENTS REQUIRED

The equipments required for mass or bulk food production and service are as follows:





a) **Light equipments**

- Ladle
- Perforated spoons
- Cooking spoons
- Flat Cooking Spoons
- Large Flat Cooking Spoons
- Large Jhara (perforates spoon)
- Dohri (Large spoon to dish out cooked food)
- Strainers
- Large Perforated strainers
- Large Griddles
- Large Deep Frying Pans (Karahi)
- Large Cooking Pans
- Large Cooking Pots
- Jalebi Kadhai
- Large Wooden Cooking Spoons
- Large Pressure Cookers
- Large Trays
- Large Thalís
- Large Basins
- Knives
- Pealers
- Rolling pins
- Graters
- Mashers
- Electrical Mixers





- Manual Stone Grinders
- Bowls
- Small Pots
- Small Pans

b) Heavy Equipments

- Ovens
- Electrical Mixer (Heavy Duty)
- Stone Grinder (Electrical)
- Electrical Potato Peeler
- Deep Fridge
- Fridge
- Deep Fat fryer
- Tilting Pans
- Rice Steamers
- Gas Burners (Heavy Duty)
- S.S. working Tables
- Slicer (Electrical)
- Grater (Electrical)
- Roti making Machine (Automatic) if the numbers are too large
- Dough Kneader
- Food Trolley
- Bain Marie
- Storage Bins
- Gas Bank
- Idli Steamer





VIII. FACTORS AFFECTING QUALITY AND QUANTITY CONTROL

Quality, quantity and portion control is very important when ever dealing with the mass or bulk cooking. A good quality standard should cover essential characteristics that may indicate quality standards. A quality control program makes it possible to serve consistent standards. Employee's evaluation, Taste panel scoring, customer feed back and other means can be used to evaluate quality.

There are different factors affecting quality and quantity of the food.

- *Proper forecasting of the quantity required and controlled portion size are two basic essentials for quality and quantity control.*
- *Portion size varies according to the food, flavor and portion appearance.*
- *Depending on the work and energy consumption, adults, teenagers and small children consume different quantities and portion. An individual doing hard work needs more calories therefore consumers more food as compared to a person doing sedentary tasks.*
- *Giving liberal quantities of less costly foods and smaller quantities of costly food can be flexible practiced.*
- *The portion appearance is affected by the size and shape of the dish, decoration and width of the rim, dish color and food arrangement.*
- *The servers should be informed before service on the size of PORTION by weight, volume or count and also the dish in which they are to be served. The type of serving tool should be specified.*
- *The use of standard recipes offers a sound basis for controlled portioning and the achievement of uniform products every time.*
- *Sampling of food by seniors should always be done before service to ensure quality food.*

IX. INSTITUTIONAL CATERING

i) Introduction

Institutional catering originated from Gurukul and Ashrams. During 12th Century, Nalanda University not only in India but throughout Asia, practised it.

In the modern world, for health and welfare of younger generation (age group 5-25) at schools, colleges and Residential Universities, the idea of catering at the insitutional level is found as a social responsibility.





It is a social responsibility of institutions as schools to develop good food habits among the children of India and helping to build a strong and healthy population.



ii) Objectives

- To serve food of good quality, properly cooked and prepared.
- To deliver prompt and courteous service.
- To provide well balanced varied menu.
- To offer reasonable price.
- To ensure adequate effective facilities.
- To maintain high standards of cleanliness and sanitation.

iii) Skills required of cooks and Caterers

Skills of selecting, preparing and cooking food together with the skills of demonstration.

Providing meals which will really appeal to the students/target clientele and working on no profit and loss basis.

Charging - Fixed charges

X. MENU

Following points should be taken into consideration:

- Menu should be simple. Items of the menu should be properly cooked and palatable
- Generally a cyclic menu, should have same variety.
- Nutritional aspects to be considered.
- Where there is lack of professionals in the kitchen, there needs a simple meals without any elaborate items.





Special menu: In addition to fixed menu there are menus for special occasions and events. e.g. festival day, parent and teacher's day, Annual day. etc.

Equipment: While selecting equipments consideration should be given to :-

- Original cost, installation cost, dependability Insurance, repairs. etc.
- Durability and simplicity in operation.
- Efficient use of space.
- Mechanical efficiency
- Availability of spare parts

Dining Hall: In addition to sociological and psychological factors plenty of light and air etc.

X. AIRLINE CATERING

Hotel catering vs Aircraft catering

Space: space is limited in airplane to have a full fledged kitchen, cold room and other storing facilities.

If due to some reason food goes bad in air craft, It will be very difficult to change it and to cook fresh meal, due to want of space, time and man power. But in a hotel space problem is not there and any kind of food can be supplied to the customers requirement on a *ala carte* basis.

In aircraft all the meals are provided as finished goods and ready for service and consumption on a *table-d-hote* basis.

Cutlery and Crockery: In hotel the cutlery, crockery and other equipments need not leave the premises, therefore there are less chances for loss or breakages but in case of Aircraft all valuable cutlery and crockery etc are flying along with the aircraft all over the world.





XI. HOSPITAL CATERING

Hospital Kitchen should be planned for efficiency, hygiene, flow of productions, etc.

a) While planning or redesigning the kitchen, the following points must be taken into consideration.

1. Number of people to be catered to type of service for staff and patients.
2. the extent of choice
3. the type and size of equipment to be installed
4. Light:
 - utilization of all available natural light

- Artificial light
 - Tungsten
 - Fluorescent
 - cheaper

- Light fitting should be attached to the ceiling





5. **Ventilation:** natural ventilation or artificial for air circulation or fresh air.

6. **Extraction:** cooking area is covered with suspended canopies diet traps connected by trunking with fans at the point of extraction.

7. **Floors:** should be flat throughout, so that trollies can be moved into any part of kitchen. Non slip quarry tiles are the best. The level of floor should have slight fall towards the gulleys for better flow of water towards drain.

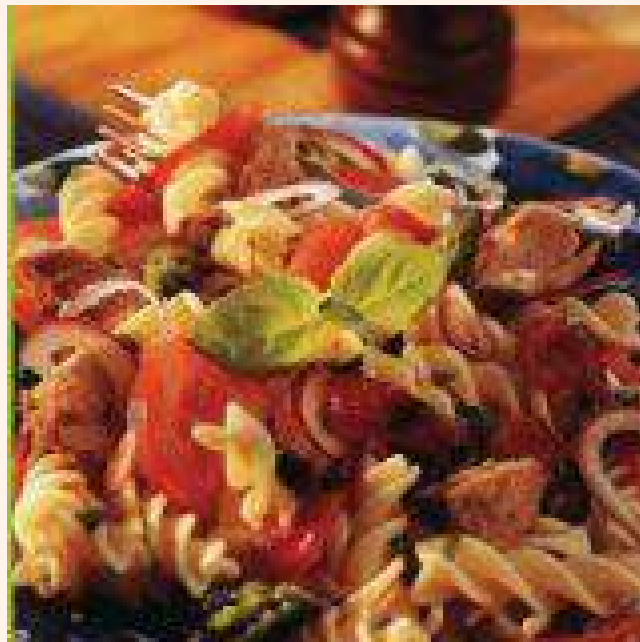
8. **Walls:** should be tiled throughout the ceiling height. Strong colours should be avoided as they can become very tiring to the eyes.

9. Ceilings should not be too low in working areas. Steam proof tilling may be used or should be covered with heat resistance paints.

10. **Stores:** Daily store - for groceries and small reserve stock. Refrigeration and Cold store, Veg store, Equipment store, etc.

11. **Preparation bays:** sections around the central cooking area where all the preparation work is done each preparation area should have hand washing facilities or sinks. The main preparation areas are:

- Meals and fish preparation
- Veg preparation
- Pastry preparation
- Diet preparation





b) **Hygiene:** It plays an important role in a hospital.

- A sick person with lower resistance is more prone to bacterial growth.
- All walls and ceilings should be painted every two years and washed down every six months.
- Floor cleaning in the kitchen should be a routine job.
- Equipment hygiene and personal hygiene should be stressed.

c) **Cooking of food**

- Appropriate cooking method should be used to avoid nutritional waste.
- Careful organisations and planning should be done to cook the food near to the time of service

d) **Disposal/Waste/garbage**

Portion control: avoid the wastage, use of graded container, proper serving spoon and ladles.

Suggested Activities

- Visit to one of the hospitals kitchen to submit a report based on the observations related to :
 - a) Type of menu (meal) - preparation
 - b) Type of kitchen - flooring, ceiling lighting, ventilation, servicing equipments, etc.

REVIEW QUESTIONS

- 1) Explain the salient features of Bulk food production.
- 2) What do you mean by commercial catering?
- 3) List five light equipments and five heavy equipments used in Bulk food production.
- 4) State the objectives of Institutional catering.
- 5) Give five points to be kept in mind while planning a kitchen for hospital catering.

